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TESIS DOCTORAL

El aprendizaje de los pronombres personales a través de la enseñanza explícita de la transitividad por estudiantes de Inglés como Segunda Lengua: un enfoque sistémico-funcional

The learning of personal pronouns through the explicit teaching of transitivity by students of English as a Second Language: a Systemic-Functional approach

MEMORIA PARA OPTAR AL GRADO DE DOCTORA
PRESENTADA POR

M^a Inmaculada López Bermudo

Directores
Marta Carretero Lapeyre
Jorge Arús Hita

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*To my mother Inés and to the memory of my
father Antonio, who considered education relevant*

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ABBREVIATIONS

SEMANTIC FUNCTIONS

A	Actor
Aff	Affected
Ag	Agent
Att	Attribute
B	Behaver
Be	Behavior
Ben	Beneficiary
Ca	Carrier
Cl	Client
E	Existent
G	Goal
Id	Identified
Idr	Identifier
Pa	Patient
Ph	Phenomenon
Pr	Process
R	Range
Re	Receiver
Rec	Recipient
Sa	Sayer
Sc	Scope
Se	Senser
T	Token
Ta	Target
V	Value
Ve	Verbiage

UNIT BOUNDARIES

	complex sentence
	clause
	group

CLASSES OF UNIT

cl	clause
wh-cl	wh-clause
NG	nominal group
AdjG	adjectival group
AdvG	adverbial group
PP	prepositional phrase
VG	verbal group
n	noun
pron	pronoun
adj	adjective
adv	adverb
conj	conjunction
prep	preposition

SYNTACTIC FUNCTIONS

S	subject
P	predicator
O	object
dO	direct object
iO	indirect object
C	complement

OTHER SYMBOLS

*	unacceptable or ungrammatical form
(?)	doubtfully acceptable
BrE	British English
AmE	American English
vs.	versus

Summary of this doctoral thesis in Spanish

La tesis actual tiene su origen en los años que trabajé en EEUU como profesora durante los cursos académicos 2006-11. A lo largo de ese tiempo tuve la oportunidad de trabajar tanto con alumnos hablantes de inglés americano como primera lengua, como con alumnos cuya lengua materna no era el inglés. Fue de estos últimos alumnos de los que aprendí mucho y los que me movieron a emprender este estudio de clase. Sus problemas con el uso de los pronombres personales y dificultades en rastrear los distintos participantes en un texto, me llevaron a estudiar en profundidad la lengua escrita y su relación con el éxito o fracaso escolar.

Esta tesis es el estudio de clase diseñado siguiendo la gramática sistémico-funcional (SFG por sus siglas en inglés) de Halliday (1985a, 1994a, 2013 y sucesivas ediciones), Halliday y Matthiessen (2004), Christie (2012), Schleppegrell (2006), y Menyuk (2005) entre otros. Asimismo, he tenido en cuenta las obras de autores como Bruner (2006) y Vygotsky (1962, 1978) quien ha sido una inspiración y una revelación.

Tuve la impresión de que la enseñanza explícita de algunos conceptos lingüísticos, en concreto utilizando la SFG, beneficiaría a los alumnos. Mi hipótesis fue que la enseñanza explícita de la transitividad mejoraría el uso de los pronombres personales, entre otros conceptos, de los alumnos.

El objetivo de la tesis es comprobar si la enseñanza explícita de roles semánticos y tipos de procesos ayudaría a los alumnos a: identificar pronombres personales y sus antecedentes; identificar constituyentes dentro de una cláusula y relacionarlos con sus correspondientes funciones sintácticas; entender y usar estructuras complejas de la lengua tales como la voz pasiva y la subordinación; y producir textos escritos más precisos y cohesivos.

Esta tesis está dividida en cuatro partes. La primera parte presenta la SFG de Halliday haciendo especial hincapié en las *metafunciones ideacional y textual* puesto que ellas están en el centro de la investigación de clase. Además presenta el concepto de *registro* que es un elemento clave en el modelo de Halliday y tiene una estrecha relación con las asignaturas escolares y el desarrollo de la literalidad.

Para el estudio de clase se ha tenido en cuenta el concepto de *cláusula* porque en palabras de Halliday ‘es la unidad gramatical en la que distintos tipos de construcciones semánticas confluyen y se integran en un todo’ (1989: 66). Además, la cláusula es el centro de acción en

la gramática, es una realización compleja de todas las funciones semánticas, es decir, los componentes ideacional, interpersonal, y textual (2002: 237).

Las tres metafunciones son analizadas en detalle (sección 1.2.1) y dentro de la metafunción ideacional se hace una exposición de los tipos de Procesos y Participantes. Los tipos de Procesos son: Material, Mental, Relacional, Comportamiento, Verbal, y Existencial. Por razones pedagógicas y metodológicas estos procesos fueron agrupados en cuatro: Material y Comportamiento; Mental; Verbal; y Relacional. Los Procesos Existenciales no se utilizaron en el estudio porque en primer lugar no se detectaron problemas en los alumnos y en segundo lugar porque *there* no puede ser reemplazado por ningún pronombre personal. También se estudian los *Circunstanciales* porque aunque no son un componente central en la metafunción ideacional, tienen presencia frecuente en las cláusulas. Se añade una sección sobre la *transitividad* puesto que está intrínsecamente relacionada con los Procesos, los Participantes, y los Circunstanciales (Halliday 1968: 179).

También se dedica una sección a la cláusula compleja y los tipos de proyecciones que generan. Igualmente, se dedica una parte a los recursos lexicogramaticales de la cohesión como las conjunciones y el léxico. Mención especial tiene el recurso de la referencia puesto que el objetivo de esta tesis es conseguir un mejor aprendizaje de los pronombres personales y su seguimiento a lo largo de un texto. Dentro de la sección dedicada a la referencia (1.2.5.1.4) se analizan los pronombres personales desde distintas gramáticas incluida la SFG que es la utilizada para la instrucción de clase. Los pronombres personales tienen una función importante en el discurso puesto que su uso defectuoso puede hacer que el texto sea difícil de entender (Downing and Locke 2006).

La primera parte concluye con una sección (1.2.6) dedicada al concepto de *registro* que es central en el modelo gramatical de Halliday (1976). Dicho concepto junto al de cohesión hacen que un texto pueda ser calificado como tal y no como una sucesión de frases desorganizadas. Halliday divide el concepto de registro en tres componentes: campo, tono, y modo. Cada uno de estos componentes coincide con una de las tres metafunciones arriba mencionadas. Así, el campo está relacionado con la metafunción ideacional, el tono con la interpersonal, y el modo con la textual.

La segunda parte pone en relación la gramática sistémico-funcional con la educación y se desarrollan los conceptos de tipos de textos a los que los alumnos se enfrentan a lo largo de

los años de escolarización. El modelo de Halliday es el que, de forma explícita, está más orientado a la educación (Byrnes 2006: 3) y ha sido precisamente en el campo de la educación en el que se ha desarrollado de forma amplia durante décadas (Halliday 2009: viii).

Hay que tener en cuenta la diferencia entre lengua escrita y hablada puesto que cada una presenta unos rasgos lingüísticos particulares. El concepto de *literalidad*, es decir, la participación activa en cualquier proceso social, se refiere tanto a la lengua escrita como a la hablada (Halliday 1996: 98). Sin embargo, en esta tesis el concepto de literalidad se utiliza para la lengua escrita puesto que el estudio de clase analiza única y exclusivamente la lengua escrita de los alumnos.

El concepto de gramática junto con la escritura adquieren un papel fundamental en la educación y según Vygotsky son precisamente estos dos conocimientos los que hacen que el alumno alcance un nivel más alto del desarrollo del habla (1962: 101). Este conocimiento de la lengua o KAL (por sus siglas en inglés) tiene que hacerse de forma explícita para que el conocimiento inconsciente sobre la lengua se convierta en consciente (Rose and Martin 2012: 236).

La lengua escrita tiene unas características propias: no está anclado en el aquí-y-ahora; no está atado al entorno en el que se produce; los elementos cohesivos suelen ser anafóricos; tiene una visión sinóptica; y las referencias suelen ser endofóricas (Halliday 1979: 70).

Un aspecto importante de la lengua escrita son los elementos cohesivos. Una unión cohesiva es la relación semántica entre un elemento en el texto y algún antecedente que es fundamental para su interpretación (Yde and Spoelders 1987: 187). Uno de estos elementos cohesivos son los pronombres personales que proporcionan al texto cohesión. El estudio de clase (parte III) se centra precisamente en el aprendizaje de estos pronombres personales para facilitar a los alumnos la producción de textos comprensibles y coherentes.

La sección 2.3 analiza las etapas de la lengua por las que pasan los alumnos en los años escolares. Estas son cuatro: temprana infancia (de 5 a 8 años); final de la infancia y comienzo de la adolescencia (de 9 a 12 o 13 años); la adolescencia (de 11 a 14 años); y el final de la adolescencia y comienzo de la madurez (de 16 a 17 o 18 años). Es durante estos primeros años de escolarización donde los alumnos se enfrentan a la especificidad de las asignaturas como historia, ciencias, geografía, y lengua (entre otras), pero será en la transición de primaria a secundaria donde esas especialidades y diferencias se hagan más profundas. Es en esta etapa

donde el conocimiento lingüístico se evalúa y donde los alumnos que no consigan dominar los rasgos gramaticales y discursivos de la lengua escrita, tanto sea en lectura o exigida en la escritura, suspendan y se atrasen (Christie 2012: 72). En este sentido, un buen conocimiento de la SFG beneficiaría a los profesores y educadores puesto que podrían tomar decisiones sobre que conocimiento de lengua enseñar y cuándo enseñarlo (Christie 2012: 223). Estas asignaturas y sus especificidades se presentan de forma somera en la sección 2.4 donde se vuelve a tratar el concepto de registro ya mencionado en la parte I (sección 1.2.6). En la tabla 29 (p. 141) se presentan los principales rasgos de estas asignaturas y los tipos de textos asociados a las mismas.

La parte segunda concluye con la exposición del modelo australiano que aplica la SFG al desarrollo de la lengua y a la educación. Este modelo, conocido con el nombre de la ‘Escuela de Sidney’, surge de la necesidad de democratizar los resultados del sistema educativo. Joan Rothery y Jim Martin, principalmente, se han dedicado a investigar los tipos de textos que los alumnos deben leer y producir en las escuelas. Su punto de partida son los trabajos en educación del sociólogo Basil Bernstein y de Michael Halliday (Rose y Martin 2012: 4). Este enfoque tiene como eje hacer del aprendizaje de la lengua una tarea explícita y así ir construyendo conocimiento nuevo sobre la lengua (KAL) tanto para profesores como para alumnos. Esto es lo que Bernstein llama *pedagogía visible* (1975:119-20). Este proyecto comienza en primaria (*Writing Project*), continúa en secundaria (*Write it Right Project*) y se extiende hasta la educación superior (*Reading to Learn Project*).

Los resultados de este proyecto se pueden observar en el último informe PISA (tabla 30, p. 158) donde Australia obtuvo el puesto decimotercero en la prueba de lectura y en general obtuvo un resultado superior a la media de la OECD en las tres pruebas (matemáticas, lectura y ciencias). En el informe PISA *la habilidad lectora* se define como ‘la capacidad individual de entender, utilizar y reflexionar sobre los textos e interactuar con ellos para alcanzar los objetivos individuales, desarrollar el conocimiento y potencial personales y participar en la sociedad’ (oecd 2009: 14).

La tercera parte consta de tres subapartados: el primero explica las motivaciones del presente estudio de clase y trata algunos conceptos relacionados con el aprendizaje/adquisición de lenguas; el segundo describe en detalle el estudio de clase realizado en EEUU con alumnos

de inglés como segunda lengua (ESL por sus siglas en inglés); y el tercero presenta los resultados de dicho estudio.

Los motivos que me llevaron a estudiar el uso de los pronombres personales en detalle fueron, en primer lugar su uso frecuente en la lengua (oral y escrita) (Biber et al. 2010: 334), y en segundo lugar, el alto número de errores en su uso por parte de los alumnos de ESL. El origen de este segundo motivo se amplía en la sección 3.2.3.1.

Además de estos motivos, el uso de los pronombres personales ha sido estudiado por autores como Joan Tough (1970 en Bruner 1973a: 149), Bernstein (1974), y Hawkins (1977). Estos autores encuentran una conexión entre el uso de los referentes *exofóricos* y *endofóricos* y el nivel social de los niños. En general, los niños de clase social más baja o más desfavorecidos tienden a usar referentes exofóricos. Esto en palabras de Bernstein es ‘el efecto provinciano de la cultura de la pobreza que mantiene la lengua atada al contexto, a la experiencia común y limitada del grupo’ (1974: 79). Hay que recordar que la lengua escrita no está anclada en ‘el aquí y el ahora’, en el entorno en el que se produce, al contrario que la lengua hablada (Halliday 1979: 70). Esta diferencia es crucial porque en la segunda parte se hace alusión expresa a los distintos tipos de conocimiento (común y académico) y a la terminología empleada por varios autores (tablas 24 y 25 respectivamente, ps. 113-4). De la interpretación y entendimiento que de esta diferencia hagan profesores y educadores dependerá el éxito en mayor o menor medida de los alumnos.

Seguidamente se definen algunos conceptos relacionados con el aprendizaje de lenguas como: la diferencia entre aprendizaje y adquisición; factores que influyen en el aprendizaje de lenguas (edad, aptitud, motivación, actitud, y personalidad entre otros); la transferencia de la lengua materna (L1); y el concepto de interlengua.

Se dedica un apartado a los estudios realizados sobre la adquisición y aprendizaje de los pronombres personales. En cuanto a los primeros, se resalta la temprana adquisición de los pronombres personales *I, you, me* (Brown 1973), especialmente cuando los niños ocupan esos roles (Charney 1980). En cuanto a los segundos, se concluye que los alumnos usan estrategias parecidas al reconstruir la sintaxis inglesa, por lo que la transferencia no parece ser la fuente de los errores (Dulay y Burt 1974; Larsen-Freeman 1975). Además, los alumnos parecen beneficiarse de la instrucción formal (Seow 2004) y aprender rasgos individuales uno a uno (Felix y Hahn 1981), independientemente del estilo (Collin 1988).

La sección 3.1.4 hace un repaso a los enfoques sobre el aprendizaje de lenguas y a los métodos que de ellos se derivan.

En cuanto a la instrucción centrado en la forma, hay muchos autores que la consideran beneficiosa (Chaudron 1988; Long 1991; Ellis 1997; Larsen-Freeman and Long 1999; Halliday 2003a; Marinova-Todd 2003; Corbeil 2005; Ziemer Andrews 2007; Spada 2008; Brown 2014 entre otros) para los alumnos y que, en gran medida, depende del profesor que es quien decide cuándo introducirla, sobre qué aspectos, y cómo. Es importante resaltar que Vygotsky considera ‘la lengua y la percepción están unidas’ (1978: 33) y que se debería dar un lugar preferente a la ‘atención’ puesto que ‘el niño debe prestar atención para ver el palo, mientras que el mono debe ver el palo para prestar atención’ (1978: 36).

A continuación se dedica una sección al aprendizaje/enseñanza de la lengua desde un enfoque sistémico-funcional. Lo primero decir que Halliday considera estos términos (aprendizaje y enseñanza) dos aspectos del mismo proceso (2007: 354) y por ello son tratados en conjunto. Según Schleppegrell el modelo sistémico-funcional nos permite centrarnos en las formas a través de las cuales se construye el conocimiento y así capacitar a los profesores para hacer explícitos los significados que la lengua realiza (2010: 3). Schleppegrell señala como las dificultades aumentan a medida que los alumnos llegan a secundaria y que su éxito o fracaso depende de que lleguen a conocer los recursos lingüísticos necesarios para desarrollar tareas académicas (2010: 22-4). Este tipo de lenguaje está organizado en patrones lingüísticos que difieren de los encontrados en el lenguaje oral (véase 2.2). Estas diferencias y dificultades ya fueron mencionadas en la parte II de esta tesis cuando se hace un repaso a las etapas en el desarrollo de la lengua y a las diferentes materias a las que los alumnos se enfrentan en la escuela (primaria y secundaria). Es importante resaltar que muchos alumnos no tienen como lengua materna la utilizada en el instituto (inglés en este caso en concreto) dificultando aún más el acceso a esas estructuras académicas necesarias en el desarrollo escolar. Además, muchos alumnos que hablan inglés con fluidez no presentan el mismo nivel en la escritura, esto tiene que ver con las diferencias entre los dos tipos de lengua (oral y escrita) ya mencionadas. Aquí resulta crucial el papel de los profesores y de cómo haga partícipe a los alumnos de esos recursos lingüísticos y patrones (2010: 153-4). Este enfoque considera que la dificultad de los contenidos académicos residen en la lengua a través de la que se enseñan esos contenidos y contempla los dos (el aprendizaje de la lengua y del contenido)

intrínsecamente unidos (2010: 163-4). Por todo ello, considero que la calidad de la instrucción y la explicitud de los contenidos son factores cruciales en el desarrollo de la lengua a lo largo de los años escolares.

Es necesario hacer la distinción entre ESL y EFL. En ambos se estudia la lengua inglesa pero mientras en el segundo el entorno, de la comunidad como escolar, no se desarrolla en esa lengua, en el primero sí. Esto hace que el alumno se enfrente a una triple exigencia: entender las tareas que se desarrollan en el aula; alcanzar competencia suficiente para participar; y aprender los contenidos de las materias impartidas. Esto requiere mucho conocimiento de la lengua y puede llegar a ser agobiante para dichos alumnos. Los profesores deben ser conscientes de estas exigencias y facilitar y guiar la comprensión para evitar errores de comunicación e innecesarios problemas de disciplina (Fillmore 1982 en Menyuk 2005: 107). Las cláusulas utilizadas en el estudio de clase han sido seleccionadas teniendo en cuenta los siguientes criterios: la linealidad de la lengua inglesa como principal aspecto sintáctico (Brown 1973: 8); el orden fijo de las palabras en la lengua inglesa (Halliday 1985b: 216); la orientación semántica de la SFG (Halliday 2005: xv); la cláusula como el punto de encuentro de todas las funciones de la lengua (Halliday 1989: 66; 2002: 175 entre otros); los constituyentes como mecanismo de organización y expresión del significado (Halliday 1985a: 18); y el número claramente superior de cláusulas afirmativas (Halliday 2009: 69). Todos estos criterios juntos tienen como resultado una ‘cláusula prototípica’ (Rosch 1978: 27) basada en los principios de categorización de predicación que ayuda a los alumnos a prestar atención a la estructura de la cláusula y a la relación entre sus participantes.

La sección 3.2 está dedicada al diseño del estudio de clase, empezando por resaltar la función del profesor como investigador. El colegio donde se desarrolló el estudio está situado en el condado de Sampson, en el estado de Carolina del Norte, en EEUU. Dicho colegio cuenta con unos 700 alumnos divididos en tres cursos: 6º, 7º, y 8º. Estos cursos equivalen a 6º de primaria y 1º y 2º de ESO en España. La confidencialidad de dichos alumnos se garantiza mediante un código en el que se anota el grupo al que pertenecían (Experimental, de Control, o Nativos), seguido del curso y el número que ocupaban dentro del grupo. En las tablas 37 a 42 se recoge dicha información y se añade el nivel obtenido por los alumnos de ESL en el último examen nacional de lengua inglesa (ACCESS test), o el examen inicial (W-APT), en caso de que fuesen nuevos y no se dispusiese de ese dato. De dicho examen sólo se han

utilizado los niveles obtenidos en lectura y en escritura puesto que este estudio (ya arriba mencionado) se centra en la lengua escrita.

El estudio es cuantitativo y experimental y, en menor medida, cualitativo porque intenta entender las estrategias que los alumnos utilizan cuando se enfrentan a tareas escritas. Es deductivo, comienza con el marco teórico de la SFG y de la misma deriva una hipótesis. En dicho estudio participaron seis grupos, distribuidos de la siguiente manera: dos grupos de control; un grupo experimental; y tres grupos de nativos, uno por curso. Se seleccionaron dos grupos de control porque entre estos alumnos es frecuente que se produzcan bajas a mediados de curso y no completen el año escolar en el mismo colegio.

El experimento consta de cuatro partes: tareas previas; tareas posteriores (después de la instrucción); tareas de seguimiento-1; y tareas de seguimiento-2.

Durante el curso escolar 2007-08 observé que los alumnos cometían muchos errores en el uso de los pronombres personales. Llevé a cabo un estudio no experimental en el que los alumnos (ESL y nativos) tenían que completar unas frases o un texto con unos pronombres personales que habían sido omitidos. Los resultados demostraron que no había gran diferencia entre los alumnos de ESL y los nativos y que los conceptos de género y número causaban problemas. Además el pronombre neutro *it* no se relacionaba con un grupo (Nominal) cuando éste estaba compuesto por más de una palabra y la distancia con el pronombre era superior a cuatro palabras.

Estos resultados son el punto de partida del presente estudio que se centra en el aprendizaje de los pronombres personales por alumnos de ESL desde un enfoque sistémico-funcional. Tiene como objetivo general que los alumnos tomen conciencia de la lengua para que les ayude a entender las estructuras, patrones, y el orden de palabras de la lengua inglesa. Sus principales objetivos son:

- Examinar los efectos de la instrucción en roles semánticos en el aprendizaje de los pronombre personales, sujeto y objeto, tras la instrucción de dichos roles y de los tipos de procesos.
- Determinar los efectos que dicha instrucción podría tener en el conocimiento que los alumnos tienen de la sintaxis.

- Determinar los efectos plausibles de dicha instrucción en la comprensión lectora y en la producción escrita.

El presente estudio intenta medir once variables que se agrupan en cuatro hipótesis:

Pregunta 1: ¿ayudará la instrucción en roles semánticos a los alumnos a identificar los pronombres personales y encontrar sus antecedentes?

Variable 1.1.: reconocer pronombres personales, sujeto y objeto

Variable 1.2: relacionar los pronombres personales con sus antecedentes

Pregunta 2: ¿ayudará la instrucción en roles semánticos a los alumnos a identificar los distintos constituyentes dentro de la cláusula y relacionarlos con sus correspondientes funciones sintácticas?

Variable 2.1: reconocer constituyentes/grupos (Grupo Nominal, Adverbial y Verbal) dentro de la cláusula

Variable 2.2.: relacionar los roles y grupos con las funciones sintácticas (S-V-O)

Pregunta 3: ¿ayudará la instrucción en el tipo de procesos a los alumnos a entender y a usar estructuras complejas de la lengua?

Variable 3.1: uso de la voz pasiva

Variable 3.2: uso de la subordinación

Variable 3.3: uso de los distintos procesos

Pregunta 4: ¿ayudará la instrucción en roles semánticos y procesos a los alumnos a producir textos más precisos y más cohesivos?

Variable 4.1: uso de los elementos cohesivos

Variable 4.2: uso de Temas

Variable 4.3: relacionar pronombres con antecedentes abstractos en una lectura

Variable 4.4: estructura de la frase y orden de palabras

El experimento consistió en recoger ejercicios de los alumnos en cuatro momentos distintos del año escolar. Las tareas previas se recogieron en octubre del 2010, las posteriores en diciembre (tras la instrucción realizada en noviembre), las de seguimiento-1 en marzo del 2011, y las de seguimiento-2 en junio del 2011.

De los datos de los alumnos (tablas 37-42) se desprende que los alumnos de ESL tienden a ser un poco más mayores que los nativos. Esto se produce porque muchas veces repiten curso para alcanzar el nivel de lengua necesario. Además por los resultados del examen nacional

(ACCESS) se ve que la parte escrita es la que, en muchos casos, hace que el alumno no salga del programa. Se requiere un resultado general de 4.8 pero en lectura y escritura tiene que ser de 4.0.

La tabla que se presenta a continuación resume las sesiones con los tipos de procesos y los roles semánticos que se explicaron en cada sesión. Esta tabla corresponde al número 43 en el cuerpo de la tesis. Los ejemplos se han mantenido en inglés porque su traducción al español podría modificar el análisis de sus componentes.

Procesos Materiales	Procesos de Hacer 1ª Sesión: algo ocurre [sin Rango] o alguien hace algo [Circunstancial] <i>Mary ran fast.</i> <i>The girl cried in the afternoon.</i> 2ª Sesión: alguien causa o modifica algo <i>Diana is fixing the fence.</i> 3ª Sesión: alguien da algo a otra persona <i>My father gave me a book.</i> 4ª Sesión: alguien hace algo [Rango] <i>Mary walked the streets of New York.</i> 5ª Sesión: Revisión y voz pasiva
Procesos Mentales	Procesos de Sentir 6ª Sesión: alguien siente algo [+Fenómeno]. Presente <i>Students heard the teacher.</i> 7ª Sesión: alguien siente que algo/alguien... [+Fenómeno]. Presente continuo <i>Students are learning a lot.</i>
Procesos Verbales	Procesos de Decir 8ª Sesión: alguien dice algo a otra persona <i>John told me a pack of lies.</i> 9ª Sesión: alguien dice que algo/alguien... <i>Vivian said that Charles was not coming.</i> <i>Vivian said: "Charles is not coming"</i>

Procesos Relacionales	Procesos de Ser 10ª Sesión: intensivo <i>Tanisha is big.</i> [atributo intensivo] <i>Latoya is my doctor.</i> [identificador intensivo] Atributivo posesivo <i>Trevor has some pencils.</i> Atributivo circunstancial <i>Mrs. Moore is in the cafeteria.</i> 11ª Sesión: Revisión
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Tabla 43: Resumen de las sesiones de instrucción

Las frases se escogieron de Matthiessen (1995) y de Martin et al. (1997) y, en alguna ocasión, fueron modificadas para adaptarlas al entorno de los alumnos y que ellos pudiesen relacionar fácilmente. La instrucción tuvo lugar en los primeros 30 a 45 minutos de la clase. Hay que especificar que en EEUU las clases suelen tener una duración mayor que en España. Por ejemplo, en el instituto son de 90 minutos y en los cursos 6º a 8º son de 80 minutos.

La sección 3.3 presenta los resultados de dicha instrucción. Está dividida en cinco partes, recogiendo cada una los distintos ejercicios realizados por los alumnos.

En la primera (3.3.2) se recoge la *referencia anafórica* y como resultado general, el EG redujo el número de errores a lo largo del experimento. Los alumnos de todos los grupos utilizaron estrategias similares cuando tenían que localizar un antecedente. En general estas estrategias se pueden resumir de la siguiente forma:

- Cuando la palabra era difícil, buscaban un sinónimo dentro de la frase
- Favorecieron el participante Humano dentro de la frase
- Seleccionaron la característica sobre el objeto; y
- Relacionaron la situación con el aquí-y-ahora

En la segunda (3.3.3) se analizaron los Grupos, las Funciones sintácticas y la Sustitución de pronombres personales. Dentro de los Grupos, el EG finalizó con el menor número de errores. Sin embargo, todos los grupos pasaron por las mismas fases, es decir, redujeron el número de errores en las tareas posteriores y lo aumentaron en las de seguimiento. Parece que tienen problemas en localizar los Grupos Nominales cuando éstos son compuestos.

En cuanto a las Funciones sintácticas, el único grupo que redujo el número de errores de forma continua fue el EG.

En los ejercicios de sustitución de pronombres en cuanto a los Sujetos, el EG terminó con un número muy bajo de errores. En general, todos los grupos, excepto el CG1, redujeron ligeramente el número de errores. Dentro de los Nativos, el grupo que tuvo mejor comportamiento fue el N6. En cuanto a la sustitución de pronombres personales Objetos directos e indirectos, destacar que el número de errores en los Objetos indirectos se redujo mientras que el de los Objetos directos, aunque experimentó un ligero descenso, se mantuvo muy elevado. Una de las conclusiones extraídas es que los alumnos favorecen el participante Humano dentro de la frase y en este sentido, los Objetos indirectos eran Humanos y fueron sustituidos en detrimento de los objetos.

En los ejercicios de lectura el comportamiento fue similar. Se experimentó una reducción en el número de errores excepto en el EG con los alumnos del curso 8º que finalizaron con el número mayor de errores.

La tabla que a continuación se adjunta (tabla 71) recapitula los resultados de los grupos en relación con los *ejercicios cerrados* realizados a lo largo del curso escolar.

	Referencia anafórica		Lectura		Grupos		Sujetos		Od		Oi	
	PRE	FU -2	PR E	FU -2	PR E	FU -2	PR E	FU -2	PR E	FU- 2	PRE	FU- 2
EG	56	31	61	29	31	27	68	12	87	65	86	18
CG1	80	58	85	67	26	48	85	83	95	99	100	93
CG2	77	54	83	58	34	52	58	52	87	97	87	75
N6	48	40	50	36	21	43	24	15	74	78	80	39
N7	52	57	50	50	8	42	21	24	66	85	74	61
N8	41	62	57	56	15	45	57	33	71	83	77	63

Tabla 71: Resumen de los resultados en grupos y tareas

En la cuarta parte (3.3.6) se analizan las composiciones de los alumnos. Dentro de ellas se han observado el número de frases, los Temas, los pronombres personales, la relación entre las frases, y los procesos utilizados.

En cuanto al número de frases destacar que los alumnos no parecen tener una idea clara sobre lo que una frase es. En algunas composiciones había una o dos frases sólo, mientras que en otras había dos o tres por línea.

En los Temas utilizados por los alumnos, los simples son la mayoría duplicando el número de Temas múltiples. Los alumnos favorecieron la *progresión temática continua* en la que el Tema es constante a lo largo de las distintas frases de la composición.

En el uso de los pronombres personales, destacar el uso ‘abusivo’ del Sujeto, especialmente en primera persona singular *I* y *we*. Esto constituye una característica de la lengua hablada que los alumnos transfieren a la lengua escrita.

La relación entre las frases es *paratáctica* y cuando es *hipotáctica* es por el uso de *if* y *because*.

Los procesos utilizados por los alumnos en su mayoría fueron Materiales. En pocas ocasiones utilizaron Procesos Verbales aunque el número aumentó en las tareas de seguimiento. En

general, las composiciones presentan poca variedad de Procesos y mucha repetición de verbos comunes como *be, say, do, go, etc.*

La sección 3.12.4 recoge los resultados de unos ejercicios sobre la voz pasiva. Este concepto no se incluyó en todas las tareas y se administró para ver si el KAL de los alumnos aumentaba en cuanto al reconocimiento de esta voz y el Participante Receptor. Como resultado el EG mejoró el reconocimiento de esta voz, al igual que en reconocer al Receptor en este tipo de frases.

Finalmente, la parte cuarta es un resumen con conclusiones donde se dirige al lector hacia futuras investigaciones utilizando la SFG como modelo. Se hace hincapié en la diferencia entre lengua escrita y lengua hablada y en la necesidad de enseñar de forma explícita los recursos lingüísticos. Siendo estos necesarios para que los alumnos puedan alcanzar un nivel de lengua académica suficiente para superar el instituto y prepararlos para estudios superiores. En este sentido, la SFG es una herramienta útil y eficaz para conseguir este objetivo.

Se apunta a la investigación futura de temas tales como: la metáfora gramatical o nominalización; los tipos de procesos en los distintos registros; Temas; y la relación entre la instrucción formal y el aprendizaje de L2.

Hay que recordar que hoy en día vivimos en un mundo globalizado y que muchos alumnos estudian en una lengua diferente a la L1. Además, muchos sistemas educativos están poniendo en marcha programas bilingües, desde primaria a la universidad, y son esos alumnos los que más podrían beneficiarse de la enseñanza explícita de la SFG puesto que el nivel de exigencia de escritura en una lengua extranjera es elevado. Australia es un claro ejemplo de los buenos resultados obtenidos tras décadas de aplicación de este enfoque.

Summary of this doctoral thesis in English

The present thesis has its origin in the years I worked as a teacher in secondary education in the United States during the school years of 2006-11. Throughout that time I had the opportunity to work with native speakers of American English as well as with students whose mother tongue was not English and it was the latter group from whom I learned the most. Their difficulties using personal pronouns and tracking the different participants within a text, made me study in depth written language and its relation to school success or failure.

The present thesis is the classroom research I designed using Halliday's (1985a, 1994a, 2013 and successive editions) Systemic-Functional Grammar (SFG), Halliday and Matthiessen (2004), Christie (2012), Schleppegrell (2006), and Menyuk (2005) among others. I have also taken into consideration the valuable work of authors such as Bruner (2006) and Vygotsky (1962, 1978), who has been a revelation and more than an inspiration.

My impression was that the explicit teaching of some linguistic concepts, especially within SFG, would benefit students. My hypothesis was that the explicit teaching of transitivity would be beneficial for the students' use of personal pronouns and in other respects.

The research questions aimed at seeing if the explicit instruction on semantic roles and process types would help students: identify personal pronouns and their antecedents; identify constituents within a clause and relate them to their corresponding syntactic functions; understand and use complex language structures such as passive voice and subordination; and produce more accurate and construe more cohesive writings.

This thesis is organized in four parts. The first one introduces Halliday's SFG with special emphasis on the *ideational* and *textual metafunctions*, since both are the core of the classroom research. Furthermore, it introduces the concept of *register*, which is a key element in Halliday's model owing its relationship with school subjects and the connections to literacy development.

I have taken into consideration the concept of clause for this classroom research because as Halliday posits 'the clause is the grammatical unit in which semantic constructs of different kinds are brought together and integrated into a whole. The clause is the unit where meanings are organized and wrapped up together' (1989: 66). Furthermore, the clause is a complex realization of all these three semantic functions. It has an ideational component, based on transitivity, the processes, participants and circumstantial elements that make up the

semantics of the real world. It has an interpersonal component, consisting of mood, modality, person, and all the various attitudinal motifs that come to be organized as meaningful alternatives. And it has a textual component, the functional sentence perspective (thematic and news-giving systems) and the cohesive resources of reference, ellipsis and conjunction (2002: 237).

These three metafunctions are analyzed in detail (section 1.2.1) and within the ideational one the concepts of Processes and Participants are presented. The type of Processes are: Material; Mental; Relational; Behavioral; Verbal; and Existential. For pedagogical and methodological reasons these processes were grouped in four: Material and Behavioral; Mental; Verbal; and Relational. Existential Processes were not included in the classroom research because, on the one hand, students did not have problems with them, and on the other, because *there* cannot be replaced with any personal pronoun. Although *Circumstances* are not a central component in the ideational metafunction, they are studied since they are very common within clauses. A section on transitivity is added because it is intrinsically related to Processes, Participants, and Circumstances (Halliday 1968: 179).

Furthermore, a section is devoted to the complex clause and to the types of projections they produce. In addition, a section is devoted to the lexicogrammatical resources of cohesion such as conjunctions and lexis. There is a special mention to the resource of reference because the goal of this thesis is to obtain a better learning of the personal pronouns and their tracking along a written text. Within the section titled ‘Reference’ (1.2.5.1.4) personal pronouns are analyzed from different approaches included SFG which is used in this classroom research. Personal pronouns have an important function in discourse since their faulty use of them could result in a text difficult to understand (Downing and Locke 2006).

The first part finishes with a section (1.2.6) devoted to the concept of *register* which is central to Halliday’s grammatical model (1976). This concept together with the cohesion make a text to be defined as such and not a list of unconnected sentences. Halliday divides the concept of register into three components: *field*; *tenor*; and *mode*. Each component coincides with a metafunction mentioned above. Therefore, field is related to the ideational metafunction, tone to the interpersonal, and mode to the textual.

In the second part SFG and education are connected. The concepts of literacy and written language are expanded and linked to language education and the different types of texts

learners encounter throughout the school years. Halliday's model is the most explicitly education-oriented (Byrnes 2006: 3) and it has been precisely in the field of language education in which SFG has been most widely deployed throughout the decades of its evolution (Halliday 2009: viii).

It has to bear in mind the difference between written and spoken language since they have different linguistic features. Halliday uses the term *literacy* to refer specifically to writing as distinct from speech and to the effective participation of any kind in social processes (1996: 98). Nevertheless, in this thesis the concept of literacy is used for written language because the classroom research analyzes exclusively the students' written language.

The concept of grammar and writing are crucial in education and according to Vygotsky these two together help the child to rise to a higher level of speech development (1962: 101). This Knowledge about Language (KAL) has to be done explicitly so it brings the unconscious knowledge to conscious (Rose and Martin 2012: 236).

Written language presents specific characteristics: it is not anchored in the here-and-now; it is not tied to the environment in which it is produced in the way that conversation is; some cohesive elements tend to be anaphoric; it presents a synoptic view; and references tend to be endophoric (Halliday 1979: 70).

One important aspect of written language is connectedness. A cohesive tie is a semantic relation between an element in a text and some antecedent that is crucial to its interpretation (Yde and Spoelders 1987: 187). One of these cohesive elements is personal pronouns providing cohesion to the text. The classroom research (part III) focuses precisely in the learning of these personal pronouns to facilitate students the production of more coherent and more comprehensible texts.

Section 2.3 analyzes the different stages or phases students go throughout the school years. These stages are four: early childhood (from 5 to 8); late childhood to early adolescence (from 9 to 12 or 13); adolescence (from 11 to 14); and from late adolescence to adulthood (from 16 to 17 or 18). It is during the first years (early childhood) in which formal schooling commences, and children need to make many adjustments to learn the patterns of oral language characteristic of schooling in order to participate effectively in class work. It is also during this period when children face the specificities of school subjects such as History, Science, and Language (among others), but it will be during the transition from primary to

secondary school when these specificities are considerable. It is in this stage where the linguistic knowledge is assessed and where the students who fail to master the grammatical and discursive features of written language, both in reading and writing, will struggle and fall behind (Christie 2012: 72). In this sense, a good knowledge of functional grammar would be beneficial for teachers and teacher educators so that they could make considered decisions about what knowledge to teach, and when to teach it (Christie 2012: 223). These school subjects and their particularities are succinctly presented in section 2.4 where the concept of register already mentioned in part I (section 1.2.6) is revisited. In table 29 the main linguistic features across texts and school subjects are presented.

Part II concludes with an exposition of the Australian case. This model, known as the ‘Sydney School’, applies SFG to the development of language and arises from the need to democratize the results from the educational system. Joan Rothery and Jim Martin, among others, have investigated the Types of texts students have to read and write in school. Their point of departure is the works done in education by Basil Bernstein and Michael Halliday (Rose and Martin 2012: 4). This approach is to make the entire language-learning task explicit, and this means building up a lot of new knowledge about language (KAL) for both teachers and students (2012: 10). This is what Bernstein called *visible pedagogy* contrasting with the *invisible pedagogy* typical of the constructivism approach (1975:119-20). This project starts in primary education (*Writing Project*), it continues in secondary education (*Write it Right Project*), and it goes up to tertiary education (*Reading to Learn Project*).

The results of this project can be observed in the latest PISA report (table 30) where Australia was placed at number thirteen in Reading among the sixty-five countries taking part in the program. All in all, Australia performed above the OECD countries in the three competencies (mathematics, reading, and science). Reading literacy in PISA is defined as ‘an individual’s capacity to understanding use and reflect on and engage with written texts, in order to achieve one’s goals, to develop one’s knowledge and potential and to participate in society’ (oecd 2009: 14).

The third part consists of three subparts: the first explains the motivations for this classroom research, previous studies on the topic, theories on language teaching and language learning and some linguistic concepts related to the process of learning a language; the second is

devoted to the design of the research, as well as the collection of the students' exercises; and the third presents the results of the research.

The reasons that made me study the use of personal pronouns were, firstly, their high frequency, both in written and spoken English (Biber et al. 2010: 334), and secondly, the high number of errors observed in ESL students (section 3.2.3.1).

In addition, the use of personal pronouns has been studied by authors such as Joan Tough (1970 in Bruner 1973a: 149), Bernstein (1974), and Hawkins (1977). These authors find a connection between the use of *exophoric* and *endophoric* referents and children's social level. In general, children from a lower social class tend to use exophoric referents. This is what Bernstein calls 'the parochializing effect of a culture of poverty that keeps language tied to context, tied to common experience, and restricted to the habitual ways of one's own group' (1974: 79). It needs to be reminded that written language is not anchored in 'the-here-and-now', in the environment in which is produced, contrary to spoken language (Halliday 1979: 70). This is a crucial difference because in part II of the present thesis there is an explicit mention to the different types of knowledge (common and educational), as well as the terminology used by various authors (tables 24 and 25 respectively). Students' success it will depend, to some extent, of how teachers and educators interpret and understand this difference.

This part continues with the definition of some concepts related to the learning of languages such as the difference between learning and acquisition, factors influencing language learning (age, aptitude, attitude, motivation, and personality among others), and language transfer and the concept of interlanguage.

A section is devoted to the previous studies conducted on the acquisition and learning of personal pronouns. In relation to the former, Brown (1973) highlights the early acquisition of the personal pronouns *I*, *you*, *me*, especially when children themselves occupy those roles (Charney 1980). In relation to the latter, some authors conclude that students use similar strategies when reconstructing English syntax, thus language transfer does not seem to be the source of errors (Dulay and Burt 1974; Larsen-Freeman 1975). Furthermore, students seem to benefit from formal instruction (Seow 2004) and to learn individual features one at a time (Felix and Hahn 1981), independently of the style (Collin 1988).

There are many authors who consider *form-focused instruction* beneficial to students (Chaudron 1988; Long 1991; Ellis 1997; Larsen-Freeman and Long 1999; Halliday 2003a; Marinova-Todd 2003; Corbeil 2005; Ziemer Andrews 2007; Spada 2008; Brown 2014 among others) and it depends, to a great extent, on the teacher who is the person who decides when to introduce certain aspects and how to do it. It is important to point out that Vygotsky considers that ‘language and perception are linked’ (1978: 33) and that ‘attention’ should be given first place among the major functions in the psychological structure underlying the use of tools because the child may pay attention in order to see the stick while the ape must see the stick in order to pay attention (1978: 36).

After this a section is devoted to a systemic-functional approach to the language learning and language teaching. First of all, Halliday considers these terms (learning and teaching) two aspects of a single process (2007: 354) thus, they are treated together. According to Schleppegrell, the systemic-functional model allows us to focus on the forms through which knowledge is construed and enables teachers to make explicit the ways that meanings are made through language (2010: 3). Schleppegrell states that as students move into middle school and secondary school, the tasks they are asked to do become more and more dependent on control of a wide range of linguistic resources and their success or failure is very much related to their knowledge of the linguistic resources necessary to develop academic tasks (2010: 22-4). This type of language is organized into linguistic patterns different from the ones found in spoken language (section 2.2). These differences and difficulties were already mentioned in part II of this thesis where the different school subject, in primary and secondary education, and the different stages of language development were treated. It is important to highlight that many students do not have as their mother tongue the language used in school (English in this particular case) making even more difficult their access to these academic structures needed to the academic knowledge development. Furthermore, many students who speak English fluently do not have the same writing level, this has to do with the differences between the two types of language (spoken and written) already mentioned. It is here where the role of teachers is key and how they make students participate from those linguistic resources and patterns (2010: 153-4). This approach considers that the difficulty lies in learning academic content in the language through which content is taught and learned, and it views the learning of language and content as inextricably linked, rather

than as separate processes (2010: 163-4). This is why I consider the quality of instruction and the explicitness of the contents key factors in the language development along the school years.

It is necessary to make the distinction between the terms ESL and EFL. In both the English language is studied but while in the latter the language used in the community around the school is other than English, in the former is English. This makes the learner's task threefold: making sense of instructional tasks posed in the L2; attaining a sociolinguistic competence to allow greater participation; and learning the content itself. This requires a great knowledge of the language and it could be overwhelming to those students. As a result, teachers need to be aware of those challenges and facilitate and guide the comprehension to avoid errors in communication and unnecessary problems of disciplines (Fillmore 1982 in Menyuk 2005: 107).

The clauses used in the classroom research have been selected bearing in mind the following criteria: linearity as a major syntactic aspect of language first acquired by children (Brown 1973: 8); the fixed word order in the English language (Halliday 1985b: 216); the semantic orientation of SFG (Halliday 2005: xv); the clause as the meeting point of all functions of language (Halliday 1989: 66; 2002: 175 among others); constituents as a mechanism for organizing and expressing meaning (Halliday 1985a: 18); and the overriding number of positive clauses (Halliday 2009: 69). All this considered, the result is the 'prototypical clause' (Rosch 1978: 27) based on the principles of categorization of predication that helps students draw attention into the clause structure and the relationship among its participants.

Section 3.2 is devoted to the design of the classroom research and it starts highlighting the role of the teacher as a researcher. The school, where the research was conducted, is located in Sampson County, in North Carolina in the USA. The school has around 700 students divided into three grades: 6th; 7th; and 8th. These grades correspond to the 6th grade of primary school and 1st and 2nd of secondary school in Spain. The students' anonymity and confidentiality were protected through a codified system where the first letter(s) stands for the type of group the students belong to (Experimental, Control, or Native), followed by the number of the subject in each group. Tables (37-42) summarize that information and the ESL students' level obtained in the latest national exam of the English language (ACCESS test), or in the initial test (W-APT), if they were newcomers or that datum was not available. From

that test only the results in reading and writing were used since this research, already mentioned, focuses on written language.

This study is a quantitative and experimental research but it is also qualitative, to a lesser extent, because it tries to understand students' strategies when dealing with written information. It is a deductive approach, i.e. the research begins with a theoretical framework (SFG in this case) and derives a hypothesis from it. In this research there were two control groups (CG), one experimental group (EG), and three groups of native speakers (Ns) to compare with. Two CGs were selected because the 'mortality' among these subjects is very high. It is common to have students enrolling in school in January or moving to another school in the middle of the academic year.

The research consisted of four parts: pre-tasks; post-tasks (after the classroom instruction); follow-up1; and follow-up2.

During the school year 2007-08 I observed that students made many errors when using personal pronouns. At that time I conducted a non-experimental research (López Bermudo 2008) and I collected students' exercises on personal pronouns, subject and object, from both ESL students and Ns of AmE. The results showed that there was not a big difference between the ESL students and the native speakers and that the concepts of gender and number caused some problems. Furthermore, the personal pronoun neuter *it* caused some problems when students had to connect it with an abstract antecedent, with a long sentence, or when the distance of the antecedent was longer than four words.

These results are the point of departure of the present research and it focuses on the learning of personal pronouns in English as a second language from a Systemic-Functional approach. It aims at students gaining a deeper understanding of the different constituents, including processes, within a clause and correlating them to their syntactic function. A general purpose is to raise language awareness to help students understand the structures, patterns, and word order in the English language. The main purposes can be summarized as follows:

- To examine the effects of the instruction on semantic roles on the learning of personal pronouns, subject and object, after an instruction on semantic roles and type of processes.
- To determine the effect(s) that the instruction on semantic roles can have on students' knowledge of syntax.

- To determine the plausible effects of that instruction on reading comprehension and on writing production.

The present classroom research tries to measure eleven variables which are grouped into four hypotheses:

Research question 1: will instruction on semantic roles help students identify personal pronouns and find their antecedents?

Variable 1.1: recognize personal pronouns, subject and object

Variable 1.2: relate personal pronouns to their antecedents

Research question 2: will instruction on semantic roles help students identify constituents within the clause and relate them to their corresponding syntactic functions?

Variable 2.1: recognize constituents/groups (NG, AdvG, VG) within a clause

Variable 2.2.: relate semantic roles/groups to syntactic functions (S-V-O)

Research question 3: will instruction on type of processes help students to understand and use complex language structures?

Variable 3.1: usage of passive voice

Variable 3.2: usage of subordination

Variable 3.3: usage of different processes

Research question 4: will instruction on semantic roles and processes help students to produce more accurate and construe more cohesive writings?

Variable 4.1: usage of cohesive devices

Variable 4.2: usage of Themes

Variable 4.3: relate pronouns and abstract antecedents in a reading passage

Variable 4.4: sentence structure and word order

The research consisted of collecting students' exercises at four different times during the school year. The pre-tasks were collected in October 2011, the post-tasks in December 2010 (after the instruction), the follow-up1 in March 2011, and the follow-up2 in June 2011.

From tables (37-42) two observations can be made: firstly, that ESL students tend to be slightly older than Ns in the same grade; and secondly, that almost half of the students who did not exit the ESL program was because of the writing part. In section 3.2.2.3 it was mentioned that in order to exit the program students needed an overall score of 4.8 with a minimum of 4.0 in reading and writing.

Table 43 below summarizes the sessions of instruction with the types of processes and the semantic roles in each one. The examples have been maintained in English because their translation could result in a different analysis of their components.

The sentences used were taken from Matthiessen (1995) and Martin et al. (1997) and, in some cases modified so as to make sense in the real world of the students. The instruction took place during the first 30 to 45 minutes of the class. In the USA school system, classes are usually longer than in Spain, for instance, in high school they can be up to 90 minutes and in middle school up to 80 minutes.

Material Processes	<p>Processes of Doing</p> <p>1st Session: something happens [no Range] or somebody does something [Circumstance] <i>Mary ran fast.</i> <i>The girl cried in the afternoon.</i></p> <p>2nd Session: someone causes or modifies something <i>Diana is fixing the fence.</i></p> <p>3rd Session: someone gives something to someone else <i>My father gave me a book.</i></p> <p>4th Session: someone does something [Range] <i>Mary walked the streets of New York.</i></p> <p>5th Session: Revision Passive voice</p>
Mental Processes	<p>Processes of Sensing</p> <p>6th Session: someone senses something [+Phenomenon]. Present <i>Students heard the teacher.</i></p> <p>7th Session: someone senses that something/someone... [+Phenomenon]. Present continuous <i>Students are learning a lot.</i></p>

Verbal Processes	Processes of Saying 8 th Session: someone says something to someone else <i>John told me a pack of lies.</i> 9 th Session: someone says that something/someone... <i>Vivian said that Charles was not coming.</i> <i>Vivian said: "Charles is not coming"</i>
Relational Processes	Processes of Being 10 th Session: intensive <i>Tanisha is big.</i> [attributive intensive] <i>Latoya is my doctor.</i> [identifying intensive] Attributive possessive <i>Trevor has some pencils.</i> Attributive circumstantial <i>Mrs. Moore is in the cafeteria.</i> 11 th Session: Revision

Table 43: Summary of the instructional sessions

Section 3.3 presents the results of the classroom instruction. This section is divided into different parts, each one explaining the different exercises students did.

Subsection 3.3.2 is about *anaphoric reference* and as a general result, the EG reduced the number of errors along the research. All students, regardless the group they were in, used similar strategies when they had to locate an antecedent. These strategies can be summarized as follows:

- When they encounter a difficult word, they looked for a synonym within the sentence
- The Human Participant was favored
- Feature over object was selected; and
- Students related to the here-and-now situation

In subsection 3.3.3 Groups, syntactic Functions, and the Substitution of personal pronouns are analyzed. EG ended up having the fewest number of errors. Nevertheless, all the groups underwent the same stages, that is to say, they reduced the number of errors in the post-tasks

and they increased in the follow-up tasks. It seems that students have problems locating Nominal Groups when they are compounded.

In relation to syntactic Functions, EG was the only group that reduced steadily the number of errors.

In the exercises on personal pronouns substitution EG ended up having the fewest number of errors when replacing Subjects. In general, all the groups, but CG1, reduced slightly the number of errors. Within the Ns, N6 performed the best. Regarding dO and iO replacement, it is worth highlighting that the number of errors in iO was reduced while the dO was maintained quite high. One of the conclusions is that students favored the human participant within the clause and, in this sense, the iO who were humans were replaced to the detriment of the objects.

In the Reading exercises the students' behave in a similar way. A reduction in the number of errors was produced except in EG with 8th graders that ended up having the higher number of errors.

Table 71 below summarizes the results across groups in relation to *construed exercises* throughout the school year.

	Anaphoric Reference		Reading		Groups		Subjects		dO		iO	
	PRE	FU -2	PR E	FU -2	PR E	FU -2	PR E	FU -2	PR E	FU- 2	PRE	FU -2
EG	56	31	61	29	31	27	68	12	87	65	86	18
CG1	80	58	85	67	26	48	85	83	95	99	100	93
CG2	77	54	83	58	34	52	58	52	87	97	87	75
N6	48	40	50	36	21	43	24	15	74	78	80	39
N7	52	57	50	50	8	42	21	24	66	85	74	61
N8	41	62	57	56	15	45	57	33	71	83	77	63

Table 71: Summary of results across groups and tasks

In subsection 3.3.6 students' composition are analyzed and there has been a few elements observed: number of sentences; Themes; personal pronouns; type of relation between clauses; and Process types.

In relation to the number of sentences, students did not seem to have a clear idea about what a sentence is. In some compositions there were one or two sentences, while in others there was one per line.

Students mainly used simple Themes over multiple Themes. They favored *thematic development* in which the Theme was constant along the different sentences in the composition.

In the use of personal pronouns, just to highlight the 'overuse' of Subject, especially in first personal singular *I* and *we*. This is a feature of spoken language that students transfer to written language.

The relationship between clauses is *paratactic* and when *hypotactic* is due to the use of the conjunctions *if* and *because*.

The Process types used by students are mainly Material. In only a few occasions they used Verbal Process although the number increased in the follow-up tasks. In general, compositions present little variety regarding Processes and much repetition of common verbs such as *be*, *say*, *do*, *go*, etc.

Section 3.12.4 summarizes the results on some exercises on the passive voice. This concept was not included in all the tasks and it was administered to see if the students' KAL increased in relation to the recognition of this voice, as well as the recognition of the Receiver in this type of sentences. As a result, EG improved the recognition of both, the voice and the Receiver.

Finally, part IV is a summary and conclusions where reader is directed to future research using SFG as a model. The difference between written and spoken language is highlighted and the need to teach explicitly the linguistic resources being these necessary for students to reach an academic language level enough to success in high school and in tertiary education. In this sense, SFG is a useful and beneficial tool to reach this goal.

Some themes are pointed for future research such as: grammatical metaphor or nominalization; Process types across registers; Themes; and the relation between formal instruction and L2 learning.

To conclude with, it is important to remind that we live in a global world and many children study in a language different than their L1. Furthermore, many countries are implementing bilingual programs in their education system, from primary to tertiary level. It is precisely in those schools where SFG and research based on it can be very beneficial for students who are facing reading and writing in a *foreign* language at a high level. Australia is an example of the good results achieved through the last three decades with the implementation of this approach.

PART I. INTRODUCTION

“Grammar is the level of formal organization in language.” (Halliday 1973: 98)

1.1 Origin of the thesis and research questions

The origin of this thesis goes back to the years I worked as a teacher in secondary education in the United States. During that time I had the opportunity to work both with native and non-native speakers who had to meet the same curricular demands as the natives. It was the latter group from whom I learned the most. Thanks to their varied language level, literacy, background, age and motivation I could magnify the complex and fascinating process of teaching a language and also the converse process of learning a language.

Their errors or mistakes awakened my curiosity and took me to delve into language, in particular written language, and their relation to school success or failure. It was one particular kind of these errors that I decided to analyze and take into further research. The reason for my choice is that the faulty use of the personal pronouns made me realize that there might well be a connection between the ability to use them, in terms of both production and comprehension, and the reading comprehension level.

The present thesis is the classroom research I designed using a systemic-functional approach. For this purpose I follow Halliday (1985a, 1994a, 2013 and successive editions), Halliday and Matthiessen (2004), Christie (2012), Schleppegrell (2006), and Menyuk (2005) among others. I also take into consideration the valuable work in education of authors such as Bruner (2006), and in particular Vygotsky (1962, 1978), who has been a revelation and more than an inspiration throughout this challenging task.

My impression was that the explicit teaching of some linguistic concepts, especially within SFG, would benefit students. In particular, my hypothesis was that the explicit teaching of transitivity would be beneficial for the students' use of personal pronouns and in other respects.

The research questions aimed at seeing if the explicit instruction on semantic roles and process types would help students: identify personal pronouns and their antecedents; identify constituents within a clause and relate them to their corresponding syntactic functions; understand and use complex language structures such as passive voice and subordination; and produce more accurate and construe more cohesive writings.

It is a quantitative, experimental and longitudinal research in which six different groups of students took part, distributed as follows: one experimental; two control; and three groups of native speakers. Students' exercises were collected throughout the school year 2010-11. The experimental group received explicit instruction, in eleven sessions, on types of processes and the participants taking part in each one. Students were provided with examples on Participants, Processes, and Circumstances, along with vocabulary. This is fully explained in section 3.2 below.

1.1.1 Organization of the thesis

The present thesis is organized in four parts. The first one introduces Halliday's Systemic-Functional Grammar (hereafter SFG) with special emphasis on the ideational and textual metafunctions, since both are the core of the classroom research developed in part three. It also introduces the concept of register, which is a key element in Halliday's model owing its relationship with school subjects and the connections to literacy development. It devotes a special section to personal pronouns from a traditional and a systemic-functional perspective, since personal pronouns and their role in providing cohesion to texts are the main grammatical elements studied in this thesis.

In the second part SFG and education are connected. The concepts of literacy and written language are expanded and linked to language education and the different types of texts learners encounter throughout the school years. Finally, the example of Australia is depicted to see how the use of SFG has been implemented as a holistic approach to language and education.

The third part is a classroom research conducted in USA with students of English as a Second Language (ESL) where SFG was used to help students learn the English personal pronouns along with enlarging their vocabulary, improving their reading comprehension and their writing skills by focusing on semantic Roles, Process types and Circumstances. Furthermore, the use of Themes used by the students, both native and non-native, was analyzed together with the types of processes used in their compositions.

Finally, the fourth part commences with a summary and draws conclusions directing readers to future researches on the application of the SFG to English as a Second and Foreign language (ESL and EFL respectively).

1.1.2 Types of grammar

Halliday (1977a) suggests that it is possible to trace two views of language through the history of Western thinking about language, i.e. language as rule and language as resource. As a subsystem of language, grammar is thus similarly seen either as rule or as resource. Sometimes one view has dominated, sometimes the other; sometimes they have been more balanced. While the first is a product of our primary socialization and belongs to the reality that is learned at our mother's knee, and the second is part of a secondary reality and belongs to the realm of organized knowledge, they impinge on each other very little. In most of our conscious thinking, the dominant model is that of language as rule; in school we learn the formal grammar of logic, not the functional grammar of rhetoric (1977a: 34). Nowadays this is changing and countries and different educational systems are emphasizing the importance of writing a variety of text types.

These two different views are oriented towards different disciplines and their proponents develop different theories of grammar as table 1 below shows.

Language as Rule	Language as Resource
philosophy	ethnography
logic	rhetoric
formal grammar	functional grammar

Table 1: Different theories of grammar (after Matthiessen 1995: 64)

Both formal grammar and functional grammar are, in fact, families of grammars (partly genetic and partly typological families) as table 2 displays.

In addition, the basic contrast between them is the conceptualization of language as a resource for meaning (functional linguistics) and the conceptualization of language as a system of rules (formal linguistics). One of the main advantages of a functional grammar over a formal one is that it allows us to reason grammatically, i.e. functional linguistics is concerned with choice, with what speakers might and tend to do, while formal linguistics on the other hand is a linguistics concerned with restrictions (Martin 1992: 3). This is a main point in the present thesis since it uses SFG to help students to reason about language. These differences are shown in table 3.

Formal Grammar	Functional Grammar
Transformational Grammar (TG)	Systemic Functional Grammar (SFG)
Government and Binding Grammar (GB)	Functional Grammar (FG, by S. Dik)
Generalized Phrase Structure Grammar (GPSG)	Tagmemic Grammar
Lexical Functional Grammar (LFG) Head Driven	West-Coast functionalism
Phrase Structure Grammar (HPSG)	

Table 2: Families of grammars (after Matthiessen 1995: 64)

Formal grammar is constructed in large part to answer philosophical questions – questions having to do with the nature and origin of knowledge. In contrast, functional grammarians are concerned with a variety of questions concerning grammar as a socio-cultural system. Formal grammar takes categories from logic, such as Subject + Predicate (translated as NP + VP), while functional grammar is oriented towards the rhetorical tradition with its interest in categories such as Theme + Rheme (Matthiessen 1995: 64).

Language as a resource	Language as a system of rules
Language is a network of relationships	Language is a set of sentences
Description shows how these relationships are inter-related	Description shows which sentences are in the set and which out
Explanation reveals the connection between these relationships and the use to which language is put	Explanation reveals why the line between in and out falls where it does in terms of an innate neurological speech organism

Table 3: Differences between language as a rule or as a resource (after Martin 1992: 3)

As Halliday points out (2002: 307), grammar is part of language. It is a resource for meaning, it is a theory of experience and, like any other theory, something to think with. It is through grammar that we make sense out of our experience, both of the world we live in and of the world that lives in us, construing a reality such that the one can be reconciled against the other.

1.1.3 A note on terminology

An explanation of the meaning of SFG is required beforehand. Firstly, the term *systemic* is used because grammar is a system with a set of options and an entry condition: that is to say, a set of things of which one must be chosen, together with a statement of the conditions under which the choice is available (Halliday 1973, 1976, 2003a, and 2005). Therefore a systemic theory is a way of doing things, it is explicitly constructed both for thinking with and for acting with (Halliday 2003a: 177-97).

Secondly, it is *functional* in three distinct although related senses: in its interpretation of texts, of the system, and of the elements of linguistic structures.

1. - It is functional in the sense that it is designed to account for how the language is used.
2. - The fundamental components of meaning in language are functional components called metafunctions¹. They are the manifestations in the linguistic system which underlie all uses of language: to understand the environment (ideational), and to act on the others in it (interpersonal). Combined with these is the third metafunctional component, the textual. These metafunctions are going to be seen in depth later.
3. - Thirdly, each element in a language is explained by reference to its function in the total linguistic system. In this sense, each part is interpreted as functional with respect to the whole (Halliday 1973; 1985a: i-xiv).

And thirdly, Halliday uses the term *grammar* to refer to the level at which the different meaning selections are integrated so as to form structures. Thus, grammar is the level of formal organization in language, it is a purely internal level of organization, and is in fact the main defining characteristic of language. But it is not arbitrary (Halliday 1973: 93-8).

Halliday's grammar is semantically driven, therefore the linguistic items are functionally based, not syntactically based. Moreover, it is interested in both written and spoken language (1989: ix-xv).

Bloor and Bloor summarize Halliday's idea of grammar by saying that 'grammar is concerned with meaning and with how the language is used' (1995: 2).

¹ These are not to be confused with the functions of language which simply means purpose or way of using language such as instrumental and regulatory (Halliday 2003a: 311).

1.1.4 Linguistic applications of SFG

As Halliday highlights in the first edition of his introduction to Systemic Functional Grammar (1985a, 1994a, 2004, 2013 and successive editions), a theory is a means of action and there are many very different kinds of actions (involving language) one may want to take. At the same time, a theory should not be so specialized that one can only do one thing with it. There are very many tasks for which linguistics is needed, and they make very different demands on the subject.

Applications of linguistics range from research applications of a theoretical nature to quite practical tasks where problems have to be solved. Some of the uses of linguistics are enumerated below, but not limited to:

- understand the nature and functions of language;
- understand what all languages have in common (i.e. what the properties of language are), and what may differ from one language to another;
- understand how languages evolve through time;
- understand how a child develops language, and how language may have evolved in the human species;
- understand the quality of texts: why a text means what it does, and why it is valued as it is;
- understand how language varies, according to the user, and according to the functions for which it is being used;
- understand literacy and poetic texts, and the nature of verbal art;
- understand the relation between language and culture, and language and situation;
- understand many aspects of the role of language in the community and the individual: multilingualism, socialization, ideology, propaganda, etc.;
- help train translators and interpreters;
- write reference works (dictionaries, grammar, etc.) for any language;
- understand the relationship between language and the brain;
- help in the diagnosis and treatment of language pathologies arising from brain insults (tumors, accidents) or from congenital disorders such as autism and Down's syndrome;
- understand the language of the deaf (sign);
- design appliances that will aid the hard of hearing;
- design computer software that will produce and understand text, and translate between

languages;

- design systems for producing and understanding speech, and converting between written and spoken text;
- assist in legal adjudications by matching samples of sound or wording;
- design more economical and efficient means for the transmission of spoken and written text.

In the same way, Halliday (1996: 139) and other authors like David Crystal (1990: 19) have remarked that one of the most important applications of linguistics is to help people learn their mother tongue: reading and writing, language in school subjects, etc. and to help people learn foreign languages. This has become a very important field in many countries.

In Hasan and Williams' words:

...functional grammar is the means through which teachers might learn to use grammar as a professional resource, not only in teaching students about language as part of a literacy curriculum but also for a wider range of other educational purposes, including the assessment of children's language development (1996: xix).

Along with mother tongue and foreign languages we can also mention second languages which are becoming more and more common all around the world.

Larsen-Freeman and Long (1999) remark that the acquisition of second languages in a formal school setting, however, is not the only context where second languages have their place in the world today. English, the most important second language for people in the world, has increasingly become the international language for business and commerce, science and technology, and international relations and diplomacy. Other professional intercourse, such as the proceedings of meetings of health practitioners or educators from many different parts of the world, is often conducted in English, a second language for many of the participants. In fact, it has been estimated that although only 325 million among the world's 4.7 billion people are native English speakers, for as many as 1.4 additional people, English is an official second language (1999: 1) (cf. Crystal 1985: 7).

Another example of second language use linked with occupations is the *Gastarbeiter* or migrant worker situation in Europe. In recent years, 11 million workers, primarily from Greece, Spain, Italy and Turkey, have left their homes and families to seek employment in the industrialized Western Europe countries. The migrant workers typically do not speak or understand the language of their new environment when they arrive. This has made for a number of social problems in the host community. It has also afforded a unique opportunity

for SLA researchers to study what, or how language is acquired. In short, not only do second languages have a place in school, they also affect many other aspects of people's lives. In the interdependent world of today, second language acquisition and use are ubiquitous (1999: 2).

Halliday states that

the way it has turned out, English has become a world language in both senses of the term, international and global: international as a medium of literacy and other cultural life; global, as the co-genitor of the new technological age, the age of information. That was not the case 50 years ago and it may well not be the case 50 years from now; but for the moment, that is how it is (2003b: 16).

The importance of second languages is evident when more than half of the children in the world are raised in environments that provide them with more than one language (Menyuk and Brisk 2005: x). As a consequence our schools currently serve many second language learners (Schleppegrell 2010: 153). Thus, education faces daunting new challenges around the world today. Complex context of literacy use in adult life require that students develop advanced competencies in all school subjects. At the same time, global migration has increased the diversity of classrooms around the world, where many children now learn in a language that is not their mother tongue (Schleppegrell 2012: vii).

1.1.5 Why the clause

In this section I will explain why the clause has been selected as the central element for the classroom research (part III below).

Halliday and Hasan (1976: 1) offer the following definition of text: 'The word TEXT [original capitals] is used in linguistics to refer to any passage, spoken or written, of whatever length, that does form a unified whole.'

In functional grammar the basic unit is often said to be the clause. What this means is that in language itself the clause has a special place in expressing meaning because it is at this rank that we can begin to talk about how things exist, how things happen and how people feel in the world around us. It is also at the rank of clause that we usually use language to interact with others (Bloor and Bloor 1995: 6). SFL considers grammar and lexis as a continuum, i.e. lexicogrammar includes lexis (vocabulary) as well as grammar in one unified system; lexis is interpreted as the most specific (delicate) part of grammar (Matthiessen 1995: 5). In a lexicogrammar, each element (each word or group or clause, for example) has to be seen as

part of the systems of the language. This means (in part) that each element is seen in relation to the elements that are next to it in the text. Therefore, each element is said to have some function in relation to the linguistic system. One type of language analysis depends on assigning grammatical functions to linguistic elements (Bloor and Bloor 1995: 7-8).

As Halliday posits (1989: 66), the clause is the grammatical unit in which semantic constructs of different kinds are brought together and integrated into a whole. The clause is the unit where meanings are organized and wrapped up together.

Furthermore, the clause is the center of action in the grammar. In this sense, the clause has to be introduced because it is the place, or the locus, where fundamental choices in meaning are acted out (Halliday 2005: xv).

The so-called simple sentence is a sentence consisting of one clause. What is traditionally known as a compound sentence will still consist of two or more clauses; and each of them potentially carries the same load of information as the single clause of a simple sentence (Halliday 1989: 66).

The clause is a functional unit with a triple construction of meaning: it functions simultaneously, firstly, as the representation of the phenomena of experience, as these are interpreted by the members of the culture; secondly, as the expression of speech function, through the categories of mood; and thirdly, as the bearer of the message, which is organized in the form of the Theme plus exposition (Halliday 1989: 67). This triple construction is represented in figure 1 below.

	Sister Susie	is	sewing	shirts	for soldiers
transitivity	Participant Agent/Actor	process Material		participant Goal	participant Beneficiary

Mood	Subject	Finite	Predicator	Complement	Complement
	Mood	Residue			

Theme	Theme	Rheme			
-------	-------	-------	--	--	--

Figure 1: Analysis of a clause (based on Halliday 1985a: 78)

A clause, then, can be defined as the locus of choices in Transitivity, Mood, and Theme. This does not imply that all choices under these headings are open to all clauses; they are not. But every clause embodies some pattern of selection in these three functional components of the grammar (Halliday 1989: 68).

The functions of language are reflected in the structure of the clause (Halliday 2002: 156). Although texts and clauses are different and have two distinct natures, texts being semantic and clauses being lexicogrammatical, Halliday proceeds to point out how they are alike. Firstly, language serves for the expression of the speaker's experience of the real world, including the inner world of his own consciousness (ideational function). Secondly, language serves to establish and maintain social relations (interpersonal function). And thirdly, language has to provide for making links with itself and with features of the situation in which it is used (textual function). These functions and how they are expressed through various configurations of structural roles – functional elements such as process and actor that derive from these basic functions (Halliday 2002: 156; 174-5).

Now a clause is a complex realization of all these three semantic functions. It has an ideational component, based on transitivity, the processes, participants and circumstantial elements that make up the semantics of the real world, and including the onomastic system that classifies these into nameable of various kinds. It has an interpersonal component, consisting of mood, modality, person, key and all the various attitudinal motifs that come to be organized as meaningful alternatives. And it has a textual component, the functional sentence perspective (thematic and news-giving systems) and the cohesive resources of reference, ellipsis and conjunction. Each of these components makes its contribution to the total make-up of the clause. What we identify as a clause is the joint product of functional-semantic processes of these three kinds (Halliday 2002: 237).

Since the functions called ideational, interpersonal and textual are components of the semantic system, and since a text is a semantic unit, it follows that these components will be present in the text just as they are in the lexicogrammatical entities, the wordings by which the text is realized. In this sense, then, a clause is bound to be like a text: it originates in the same meaning potential (Halliday 2002: 241).

As Halliday explains:

A clause is a text in microcosm, a “universe of discourse” of its own in which the semiotic properties of a text reappear on a miniature scale. This is what enables the

clause to function as it does. What are clauses for? – to make it possible to create text. A clause does this effectively because it has itself evolved by analogy with the text as a model, and can thus represent the meanings of a text in a rich variety of different ways (2002: 246-7).

As has been succinctly shown above, and will be shown below in more detail, in Halliday's words (2003a: 317), a clause in English is the simultaneous realization of ideational, interpersonal and textual meanings. The clause is the mainspring of grammatical energy; it is the unit where meanings of different kinds, experiential, interpersonal and textual, are integrated into a single syntagm (Halliday and Matthiessen 2004: 50) (cf. Martin 1993b: 251). Not only is the clause a constituent of the text, it is also the actualization of the text, inheriting properties from the text-as-model which is itself realized in relation to the context of situation (Webster 2009: 6). Clauses create text, explains Halliday, because a clause has itself evolved by analogy with the text as model, and can thus represent the meanings of a text in a rich variety of different ways (Halliday 1981: 44).

To conclude, this is the main reason why the clause is being chosen to be the core of the present classroom research. The clause is the main rank where the different kinds of meaning are integrated.

1.1.6 The Rank scale

Halliday (1985a: 25) uses the notion of rank, which states that a sentence consists of one or more clauses; a clause consists of one or more groups; a group consists of one or more words; and a word consists of one or more morphemes. Each of these ranks refers to a unit of meaning, as example (1) illustrates

(1) Thomas T.| has been try-ing| his two tub-s| tentative-ly| to those two tall tree-s.|| (Halliday 1985a: 24)

As Halliday (1977a) explains, the rank is the place where structures from the different components (Ideational: Experiential and Logical; Interpersonal and Textual) are mapped on to each other (1977a: 177).

	Highest rank	clause complex	consists of one or more clauses
		clause	consists of one or more groups or phrases
RANK SCALE		group or phrase	consists of one or more words
		word	consists of one or more morphemes
	Lowest rank	morpheme	

Table 4: Components within the rank scale (after Halliday 1977b; Butt et al. 2003; Bloor and Bloor 1995; and Eggins 2007)

At this point it is important to make the difference between a Phrase and a Group. While the former is a contraction of a clause, the latter is an expansion of a word. The two achieve roughly the same status on the rank scale, as units that lie somewhere intermediate between the rank of a clause and that of a word (Halliday 1985a: 159). In example (2), ‘on the burning deck’ is a phrase (Prepositional Phrase in particular) and in example (3), ‘in a revolving door’ as well. In both examples, the phrase could have been expanded into a clause, such as ‘in a door which was revolving’.

(2) The boy| stood |on the burning deck| (Halliday 1985a: 190)

(3) He| got stuck| in a revolving door|| (Halliday 1985a: 165)

A Group being the expansion of a word can be of three different types: Verbal Group (VG); Adverbial Group (AdvG); and Nominal Group (NG) (1985a: 192). The grammar of the VG produces groups such as *will do*, *have done*, and *have been going* to do. The grammar of the AdvG produces groups such as *gracefully*, *quickly*, and *unfortunately*. And the grammar of the NG produces groups such as *Henry*, *message 45*, and *the messages that have been deleted* (Matthiessen 1995: 81).

Clauses are either MAJOR (clause) or MINOR (clause) (Halliday 1984: 15). Major clauses can have a Subject and a Finite (verb) and make a mood selection, whereas minor ones cannot. Minor clauses include calls (*Henry!*), greetings (*Hello!*), or exclamations (*Ouch!*). Minor clauses of the greeting type often occur at the boundaries of conversations whereas the major clauses carry the conversation itself forward. Major clauses make several simultaneous selections – one set for each metafunction (Matthiessen 1995: 78).

The primary word classes are essentially predictable from the primary group/phrase classes (as showed in figure 2 below). Secondary word classes differ with respect to which function

they can serve in the different groups. For instance, adjectives are one secondary class of nominals and they typically serve as Epithets in the structure of the nominal group (Matthiessen 1995: 83).

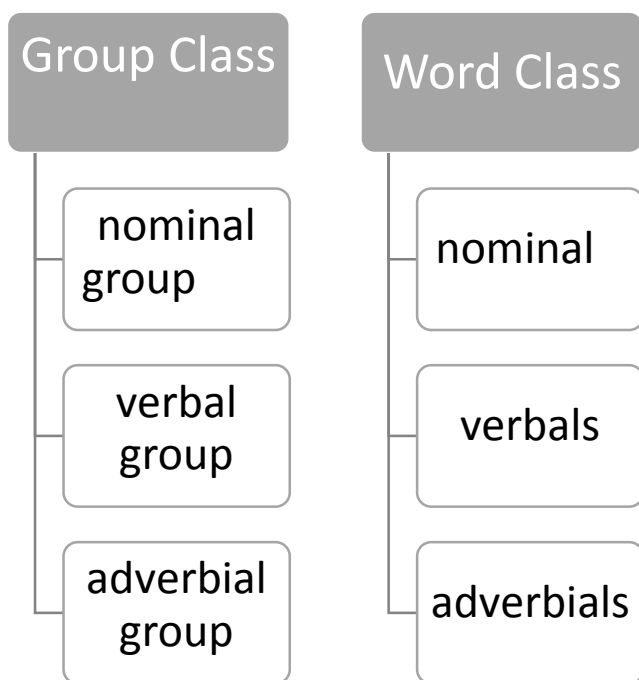


Figure 2: Primary word/group classes (after Matthiessen 1995)

These classes will be projected in the structure of the ideational function taking the function of Roles or Adjuncts, as table 5 shows.

Participants: Nominal Groups (Actor, Goal, Senser, Attribute, etc.)
Processes: Verbal Groups
Circumstances: Adverbial Groups (Location, Extent, Manner, Cause, etc.)

Table 5: Projection of the group classes in the ideational metafunction (after Matthiessen 1995: 81)

The VG is the constituent that functions as Finite plus Predicator (or as Predicator alone if there is no Finite element) in the mood structure (clause as exchange); and as Process in the transitivity structure (clause as representation). Example (4) illustrates how the VG functions as a Process in the transitivity structure.

(4) <u>He</u>	<u>wrote</u>	<u>them</u>	<u>a book.</u> (Matthiessen 1995: 209)
Actor	Material Process	Beneficiary	Goal

A VG is the expansion of a verb and a NG is the expansion of a noun. The former consists of a sequence of words of the primary class of verb and the latter of words of the primary class of noun. AdvG has an adverb as Head, which may or may not be accompanied by modifying elements (Halliday 1985a: 175-87).

This is a very simplified panorama but for the purpose of the present research these concepts are to be reduced and presented in an easy way to the students.

1.2 SFG in detail

1.2.1 Metafunctions

According to Matthiessen (1995: 18), the concept of metafunctions is crucial in the overview of the SFG model. Halliday (1985a: 53) mentions the three kinds of meaning that are embodied in human language as a whole, forming the basis of the semantic organization of all natural languages. These are the metafunctions: interpersonal, ideational and textual.

On the other hand, authors like Robin Fawcett (1980: 27) distinguishes eight functional components in the core of the semantics: experiential, logical relationships, negativity, interactional, affective, modality, thematic, informational; and three besides: inferential, metalingual, and discourse organizational.

I will follow Halliday's model of grammar and refer in the present thesis to the three metafunctions mentioned before. Halliday's model comprises the other functional components mentioned above and it is more suitable, for methodological reasons, to apply in the present classroom research. Next I will give a more detailed description of the three metafunctions and their components with special emphasis in the ideational metafunction (processes and participants) and textual (Theme) being both the core of the classroom research presented in this dissertation.

1.2.1.1 Interpersonal metafunction: clause as exchange

Following Halliday (1985a), this metafunction of the clause concerns the change of roles in rhetorical interaction: statements, questions, offers and commands, together with accompanying modalities (1985a: 53).

An interpersonal structure is formed by the Mood (Subject + Finite) and the Residue (Predicator + Adjunct + Adjunct). Mood represents the organization of participants in speech situations, providing options in the form of speaker roles: the speaker may inform, question or command; he may confirm, request confirmation, contradict or display any one of a wide range of postures defined by the potentialities of linguistic interaction (Halliday 1967b: 199). Table 6 presents the type of clauses and their analysis in terms of Mood and Residue and with the elements within each component.

Clause type	Mood [Subject + Finite]	Residue [Predicator + Complements + Adjuncts]
Declarative	We are	meeting again tomorrow.
Interrogative (yes/no)	Are we	meeting again tomorrow?
Interrogative (wh-)	(What) do you	want?
Exclamative	(What a shock) they'll	have!
Imperative	[no overt Subject]	Sit down!

Table 6: Type of clauses based on exchanging roles in rhetorical interactions (after Downing and Locke 2006)

1.2.1.1.1 Mood

According to Halliday (1985a), the Mood element consists of two parts: (a) the Subject, which tends to be a NG, and (b) the Finite element, which is part of a VG.

The Subject, in a declarative clause, is that element which is picked up by the pronoun in the tag. So in order to locate the Subject, a tag is to be added (if one is not already present) and the Subject is the element which is taken up. For example:

(5) *That teapot was given to your aunt*: here the tag would be *wasn't it?* (Halliday 1985a: 73).

This is not the definition of the Subject; it is the way of identifying it in a text. Note that the category that is identified in this way will in fact accord with the classical conception of the Subject as 'that noun or pronoun that is in person and number concord with the verb', i.e. Subjects *he, she, it* go with *has*, and *I, you, we, they* go with *have*. This formulation, however, has a rather restricted application in present-day English, because apart from the verb *be*, the only manifestation of person and number in the verb is the *-s* on the third person singular present tense. The other part of the classical definition of the Subject, 'that noun or pronoun which is in the nominative case', is even more restricted, since the only words in English which display case are *I, we, he, she* and *they* (and in formal language also *who*) (1985a: 73).

Table 7 shows the different elements within the Mood and the Residue.

The concept of Subject will be elaborated in more detail in section 1.2.2.

Possibly	she	just	has not	seen	it	yet
Adjunct	Subject	Adjunct	Finite	Predicator	Complement	Adjunct
Mood				Residue		

Table 7: Elements within the Mood and the Residue (based on Halliday 1985a: 82)

1.2.1.1.2 Residue

Halliday claims that there are three different elements in the Residue (1985a: 78-9):

a. Predicator (P). The function of the P is fourfold: (i) it specifies time reference, i.e. ‘secondary’ tense: past, present or future relative to the primary tense; (ii) it specifies various other aspects and phrases like seeming, trying, hoping; (iii) it specifies the voice: active or passive; and (iv) it specifies the process (action, event, mental process, relation) that is predicated of the Subject.

b. Complement (C). A C is an element within the Residue that has the potential of being Subject but is not. It is typically realized by a NG.

c. Adjunct (circumstantial). An Adjunct is an element that has not got the potential of being Subject. It is typically realized by an AdvG or a PP.

Furthermore, there are other types of Adjuncts viz., conjunctive and modal. Conjunctive Adjuncts tend to occur at points in the clause which are significant for textual organization such as *however* and *nevertheless*. These are outside the Mood-Residue organization; they have no function in the clause as exchange, while Modal Adjuncts fall in the mood and according to their place they fall into two groups:

(i) Mood Adjuncts: these relate specifically to the meaning of the finite verbal operators, expressing probability, usuality, obligation, inclination or time.

(ii) Comment Adjuncts: as far as position in the clause is concerned, these are like Conjunctive Adjuncts, i.e. they tend to occur thematically, finally, between Theme and Rheme, or between Mood and Residue; and when medial, they are typically associated with a boundary between information units. Table 8 below summarizes the principal Adjuncts, namely Conjunctive and Modal.

Adjunct	Type	Examples
Conjunctive	<ul style="list-style-type: none"> • Appositive • Corrective • Dismissive • Summative • Verifactive • Additive • Adversative • Variative • Temporal • Comparative • Casual • Conditional • Concessive • Respective 	<i>that is, in other words</i> <i>or rather; at least</i> <i>in any case, anyway</i> <i>in short, to sum up</i> <i>actually, in fact</i> <i>also, moreover, besides</i> <i>on the one hand, however</i> <i>instead, alternatively</i> <i>meanwhile, later on</i> <i>likewise, in the same way</i> <i>therefore, as a result</i> <i>in that case, otherwise</i> <i>nevertheless, despite that</i> <i>in this respect</i>
Modal	Mood: <ul style="list-style-type: none"> • probability/obligation • usuality • opinion 	<i>probably, certainly</i> <i>usually, sometimes</i> <i>in my opinion</i>
	Comment: <ul style="list-style-type: none"> • admissive • assertive • presumptive • desiderative • tentative • validative • evaluative • predictive 	<i>frankly, to be honest</i> <i>honestly, really</i> <i>evidently, apparently</i> <i>(un)fortunately</i> <i>initially, provisionally</i> <i>broadly speaking,</i> <i>wisely, foolishly</i> <i>to my surprise, amazingly</i>

Table 8: Types of Adjuncts (after Halliday 1985a: 50)

Although the modal Adjuncts are interpersonal rather than textual in function, expressing the speaker's comment on what is saying, they are not themselves part of the proposition, and therefore fall outside the Mood-Residue structure.

1.2.1.2 Ideational metafunction: clause as representation

Language serves for the expression of humans' experience of the real world, including the inner world of their own consciousness. Thus, language gives structure to experience and helps to determine the way of looking at things (Halliday 2002: 174-5).

In order to represent our experiences (outer and inner) of the world we use three components: processes, participants and circumstances. These are semantic categories which explain in the most general way how phenomena of the real world are represented as linguistic structures (Halliday 1985a: 102).

Figure 3 shows the importance of these elements, the process being the most central. Participants are close to the center and are directly involved in the process, bringing about its occurrence or being affected by it in some way. The configuration of Process + Participants constitutes the experiential center of the clause. Circumstantial elements enhance this center in some way – temporally, spatially, causally and so on but their status in the configuration is more peripheral and unlike participants they are not directly involved in the process (Halliday and Matthiessen 2004: 176).

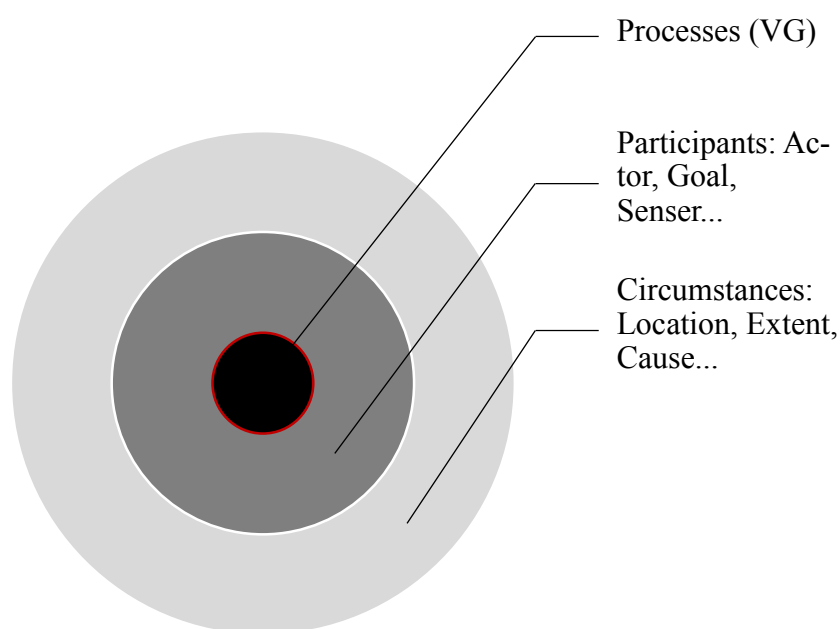


Figure 3: Components in the ideational metafunction (after Matthiessen 1995)

1.2.1.2.1 Processes and Participants

Using Halliday's words, Processes consist of the goings-on in reality: of doing, happening, feeling, being (1985a: 101).

There are six basic types of Processes grouped differently by different authors.

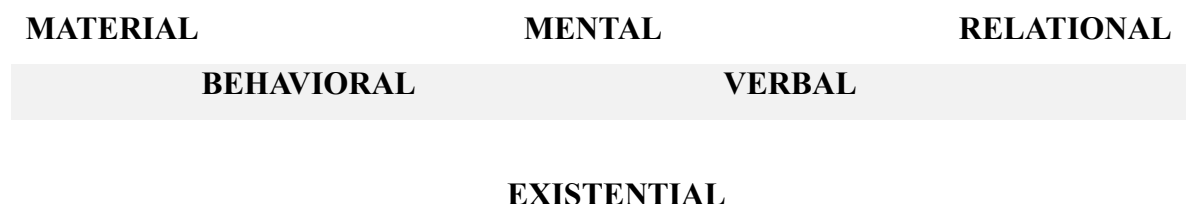


Figure 4: The main Process types after Halliday (1985a)

Halliday considers the first three processes the primary type and the other three the secondary type. Behavioral Process are in between Material and Mental, Verbal Processes are in between Mental and Relational. And finally, Existential Processes will fall somewhere in between Material and Relational.

Some authors grouped Verbal and Mental under the heading of projecting since the inner world of consciousness is projected (cf. Butt 2003: 52-65). Some others treat Verbal Processes between Mental and Material (cf. Thompson 1997: 97).

In this section I will follow Halliday (1985a, 2004) and consider three main types of Processes, i.e. Material, Mental and Relational and three Processes located at their boundaries: Behavioral, Verbal and Existential. Nevertheless, Halliday and Matthiessen point out that all these process types are fuzzy categories and have been the source for the traditional distinction between transitive and intransitive verbs (2004: 171-2). The concept of transitivity will be treated in section 1.2.1.2.10.

Table 9 below comprises the main differences by the authors when approaching the types of process, which illustrate precisely the point mentioned above about the fuzziness among the process types.

M.A.K. Halliday (1985a, 2004)	C. Matthiessen (1995)	D. Butt et al. (2003)
MATERIAL: Type of doing MENTAL: Perceptive Cognitive Desiderative Emotive BEHAVIORAL VERBAL RELATIONAL EXISTENTIAL	MATERIAL: Type of doing BEHAVIORAL MENTAL: Perceptive Cognitive Desiderative Emotive VERBAL RELATIONAL: RELATIONAL EXISTENTIAL	MATERIAL: MATERIAL BEHAVIORAL PROJECTING: VERBAL SENSING RELATIONAL: RELATIONAL EXISTENTIAL

Table 9: Overview of Processes

1.2.1.2.2 Material Processes

Following Halliday (1985a: 103-5), Material Processes are processes of doing and happening. They express the notion that some entity does something – which may be done to some other entity.

In these processes, the Actor (A) is the logical subject (the notions of textual and psychological subject are discussed further) and if there is a second participant, it will be the Goal (G). The term Goal means ‘directed at’ and for this role sometimes the term Patient (Pa) is been used, meaning one that suffers or undergoes the process. The relevant concept though is more like that of one to which the process is extended. This concept, in fact, is the one that is embodied in the classical terminology of transitive and intransitive.

Examples (6, 7) are instances of Actor, Process and Actor, Process and Goal respectively (Halliday 1985a: 104-5).

- (6) The two schools combine
 A Pr
- (7) The lion caught the tourist
 A Pr G

Material Processes are not necessarily concrete, physical events; they may be abstract doings and happenings, as in the examples (8, 9) (1985a: 104-5).

- (8) The tourist collapsed
 G Pr
- (9) A new approach is evolving
 A Pr

In addition to the roles of Actor and Goal, there are a number of other participant roles that may be involved in this type of processes, these are: Scope (Sc), Recipient (Rec), Client (Cl), and (more marginally) Attribute (Att).

As Halliday and Matthiessen express, Recipient is one that services are done for. Example (10) below illustrates this Role (2004: 191).

- (10) I gave my love a ring
 A Pr Rec G

Client is one that services are done for. Most typically the Recipient/Client is realized by a nominal group denoting a human being; especially a personal pronoun, and most commonly of all a speech role (*me, you, us*) (2004: 191-2).

Scope is the most general participant function across different types of material clause, but it is more semantically restricted than Actor and Goal (2004: 190). It typically occurs in intransitive clauses, those in which there is only one direct participant – hence where there is Actor only, not Goal, although sometimes the only participant is the Goal as in *she was kidnapped*. It is not always easy to distinguish a Scope from a Goal. Semantically the Scope element is not in any very obvious sense a participant in the process – it is not directly involved in the process by bringing it about, being affected by it or benefiting from it; but grammatically the Scope is treated as if it was a participant.

Number (11) are examples of Scopes after Halliday and Matthiessen (2004: 194).

(11)	<u>They</u>	<u>played</u>	<u>games</u>	Sc: general
	A	Pr	<u>five games</u>	Sc: specific, quantity
			<u>tennis</u>	Sc: class
			<u>a good game</u>	Sc: specific, quality

1.2.1.2.3 Mental Processes

According to Halliday and Matthiessen (2004: 197-9) Mental Processes are processes of sensing. Mental clauses are concerned with our experience of the world of our own consciousness.

Halliday (1985a: 109-10) enumerates the grammatical differences between these clauses and the material ones:

1. - in a clause of Mental Process, there is always one participant who is ANIMATE, i.e. human or animal.
2. - in a clause of Mental Process, the other participant may be not only a thing but also a fact.
3. - in these processes the unmarked present tense is the simple present.
4. - Mental Processes are represented in the language as two-way processes.
5. - Mental Processes are processes of feeling, thinking and seeing. They are not kinds of doing, and cannot be probed or substituted by *do*, like Material Processes.

The participants in these processes are two: Senser (Se) and Phenomenon (Ph).

Within the general class of mental clauses there are four different sub-types of sensing: perceptive, cognitive, desiderative and emotive. Table 10 below provides some examples of verbs in mental clauses.

Examples of mental clauses (12, 15) with analysis of process and participants (2004: 208):

(12)	<u>He</u>	<u>saw</u>	<u>the car</u>
	Se	Pr (perceptive)	Ph
(13)	<u>He</u>	<u>knows</u>	<u>the book</u>
	Se	Pr (cognitive)	Ph
(14)	<u>He</u>	<u>wants</u>	<u>the car</u>
	Se	Pr (desiderative)	Ph

- (15) He likes the car
 Se Pr (emotive) Ph

‘like’ type	Examples of verbs
Perceptive	<i>perceive, sense, see, notice, glimpse, hear, overhear, feel, taste, smell</i>
Cognitive	<i>think, believe, suppose, expect, consider, know, understand, realize, appreciate, imagine, dream, pretend, guess, remember</i>
Desiderative	<i>want, wish, would like, desire, intend, plan, decide, resolve, determine, agree, refuse</i>
Emotive	<i>like, fancy, love, adore, dislike, hate, detest, despise, loathe, abhor, rejoice, mourn, regret, fear, enjoy, grieve</i>

Table 10: Four types of verbs in mental clauses (after Halliday and Matthiessen 2004: 210)

The relationship between the ‘mental’ clause and the ‘idea’ clause is one of projection: the mental clause projects another clause or set of clauses, giving them the status of ideas or of the content of consciousness. This is why some authors, such as David Butt et al. group these processes under the heading of *projecting* (see table 9 above). Examples (16, 17) illustrate this type of relationship.

(16) ||| I don’t believe || that endorsing the Nuclear Freeze initiative is the right step for California CC.|||

(17) ||| An unknown number of passengers are still missing || and police presume || they are dead. ||| (Halliday and Matthiessen 2004: 206).

1.2.1.2.4 Relational Processes

Following Halliday and Matthiessen (2004: 213-4) Relational Processes are processes of being and having. These processes set up a relationship between two separate entities meaning that in a relational clause in English, there are always two inherent participants – two ‘be-ers’.

The verbs that occur most frequently are ‘be’ and ‘have’, and they are both typically unaccented and phonologically reduced. This means that in general verbs in relational clauses are typically non-salient².

According to Halliday’s types of relational clauses, there are three types of relation, namely intensive, circumstantial and possessive. Each type can be at the same time attributive or identifying. This results in six different types of clauses explained briefly below (2004: 219-46). Nevertheless, for pedagogical reasons only two Participants were introduced in the classroom instruction, i.e. the Carrier and the Attribute. Consequently only three types of clauses were instructed.

1) *Intensive clause attributive*: in this subtype, an entity has some class ascribed or attributed to it. Structurally this is labelled as the Attribute (Att) and the entity to which it is ascribed as the Carrier (Ca).

There are four characteristics of attribute clauses:

- a) the NG functioning as Attribute construes a class of thing and is typically indefinite. It cannot be a proper noun or a pronoun;
- b) the lexical verb in the VG realizing the process is one of the ascriptive classes such as *seem*, *sound*, and *become*;
- c) the interrogative probe for such clauses is *what?*, *how?*, or *what...like?*; and
- d) the clauses are not reversible as in *Sarah is wise* (2004: 220).

2) *Intensive clause identifying*: in this type something has an identity assigned to it. Structurally the x-element is labelled as Identified (Id)/Token (T) and the a-element as Identifier (Idr)/Value (V), this is so in the active voice. In the Identifying mode, one entity is used to identify another; the relationship between them is one of Token and Value (intensive), of phenomenon and circumstance of time, place, etc. (circumstantial), or of owner and possession (possessive). The structural functions are Identified (Id) and Identifier (Idr). When the variable is taken into account it defines another pair of semantic functions, which refers to as Token (T) and Value (V). In any identifying clause, one element will be the Value (meaning, referent, function, status, role) and the other will be the Token (sign, name, form, holder, occupant). These functions are then conflated with those of Identified and Identifier;

² Halliday (2005: 54) uses the term ‘salient syllable’ over ‘strong syllable’. *Salient*, according to Oxford *Dictionary of English* (2006), means ‘most noticeable or important’. According to Peter Roach (1991: 75) strong syllables are stressed and weak syllables are unstressed.

and the conflation can go either way. Example (18) illustrates this correlation.

(18a) King Louis was the King of France. (Halliday 1985a: 115-6)
Id/T Idr/V

But:

(18b) The King of France was King Louis.
Id/V Idr/T

The characteristics of this type are as follows:

- a) the NG realizing the function of Identifier is typically definite;
- b) the lexical verb of the VG realizing the process is one from the equative classes, such as *mean*, *represent*, and *spell*;
- c) the interrogative probe for such clauses is *which?*, *who?*, *which/who...as?* (or *what?* If the choice is open-ended); and
- d) these clauses are reversible as in *c-a-t spells 'cat'* (Halliday 2004: 227).

3) *circumstantial clause attributive*: in here the circumstantial element is an Attribute that is being ascribed to some entity. These can take the form of circumstantial as Attribute.

Examples (19, 20) are taken from Halliday and Matthiessen (2004: 240):

(19) My story is about a poor shepherd boy.
Ca Att

or circumstantial as process, e.g.

(20) My story concerns a poor shepherd boy.

4) *circumstantial clause identifying*: here the circumstance takes the form of relationship between two entities; one entity is being related to another by a feature of time, place, manner, etc. This pattern may be organized semantically in two ways: either the relationship is expressed as a participant;

(21) Tomorrow is the tenth (2004: 242).

or as a process;

(22) More than 50 years span her age and mine. (2004: 243).

When the circumstantial relation is expressed as a participant the Id and Idr are both expressions of cause. The T can be quite varied in grammatical class, whereas the V is often a NG with the name of a class of circumstance as Thing. We need to remember that this type of clauses are reversible.

5) *possessive clause attributive*: the possessive relationship may be construed either as Att as

in

(23) The piano is Peter's
Ca Att

or as process,

(24) Peter has a piano

(25) The piano belongs to Peter

6) *possessive clause identifying*: the possession takes the form of a relationship between two entities and this relationship may be organized as a feature of the participant;

(26) The piano is Peter's
Id/T Idr/V

or as a feature of the process;

(27) Peter owns the piano
Id/T Idr/V

(examples (23-27) are from Halliday and Matthiessen 2004: 245-6).

1.2.1.2.5 Behavioral Processes

According to Halliday (1985a: 128) these are processes of physiological and psychological behavior, like breathing, dreaming, etc. and grammatically they are intermediate between Material and Mental Processes. The Behaver (B) is typically a conscious being but the process, unlike the mental, functions more like one of doing. The usual unmarked tense is the present in present.

Behavioral Processes are almost always middle, i.e. there is one participant, the Behaver. Sometimes the Behavior (Be) seems as if it was a participant like:

(28) She sang a song

(29) He gave a great yawn

In this case, the participant is analogous to the Scope of a material clause and we will call it Behaver. Examples (28, 29) are from Halliday and Matthiessen (2004: 251).

(28) She sang a song
B Pr Be

1.2.1.2.6 Verbal Processes

Following Halliday (1985a; 2004), these are processes of saying and they cover any kind of symbolic exchange of meaning. The participant who says something is the Sayer (Sa) and what s/he says can be a proposition as in

(30) She asked me whether it was Tuesday

or a proposal realized by a perfective non-finite clause as in

(31) She told him to mend his ways.

Examples (30, 31) are from Halliday (1985a: 130).

These processes are between Mental and Relational.

Unlike mental clauses, verbal ones do not require a conscious participant. Besides being able to project, they accommodate three further participants in addition to the Sayer:

a) the Receiver (Re) is the one to whom the saying is directed. It is realized by a NG typically denoting a conscious being (a potential speaker), a collective or an institution. The NG either occurs on its own or is marked by a preposition – almost always 'to' but sometimes 'of' as examples (32, 33) illustrate.

(32) Filled her up? || asked Mrs. Farthing of her mate.

Pr Sa Re

(33) How often have you said to yourself 'I could do better alone or with another woman'?

Sa Pr Re (Matthiessen 1995: 292)

b) the Verbiage (Ve) is the function that corresponds to what is said, representing it as a class of thing rather than as a report or quote.

c) the Target (Ta) occurs only in a sub-type of verbal clause. This function construes the entity that is targeted by the process of saying, for example:

(34) He also accused Krisham Kant of conspiring with Bansi Lal in destabilizing.....
(Halliday and Matthiessen 2004: 256).

Here the Sayer is as if it were acting verbally on another party. Verbs that accept a Target do not easily project reported speech. This type of clause is closer to the Actor + Goal structure of a material clause.

(35) John told Mary a pack of lies
 Sa Pr Re Ve/R (Halliday 1985a: 130).

(36)	<u>Peter</u>	<u>accused</u>	<u>Krisham Kant</u>	<u>of conspiring with Bansi...</u>
	Sa	Pr	Ta	Circumstance

(2004: 256).

These processes have been presented to students as a separate group because in Halliday's words, such clauses are an important resource in various kinds of discourse. They contribute to the creation of narrative by making it possible to set up dialogic passages. Furthermore, in news reporting, these clauses allow the reporter to attribute information to sources including officials, experts and eye witnesses. And in academic discourse they make it possible to quote and report from various scholars while at the same time indicating the writer's stance with verbs like *point out*, *suggest*, *claim*, and *assert* (2004: 252-3).

1.2.1.2.7 Existential Processes

These processes have been excluded from the classroom research, therefore just a brief description will be given. These processes did not seem to cause problems among students and, in addition, the word *there* cannot be replaced by a personal pronoun.

These are processes of existing or happening. They represent that something exists or happens, as in examples (37-39) (Halliday 1985a: 130):

(37) There was a little guinea-pig.

(38) There seems to be a problem.

(39) Has there been a phone call?

The word 'there' in such clauses has no representational function; it is required because of the need for a subject, as examples (40) illustrates (1985a: 131).

(40)	<u>There</u>	<u>was</u>	<u>a storm</u>
		Pr	E

These clauses typically have the verb 'be', or some other verb expressing existence, such as 'exist' and 'arise', followed by a NG functioning as Existent (Halliday 1985a: 130-1).

Next section explains in more detail the Participant of Range. This Participant may occur in all Processes but the Existential and they are between Participants and circumstances. This element is not so much an entity as a refinement of the process itself.

1.2.1.2.8 Range

1.2.1.2.8.1 Definition

Halliday states that the Range is the element that specifies the range or domain/scope of the process. A Range may occur in material, behavioral, mental, verbal and relational clauses but not in existential ones (1985a: 134; 2004: 293). Table 11 summarizes the types of Range across processes.

1.2.1.2.8.2 Range across clauses

A. - In a material clause the Range either expresses the domain over which the process takes place, or expresses the process itself, either in general or in specific terms. The Range may be an entity which exists independently of the process but which indicates the domain over which the process takes place as in example (41). Furthermore, the Range may be another name for the process as in example (42) (Halliday 1985a: 134-5).

(41) Mary climbed the mountain

(42) John and Mary played tennis

Process Type	Range:	Examples:
Material	Scope	He rode <i>his motorbike</i> to work You haven't signed <i>your name</i> on this letter I'm following <i>your example</i>
Behavioral	Behavior	The child wept <i>copious tears</i>
Mental	Phenomenon	You can feel <i>the pressure</i> on your skull Do you prefer <i>tea</i> for breakfast? I would recognize <i>that face</i> anywhere
Verbal	Verbiage	He made <i>a defiant speech</i> She speaks <i>Russian</i> with her children What <i>question</i> did you want to ask me?

Table 11: Types of Range across processes (after Halliday and Matthiessen 2004: 294)

Both examples are similar but the difference lies in the existence of the entity. Thus, mountains exist whether they are climbed or not while tennis is there just for the act of playing (2004: 294).

The Range in a Material Process typically occurs in middle clauses, those in which there is only one direct participant, Actor. As a result it is not always easy to distinguish a Range from a Goal. Semantically a Range element is not in any very obvious sense a participant in the process; but grammatically it is treated as if it was.

There are some grammatical distinctions between a Range and a Goal, viz.

- the Range cannot be probed by *do to* or *do with*;
- a Range element can never have a resultative Attribute added within the clause;
- the Range cannot be a personal pronoun, and it cannot normally be modified by a possessive (1985a: 134-6). This varies depending on the type of Process where the Range takes place, e.g. Phenomenon in Mental Processes is easily replaced by a personal pronoun.

B. - In mental clauses the concept of Range helps to understand the structure of Senser and Phenomenon. It is not an additional element, but an interpretation of the Phenomenon in one of its structural configurations.

These processes are distinguished by their bi-directionality, by the types 'I like it' and 'it pleases me'. The latter is the earlier form and resembles the Actor + Goal type constructions. Like material processes, they frequently occur in the passive (I was pleased by the result...) (1985a: 136). Therefore we can interpret the role of Phenomenon in the like type of Mental Processes as a counterpart of that of Scope in the material being the element which delimits the boundaries of the sensing (2004: 294).

C. - In a verbal clause the Range is the function referred as Verbiage. It is similar as the Scope in the material clause.

D. - In a behavioral clause the Range is the Behavior.

E. - Relational clauses are complex and we can simplify by interpreting the Token as Medium and the Value as Range in all types.

What is common to all these functions – Scope in material clauses, Behavior in behavioral clauses, Phenomenon in the like type of mental clauses, Verbiage in verbal clauses, and Attribute or Value in relational clauses – is that firstly, the element is not so much an entity as a refinement of the process itself. And secondly, the element is an entity that instead of playing a part in the process by acting or being acted upon, it is marking its domain. They are on the borderline between participants and circumstances and there is a closely related form with a prepositional phrase, for example: *play on the piano*, *delight in the scenery*, and

tell about the events (2004: 294-5).

Table 12 summarizes the type of Processes and Participants.

Process Type	Core meaning	Primary participants	Secondary participants
Material	doing, happening	Actor, Goal	Range/Scope
Mental:	sensing:	Senser, Phenomenon	Beneficiary:
perception	perceiving		- Client
cognition	thinking		- Recipient
affection (desire and emotive)	feeling		
Relational:	being:	Carrier, Attribute	Instrument/Force ³
attributive	attributive	Identified,	
identifying	identifying	Identifier/Value/Range, Token/Medium	
Verbal	saying	Sayer, Receiver/Beneficiary, Verbiage/Range, Target	Range/Behavior
Behavioral	behaving	Behaver	
Existential	existing	Existent	

Table 12: Overview of process types (after Halliday 1980a, 1985a, 2004; and Thompson 1997)

³ Halliday (1980a: 149) lists Instrument (with) and Force (by) under the participant role of Instrument along with other five roles. Likewise Saeed (2003: 150) defines the Instrument role as the means by which an action is performed or something comes about, e.g. *She cleaned the wound with an antiseptic wipe*. This Participant is not included in the classroom research for pedagogical reasons.

1.2.1.2.9 Circumstances

I have based the present section on Halliday's works (1985a: 137-41; 2004: 262-76). Circumstantial elements associated with processes are expressed through location of an event in time or space, manner or cause. They are mapped onto Adjuncts, thus they cannot become Subjects. They are realized by AdvG or PP.

The principal types of circumstantial element (which are summarized in table 13 below) in English are as follows:

1. - *Extent and Location*. There is no very sharp line separating (circumstantial) expressions of Extent from (participant) expressions of Range. Yet there is a distinction between them: Extent, which comprises space and time, is expressed in terms of some unit of measurement, like yards, laps, rounds, years, whereas Range is expressed in terms other than measure units: (43) They walked five miles vs. They walked the streets (2004: 264).

In this way, the participant, the Scope has the potential of becoming a Subject.

According to Matthiessen (1995: 334), circumstances of location are typically the most frequent in text, although there is obviously variation across registers and individual text.

2. - *Manner*. Manner comprises four subcategories: Means, Quality, Comparison, and Degree. Means is close to the participant role of Agent and Comparison is like a participant in a clause with the same kind of process, whereas Quality and Degree are like features of the Process itself. These differences in status are reflected in realizational tendencies: Means and Comparison tend to be realized by PP, whereas Quality and Degree tend to be realized by AdvG.

(a) Means refers to the means whereby a process takes place; it is typically expressed by a PP with the preposition *by* or *with*.

In addition, the category includes the concepts of both agency and instrumentality. The instrument is not a distinct category in English grammar; it is simply a kind of means. So given *The pig was beaten with the stick*, the corresponding active form is *She beat the pig with the stick*; in both, *with the stick* is a circumstantial expression of Manner.

The Agent typically functions as a participant in the clause as examples (44, 45) (2004: 267) show;

(44) The pig was beaten by the stick
the corresponding active is

(45) The stick beat the pig

where ‘the stick’ has the function of Actor.

The line between Agent and Instrument is not always very sharp. Nevertheless, there is a significant distinction in the grammar between manner and agency, so that a passive *by* phrase, if it could not remain unchanged in the corresponding active clause, is interpreted as participant, not as a circumstance of Manner. This reflects the fact that semantically, whereas the Instrument is not usually an inherent⁴ element in the process, the Agent typically is – although less clearly so when the process is expressed in the passive.

(b) Quality is typically expressed by an AdvG, with a *-ly* adverb as Head. Quality expressions characterize the process in respect of any variable that makes sense.

(c) Comparison is typically expressed by a PP with ‘like’ or ‘unlike’, or an AdvG of similarity or difference, for example:

(46) It went through my head like an earthquake (Halliday 1985a: 140).

(d) Degree is typically expressed by an AdvG with a general indication of degree such as *much*, *a good deal*, *a lot*, or with a collocationally more restricted adverb of degree such as *deeply*, *profoundly*, *completely*, *heavily*. The collocationally restricted adverbs collocate with verbs serving as Process, as in mental clauses: *love* + *deeply*, *understand* + *completely*, *believe* + *strongly* (cf. Matthiessen 1995: 279-81). Degree expressions characterize the extent of the actualization of the process and they often occur immediately before or immediately after the Process.

3. - *Cause*. This circumstantial element comprises three subcategories:

(a) Reason: it represents the reason for which a process takes place – what causes it. It is typically expressed by a PP with *through* or a complex preposition such as *because of*, *as a result of*, *thanks to*, for example:

(47) For want of a nail the shoe was lost.

(b) Purpose: it represents the purpose for which an action takes place – the intention behind it. They are typically expressed by a PP with *for* or *with* a complex preposition such as

⁴ The nature of the process determines the number of participants involved in it. They can be actualized as in *Ted kicked the ball* or inherent as *Ted kicked hard* (Downing and Locke 2006: 125-6). An inherent function is one that is always associated with a given clause type even if it is not necessarily expressed in the structure of all causes of that type. This concept contrasts with the obligatory Roles (Halliday 2002: 181).

(48) For the sake of peace and quiet they moved to the countryside.

(c) Behalf: it represents the entity, typically a person, on whose behalf or for whose sake the action is undertaken – who it is for. They are expressed by a PP with *for* or with a complex preposition such as

(49) I'm writing on behalf of Aunt Jane.

Examples (47-49) are from Halliday (1985a: 140).

4. - *Contingency*. They specify an element on which the actualization of the process depends.

There are three sub-types:

(a) Circumstances of condition construe circumstances that have to obtain in order for the process to be actualized; they have the sense of 'if'. They are expressed by PP with complex prepositions.

(b) Concession circumstances construe frustrated cause, with the sense of 'although' they are expressed by PP with prepositions like *despite*, *notwithstanding* or with complex prepositions as *in spite of* or *regardless of*.

(c) Default circumstances have the sense of negative condition – 'if not, unless'. They are expressed by PP with complex prepositions like *in the absence of*, *in default of*.

5. - *Accompaniment*. This element represents the meanings 'and', 'or', 'not' as circumstances. It is expressed by PP with prepositions such as *with*, *without*, *besides*, *instead of*. We can distinguish two subcategories, comitative and additive; having each one a positive and a negative aspect:

(a) The comitative represents the process as a single instance of a process, although one in which two entities are involved. It ranges from some cases where the two entities could be conjoined as a single element, as in

(50) Fred and Tom set out together.

to others where they could not, like

(51) Jane and her umbrella set out together.

(b) The additive represents the process as two instances. Here both entities clearly share the same participant function, but one of them is represented circumstantially for the purpose of contrast. We could say (52) and (53),

(52) Fred and Tom both came.

(53) Fred came as well as Tom.

which differ in that (53) distinguishes the two as regards their news value ('not only Tom but also Fred came'). In the same way, when one participant is represented circumstantially it can be given the status of 'them'.

Examples (54-55) are from Halliday (1985a: 141).

6. - *Matter*. This element is expressed by PP with prepositions such as *about*, *concerning*, *with reference to* and sometimes simply *of*, for example:

(54) I worry about her health.

It is particularly frequent with verbal processes, as in

(55) They're talking about the weather (1985a: 142).

7. - *Role*. This category construes the meanings 'be' and 'become' circumstantially; the Role corresponds to the Attribute or Value of an intensive relational clause. Role includes the subcategories of Guise (be) and Product (become).

(a) in Guise the usual preposition is *as*; other complex prepositions with this function are *by way of*, *in the role/shape/guise/form of*. Thematic circumstances of Role may indicate a period of time in a person's life.

(b) in Product the meaning corresponds to 'become', similarly as attribute or identity; e.g.

(56) Aren't you growing into a big girl? ('becoming a big girl') (Halliday and Matthiessen 2004: 275).

8. - *Angle*. Angle is related either to:

(i) the Sayer of a verbal clause, with the sense of 'as... says' or

(ii) to the Sayer of a mental clause, with the sense of 'as ... thinks'.

The former type is called 'source', since it is used to represent the source information. And the latter is called 'viewpoint', since it is used to represent the information given by the clause from somebody's point of view.

TYPES OF CIRCUMSTANTIAL ELEMENT	EXAMPLES
Extent	<i>five miles, five years</i>
Location	<i>at home, at noon</i>
Manner	Means: <i>with fusewire</i> Quality: <i>in complete silence</i> Comparison: <i>differently</i> Degree: <i>much</i>
Cause	Reason: <i>because of the drought</i> Purpose: <i>with a view to promotion</i> Behalf: <i>on my behalf</i>
Contingency	Condition: <i>in case of</i> Default: <i>in the absence of</i> Concession: <i>in spite of</i>
Accompaniment	<i>with Tom, without Tom, as well as Tom, instead of Tom</i>
Matter	<i>on the subject of compensation...</i>
Role	<i>by way of</i>
Angle	<i>as...says as...thinks</i>

Table 13: Types of circumstances (after Halliday 1985a: 137-43; 2004: 262-3)

1.2.1.2.10 A note on transitivity

This section is basically a recapitulation of what has been explained before about transitivity. According to Downing and Locke the representational meaning of the clause is encoded through transitivity (2006: 5); therefore, a brief mention to it seems necessary before I move to the textual metafunction. As this is a complex topic, the intention of this sections is just to provide a note to understand how entwined and inseparable the elements of language are represented in the clause.

Halliday states that transitivity is the name given to a network of systems whose point of origin is the major clause, the clause containing a predication; thus simultaneous at the point of origin with other networks such as those of mood and Theme (1967a: 38). Transitivity is the set of options relating to cognitive content, the linguistic representation of extralinguistic

experience, whether of the phenomena of the external world or of feelings, thoughts and perceptions (Halliday 1967b: 199).

Therefore, transitivity is not only concerned with the type of process expressed in the clause, but also with the participants and circumstances and thus defined as relating to the experiential component of meaning (Halliday 1968: 179) and this is the reason why it is brought about in this section.

Transitivity is the name for the whole system, including both the transitive model and the ergative one. Ergativity is thus not the name of a system, but of a property of the system of transitivity. We can consider all the processes different or having the same grammar, i.e. there is just one generalized representational structure common to every English clause. These two perspectives constitute two different modes of modelling transitivity. These are called the transitive model and the ergative model (2004: 281) represented in table 14.

	transitive model	ergative model
generalized		Process + Medium (\pm Agent) [middle/effective]
particularized	material: Actor + Process \pm Goal [intransitive/transitive] behavioral: Behaver + Process mental: Senser + Process + Phenomenon verbal: Sayer + Process (\pm Receiver) relational: Carrier + Process + Attribute; Token + Process + Value	

Table 14: The transitive and ergative models of transitivity (after Halliday and Matthiessen 2004: 282)

The ergative system also receives the name of middle (Halliday 1968: 183), taking one participant against the non-middle or transitive system taking two or more participants.

The transitive system asks ‘does the action extend beyond the active participant or not?’ The ergative, ‘is the action caused by the affected participant or not?’ (Halliday 1970: 188).

Downing and Locke (2006: 126) classify the types of verbs syntactically or semantically depending on what we take into account. Therefore, the terms transitive and intransitive are syntactic terms whereas when we refer to the number of participants (actualized⁵ or

⁵ Downing and Locke explain that certain verbs such as *eat* and *see* have two inherent participants but they are not always actualized, i.e. expressed in the process.

unactualized inherent participant), we are using a semantic terminology. Downing and Locke use the term *valency* to refer to the number of participants. In this way, a process with one participant is monovalent, with two bivalent, and with three trivalent.

The transitive and intransitive types – those with non-middle as norm and with middle as norm respectively – are the marginal ones, and they seem to be becoming more marginal as times goes on (Halliday 1980a: 157).

Once transitivity is treated as a system of the clause, it can be seen to be part of a wider domain extending over the whole of the experiential component of clause organization and embracing the full set of structural functions. The question whether the term transitivity is used to cover the whole of this domain, or is limited to the area of processes and participants, or even more narrowly to process, Actor and Goal, is a terminological one.

Whether we describe the organization of the English clause in terms of Action and Goal or in terms of cause and effect, we will have two patterns called respectively the transitive and the ergative. In English, both patterns coexist but the ergative pattern is the predominant.

In Actor-Goal analysis, structural functions are assigned such that, in the Effective
(57) Mary turned the light on (1968: 183).

Where ‘Mary’ is Actor and ‘the light’ is Goal, while in the Descriptive
(58) The baby sat up (1985a: 147).

‘the baby’ is Actor and there is no Goal; and the first of these, but in principle not the second, admits the thematically determined option of operative / receptive with the Actor optional in the receptive form:

(59) Mary turned the light on//the light was turned on (by Mary) (1968: 183).

The Actor is optional here because, the selection of receptive is partly determined by the informational status of the Actor. This gives the pattern, characteristic of a transitive form of clause organization. The tendency in English, however, is to treat example (58) as a middle form and for the paradigm to be filled out by the presence of a middle form in the Effective type and of non-middle forms in the descriptive. Table 16 below summarizes the different ways of organizing a clause from a transitive point of view.

In this representation the roles of Actor and Goal in the Effective are matched by those of Initiator and Actor in the Descriptive, the two being thereby shown as proportional (1968: 180-3). The Initiator is the Participant that initiates the action but does not perform it as the

Actor does (Halliday 1967: 42).

In English and in many other languages, it is the transitive model that differentiates the different process types (see table 15 below) and it is the ergative model that generalizes across the different process types.

	Active (‘operative’)/transitive	Ergative	Passive (‘receptive’)/transitive
Effective (directed action)	Mary turned the light on	The light turned on	The light was turned on (by Mary)
	Ac Go	Go	Go (Ac)
Descriptive/ middle (non- directed action)	He marched the prisoners	The prisoners marched	The prisoners were marched (by him)
	In Ac	Ac	Ac (In)

Table 15: Pattern of a clause organization from a transitive point of view (after Halliday 1968: 183; 1980a: 152)

The transitive model is based on the configuration of Actor + Process, the latter being the one that unfolds the process through time. This unfolding is either confined in its outcome to the Actor or extended to another participant, the Goal (Halliday 1985a, 2004).

On the other hand, in the ergative model the process is represented as being self-engendered, as happening such as in

(60) The great flood spread (2004: 285).

In here the process is actualized through the Medium.

There are many registers of current modern English where the ergative model is foregrounded, playing a role that is as important as, or more important than, that of the transitive model. These registers include those that are collectively known as Scientific English – registers that evolved over the last 500 years; but they also include those that are collectively known as casual conversation – the frontier of change in English. The ergative model is now fully systemic in English; that is, it is not restricted to certain registers, but together with the transitive model it makes up the general system of transitivity, and it has been gaining ground over the last half a millennium. The two models complement one another, which is why they are variably foregrounded across registers (2004: 284-5).

It can be said that the concept of transitivity is approached differently by different authors. Depending whether we consider type of verb, number of participants, explicitness and alike we will come up with sentences analyzed as transitive, intransitive, ergative, etc. This could be the reason why authors such as Hopper and Thompson (1980: 252) establish parameters and consider transitivity as a continuum more than as a linear concept. These authors are not systemic-functional linguists and their approach to transitivity is different therefore. Figure 5 displays these parameters and the ideas of high/low transitivity.

	High transitivity	Low transitivity
A. PARTICIPANTS	2 participants or more	1 participant
B. KINESIS	action	nonaction
C. ASPECT	telic	atelic
D. PUNCTUALITY	punctual	nonpunctual
E. VOLITIONALITY	volitional	nonvolitional
F. AFFIRMATION	affirmative	negative
G. MODE	realis	irrealis
H. AGENCY	A high in potency	0 low in potency

Figure 5: Parameters determining the cardinal transitivity of a clause (after Hopper and Thompson 1980: 252; 1982: 3)

These ten parameters, besides having a grammatical value, also seemed to have a unified discourse function. To a greater or lesser extent they contribute to the construction of ‘foreground’ –the chief, event-centered, sequential actions of a discourse (Hopper and Thompson 1982:4).

1.2.1.3 Textual Metafunction: clause as message

According to Halliday (1985a: 38-9) the clause is organized as a message and this means the combination of a Theme and a Rheme: Theme + Rheme. English is a language whose Theme is indicated by position in the clause.

The Theme is what the clause is going to be about, the point of departure of the message. So part of the meaning of any clause lies in which element is chosen as its Theme. The Theme is not necessarily a NG, it may be an AdvG or PP, among other kinds of linguistic units, as

the example (61) below illustrates (Halliday 1985a: 39):

(61)

Once Very carefully On Friday night	I was a real turtle she put him back on his feet again I go backwards to bed
Theme	Rheme

In one of his early articles on the subject of Theme, Halliday (1968: 179) connects Theme with the comprehension of a text and its interpretation along predicted lines. The Theme enables the message to be communicated effectively and so understood clearly.

As Halliday (1989: 73) points out the Theme is an important part of the message, since it is here that the speakers/writers announce their intentions: the peg on which the message is to hang. In spoken language it is often a pronoun, most typically *I* or *you*. But in writing, with its more strongly ‘third person’ orientation, it is usually some other phenomenon; and again this is typically a nominal element.

Nevertheless, the concept of Theme is not to be confused with the concept of Topic. Bloor (1995: 72) states that the former is a linguistic category and the so-called Topical Theme in any clause is the first constituent that is part of the meaningful structure of the clause. To put it another way, we can say that the Topical Theme always represents a Participant, Circumstance or Process.

Halliday highlights (2002: 190) that the Theme of a clause is the element which, in English, is put in first position. Hence this is going to have an important effect in the arrangement of the clause, of the message. Theme, Actor and modal Subject are identical unless there is good reason for them not to be. In figure 6 below Matthiessen summarizes the concepts of Theme and Rheme.

The concept of Theme is worth studying since linguists seem to agree that information in first position has two important functions: it links up with the previous text and guides readers’ comprehension of subsequent segments (Whittaker 1995: 105).

1.2.1.3.1 Theme and Mood

The concepts of Theme and Mood are intrinsically related and the choice of writers will

determine whether the Theme is marked or unmarked. This is important for (young) learners who need to know the differences in Mood as well as in Theme because those choices will give their texts coherence and help them build an appropriate thematic development.

Following Halliday (1985a) we see that the thematic structure of a clause is interrelated with the Mood. Thus the type of clause (mood) is going to determine the type of unmarked Theme in the clause. For instance, in a declarative clause the typical pattern is one in which Theme is conflated with Subject. This would be the unmarked Theme. By contrast, when the Theme is something other than the Subject in a declarative clause, it will receive the name of marked Theme. The most usual form of marked Theme is an AdvG functioning as Adjunct in the clause. Least likely to be thematic is a Complement which is a NG that is not functioning as Subject (1985a: 45).

Theme:	Rheme:
Point of departure of clause as message; Local context of clause as a piece of text.	Non-Theme –where the presentation moves after the point of departure; What is presented in the local context set up by Theme.
Initial position in the clause <i>Carefully</i>	Position following initial position <i>fold in egg whites</i>

Figure 6: Theme and Rheme (after Matthiessen 1995: 532)

In an interrogative clause the situation depends on the type of question: if it is a yes/no question (polarity), the Theme is the operator of the verb and the Subject, and in a wh-question the Theme is the wh-element (1985a: 47).

In imperative clauses the basic message is ‘I want you to do something’, or ‘I want us (you and me) to do something’. So the unmarked Theme is ‘you’ or ‘let’s’. Another form of the imperative has the finite verb ‘do’ being the function of this to mark the clause explicitly as positive not negative. In a negative imperative, the Theme is typically ‘don’t’.

Nevertheless, the common everyday form of the ‘you’ imperative, which has no Subject or finite verb, strictly speaking, has no Theme, only Rheme (1985a: 49).

Table 16 below summarizes the different types of clauses with their corresponding Themes,

both unmarked and marked.

Type of clause	Theme	Rheme
Declarative	I On Saturday night	had a little nut-tree I lost my wife
Interrogative (wh- and yes/no)	Who In your house Can you After tea	killed Cock Robin? who does the cooking? find me an acre of land? will you tell me a story?
Imperative	Let's Do	go home keep quiet Keep quiet!

Table 16: Types of Themes across clauses (after Halliday 1985a: 46)

In the classroom research conducted for the present thesis only declarative clauses were used for reasons that will be explained in part III.

1.2.1.3.2 Types of Theme

Beside the unmarked Themes seen above, Halliday (1985a: 49-52) claims that there are certain elements that have special status in the thematic structure, viz.

- conjunctive and modal Adjuncts
- conjunctions and
- relatives

It is not difficult to see why modal and conjunctive Adjuncts tend to come at the beginning of the clause. Firstly, conjunctions are items that often come first but they have no function as Subject, Adjunct or Complement. When one of them is present it does not take up the whole of the thematic potential of the clause. The speaker/writer now has the choice of which element to put next; and whatever item is selected to follow will still have thematic force.

Secondly, relatives are either nouns or adverbs functioning as Subject, Adjunct or Complement; either alone, or within the structure of a group, nominal or adverbial, or a phrase; e.g. whose house, in which, with whom, on whose behalf, whichever way, for whatever reason, however badly. A relative group or phrase of this kind functions, as a whole, as the Theme of the clause in which it occurs (1985a: 52).

Table 17 summarizes the different types of Themes with examples.

Type of Theme	Examples
Conjunctive Adjuncts	<i>that is, in other words, actually, meanwhile, therefore, nevertheless, in this respect</i>
Modal Adjuncts	<i>probably, evidently, frankly, broadly speaking, wisely, to my surprise</i>
Relatives	<i>which, who, whatever, whoever,</i>

Table 17: Elements with special status in the thematic structure (after Halliday 1985a: 49-52)

So far we have seen that two main types of Themes can be distinguished, i.e. Simple Themes and Multiple Themes. According to Butt (2003: 91-2), since the Theme is the starting point for the experiences to be unfolded in a clause, it must include the whole of the first item in the experiential meanings. Thus, when the first element is a Participant, a Process or Circumstances (i.e. some transitivity element (Hasan and Fries 1997: xxxiv)), we talk about Simple Theme or Topical Theme.

When the Topical Theme is preceded by a Textual Theme or an Interpersonal Theme, then we have a Multiple Theme. This is represented in figure 7 below.

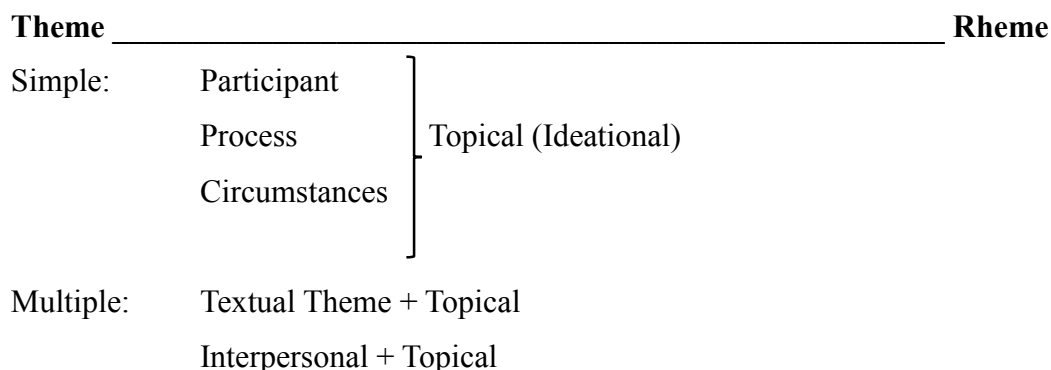


Figure 7: Summary of types of Themes (after Butt 2003: 92-5)

In section 3.3.6.2 below, students' use of Themes is analyzed and the main remark is that students favored simple over multiple Themes and especially the Participant with the use of personal pronouns in first person, singular and plural. This is one of the myriad of orality features students employed in their writings (Perera 1991: 227).

Halliday (1985a) states that if the initial element in the clause does not function as Subject or Complement or Circumstantial Adjunct, then the Subject, Complement or Adjunct next following is still part of the Theme. In this case we will have a multiple Theme, containing always an ideational element in the Theme (1985a: 53).

The Theme of any clause extends up to (and includes) the topical Theme. The topical Theme is the first element in the clause that has some function in the ideational structure (see Butt 2003). Whilst a simple Theme consists of this topical element only, a multiple Theme consists of this element plus one or more preceding elements; that is, it has some additional thematic material, interpersonal and/or textual (Halliday 1985a: 53; 56).

Matthiessen (1995: 532) provides examples (62-64) of simple Theme (ideational Theme or Topical⁶ Theme) and of multiple Themes:

- (62) Ideational Theme: Carefully fold in egg whites and set the batter aside.
- (63) Interpersonal + Topical (Participant): Obviously, they need to have water added...
- (64) Textual + Topical (Process): Next, add oil, salt, and the remaining 3 cups of whole-wheat flour.

1.2.2 The concept of Subject

According to Downing and Locke: 'Semantically and communicatively, the Subject encodes the main participant in the situation represented by the clause and has the highest claim to the status of topic' (2006: 35).

The Subject is that functional category of the clause of which something is predicated. The prototypical subject represents the primary participant in the clause and has the strongest claim to the cognitive status of Topic – who or what the clausal message is primarily about (2006: 42).

And they add that it is that syntactic function which, in English, must be present in declarative and interrogative clauses, but is not required in the imperative (2006: 43).

Then they list a number of classes of groups and clauses with the different realizations that a Subject can have:

- NGs: That man is crazy

⁶ The term Topic should not be confused with Theme. The latter is an element of the thematic structure of a clause whereas the former is what the message is about. Nevertheless these tend to coincide in one wording along with the Subject which is a syntactic element (Downing and Locke 1995: 222).

- Dummy⁷ it: It's hot
- Unstressed there: There's plenty of time
- PP and AdvG as subject: Now is the time
- Adjectival head: the poor
- Embedded clauses: That he failed his driving test surprised everybody.
- Anticipatory it + extraposed subject: It was silly to say that (2006: 44-7).

Halliday and Matthiessen (2004: 56) identify three different types of Subject (cf. Sweet 1981):

1. The psychological Subject is the constituent which is the concern of the message, the information that is the point of departure for the message. Halliday uses the functional label Theme to refer to this psychological Subject. It concerns the textual metafunction.
2. The grammatical Subject is the constituent of which something is predicated, the constituent we can argue about. Halliday retains the term Subject to refer to this grammatical Subject. Since it is part of the Mood structure, it is associated to the interpersonal metafunction.
3. The logical Subject is the constituent which is the doer of the action, the constituent that actually carries out the process. It concerns the ideational metafunction. Halliday uses the term Actor to refer to this logical Subject.

Example (65) illustrates the differences among the three types of Subjects.

(65) These beads I was given by my mother (Halliday 1980a: 159).

Where 'these beads' is the psychological Subject, the 'I' is the grammatical one, and 'my mother' the logical Subject.

Halliday and Matthiessen specify (2004: 194) that in the grammatical Subject, the Subject-Predicate structure is entirely derivable from Mood, and has no independent significance. As a form of generalization, it may be useful in that it expresses the fact that Actor, modal Subject and Theme are regularly associated; but it obscures the equally important fact that they are distinct and independent structure roles.

Hasan and Fries (1997: xxi) provide the five major features of the constituent typically regarded as Subject in English:

⁷ 'Dummy it' refers to the semantically empty use of the pronoun 'it' which occurs in expressions of time, weather and distance. This element has no other function but to provide a subject (Downing and Locke 2006: 44; 250).

1. - the English Subject is a NG or nominalization;
2. - it is anaphorically presupposed by the pronoun in the Mood-Tag; if the latter occurs, its pronoun will be co-referential with Subject;
3. - Subject occurs in close contiguity with the element Finite; if an intervening element occurs at all, it will prototypically be a Modal Adjunct e.g., *usually*, *normally*, and *surely*;
4. - when Subject is instantiated by a pronoun, in some cases the pronoun will be marked for case (nominative); and
5. - under certain conditions, the Subject nominal will display person and number concord with the primary tense, i.e. with the Finite element.

1.2.3 Voice

Following Matthiessen (1995: 590-6) voice is the resource for varying the mapping between Subject and the different participant roles in the clause. The voice selection determines the form of the process (active or passive VG), and it opens up the possibility of not specifying the Agent (or, in middle clauses, the Medium). Voice can only assign subjecthood to participants.

The systems in the voice region are distributed across the grammar, more specifically across different transitivity types. There are different voice systems for ranged and middle clauses, nonbenefactive, effective clauses, and benefactive clauses (range voice, effective voice, benefactive voice, etc.).

The basic principle is that voice selections are made in discourse to give a participant the status of unmarked topical Theme (see 1.2.1.3.2) and hence subject in declarative and yes/no interrogative clauses. In addition, the choice of receptive makes it possible to leave the Agent (or Medium) implicit.

There are four factors involved in the selection in the area of voice:

- one is a consideration of Theme, since the subject is the unmarked (topical) Theme of a (non wh-cl interrogative) clause;
- there is another textual factor (the selection of unmarked news);
- there is also an interpersonal factor (the assignment of modal responsibility); and
- an ideational factor (the specification of the Agent).

According to Halliday (1968: 214) it is important to highlight the relationship between voice

and Theme since the selection of one determines the other. Thematic prominence tends to be assigned to the more ‘central’ among the clause elements, the participants which occupy the active roles in transitivity; and this, together with the opposite tendency in information focus, which favors the more ‘peripheral’ elements, especially circumstances, defines in general terms a preferred clause type for transitivity and Theme.

Voice is concerned with the Roles of Actor and Goal, both as inherent and as actualized Roles. Nonetheless, this does not preclude its realization throughout the other processes. In Mental, Verbal, and Behavioral Processes the participants are labelled differently due to the nature of the process but still susceptible of being expressed in passive voice (Halliday 1970: 151).

The following table shows the full range of possibilities of voices in action clauses, i.e. in Material Processes, together with the Roles associated with each of them:

Voice (clause)		Roles	Voice (verb)	Example
Middle		Actor	active	The building has collapsed
Non-middle	active	Actor/Goal	active	The Council are selling the building
Non-middle	active	Actor (Goal)	active	The Council won’t sell
Non-middle	passive	Goal	passive	The building won’t sell
Non-middle	passive	Goal/Actor	passive	The building has been sold by the Council
Non-middle	passive	Goal (Actor)	passive	The building has been sold

Table 18: Possibilities of voice in action clauses (after Halliday 2002: 183)

The Roles in parentheses are inherent but not expressed.

Now I provide the passive analysis of the clauses used as examples in the above section 1.2.1.2.1 dealing with the different processes.

Examples with Material Processes:

(66)	Active voice: <u>The lion</u>	<u>caught</u>	<u>the tourist</u>	
	A	Pr	G	
	Passive voice: <u>The tourist</u>	<u>was caught</u>	<u>by the lion</u>	
	G	Pr	A	(Halliday and

Matthiessen 2004: 182)

- (67) Active voice: I gave my love a ring
A Pr Rec G
Passive voice: My love was given a ring (by me)
Rec Pr G A (2004: 191)
- (68) Active voice: He painted John a picture
A Pr Cl G
Passive voice: A picture was painted for John (by him)
G Pr Cl A (2004: 191)
- (69) Active voice: They played games
A Pr Sc
Passive voice: Games were played (by them)
Sc Pr A (Halliday 1985a: 135)

Examples with Mental Processes:

- (70) Active voice: He saw the car
Se Pr (perceptive) Ph
Passive voice: The car was seen (by him)
Ph Pr (perceptive) Se
- (71) Active voice: He knows the book
Se Pr (cognitive) Ph
Passive voice: The book is known (by him)
Ph Pr (cognitive) Se
- (72) Active voice: He wants the car
Se Pr (desiderative) Ph
Passive voice: The car is wanted (by him)
Ph Pr Se
- (73) Active voice: He likes the car
Se Pr (emotive) Ph
Passive voice: The car is liked (by him)*
Ph Pr (emotive) Se

Examples (69-72) are taken from Halliday and Matthiessen (2004: 208).

Examples with Verbal Processes:

(74) Active voice:	<u>John</u>	<u>told</u>	<u>Mary</u>	<u>a pack of lies</u>
	Sa	Pr	Re	Ve/R
Passive voice:	<u>Mary</u>	<u>was told</u>	<u>a pack of lies</u>	<u>(by John)</u>
	Re	Pr	Ve/R	Sa
	<u>A pack of lies</u>	<u>was told</u>	<u>to Mary</u>	<u>(by John)</u>
	Ve/R	Pr	Re	Sa
(75) Active voice:	<u>Peter</u>	<u>accused</u>	<u>Krisham Kant</u>	<u>of conspiring with...</u>
	Sa	Pr	Ta	Circumstance
Passive voice:	<u>Krisham Kant</u>	<u>was accused</u>	<u>(by Peter)</u>	<u>of conspiring with...</u>
	Ta	Pr	Sa	Circumstance

(Halliday and Matthiessen 2004: 256).

Relational and Existential Processes do not admit the passive voice.

This topic is interesting for the purposes of this dissertation, since students tend to avoid the use of the passive voice and when they use it, they employ the *get*-passive structure which belongs to the spoken language domain and it is informal. This topic is explained in section 3.3.7 where the instruction seems to have benefited students, at least, in recognizing the passive voice. More research is needed in this direction and especially in revealing the specific features of registers to students.

1.2.4 Above the clause: the clause complex

First of all, I need to establish what it is understood by sentence and what by clause. Halliday (1985a) posits that a sentence is a clause complex but we can use it simply to refer to the orthographic unit that is contained between full stops. Thus a sentence is a constituent of writing, while a clause complex is a constituent of grammar (1985a: 193).

Since the clause complex is not an element of study in this research, a brief description will be provided of the main classes based on the type of relationship between clauses. I will follow Halliday's work (1985a) and relate the types of relationship between clauses according to him:

a) Type of interdependence. It can be said that if the status of the two clauses is unequal, the relationship will be of Hypotaxis. This is the relation between a dependent element and its dominant, the element on which it is dependent. On the other hand, if the relation between

the two elements are of equal status, one initiating and the other continuing, the relation is of Parataxis. The two relations are illustrated in (76):

(76) I would if I could, but I can't
 1α 1β 2 (1985a: 195)

Where numerical notation indicates a paratactic relation while the Greek letter notation indicate a hypotactic one.

Parataxis is the linking of elements of equal status. Both the initiating and the continuing elements are free, in the sense that each could stand as a functioning whole. By contrast, Hypotaxis is the binding of elements of unequal status. The dominant element is free, but the dependent element is not.

b) Logico-semantic relation. There is a wide range of different logico-semantic relations between a primary and a secondary member of a clause complex. But it is possible to group these into a small number of general types, based on the two fundamental relationships of expansion and projection.

In expansion, the secondary clause expands the primary clause by elaborating it, extending it or enhancing it.

In projection, the secondary clause is projected through the primary clause, which instates it as a locution or an idea. In enhancement these types of relations are summarized in figure 8 below and an example of each type is being provided to illustrate them (Halliday 1985a: 196).

Expansion:		Examples of paratactic relation
(a) Elaboration	=	(equals): i.e.: John didn't wait; he ran away.
(b) Extension	+	(is added to): and: .John ran away, and Fred stayed behind.
(c) Enhancement	X	(is multiplied by): so, yet, then: John was scared, so he ran away.
Projection:		
(d) Locution	“	(double quotes): says: John said: “I'm running away”
(e) Idea	‘	(single quotes): thinks: John thought to himself: “I'll run away”

Figure 8: Examples of paratactic logico-semantic relations between primary and secondary clauses (after Halliday 1985a: 197)

Following the same order, we can provide with examples of hypotactic relations:

(77) Elaboration: John ran away, which surprised everyone

(78) Extension: John ran away, whereas Fred stayed behind.

(79) Enhancement: John ran away, because he was scared.

(80) Locution: John said he was running away.

(81) Idea: John thought he would run away.

Examples (77-81) are taken from Halliday (1985a: 198).

1.2.4.1 Three types of projection

This is an important aspect of Verbal Processes, which are extremely common, both in spoken and in written language. There is an abundance of these in narrative texts and since students are exposed to this type of texts at a very early stage of the language (I am referring to foreign language), I consider necessary to elaborate on them.

Again, I will follow Halliday (1985a) to provide the types of projections. These are of three kinds depending on whether we project a report, an idea or a fact.

A) Quoting (direct speech): it is a Verbal Process with a paratactic relation. The simplest form of projection is direct (quoted) speech as in:

(82) She keeps saying to us “I stay up till twelve o’clock every night” (1985a: 228).

The projecting clause is a Verbal Process, and the projected clause has the status of a wording.

Verbs used in quoting clauses include:

1. - the general member is the verb *to say*;
2. - verbs specific to statements (*tell, remark, observe, point out, report, announce*) and to questions (*ask, demand, inquire, query*);
- 3.- verbs combining say with some circumstantial element such as *reply, protest, continue, interrupt*, and *warn*; and
4. - verbs having connotations of various kinds as *insist, complain, cry, shout, boast, murmur* and *stammer* (1985a: 229-38).

B) Reporting (indirect speech): Mental Process with a hypotactic relation. It is possible to project a process of thinking:

(83) Dr Singleman always believed that his patients would recover (1985a: 230).

The difference with letter A) is that the projecting clause is a Mental Process, one of cognition, and the projected clause is a meaning, not a wording.

C) Reporting speech, quoting thought: it is possible to report a saying by representing it as a

meaning. This is the reported speech or indirect speech of traditional western grammars.

(84) The noble Brutus hath told you Caesar was ambitious (1985a: 231).

Verbs used in reporting statements and questions are largely the same as those used in quoting, with two main variations. On the one hand, many semantically complex verbs for rhetorical acts are used only in reporting, not in quoting such as *insinuate*, *imply*, *remind*, *hypothesize*, *deny*, *make out*, *claim*, *pretend* and *maintain*. On the other, verbs that are not intrinsically saying verbs are generally not used to report, even though they may be used to quote in narrative contexts.

There are different ways of referring back to what is quoted and what is reported. Typically a reference item, usually ‘that’, is used to pick up a quoted passage, while a substitute ‘so/not’, is used with a report.

(85) She said, “I can’t do it.” – Did she really say that?

She said she couldn’t do it. – Did she really say so? (1985a: 234).

There is a type of speech intermediate between direct and indirect, namely free indirect speech:

(86) quoted (‘direct’) “Am I dreaming?” Jill wondered.

Free indirect Was she dreaming, Jill wondered.

Reported (‘indirect’) Jill wondered if she was dreaming (1985a: 239).

This type of speech has some of the features of each of the other two types. The structure is paratactic, thus the projected clause has the form of an independent clause retaining the mood of the quoted form; but it is a report and not a quote, so time and person reference are shifted. Free indirect speech can be projected both verbally and mentally, and includes both propositions and proposals – everything, in fact, that can be both quoted and reported (1985a: 240).

1.2.5 Around the clause: cohesion

The notion of cohesion is precisely what motivates this thesis. This concept lies at the core of my classroom research because the faulty use of personal pronouns, among other lexicogrammatical resources, by students resulted in texts difficult to read.

If we go back to the definition of text provided by Halliday and Hasan (1976: 1): ‘any passage, spoken or written, of whatever length, that does form a unified whole’, we then consider that

a text is a unit of language in use and not a grammatical unit. This, first of all, means that is best regarded as a semantic unit, i.e. a unit not of form but of meaning. And secondly, that the concept of texture expresses the property of being a text and it derives from the fact that it functions as a unity with respect to its environment. To achieve this property the resources of English for creating texture must be used accurately and consistently.

Texture involves cohesion, textual structure (the organization of the sentence and its parts), and the component of macrostructure that establishes a text to a particular kind (1976: 324). Cohesion is a semantic relation, therefore, realized through the lexicogrammatical system. Cohesion, then, refers to the range of possibilities that exist for linking something with what has gone before. It is the sentence that is the pivotal entity here and so we can interpret cohesion as the set of semantic resources for linking a sentence with what has gone before (1976: 10).

Some forms of cohesion are realized through the grammar (grammatical cohesion) and others through the vocabulary (lexical cohesion). Section 1.2.5.1 below expands these resources of cohesion.

Cohesion occurs where the interpretation of some element in the discourse is dependent on that of another. The one presupposes the other, in the sense that it cannot be effectively decoded except by recourse to it. When this happens, a relation of cohesion is set up, and the two elements, the presupposing and the presupposed, are thereby at least potentially integrated into a text (1976: 4).

The actualization of cohesion in any given instance depends not merely on the selection of some option from within these resources, but also on the presence of some other element which resolves the presupposition that this sets up.

Any single instance of cohesion will be referred to as 'tie'. Thus, we can characterize any segment of a text in terms of the number and kinds of ties which it displays (1976: 3; 331). Cohesion takes place as a single tie between a pair of elements in adjacent sentences, with the second member of the pair presupposing the first while the first does not presuppose anything else in its turn (1976: 329).

We can classify the ties based on the distance between the presupposed and the presupposing items. In this way, we have:

- a) Immediate tie: relating the sentence to that which immediately precedes it.

b) Non-immediate:

b.1) Mediate tie: not in the preceding sentence, we need to go back more than one sentence to find out the presupposed element (1976: 330).

b.2) Remote tie: the distance between the two items can be much greater than this, especially in spoken language.

In addition to the notion of ties, I need to introduce here the concept of direction. The presupposition of something that has gone before means that the presupposition is pointing back to some previous item; this is known as anaphora. Yet, the presupposition may point forward, having in this case a cataphoric reference (1976: 14-7).

Cataphoric and anaphoric references are endophoric, since they refer to some elements within the text. When we have a reference pointing somewhere outside the text, we have an example of exophoric reference, since the reference is to the situation and not to the text. Exophoric reference is not cohesive because it does not bind the two elements together into a text (1976: 18).

The different resources of cohesion are mentioned in the following section. I will analyze in more detail the one devoted to 'Reference' and, in particular, 'Personal Reference' since the latter was utilized as the mainspring for the whole classroom research along with the Processes and semantic Roles.

In section 3.3.6 students' compositions are analyzed and one of the conclusions was the lack of cohesion in their writings. There was an inconsistency in naming Participants and tracking them throughout the text, producing in many cases a lack of texture.

1.2.5.1 Lexicogrammatical resources of cohesion

Halliday and Matthiessen (2004: 533) state that there are four ways in which cohesion is created in English:

1. - conjunctions
2. - reference
3. - ellipsis and substitution, and
4. - lexical organization

The first three are grammatical systems and thus manifestations of grammatical cohesion, whereas lexical organization refers to lexical cohesion.

1.2.5.1.1 Conjunctions

In this section I will follow Halliday and Matthiessen's work (2004: 536-7) where they maintain that conjunctive relations typically involve contiguous elements up to the size of paragraphs – and possibly beyond, or their equivalent in spoken language. Conjunctions are a way of setting up the logical relations that characterize clause complexes in the absence of the structural relationships by which such complexes are defined.

Conjunctions are concerned with rhetorical transitions, transitions between whole messages, or even message complexes. Conjunction indicates the relations through which such textual transitions are created. In contrast, the other cohesive resources are concerned with textual status – statuses having to do with how 'components' of messages are processed as information. Furthermore, conjunctions create relations between pairs of clauses that can be either hypotactic or paratactic (see 1.2.4).

The logico-semantic relation is marked by a conjunction- either by a non-structural one that is used in this way, that is, only cohesively, such as for example, furthermore, consequently; or by a structural one whose prototypical function is to mark the continuing clause in a paratactic clause nexus. The former serve as conjunctive Adjuncts and are very commonly thematic; the latter are simply analyzed as structure markers and are obligatorily thematic as textual Theme. Table 19 summarizes the different types of conjunctions and some examples.

Elaboration	Apposition	<u>Expository</u> : <i>in other words, that is (to say), I mean (to say), to put it another way</i> <u>Exemplifying</u> : <i>for example, for instance, thus</i>
	Clarification	<u>Corrective</u> : <i>or rather, at least, to be more precise</i> <u>Distractive</u> : <i>by the way, incidentally</i> <u>Dismissive</u> : <i>in any case, anyway, leaving that aside</i> <u>Particularizing</u> : <i>in particular, more especially</i> <u>Resumptive</u> : <i>as I was saying, to resume</i> <u>Summative</u> : <i>in short, to sum up, in conclusion, briefly</i> <u>Verifactive</u> : <i>actually, as a matter of fact, in fact</i>
Extension	Addition	<u>Positive</u> : <i>and, also, moreover, in addition</i> <u>Negative</u> : <i>nor</i> <u>Adversative</u> : <i>but, yet, on the other hand, however</i>

	Variation	<u>Replacive</u> : <i>on the contrary, instead</i> <u>Subtractive</u> : <i>apart from that, except for that</i> <u>Alternative</u> : <i>alternatively</i>
Enhancement	Spatio-temporal: temporal	<u>Simple</u> : <i>following (then, next); simultaneous (at the same time); preceding (before that); conclusive (in the end, finally)</i>
		<u>Complex</u> : <i>immediate (at once); interrupted (soon); repetitive (next time); specific (next day); durative (meanwhile); terminal (until then)</i>
		<u>Simple internal</u> : <i>following (secondly); simultaneous (here); preceding (up to now); conclusive (last of all)</i>
	Manner	<u>Comparison</u> : <i>positive (similarly); negative (in a different way)</i>
		<u>Means</u> : <i>thus, thereby, by such means</i>
	Causal-conditional	<u>General</u> : <i>so, then, therefore, consequently, because of that</i>
		<u>Specific</u> : <i>result (in consequence); reason (for that reason); purpose (for that purpose); conditional positive (then, in that case); conditional negative (otherwise, if not); concessive (yet, still, though)</i>
	Matter	<u>Positive</u> : <i>here, there, as to that, in that respect</i>
		<u>Negative</u> : <i>in other respects, elsewhere</i>

Table 19: Summary of the system of conjunctions (after Halliday and Matthiessen 2004: 541)

For the most part, students limited the use of conjunctions to the ones expressing addition (*and* and *but*) and the ones expressing causal-conditional meaning (*so*, *then*, and *because*).

1.2.5.1.2 Ellipsis and substitution

Downing and Locke (2006: 238-44) explain that these devices are used to avoid repeating information that is recoverable from the context. Substitution avoids the repetition of recoverable information; but while ellipsis leaves a structural slot empty (elements of the clause that are recoverable), substitution replaces it by a filler word. Consequently, the exact words which have been ellipted are not recoverable.

As Halliday and Matthiessen (2004: 563) explain, it is not semantic but lexicogrammatical—a relationship in the wording rather than directly in the meaning.

Ellipsis and substitution can work on three different contexts in English, namely the clause,

the VG and the NG, as examples (87-91) show. Examples (87a) and (90) are examples of substitution, while examples (87b, 88, 89, and 91) are examples of ellipsis.

(87a) Is he at home? I think so.

(87b) Is he at home? yes, no + [Ø]

(88) Who is at home? John (2004: 564)

(89) Have a shower! I can't [Ø: have a shower] (2004: 567)

(90) I did cross-eye in the middle of my art. – I can't do that.

(91) I'll ask Jenny about laptops and find out whether we have got any. [Ø: laptops] (2004: 568)

1.2.5.1.3 Lexical cohesion

Following Halliday and Matthiessen (2004: 570-1) lexis is organized into a network of lexical relations. The primary types of these relations derive from either the paradigmatic⁸ or the syntagmatic organization of lexis:

A) the paradigmatic relations are inherent in the organization of lexis as a resource. They can be interpreted in terms of elaboration (repetition, synonymy, hyponymy) and extension, two of the subtypes of expansion (meronymy) that are already familiar from the logico-semantic relations used in forming clause complexes and the corresponding conjunctive relations.

B) the syntagmatic relations hold between lexical items in a syntagm that tend to occur together, or collocate with one another (collocations).

Examples (92-96) illustrate the different paradigmatic and syntagmatic organization of lexis (after Halliday and Matthiessen 2004: 571-77).

(92) Repetition: Algy met *a bear*. *The bear* was bulgy.

(93) Synonymy: I heard *a noise*. It was a car *sound*.

(94) Hyponymy: Noah's family gather *fruit and grain and vegetables*. They would need *plenty of food* for themselves and the animals.

⁸ Roman Jakobson posits that there are two axes in language: paradigmatic, which involves the association of substitutable entities, and syntagmatic, which involves simultaneous or successive combinations. He argues that the paradigmatic-syntagmatic dichotomy covers two different realities of language, one of which is operational and the other structural. On the one hand, selection and combination are the two basic modes of behavior by which language users construct (encode) and understand (decode) linguistic messages. On the other hand, similarity and contiguity are the two relations that underlie language structures. Typically, elements in a selection set are associated by similarity, those in combination by contiguity (1990: 115).

(95) Meronymy: The *rear mirror and the trunk* from *the car* were broken.

(96) Collocation: The *school choir* played the piano and the violin.

This seems to be a very productive linguistic resource for students as will be seen in section 3.3.2. In the anaphoric reference exercises where they had to locate the antecedent of a personal pronoun, they sometimes point to a word within the sentence that was a synonym or an explanation to the main word.

1.2.5.1.4 Reference

From the three metafunctions (interpersonal, ideational and textual) it is the ideational one that focuses on the content of discourse: what kinds of activities are undertaken (processes), and how participants undertaking these activities are described and classified (Martin and Rose 2003: 17). Reference refers to people and things, which are the Participants in the Process.

In Halliday's words (2004: 549) reference is a major cohesive resource for making textual status. By textual statuses, we mean values assigned to elements of discourse that guide speakers and listeners in processing these elements. Or as Saeed (2004: 12) puts it: it is the relationship by which language hooks onto the world.

The textual status in the system of reference is that of identifiability, meaning whether the listener can recover a given element by the speaker or not. If the element is presented as identifiable, then the listener will have to recover the identity from somewhere else (Halliday and Matthiessen 2004: 550). If it is presented as non-identifiable, then the listener will have to establish it as a new element of meaning in the interpretation of the text.

(97) |||There was once a velveteen rabbit. ||| **He** was fat and bunchy, || **his** coat was spotted and white, || and **his** ears were lined with pink sateen. ||| (2004: 551)

In example (97) the protagonist is first introduced as non-identifiable by means of the non-specific NG *a velveteen rabbit*, allowing the reader to establish this creature as a node in the network of meanings created in the course of the interpretation of the narrative. After having been introduced in this way, the *velveteen rabbit* is then presented as identifiable by means of the personal pronoun *he* and possessive determiner *his*. These latter are instances of

reference (2004: 551).

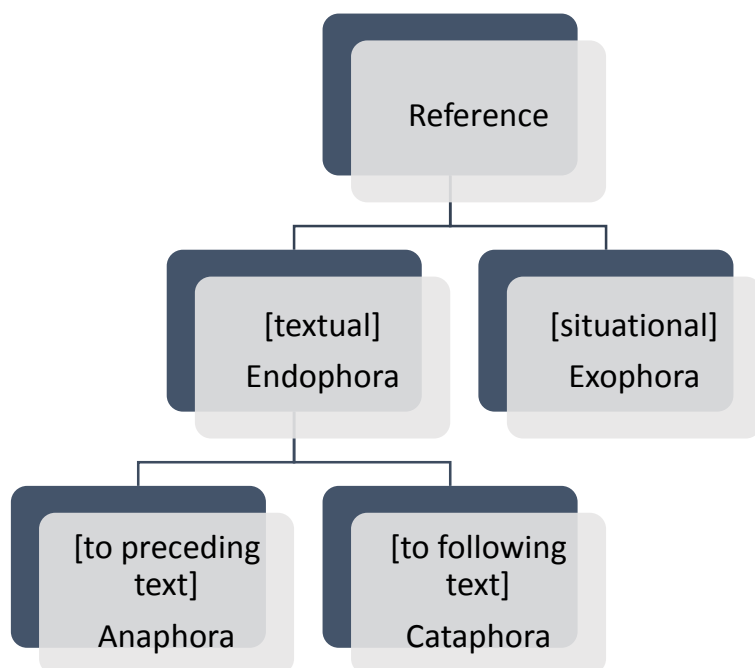


Figure 9: Types of reference (after Halliday and Hasan 1976: 33)

We can establish different ways of pointing at elements within a text (see 1.2.5). The basic distinction is between pointing outwards and pointing inwards. Figure 9 above summarizes the different types of references (cf. Martin and Rose 2003: 161; and Carretero 2014: 21-3). Once a new meaning has been introduced, it becomes part of that system, and if it is the right category of thing, it can be presumed by endophoric reference (Halliday and Matthiessen 2004: 552).

Exophora and endophora are different directions of pointing – either to referents in the environment outside the text, or to referents introduced in the text itself before or after the reference expression. All such expressions have in common the fact that they presuppose referents; but they differ with respect to whether what is presupposed is the same referent (co-reference) or another referent of the same class (comparative reference) (2004: 553). Table 20 recaps these differences.

Co-reference	Personal pronouns
	Demonstrative pronouns
Comparative reference	General (same, similar, other, etc.)
	Specific (more, fewer, etc.)

Table 20: Types of reference expression (after Halliday and Matthiessen 2004: 553)

Since the classroom research developed in part III deals only with co-reference (personal pronouns), the other types of reference expression will not be treated here.

1.2.5.1.4.1 Pronouns from a traditional perspective

In educational contexts, the debate around the choice of grammar to be taught is often framed in terms of ‘traditional’ vs. ‘functional’. Derewianka and Jones argue that this dichotomy is a simplistic and misleading framing since grammars move along a cline between ‘form’ and ‘function’. For instance the grammar of Biber et al. (2010) is functionally-oriented while Huddleston and Pullum’s is a structurally-oriented one (Derewianka et al. 2010: 6-7).

Biber et al. (2010: 327-9) regard pronouns as economy devices, since most of them replace fully specified noun phrases. They serve as pointers to the surrounding (usually preceding) text or the speech situation rather than giving a detailed specification. In addition, pronouns are used where the reference is unknown or very general, and for specific clause-binding functions.

Biber uses a traditional classification of pronouns and refers to personal pronouns as function words which make it possible to refer succinctly to the speaker/writer, the addressee, and identifiable things or persons other than the speaker/writer and the addressee. There are corresponding series of personal pronouns, possessive determiners, possessive pronouns, and reflexive pronouns. Furthermore, there is a distinction between nominative and accusative case for most personal pronouns as figure 10 below shows.

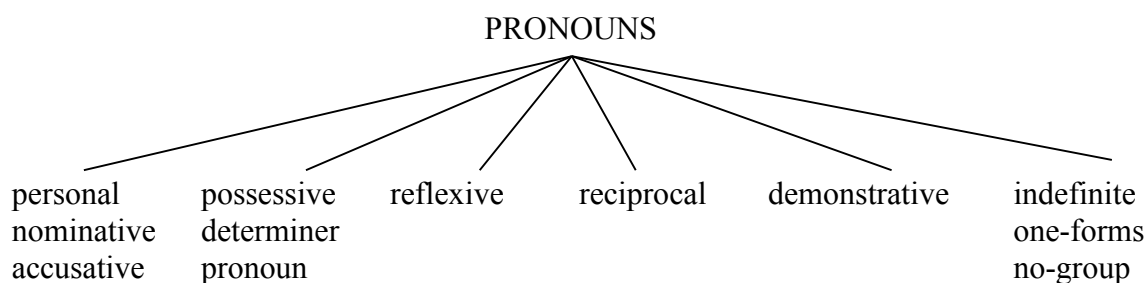


Figure 10: Types of pronouns (after Biber et al. 2010)

In spite of the name, personal pronouns may have both personal and non-personal reference. *I, you, he, she, he, she, we, and we* generally have personal reference, while *it* generally has non-personal reference. The plural pronouns *they/them*, however, are commonly used with both personal and non-personal reference.

Most typically, personal pronouns are used to refer to definite specific individuals identified in the speech situation (first and second person) or the preceding text (third person). However, the specific reference is often far from straightforward.

In conversation, uncertainty can be cleared up in the course of the exchange. However, whether in speech or writing, the interpretation of pronouns (as of definite noun phrases in general) requires a great deal of cooperation between the speaker/writer and the addressee, especially with the third person pronouns and particularly in conversation.

Quirk et al. (2004: 335) consider that the meaning of pronouns as ‘replace nouns’, is a misnomer and he claims that it is best to see them as comprising a varied class of closed-class⁹ words with nominal function (‘noun-like’ or ‘like a noun phrase’). They share several characteristics, most of which are absent from nouns.

Semantically, a pronoun may be a ‘pro-form’¹⁰ in any of the following three senses:

- it may substitute for some words or phrase;
- it may signal, as personal pronouns like *her* do;
- it may stand for a very general concept, so that its reference includes the reference of untold more specific noun phrases: *somebody*, for example, indicates a broad class of people

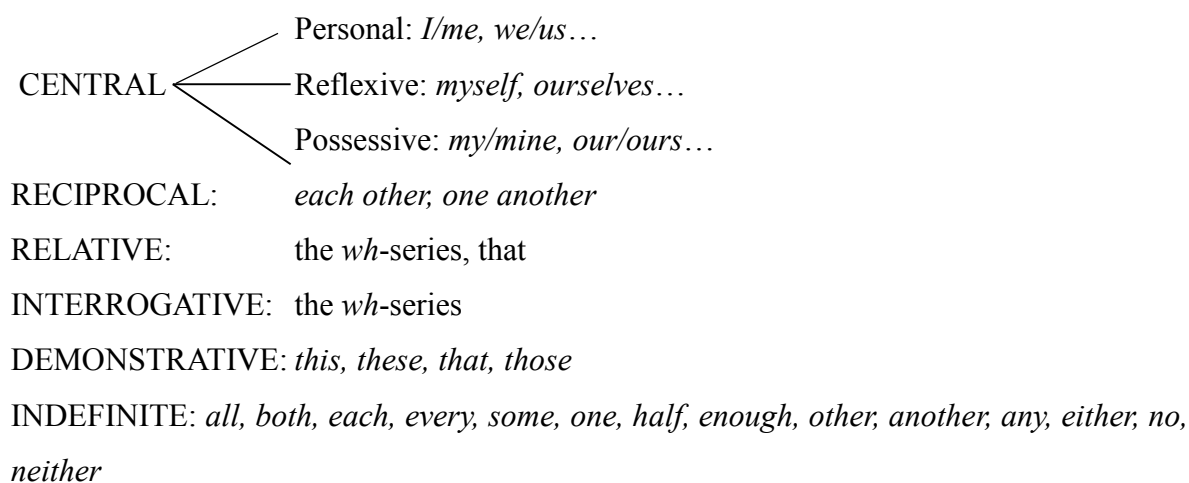
⁹ In Linguistics the notion of ‘closed’ vs. ‘open’ choice has to do with the possibilities associated to it. The range of possibilities in a closed choice is called technically a SYSTEM, that in an open choice a SET. The closed system is characteristic of grammar, while the open set of lexis (Halliday et al. 1966: 22).

¹⁰ A pro-form is a construction where a constituent representing old information is reduced, as in: *Was she arrested? I think so* (Huddleston 2005: 258).

including *a girl, a man, a secretary*, etc.

Syntactically, most pronouns function like noun phrases rather than nouns. They combine in only a limited way with determiners and modifiers. Most pronouns, being intrinsically either definite or indefinite, incorporate their own determiner.

Quirk's classification of pronouns is very complete and detailed (2004: 345):



Some pronouns have morphological characteristics that nouns do not have, namely:

- a. - Case: contrast between subjective and objective cases (nominative/accusative)
- b. - Person: first, second, and third
- c. - Gender: (i) personal and nonpersonal gender; and between (ii) masculine and feminine gender

On the other hand, Huddleston and Pullum (2005: 327) differ from the tradition that regards pronouns as a separate part of speech. They believe that there are strong grounds for treating them as a subcategory of noun. Pronouns differ inflectionally from prototypical nouns and permit a narrower range of dependents, but they qualify as nouns by virtue of heading phrases which occur in the same functions as phrases headed by nouns in the traditional sense, i.e. common and proper nouns. This functional likeness between common nouns, proper nouns, and pronouns is illustrated for the three main clause-structure complement function in examples (98-100) from Huddleston and Pullum (2005: 327):

	COMMON/PROPER NOUN	PRONOUN	
(98)	a. [<i>The <u>boss</u></i>] / [<i><u>Liz</u></i>] was late.	b. [<i><u>She</u></i>] was late.	[S]
(99)	a. I'll tell [<i>the <u>boss</u></i>] / [<i><u>Liz</u></i>].	b. I'll tell [<i><u>her</u></i>]	[O]
(100)	a. It was [<i>the <u>boss</u></i>] / [<i><u>Liz</u></i>] who left.	b. It was [<i><u>she/her</u></i>] who left.	[P]

They regard pronouns as a subclass of nouns, not a distinct primary category. Nouns can be divided in the first instance into three major classes: common nouns, proper nouns, and pronouns. The latter fall into various more specific classes such as personal, interrogative, relative, etc. They differ from ordinary nouns in that they allow a much narrower range of dependents, and in particular they do not combine with determiners (2005: 328).

The category of pronouns recognized in *The Cambridge Grammar of English Language* (Huddleston and Pullum 2005) is somewhat smaller than in traditional grammar, since a number of their determinatives are traditionally analyzed as pronouns when they occur in what they are calling the fused-head NP construction. Example (101) illustrates the differences in analysis.

- (101) i. There are a dozen applications and [several] look quite promising. [pronoun]
 ii. There were two pieces left and Kim, as always, chose [the larger]. [ellipsis]

Several is traditionally analyzed as an adjective in *several applications*, but as a pronoun in examples like i. *Larger*, however, is treated as an adjective not only in *the larger piece*, but also in ii: the latter is said to be elliptical, with *piece* understood.

Furthermore, they include in the pronoun category certain words such as *today* which are traditionally analyzed as common nouns or adverbs. This gives, then, five main categories: personal, reciprocal, interrogative, relative, and temporal (2005: 425).

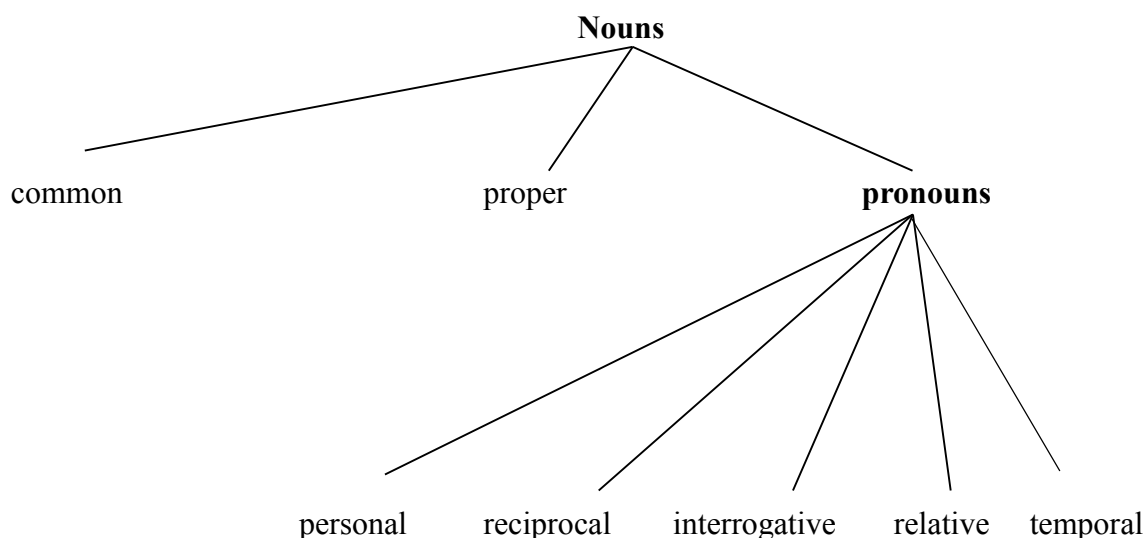


Figure 11: Types of nouns (after Huddleston and Pullum 2005)

Pronouns form a subclass of nouns distinguished syntactically from common nouns and proper nouns by their inability to take determiners as dependent. Pronouns constitute a closed category of words whose most central members are characteristically used deictically or anaphorically, as examples (102, 103) from Huddleston and Pullum (2012: 100-1) show.

- (102) *I love them.* [deictic pronouns]
 (103) *Liz said she was unavailable.* [anaphoric pronoun]

Syntactically, pronouns function as head in NP structure, and for that reason belong to the larger category of nouns. What distinguishes them from other nouns (common nouns and proper nouns) is that they permit a much narrower range of dependents. Usually they form full NPs by themselves. Most distinctively, they do not take determiners.

The traditional term *pronoun* is based on the idea that words of this class *stand for nouns*. In this grammar they retain the traditional category of pronoun, but introduce a further category based on the idea of *standing for* –the category of pro-form. A pro-form is an anaphor with little inherent semantic content of its own: the interpretation derives from the antecedent, so that the anaphor contains little descriptive information itself. Pro-forms are single words (or in a few cases idioms, such as *do so*): they constitute a subclass of anaphors as seen in (104, 105) (Huddleston and Pullum 2005: 1461).

- (104) Liz thinks she may be able to help. [pro-form]

(105) The woman next door thinks **she** may be able to help. [stands for an NP]

Not all pronouns are pro-forms, for instance *who* and *what* are not anaphor interrogative.

Kinds of pro-form:

a. - 'Pro-NP' for an anaphor with a NP antecedent.

(106) The car is being serviced at the moment but it should be ready soon.

b. - 'Pro-clause' with a clausal antecedent.

(107) If he was disappointed by her response, he did not show it.

c. - 'Pro-nominal' where the antecedent is of the nominal category.

(108) This photo of Ann is much better than the other one (examples 106-108 are from Huddleston and Pullum 2005: 1463).

1.2.5.1.4.2 Personal reference from a SFG perspective

On the other hand, Halliday's grammar is organized around the question of how language functions to construe various kinds of meanings. SFG provides a more 'comprehensive package', informing all areas of the language curriculum rather than being taught as a discrete 'topic' (Derewianka et al. 2010: 7).

Personal reference is reference by means of function in the speech situation, through the category of person (Halliday 1976: 37; Halliday and Matthiessen 2004: 554). The category of 'personals' includes the three classes of personal pronouns, possessive determiners (usually called 'possessive adjectives'), and possessive pronouns (Halliday 1976: 43).

These items are all reference items; they refer to something by specifying its function or role in the speech situation. This system of reference is known as 'person', where 'person' is used in the special sense of 'role'; the traditionally recognized categories are first person, second person, and third person, intersecting with the number categories of singular and plural (Halliday 1976: 44).

The significance of the 'person' system is that it is the means of referring to relevant persons and objects, making use of a small set of options centering round the particular nature of their relevance to the speech situation. The principal distinction is that between the persons defined by their roles in the communication process, on the one hand, and all other entities on the other. The former we shall call speech roles; they are the roles of speaker and addressee. These are the two roles assigned by the speaker; and we use 'addressee' in preference to

‘hearer’ or ‘listener’ in order to suggest the meaning ‘person designated by the speaker as recipient of the communication’ – as distinct from one who chooses to listen or happens to hear. The latter, which we shall call simply other roles, include all other relevant entities, other than speaker or addressee. In terms of the traditional categories of person, the distinction is that between first and second person on the one hand (*I, you*, and *we*) and third person on the other (*he, she, it, they*, and *one*¹¹).

Each of these personal forms enters into the structure in one of two guises: either as participant in some process, or as possessor of some entity. If the former, it falls into the class noun, subclass pronoun, and functions as Head – and sole element – in the NG; it then has one form when that NG is the Subject (*I, you, we, he, she, it, they, one*) and in most cases a different form when it is anything other than subject (*me, you, us, him, her, it, them, one*). If the latter, it falls into the class ‘determiner’, and then functions either as Head (*mine, yours, ours, his, hers, [its], theirs*) or as Modifier (*my, your, our, his, her, its, their, one’s*) (1976: 45).

Since the system network presented above is semantic, I shall accordingly present the grammar of the personal pronouns following the criteria of speech roles.

I should remind at this point that a system is defined by Halliday (1967a: 37) as ‘a set of features, one and only one of which must be selected if the entry condition to that system is satisfied’. Moreover, having meaning implies choice (Lyons 1968: 413) and learning a language is learning how to mean, therefore learning how to mean is learning how to choose (Halliday 1973: 24).

In table 21, the realization in the right hand column will depend on what other features have been co-selected. In the case of every rule the realization is simply that the head of the NG which we are generating (symbolized as *h*) is expounded by the item that is specified. The two conditional features columns show that if [one] is co-selected, and if [subject Theme] has also been selected in the appropriate ‘situation’ network, the realization is that the head of the NG will be expounded by the item ‘I’ (Fawcett 1988: 209).

¹¹ The –body forms are preferred in conversation, while –one forms are more typical of the written registers. British fiction employs the less casual choice (–one) more widely than does AmE (Biber et al. 2010: 353).

FEATURE	CONDITIONAL FEATURES		REALIZATION
Agent/Actor	singular	subject Theme	h< I
		-----	h< me
	plural	subject Theme	h< we
		-----	h< us
Addressee			h< you
Male		subject Theme	h< he
		-----	h< him
Female		subject Theme	h< she
		-----	h< her
Mass			h< it
Non-person			
Outsider	plural	subject Theme	h< they
Sex unspecified		-----	h< them

Table 21: A semantic system network of personal pronouns (after Fawcett 1988: 209)

This approach to personal pronouns combines forms and their functions (SFG) and it reveals other linguistic aspects rather than just number and gender. With this approach in mind, educators can teach some concepts such as Theme, Agent, and exophoric vs. endophoric reference.

1.2.5.1.4.3 The discourse function of pronouns

As Downing and Locke state (2006: 415) the principal function of personal pronouns is to help establish major referents in the discourse by setting up referential chains by means of anaphora (see 1.2.5.1.4). This is an important part of referential coherence, of making important referents continuous and salient enough to be perceived and remembered by listeners and readers.

Pronouns are very frequently needed in English since clauses require the Subject to be stated, except in some cases of ellipsis. Pronouns perform this and other clause functions economically, by avoiding long repetitions of parts of the previous discourse. The connections are short and usually clear so that the flow of conversation or reading is well maintained. In interpersonal communication the pronominal references of the speaker are easily interpreted by the addressee, even when they are not explicit but only inferred. Nevertheless, in written communication, where there is often less shared knowledge between

writer and reader, correct interpretation of a pronoun's reference depends on factors related to the text, such as proximity of the pronoun to its antecedent, general preference for the Subject rather than the Object as antecedent and the amount of inference the reader is required to make. On the whole, common sense and the reader's general understanding of the text seem to be the decisive factors.

The major function of the third person pronoun is to refer to NGs or other classes of units mentioned elsewhere in a text.

(109) A: Vera's looking better. B: *She's* a lot better. (Downing and Locke 1995: 414)

(110) They were all shouting and fighting; *it* was terrible. (1995: 415)

If the references of the pronouns in a text are not transparently clear, the text will be difficult to understand (Downing and Locke 1995: 416).

Martin and Rose (2003: 145) devote a chapter to identification and tracking of participants, identification being concerned with tracking participants, with introducing people and things into a discourse and keeping track of them once there. These are textual resources, concerned with how discourse makes sense to the reader by keeping track of identities.

In order to make sense of discourse, one thing we need is to be able to keep track of who or what is being talked about at any point. When we first start talking about somebody or something, we may name them (proper or common noun), but then we often just identify them with a personal pronoun such as *she*, *he* or *it*. By this our listener/reader can keep track of exactly which person or thing we are talking about, i.e. which participant in the discourse.

Table 22 below displays the types of resources for identifying thing and people.

Type	Resources
Presenting	<i>a, an, one;</i> <i>someone, anyone</i> <i>some, any;</i> <i>every, all</i>
Presuming	<i>the;</i> <i>this, that, these, those;</i> <i>the said purposes;</i> <i>each, both, neither, either;</i> <i>I, you, she, he, it, we, they, me, her, him,</i> <i>them;</i> <i>here, therewith</i>

Table 22: Resources for identifying things and people (after Martin and Rose 2003: 157)

Bolinger (1979) considers that the problem of interpreting the use of pronouns has to do, in part, with the vicinity, but this vicinity has to be defined more broadly than within the same sentence. The use of pronouns has to do with the organization of the paragraph (1979: 293). Other authors, such as Linde, see the problem of pronouns in relation to the focus of attention. She states that the term ‘focus of attention’ can be defined precisely and that, by doing so, we can make progress on the question of how speakers actually use pronouns.

Linde (1979) begins by using the definition of *focus of attention* provided by Grosz:

The focus of attention can be represented as the pairing of the underlying tree structure of the discourse with a pointer that marks a particular node of the tree. The focus of attention is on the discourse node marked by the pointer. As the discourse is constructed, the pointer moves from node to node on the tree representing the information of the discourse (in Linde 1979: 345).

This technical formulation of focus is obviously related to notions like degree of obviousness of referent or degree of difficulty of identification of the reference. Reference within a discourse node amounts to a continuation of the current topic, whereas change of node also means change of topic and, hence, more effort required by the hearer to identify the referent. The author analyzes the use of *it* and *that* in discourse (oral) and she concludes that *it* is used not only for reference within the immediate node that is the focus of attention but also for reference to the basis of the entire tree, i.e. topic. Example (111) shows how the last *it* refers to the apartment and not to an immediately preceding room as the previous *it* does.

(111) ...and *it* was a decent sized kitchen, *it* wasn't fantastic, but *it* was there, you know. And then *it* had a good-sized living room. (Linde 1979: 350)

These two types of reference suggest that, in discourse, attention is actually focused on at least two levels simultaneously – the particular node of the discourse under construction and, also, the discourse as a whole.

She observes that all of the conditions favoring the choice of *it* are cases of reference within the area of focus of attention, while the conditions favoring *that* involve reference outside the focus of attention, thus encoding information about the time, place, and participants of the speech situation. This is related to the difference between *logical distance* and *emotional distance*. Linde considers that more investigation is required in order to determine the relative strengths of these two.

She concludes by summarizing the domains where focus of attention may operate

simultaneously. These domains are: the structure of a hierarchically organized discourse; the act of speaking itself; and the object of reference itself vs. focus on the item with contrast to some other item of the same type (Linde 1979: 345-53).

This study provides more evidence along these lines about how the use of pronouns is much more complex than it may look at first and the use of them is key to the construction of a coherent discourse and in the text construction. This aspect will be treated in part II.

1.2.5.1.4.4 Certain problems with personal pronouns

Biber et al. (2010: 316) mention two major problems when using personal pronouns:

1. – The first problem is gender-specific vs. dual gender pronoun reference. When referring to nouns of dual gender such as *friend*, *individual*, or *journalist*, and pronouns such as *anybody*, there is a choice where the required pronouns have different masculine and feminine forms depending upon the sex of the referent (especially *he*, *his* vs. *she*, *her*). Special problems arise, however, where the sex of the referent is unknown or irrelevant, as English has no dual third person singular pronoun. Traditionally, masculine pronouns have been used, as examples below illustrate.

(112) Each [novelist] aims to make a single novel of the material he has been given.

(113) Each [individual] is thus the recipient of the accumulated culture of the generations which have preceded him.

Even though such masculine pronouns may be intended to have dual reference, readers often perceive the referent to be male. As a result, such use of masculine pronouns has come in for a great deal of criticism in recent years, and it has become increasingly common to use various strategies to avoid gender-specific reference. The authors propose two major grammatical devices used as alternatives to gender-specific reference, namely

a. - Use of coordinated pronoun forms as in:

(114) A [geologist] studying fossiliferous rocks in the field needs only an average knowledge of paleontology in order to make a fairly accurate estimate of the epoch in which the rocks he or she is studying belong.

(115) [Anyone] with English as his or her native language does not need other languages.

b. - Use of plural rather than singular forms. Plural co-referent pronouns and determiners are commonly used in both speech and writing, as in:

(116) [Everybody] remembers where they were when JFK was shot.

(117) [Nobody] likes to admit that they entertain very little, or that they rarely enjoy it when they do.

A way of avoiding a difference in number between co-referent forms is to opt consistently for the plural:

(118) Now they expect responsible [consumers] to pay for their folly.

Examples (114-118) are from Biber et al. (2010: 317).

This has caused some problems mainly to the fact that pronouns belong to a closed category and they resist the introduction of new forms. As Ralph B. Long mentions in TESOL Quarterly (1976: 123-4) a number of efforts has been made since the middle of the past century pursuing an acceptable new personal pronoun that means what the awkward 'he' or 'she' means. Since then some androgynous third-singular personal pronouns have turned up but none of them has anchored in the readers/writers habits. The following list of proposals was published in the volume cited above:

- Thon
- Heer, himer, hiser, hiser's
- Hesh, herm, hirs
- Tey, tem, ter, ters
- s/he along with his/her is common in written language, at least in some registers such as the academic one.
- il, ils, ilsef

Nevertheless, none of them has been chosen among the users' grammar. It is not difficult to see why speakers/writers have not favored any of these, they appear foreign to the eye and old to the ear.

In 1983 another solution was proposed by TESOL Quarterly (vol. 17.2: 328), which consists in varying the order when both genders are mentioned, as example (119) illustrates.

(119) In this study, the daughters and sons of professionals....

The TESOL Quarterly Style sheet (1998: vol. 13) proposes some methods, besides the one proposed above (1983), for avoiding the unmarked masculine, which are as follows:

(a) change to 'the'; (b) change to 'plural'; and/or (c) change to 's/he'.

2. – The second problem is personal vs. non-personal reference with pronouns. Biber et al.

(2010: 317-8) state that in a number of cases, the speaker can choose between personal (he or she) and non-personal reference (it). The former expresses greater familiarity or involvement whereas the latter is more detached. There are four specific semantic domains where this choice is relevant.

a. - baby, child, infant

(120) One three-month-old [baby] managed to talk its/her/his parents into sending Santa a letter asking for some clothes.

b. - animals, especially pets

(121) You know that [cat] it/she/he scratched me.

c. - countries

(122) [Italy] announced it/she had recalled its/her ambassador to Romania for consultations.

d. - ships

(123) The bow of the [ship] was punctured, and its/her forward speed was so great that a gash eighty-two feet long was made down the port side.

In the examples (120-23) (Biber et al. 2010: 318) there is a three-way choice and the non-personal option additionally overcomes any problems of ignorance or irrelevance of the sex of the living being that is referred to.

This issue is also pointed out by Celce-Murcia and Larsen-Freeman (1999: 304). They remind that ESL/EFL students have to learn that certain inanimate objects are sometimes referred to with a feminine pronoun form, although the use of *it* is more common today. This has been true for ships, countries, cars and until recently, hurricanes.

Halliday et al. point out that the treatment of gender in English is far from being clear. For instance, the moon is usually considered feminine, as ships and sometimes trains, while the sun is masculine (1966: 159).

Collective nouns can occur with both singular and plural personal pronouns and possessive determiners. The singular pronoun *it/its* is the predominant choice with a collective noun. However, plural pronouns occur both in speech and writing. Note that we may find singular subject-verb concord and plural co-referent pronouns and determiners in the same context (1966: 331-2).

1.2.6 Register

The knowledge and control of register(s) in written language is indispensable for students as will be seen in part II. I will commence this section with a definition of register provided by Halliday, as well as highlighting the importance of the concept of register within SFG. In section 1.2.5 I defined cohesion and the different lexicogrammatical resources that contribute to its formation. SFG, unlike Saussurean structuralist research that focused on *langue* and Chomskyan generative research on *competence* (Caffarel et al. 2004: 21), focuses on the text. However, another element is required in order to create a text effectively, viz. register. As Halliday and Hasan explain:

The concept of cohesion can be usefully supplemented by that of register since the two together effectively define a text. A text is a passage of discourse which is coherent in these two regards: it is coherent with respect to the context of situation, and therefore consistent in register; and it is coherent with respect to itself, and therefore cohesive. Neither of these two conditions is sufficient without the other, nor does the one by necessity entail the other (1976: 23).

The concept of register is central in Halliday's model of language (Lukin et al. 2011: 188). Halliday's theory of register has its origin in Firth and his interest in varieties of language (2002: 17) and Malinowski and his concept of context of situation. Firth writes that we should state first the structure of appropriate contexts of situation, then the syntactic structure of the texts and then the criteria of distribution and collocation (1968: 19). On the other hand, Malinowski claims that in a primitive language the meaning of any single word is to a very high degree dependent on its context (1923: 306).

Halliday (1977b) explains that the patterns of determination that we find between the context of situation and the text are a general characteristic of the whole complex that is formed by a text and its environment. We shall not expect to be able to show that the options embodied in one or another particular sentence are determined by the field, tenor and mode (explained below) of the situation. The principle is that each of these elements in the semiotic structure of the situation activates the corresponding component in the semantic system, creating in the process a semantic configuration, a grouping of favored and foregrounded options from the total meaning potential that is typically associated with the situation type in question. This semantic configuration is what we understand by register (1977b: 57-8). SFG seeks to identify the language-specific structures that contribute to the meaning of a text. Texture is what makes a text into a coherent piece of language, as opposed to simply being an

unorganized strings of sentences. One aspect of texture is cohesion, which deals with how successive sentences are integrated to form a whole. The other aspect of texture has to do with fit to context, or those choices based on what the speaker wants to say (Theme), and those choices related to the flow of information (Given-New) (Webster 2009: 7).

According to Halliday (1978) the theory of register attempts to uncover the general principles which govern the ways the language we speak or write varies according to the type of situation (1978: 32). Halliday defines register in terms of the association of linguistic features with different types of situation (1966: 87); and therefore, it is defined directly in lexicogrammatical terms (1978: 111).

A register can be defined as a particular configuration of meanings that is associated with a particular situation type. In any social context, certain semantic resources are characteristically employed; certain sets of options are as it were 'at risk' in the given semiotic environment. These define the register. Considered in terms of the notion of meaning potential, the register is the range of meaning potential that is activated by the semiotic properties of the situation (1986: 126).

Halliday breaks down register by saying that it is predicted or even determined by the categories of field, tenor, and mode (1976: 22; 1978: 62; 125). In Halliday's own diagram *field* is the type of social action, *tenor* is the role relationships, and *mode* is the symbolic organization (1978: 35). The three concepts are related respectively to the ideational, interpersonal and textual components of the semantic system (1978: 125; 1986: 132).

SFG has treated register in depth and it is a key domain for examining how elements, configurations and the patterning of clause Themes throughout a text may vary; how a text might deploy the resource of cohesion; and how to give an account of English semantics (Halliday 1985a: ix; 313-18; 372). Register is determined by what is taking place, who is taking part and what part the language is playing (Halliday 1978: 31). These notions are equivalent to *field*, *tenor*, and *mode* respectively.

Halliday et al. remark that when we observe language activity in the various contexts in which it takes place, we find differences in the type of language selected as appropriate to different types of situation (1966: 87). In this sense, Hasan argues that context can be seen as the major determinant of the defining characteristics of text genres (see further explanation below); given the nature of the context of situation we can predict the crucial semantic

elements of the embedded text as well as the permitted range for the overall message form (1996: 41).

Field is introduced by Martin (1992: 536-7) in terms of sets of activity sequences oriented to some global institutional purpose. Field is the contextual projection of experiential meaning. In general, fields are about people interacting with their world, so they tend to be characterisable along these two dimensions: what people are doing and what they are doing it for (Martin 2005:156).

Tenor is realized through the interpersonal metafunction in language and it is concerned with the status of the participants. This can be equal or unequal depending on whether the social ranking of participants is comparable or not (1992: 526). Tenor, basically, has to do with our feelings towards others – whether or not we like them, love them or hate them. These feelings themselves are somewhat volatile, depending in part on our emotions from moment to moment (Martin 2005: 159).

And finally, *mode* refers to the role language is playing in realizing social action. Within register, it is the projection of textual meaning, and so is realized primarily through the textual metafunction in language. Mode thus locates major systems such as tonality and tonicity in phonology, and Theme and information (clause), deixis (nominal group), tense (verbal group) and substitution and ellipsis (clause and group) in the grammar at risk, and because of their textual orientation impacts on all systems at the level of discourse semantics (negotiation, identification, conjunction and ideation) (Martin 1992: 508). Table 23 summarizes the relationship between metafunction and register providing examples of language system.

Leckie-Tarry adds that there is also a greater emphasis on the broader social context, proposing a definition of register as “the configuration of semantic resources that the member of a culture typically associates with a situation type. It is the meaning potential that is accessible in a given social context” (1993: 29).

METAFUNCTION	REGISTER	LANGUAGE SYSTEM
Ideational	Field: what is going on?	Process type Circumstance type Transitivity
Interpersonal	Tenor: relationship between speaker/writer and addressee	Mood Modality Polarity Vocation Person Speech function Attitude
Textual	Mode: Coherence, making links with co-text and context	Theme Information focus Reference Conjunction

Table 23: Relationship between metafunctions of English and register (after Painter 2005: 177)

Halliday, however, still employs the term register to encapsulate that relationship between texts and social processes. He employs the related term *genre* in a more limited sense, in the sense which has been common in literary discussions in the past. He sees generic structure not as the embodiment of the text as social process, but as a single characteristic of a text, its organizational structure, outside the linguistic system. On the other hand, Martin defines genre as ‘a staged, goal-oriented, purposeful activity in which speakers engage as members of our culture’ (1984: 25) or less technically as ‘how things get done, when language is used to accomplish them’ (1985a: 248). Nevertheless, genre theorists’ emphasis is firmly on social and cultural factors as the generating of all action, including linguistic action. Thus, Kress and Threadgold claim that ‘genres are primarily defined as the socially ratified text-types in a community’ (1988: 216). For genre theorists, the value of concepts of genre is that they offer certain theoretical categories to describe the interface between the sociocultural world and textual form. These are ways in which texts and the social agents which produce them construct and are constructed by the social and the cultural (1988: 216).

It is three factors, generic structure, textual structure and cohesion, which distinguish text from non-text, and as such can be brought within the general framework of the concept of register (1978: 145). Matthiessen explains that register analysis is both a linguistic and a metalinguistic activity. It is something we engage in linguistically as language users – we interpret texts in terms of the registers they instantiate and we also produce texts as instances

of particular register types (1993: 221). He adds that language in context is interpreted as a system of systems ordered in symbolic abstraction (1993: 226). Text is the basic semantic unit of a functional theory of language – language functioning in context (1993: 226-8).

The mode distinction between written and spoken clearly correlates with textual systems such as Theme, ellipsis/substitution, and conjunction; but it is also realized somewhat more indirectly to achieve different types of ‘information chunking’ – lexical density (Ure 1971; Halliday 1985b in Matthiessen 1993: 229), deployment of clause complexing and grammatical metaphor (Halliday 1985b in Matthiessen 1993: 229).

Language functioning in context, text, can be viewed either as a process, unfolding as an instantiation of the potential, or as a product, a completed instantiation of the system. But a very central point is that as a variety of language, a register embodies all three phases of potentiality (potential, instantiation, and instance); and this is, among other things, the key to the role of text in instantiating and changing a register system. The fractal dimensions are axis (paradigmatic/syntagmatic), delicacy and rank (Matthiessen 1993: 229-30).

Halliday considers ‘genre’ not a theoretical term; either synonymous or coordinate with register or used in its more traditional sense within literacy studies, whereas ‘register’ is a functional variation of language ‘ – a register is a ‘location’ along this dimension of variation (Matthiessen 1993: 233).

There are yet other ways of using the terms. For instance, Leckie-Tarry notes that genre may be used to characterize a whole text whereas register ‘is frequently used to refer to sections within a text which are characterized by certain linguistic forms’. If the difference is only one of scale, it would seem better to talk about e.g. genres and macro-genres (1993: 35). The present thesis follows Halliday’s concepts of register and genre.

Part II takes the concept of *register* as a point of departure and starts with the definition of *literacy* and its relation to SFG. It continues with an exposition on written language and the difficulties learners throughout school years encounter when dealing with different school subjects. In this light SFG is presented as a tool to develop learners’ (native or foreigners) language and the Australian case as an example of how this has been done.

PART II. SFG AND LANGUAGE EDUCATION

“Learning language is learning how to mean.” (Halliday 1973: 24)

2.1 SFG and literacy

Halliday’s interest in linguistic questions is ultimately an ‘applied’ one, a concern with language in relation to the process and experience of education (1978: 5). Among the major theoretical frameworks in linguistics, Halliday’s model is the most explicitly education-oriented (Byrnes 2006: 3). SFG is a theory of language that offers tools for identifying the linguistic features that are relevant in the construction of different kinds of texts (Schleppegrell 2006: 136). It has been precisely in the field of language education in which SFG has been most widely deployed throughout the decades of its evolution (Halliday 2009: viii).

Halliday says: ‘When children learn language, they are not simply engaging in one kind of learning among many: rather, they are learning the foundation of learning itself’ (1993: 93). Language, then, is the medium for most of what we learn both inside and outside school settings and literacy is ‘not only one of the principal goals of education but also one of the principal means by which it is carried out’ (Hannon 2000: 8).

As Schleppegrell states, education nowadays faces daunting and new challenges around the world. Complex context of literacy use in adult life requires that students develop advanced competencies in all school subjects. At the same time, global migration has increased the diversity of classrooms around the world, where many children now learn in a language other than their mother tongue (in Christie 2012: vii). Language is the factor that remains constant over the years of schooling and it is the fundamental resource in which teachers and students work together (Christie 2012: 2).

Many teachers in schools and in colleges of Further Education agree that ‘Educational failure is primarily *linguistic* failure,’ and have turned to Linguistic Science for some kind of explanation and practical guidance (emphasis in original) (Doughty and Thornton in Halliday 1986: iii). Halliday adds that it is a failure to understand and use the linguistic patterns appropriate to the range of information, attitudes, and ideas valued in schools (in Christie 1989: 163). Consequently teachers and educators need to use a linguistic model that will enable learners (natives or foreigners) to develop a better knowledge about language. Halliday

claims that learning language is also learning about language and learning through language (1980b). For Halliday education means enabling people to learn (1991: 269) and therefore, SFG helps language learners use their knowledge about the language to use the language – to speak, hear, read, and write more effectively in different registers and genres (Martin 2004: 73).

In this sense, Halliday explores the concept of literacy from a linguistic point of view. He means: (1) treating literacy as something that has to do with language; and (2) the framework of functional linguistics, since Halliday thinks that *literacy* needs to be understood in functional terms (1996: 97; 2001: 181). In many instances the term *literacy* has come to be dissociated from reading and writing, and written language, altogether, and generalized so as to cover all forms of discourse, spoken as well as written. In this way it comes to refer to effective participation of any kind in social processes. Halliday also uses the term *literacy* to refer specifically to writing as distinct from speech: to reading and writing practices, and to the forms of language, and ways of meaning that are typically associated with them (1996: 98) or being able to participate effectively in social processes by working with written language (1996: 122). Throughout the present thesis I would use the term *literacy* in the second sense since this thesis deals with written language exclusively.

The language of the school is written language, but of course, educational knowledge is not construed solely out of written language. The written world is a world of things, its symbols are things, its texts are things, and its grammar constructs a discourse of things. Accordingly, Halliday defines literacy as the construction of an ‘objectified’ world through the grammar of the written language and it is useful to have a ‘grammatics’, a way of using the grammar consciously as a tool for thinking with (2001: 187).

The difference between spoken and written language takes us further in the educational context. Spoken language is organized around the clause and written language is organized around the nominal group, then experience is interpreted synoptically rather than dynamically. Examples (124) and (125) below exemplify these differences:

(124) Before the interview there is a lengthy period of delay, and uniformed officials stride purposefully to and fro. Unknown to the candidate, the delay is deliberately contrived. This enables prospective employers to observe the candidate’s behavior under conditions of stress and loss of self-confidence.

(125) And what you don't realize, because you don't get told about it, is that all this time you're hanging about waiting to be interviewed while people wearing fancy clothes stride up and down looking as if they have serious business to attend to, you're actually being kept waiting on purpose so that the people you're going to work for can watch you without your knowing it, to see how you react when you're put in a position where you're likely to feel tense or uncertain of yourself (Halliday 1979: 77). This shows that students' faulty construction of written texts does not mean they lack knowledge. They lack an educational knowledge that is different from the commonsense knowledge. Halliday makes this difference and relates the main points. This is what Bruner considers the process of education to be about: it is being able to distance oneself in some way from what one knows by being able to reflect on one's own knowledge (1986: 127). In the history of language (phylogenesis, ontogenesis, and logogenesis¹²) the process starts life as a verb and is then metaphorized into a noun. Spoken language is language in flux, language realized as movement and continuous flow, while written language is language in fix, language realized as an object that is stable and bounded. Therefore, those who are constructing scientific knowledge experimentally need to hold the world still in order to observe and to study it; and this is what the grammar of written language does for them (Halliday 2001: 186-7).

It is important to highlight that even if children appear fluent in English, they may still have difficulty in understanding and using the registers associated with academic learning in school (Gibbons 2004: 197)

It is interesting to distinguish between *literacy* and *proficiency*. Arús Hita has defined literacy in a wide sense as 'the ability to function effectively within a given set or sets of discourse practices embedded in their social and cultural contexts.' On the other hand, the term 'proficiency' refers to the different levels or stages leading to the consecution of literacy. Literacy is then understood in the more culturally integrated sense of what learners at high levels of proficiency can do with the target language in the target culture (or target culture-like) setting (2005: 5).

¹² *Ontogenesis* is the history of a person's learning the lexicogrammatical system; *phylogenesis* is the history of this system in the species; and *logogenesis* is the history of the system in the text (Matthiessen 1995: 48; Halliday 2009: 239).

Students need to develop language in a way that allows them to be able to talk about language. This knowledge is so important that Carter coined the term KAL (1990: 23), which stands for ‘knowledge about language’, and describes it as ‘knowing things about language. Being interested in and informed about language’. KAL is a resource for making meaning (Webster 2009: 3). Grammar is what transforms protolanguage¹³ into language (Halliday and Matthiessen 2004: 25) and consequently to be grammarless is to be totally powerless (Halliday 1971: 40). In this light, Vygotsky states that grammar and writing help the child to rise to a higher level of speech development (1962: 101).

Thus, teachers are to teach KAL, where the term refers to any area of overt teaching about language, including grammar (Christie 2004: 145); and essential knowledge about text and system, and about text and context (Christie and Macken-Horarik 2011: 176). Or as Rose and Martin claim, ‘teaching language explicitly means bringing unconscious knowledge about language to consciousness. To do this, teachers and students need to be able to name what they are talking about, and this involves a systematic understanding of how language works’ (2012: 236).

The importance of teaching KAL has been summarized by Christie after instructing teachers on the need of teaching KAL. She concludes by saying that teaching is surely a deliberate act, and the teaching programme should function in such a way that it foregrounds and makes explicit the need to learn things, where these things will then lead on to something else. Teachers will also need to be persuaded to abandon the idea that students in the junior secondary programme cannot be taught KAL, including aspects of grammar. In fact, she argues that it is precisely because students are entering secondary schooling, with all the attendant changes in the nature of literacy that they will need to deal with, that the development of a metalanguage will assist them in coming to terms with such literacy. Teachers also need to teach how to identify and recognize word classes while also teaching notions of function (2004: 168-9).

This KAL from a SFG approach has more recently been applied in Australia with some promising results (see 2.6.4 below). Derewianka argues that although somewhat surprisingly an explicit knowledge about language has been often absent from English curricula, the new

¹³ Protolanguage is a proto form of language because it shares a number of features that render it a form of linguistic or semiotic communication, even though lacking others that are characteristic of a fully developed form of language (Halliday 1986: 82).

Australian Curriculum: English (ACARA, 2012) has taken a fairly radical step in placing KAL at the core of the classroom practice thereby raising the issue of an appropriate model of language to inform the Language Strand of the Curriculum (2012: 127). Derewianka reports on the students' good writing results but she claims that there is a need for more large-scale, rigorous research into the benefits of an explicit KAL, identifying which features in particular contribute to student literacy outcomes at different ages/stages and the extent to which the learning is durable and transferable (2012: 141-2) (see 2.6). Although this was done in secondary school, it can also be implemented with young learners by introducing first the category of *process types* for instance (Williams 2004: 247-9).

This thesis is an attempt to show how the explicit teaching of linguistic features, not only syntactic but semantic such as roles and transitivity in terms of processes, participants and circumstances, from a SFG perspective can benefit learners of a second language, especially their written language.

2.2 Written language

Halliday discusses the differences between speech and writing and observes that in the history of human species 'writing evolves in response to needs that arise as a result of cultural changes.' Such changes included, for example, the move away from nomadic lifestyles toward those involving more settled communities, where, among other things, provision and exchange of goods and services occurred and divisions of labor appeared. The settled lifestyle encourages the emergence of many new social and cultural practices, including those for recording information and ideas and communicating these to others over space and over time. These developments, over quite long periods of time, led to the emergence of writing systems. Just as language as speech had evolved over the millennia, so too did language as writing evolve, though much later in time, both being part of the processes of phylogenesis of language in the human species (1989: 39). Written and spoken language present different views of the world: written language presents a synoptic view, while spoken language presents a dynamic view (1989: 97).

According to Christie (2012), the processes of the ontogenesis of language and literacy in children bear some parallel to those of phylogenesis, in at least two senses. First, there is a parallel in that considerable proficiency in the spoken mode needs to be established before

children start to learn literacy, and, much of what they write at first has features of the grammar of speech. The other sense in which there is a parallel lies in the fact that children need to accumulate sufficient life experiences in order to develop an awareness of the meaning potentiality available to them in literacy: this enables them to enter into many social and cultural practices that would be otherwise closed to them. Although learning these practices starts early in life, particular challenges emerge in the late childhood to the years of early adolescence, as young people start to mean in new ways (2012: 74-5).

Halliday (1979) claims that the most obvious feature that marks off written language is that it is not anchored in the here-and-now, not tied to the environment in which it is produced in the way that conversation is. Every language contains numerous words and expressions that signal this relationship of the text to the environment, elements that depend for their interpretation on knowing when and where the text was produced, and who it was produced by: things such as *I* and *you*; *here* and *there*; *yesterday*, *today* and *tomorrow*; *has gone*, *is going to do*; tag questions, speaker comments, and so on. These terms tend to be deictic in spoken language and anaphoric in written language. If there are such signals in a written text, they have to be resolvable within the text; a written text must create its own context in which they can be understood. So there has to be a point of reference for them, and if we do not find one, as often happens with children's writing, we consider the text to be faulty (1979: 70).

While speech and writing can both be very complex, the complexities tend to be of different kinds. In linguistic terms, spoken language is characterized by complex sentence structures with low lexical density (more clauses, but fewer high content words per clause); written language by simple sentence structures with high lexical density (more high content words per clause, but fewer clauses) (Halliday 1979: 77). We could express this even more briefly, though at the cost of distorting it somewhat, by saying that speech has complex sentences with simple words, while writing has complex words in simple sentences as is illustrated in examples (124) and (125) above.

Table 24 below summarizes differences between commonsense and educational knowledge in general. This educational knowledge or the lack of it is what will determine education failure. The main point here is to understand that if that knowledge, its context, and its features are different, we need to approach the teaching of this knowledge from a different perspective. Thus, we as educators need to endow students with the necessary tools to do so,

ultimately enabling students to learn.

Wheelahan writes:

Access to theoretical knowledge is an issue of distributional justice because society uses it to conduct its conversation about what it should be like. Society uses theoretical knowledge to think the unthinkable and the not-yet-thought, and this makes such knowledge socially powerful and endows it with the capacity to disrupt existing social relations. [...] Knowledge is continually revised as we engage with the world using knowledge that others have created before us, and in that process we change it and often change the world, or some aspect of it (2010: 145).

Commonsense knowledge	Educational knowledge
<ul style="list-style-type: none">• Fluid and indeterminate• Foregrounds processes (actions and events)• Typically construed as dialogue and built up interactively or intersubjectively• Typically unconscious	<ul style="list-style-type: none">• Determinate and systematic• Foregrounds things (persons and concrete objects)• Typically construed monologically and built up by each individual – the “others”• Conscious knowledge

Table 24: Differences between commonsense and educational knowledge (after Halliday 1994b: 369-70)

Bernstein proposes that elaborated codes were those most directly rewarded in schools, because they predispose possessors of the codes to engage in such things as exploration of ideas; explanation of phenomena; and expression of feelings, attitudes, and values, all of them relevant in an English-speaking society's educational system (1974: 197).

Bernstein explains how when the meanings are exophoric, they are highly context-dependent. Much of everyday speech with people we know very well takes this form. We all use exophoric context-dependent speech in specific situations, but we also switch to relatively context-independent speech when we wish to make our meanings explicit and specific. He also suggests that where meanings are context-independent and so universalistic, then principles may be made verbally explicit and elaborated, whereas where meanings are context-dependent and so particularistic, principles will be relatively implicit, or, as in regulative contexts, simply announced (1974: 197-8).

Other authors propose different names to these types of knowledge. Table 25 below shows authors and terminology.

Author	Types of knowledge
Bernstein (1974: 125)	Restricted codes (particularistic) and elaborated codes (universalistic)
Bernstein (1975: 119)	Horizontal and vertical knowledge
Cummins (1980: 176)	BICS vs. CALP ¹⁴
Vygotsky (1987: 216)	Spontaneous vs. scientific concepts
Halliday (2007: 370)	Commonsense and uncommonsense knowledge (educational knowledge)

Table 25: Different types of knowledge

Considering that education is perceived as the terrain *par excellence* where language-related inequalities and discrimination are manifested (emphasis in original) (Ouane 2003: ii), we need to pay closer attention to school subjects and educational frameworks. In the same way, Bernstein claims that the organization of education often produces cleavage and insulation between subjects and levels (1972: 479).

Developing language is developing the power that consists in knowledge and control, and learning a second language is adding to this power (Halliday 1996: 212) (see 3.1.2.1 below). Thus, not only native speakers of English but also second language learners and foreign language learners should receive instruction in this type of knowledge if they are expected to perform at an academic level.

Vygotsky claims that reading and writing have to start early and they are to be something that the child must feel necessary and relevant for life (1978: 118). In this direction, Newkirk (1984: 341) has demonstrated that children can be introduced to factual writing from the beginning of school and that the main factor which has made it appear difficult in the past is simply that effective contexts for teaching writing have never been properly developed. As Martin claims factual writing and narratives are different, and they are different because they serve different functions in our culture (1985: 8).

It is not just factual writing, even narrative needs explicit teaching. As Bruner states: It has always been tacitly assumed that narrative skills comes naturally, that it does not have to be taught. But this is not true (1996: 40). As Britton explains, teachers need to help children to move to transactional writing, i.e. to a language that gets things done (1975: 160). Yde and Spoelders point into the same direction and believe that teachers should take deliberate steps in this respect. The ability to identify key trouble sources and to intervene appropriately

¹⁴ BICS stands for Basic Interpersonal Communication Skills and CALP for Cognitive Academic Language Proficiency.

implies familiarity with the cohesive patterning typical for a certain age group (1987: 202). As was stated before, SFL is a model of language with implications for education. Christie and Macken-Horarik suggest, following Halliday, that in the long apprenticeship that is school English, there are four major challenges facing students (and, by implication, their teachers): the learner has to (1) process and produce text; (2) relate it to, and construe from it, the context of situation; (3) build up the potential that lies behind this text and other like it; and (4) relate it to, and construe from it, the context of culture that lies behind that situation and others texts like it. These are not different components of the process, with separate activities attached to them: they are different perspectives on a single, unitary process (2011: 178).

Teaching KAL enables teachers to make visible the requirements and possibilities of each model of English and to build cumulative learning in students, knowledge that often remains invisible in English classrooms (Christie and Macken-Horarik 2011: 184).

Christie and Derewianka (2010: 217-38) identify four overlapping phases in emergent control of writing summarized in table 26 ‘where grades, ages, and phases are specified’.

Years of schooling	Chronological ages	Developmental phase in learning language in schooling
K to 3 rd grade	5/6 to 8	Basic tools of writing (spelling, punctuation, etc.)
4 th to 7 th	9-13 to 14	Grammar of written language (grammatical metaphor or nominalization)
8 th to 10 th	14 to 16	Grammar, abstraction, and generalization
11 th to 12 th	17 to 18	Grammar of coherent, sustained written argument. Written text for many purposes

Table 26: Expanding knowledge of written language in school learning (after Christie and Derewianka 2010: 217-38)

They conclude by emphasizing the importance of writing instruction:

Many children do not succeed in their writing, for it is in fact quite difficult to learn to write well. All children deserve the opportunity to learn to write. We argue that where teachers are possessed of appropriate knowledge of ontogenesis of writing ability, of a kind the functional grammar provides, they can the more effectively guide their students as they learn to write (2010: 244).

Teachers need to notice and analyze aspects of the usage which have previously gone unnoticed and untaught. Consequently, teachers throughout the school age-range have as part of their role to take deliberate steps to extend their pupils’ linguistic resources (Foley and Lee

2004: 97; 100).

One important aspect of meaning is connectedness, thus learning to write implies learning to handle cohesive devices appropriately. A cohesive tie is a semantic relation between an element in a text and some antecedent that is crucial to its interpretation. There is indeed a set of expectations between reader and writer so that in processing information of an utterance in context, the reader can discover the intended antecedent in that context. A kind of contract between both requires the writer to use language structures appropriate to effective written communication. Therefore research on textual cohesion provides some insight into the extent to which writers exploit writing as a communicative process. It points to the writer's assumption of the reader as a co-creator of text (Yde and Spoelders 1987: 187-8).

Personal Pronouns are the main feature studied in the present thesis. They are crucial to provide cohesion to a written text. In this sense, Wallace states that among the L2 learners' difficulties, pronouns are one of the most frequent items in any spoken or written text and an understanding of the way they give text cohesion is crucial to the comprehension of even the simplest of written texts (1987: 224).

Rose argues that the primary functions of writing are to reinforce the knowledge acquired through reading and to assess that acquisition (2004: 4). In this sense, Graham and Herbert (2010 in Parr and McNaughton 2014: 143) present evidence of three major instructional ways in which writing has been shown to improve reading, namely, (i) having students write about the texts they read through response, summaries, note-making and answering questions; (ii) teaching students the writing skills and processes that go into creating text like the process of writing, text structures, paragraph or sentence construction skills or teaching spelling, and (iii) increasing how much students write.

Parr and McNaughton claim that a consideration of the few empirical studies that investigate the extent to which explicit or recognizable connections are made between reading and writing, and between or among texts, suggests that, in normal classroom conditions, teachers do not readily articulate these links. Although there is consensus that reading and writing are linked and that they have been shown to be mutually facilitative in the development of literacy abilities and the learning of content, there are no developed models in the literature for using this interconnectedness in ways that demonstrably foster teaching and learning

(2014: 143). This link has to be made explicit (2014: 147).

The distribution across grades displayed on table 26 is not the same in different educational systems such as in the United States, where middle school covers grades 6th to 8th and high school grades 9th to 12th. Neither is there an absolute correspondence between grades and age (see 3.2.2.3), especially among foreign students. These phases are explained in detail in the next section where I turn now.

Next section provides ample details on the different linguistic stages children go through. In school students need to master the discourse (grammar and lexis) of some subjects in order to become literate in that language and to succeed in school.

2.3 Language throughout the school years

This section tries to analyze the different stages or phases students go through from the moment they enter school. It is divided into four subsections following Christie's (2012) phases of language and literacy development, viz. early childhood; late childhood to early adolescence; the years of mid-adolescence; and late adolescence to adulthood.

2.3.1 Early childhood

This is the phase that goes from about age five or six to about age eight. This is the age in which formal schooling commences, and children need to make many adjustments to learn the patterns of oral language characteristic of schooling in order to participate effectively in class work. In addition, children start to learn literacy. The visible manifestations of literacy inevitably come to the fore, as children come to terms with the spelling and writing systems, though the demands of learning literacy involve more than spelling and writing, important as they are. Learning literacy takes children into a relatively abstract experience as they grapple with new terms and ideas like *word*, *letter*, *alphabet*, whereas the larger challenge of mastering the grammar of written as opposed to spoken language, commenced in the first years, will last beyond childhood into adolescence. The first school years are developmentally very important, and constant support and guidance are needed among even the relatively advantaged children who have had exposure to literacy and school-related practices before commencement of school (Christie 2012: 33).

The initial demands in learning to handle writing are so considerable that children 'typically

regress in semiotic age by anything up to three years' (Halliday 1993: 110).

Some time of class work is devoted to promote talk. Although this is a very important aspect of developing literacy, I will not devote much space to it, since the present thesis deals with written language.

Spoken language, learned in the critical preschool years, is the primary symbolic system for making meaning, and it provides the essential learning tool with which children enter school and commence a formal education. It thus necessarily provides the basis on which young children learn 'the second order symbolic system' (Halliday 1993: 109), which develops a new consciousness about the nature of language. The new consciousness involves understanding that knowledge, whether of personal or researched experience, may be taken and essentially reconstructed in the processes of writing about it. An emergent understanding of the uses of a writing system in the human species generally has profound consequences, for it opens up the capacity to record information and communicates it across space to persons in other places and across time, including future generations. An emergent appreciation of the significance of writing also represents a very significant shift in the understanding of young children. It takes some years before children fully master the writing system (Christie 2012: 55).

The first writing in children emerges from drawing and painting and tends to be minimal. Circumstances of time and place are very commonly found in texts by young writers, and this reflects the fact that in their first writings they often recreate personal experience, where matters of spatial and temporal setting tend to be important. As children grow older they also add some lexical density to their writings (2012: 58).

The ability to create abstract meanings, like other meanings, needs to be cultivated and developed in significant learning experiences. Children need assistance in creating speculative and abstract meaning (2012: 61).

One of the significant tasks of the first phase of literate development is achieving successful control of reference so that texts are appropriately coherent. In fact, reference in English often causes confusion even to native speakers once they start to write texts of any length (Perera 1984 in Christie 2012: 62). Moreover, reference is a particular source of difficulty to ESL (English as a Second Language) students, whose languages are different in character, and many of which do not use referential items such as deictics. Speakers of Indonesian, for

example, find English reference quite difficult as do speakers of several other Asian and South East Asian languages. These are some of the difficulties students encounter but there are others such as abstraction, nominalization, or tense system. Mastery of Theme and thematic progression, coupled with emergent control of reference gives some sense of text unity and represent main linguistic elements necessary to reach more complex and abstract constructions. Yet, students need guidance and scaffolding activities in order to achieve control over them.

2.3.2 Late childhood to early adolescence

This phase covers students from about nine to twelve or thirteen years of age. These are the years where the nature of the school curriculum changes, as the claims of different school subjects emerge, building what are sometimes called *subject-specific literacies* (Unsworth 2002 in Christie 2012: 71). The character of the school day also changes, with children needing to adjust to working with several subject specialists as their teachers, rather than with the individual teacher who is typically found in the primary classroom. Children must learn to construct new, more abstract meanings, where these involve mastering new registers and genres and, necessarily, the grammatical patterns in which these are realized. Schooling represents an initiation into many things valued in an English-speaking culture: forms of knowledge; ways of asking and answering questions about such knowledge; ways of evaluating knowledge, information, experience, and ideas; and habits of reasoning and analytic practices of various kinds, depending on the school subject studied.

All these many forms of knowledge, procedures, and practices – creating subject specialisms – are expressed in language, sometimes in the constitutive sense, in that language alone realizes what is involved, and sometimes in an ancillary sense, in that language is ancillary to, or complementary of, other semiotic modes, like graphs, images, tables, diagrams, and so on. In the contemporary world of multiliterate practices, meaning in many texts resides in an intimate interplay between verbal and nonverbal resources, so that a clear distinction between texts that are constitutive of language and others that are not is not always valid. There are considerable challenges in learning to read, manipulate, and create images, diagrams, formulas, graphs, and figures (2012: 71).

The move into meaning making beyond the immediacies of local or commonsense

experience commences in the primary years. However, the transition from primary to secondary school initiates a more fundamental apprenticeship into the subject specialisms. It is quite profound in its consequences, for it takes young people increasingly into the realms of uncommonsense experience and knowledge, where they must come to terms, in time, with abstraction, generalization, interpretation, evaluation, and judgment.

As Butt (2004) claims, all of these terms involve meaning making that is increasingly abstract and “free of localistic assumptions and dependencies” of this kind associated with familiar commonsense experience. Moreover, once possessed of capacities to handle knowledge and experience in the terms suggested, the meaning-making potential available to individuals will need to be “transportable”, in that it can be used in a range of complex and often unseen future situations, for the complex contemporary global world requires nothing less than significant transportable skills (2004: 218).

Christie (2012) posits that it is because the challenges of learning in the late childhood to early adolescence transition are so considerable that many young people struggle and fall behind, their oral language and literacy not strong enough to deal with the apparently invisible demands. It is in literate skills in particular that school performance is increasingly measured and where children flounder, often because they fail to master the discursive and grammatical features of written language, where these are either encountered in their reading or required in their writing. Their difficulties arise from dealing with the more abstract written language of the uncommonsense knowledge of school subjects, and although the children involved are often students for whom English is an L2, many others include those whose social backgrounds and out-of-school experiences do not always equip them well to deal with school learning. A pedagogy for deliberate intervention and guidance is required, which involves deconstructing and modeling the kinds of text types that children need to speak, read, and write, as well as teaching a relevant metalanguage where this is useful (2012: 72). A great deal of schooling involves students in working with researched or unfamiliar knowledge, or both, to some of which I turn now. Developing confidence in control of the written language expresses itself, among other matters, in emergent control of the various English tense choices. It is certainly difficult for ESL, let alone for the purposes of learning to write. Christie has found that it remains problematic for many native speakers throughout the years of secondary education. Even some university students continue to have difficulties.

Circumstantial information expressed in prepositional phrases also contributes to the relative lexical density of the text, some prepositional phrases having to do with the commonsense field (2012: 85-6).

Besides the circumstances of time and place that emerge in phase one, other types of circumstances will appear such as circumstances of accompaniment. It is easy to underestimate the importance of prepositional phrases building circumstantial information, for among native speakers they emerge readily, typically developing from those of time and place to such circumstances as accompaniment (*with*), matter (*about*), reason (*because of*), condition (*in case of*), and angle (*according to*), to name some common ones (see table 13 in 1.2.1.2.9). Among second-language users, English prepositional phrases often prove very difficult. A great deal of deconstructing texts in which prepositional phrases appear is required, as well as modeling of ways of creating experiential information using prepositional phrases (2012: 87), as example (126) illustrates.

(126) In the past the convicts would stumble out of the giant building and slump towards the main officers' window to collect their tools so they could start working on the buildings. (Christie 2012: 87)

However, the take up of these matters is very uneven among different children and adolescents, for the challenge of handling dense written language is considerable. This is why these things need to be explicitly modeled for such children learning English, and a systemic-functional analysis provides a strong basis from which to do this (Christie 2012: 89).

Circumstantial information among younger writers is typically expressed in prepositional phrases, and the adverbs that are generally used are those of intensity (*very*, *so*). Adverbs expressive of evaluation, judgment, or opinion are more typically a phenomenon of adolescence and beyond (Christie and Derewianka 2010). Examples (127) and (128) illustrate the different use of circumstantial information and the use of adverbs in the interpersonal metafunction among students. And examples (129-134) illustrate the use of adverbs to express an opinion, evaluate or judge (Christie and Derewianka 2010: 230; 234).

(127) He was very nice and kind. (6-8 years)

(128) The moon doesn't disappear completely. (9-12 years)

(129) Many plants do not pollinate because of this. (13-15 years)

(130) Most life cannot survive in this environment. (16-18 years)

(131) The funnest [sic] part was the magi mirrors. (6-8 years)

(132) I was extremely glad to see the Presbyterian church... (9-12 years)

(133) The importance of the Vietnam war in history is that it turned Vietnam from a foreign controlled country into an independent communist country. (13-15 years)

(134) The policy was introduced based on a number of factors including it being a pragmatic, conciliatory, reasonable approach. (16-18 years)

One further developmental matter of interest is Theme choices, i.e. what the clause is going to be about, the point of departure of the message (Halliday 1985a: 39). The capacity to play with the position of dependent clauses in this manner, placing them in an enclosed position in Theme, is another developmental feature of an older writer, for it adds to the rhetorical force of what is said. Such expressions are not commonly found in younger writers (2012: 93). Table 27 shows some developmental changes in this phase across the metafunctions.

METAFUNCTION	CHANGES
Textual meanings	Emergent capacity to control thematic progression
Experiential meanings	Developing capacity to express experiential meanings in expanding control of noun group structure and a growing number of prepositional phrases
Interpersonal/attitudinal meanings	Developing attitudinal meanings, evident in various lexical choices, and adverbial expressions and capacity to use modality
Logical meanings	Emergent capacity in the selection of clause types and their relationships, involving a range of clause dependencies

Table 27: Developmental changes in children aged 9 – 12/13 across the metafunctions (after Christie 2012: 94-5)

As a consequence of achieving mastery in all these areas, children and young adolescents show developing ability to create abstract meanings in their written discourse and to adopt evaluative positions.

It is in these years that the distinctive subject specialisms of secondary schooling become more apparent, involving abstraction of various kinds. The nature of the language changes in order to deal with the often complex meanings of school subjects. Although talk remains important for school learning, written discourse becomes very important as their principal

mode in which performance is assessed in writing and as the principal mode in which information is accessed in reading. The grammatical organization of written language is different from that of speech, and the literacy skills of young people are particularly challenged in the movement to a new kind of schooling. Written language is more dense than speech, its meanings expressed in dense noun groups creating participants, verbal groups expressing a range of process types, prepositional phrases building often dense circumstantial information, and adverbial groups expressing attitude appearing more frequently. Series of interconnected clauses, creating grammatical intricacy, build longer passages of written discourse to sustain and develop meanings. However, their nature and their frequency always depend on the register and genre values involved. Grammatical metaphor appears, helping to contribute to density and abstraction, because what would otherwise be meanings expressed in interconnected clauses are reexpressed in the resources of noun groups in particular. Abstract meanings are also expressed in uses of abstract nouns or grammatical metaphor, revealing that as they mature, young people must learn to handle abstract qualities and values of many kinds. In all, teachers need a considerable knowledge of oral language and literacy in order to guide and direct the learning of their students (Christie 2012: 103-4).

2.3.3 The years of mid-adolescence

This phase, in which children are aged eleven to fourteen, covers the years of their entry in secondary school. In the early years, much of the knowledge learned is common sense in that it draws on relatively simple experience, though with the passage of time the learning becomes more demanding, and the development tasks in handling written discourse in reading and writing become more challenging. After some years of expanding and consolidating what is learned children move to late childhood and early adolescence, and as they do so, they move away from the immediacies of relatively simple experience toward the more complex uncommonsense experiences of new knowledge and ideas. They also move into the secondary school, where the distinctive knowledge features of the school subjects become more marked, and there is a challenge to master the changing nature of language, literacy in particular, because it is in literate language that so much of the knowledge is expressed. Above all, the movement into the literate language of adolescence requires the ability to handle abstract experience and information as a necessary part of interpreting, and building the knowledge of the secondary years. The language which students must read and

write becomes dense, its grammatical organization more noncongruent, increasingly unlike the more familiar congruent expressions in which much early commonsense experience is expressed (see table 28 below). According to Martin a congruent relationship is one in which the relation between semantic and grammatical categories is natural: people, places and things are realized nominally; actions are realized verbally; logical relations of time and consequence are realized conjunctively and so on (1993b: 238). Another resource students need to master is grammatical metaphor so that students turn activities into phenomena. In doing this, one particular feature is the reduction in the number of clauses. Examples (135) and (136) are taken from Christie (2012: 111):

(135) Austronesian people, who form the majority of the modern population, were originally from Taiwan and they arrived in Indonesia around 2000 BCE.

(136) The Austronesian occupation of Indonesia by Taiwanese people occurred in about 2000 BCE.

In the first example there are three clauses that collapse into one in the second example.

With the entry to the junior secondary school, many children fall behind, their reading and writing skills not being adequate to the tasks they confront. By the time such young people reach mid-adolescence they are often in difficulties (Christie 2012: 105-6).

There are various factors behind these difficulties. One is according to Muller that the various school subjects have distinctive methods of inquiry, distinctive modes of knowledge building, and distinctive *styles of reasoning* (2000: 88). A second one is the need of continuing reading beyond the primary school years and into the adolescent years (National Commission on Writing 2006). This is what The National Commission on Writing referred to as *the neglected R* (2003: 9). A third problem is that students learning English as second language are becoming more apparent in the United States because of the significant increase in students in this group over the last decade. This, together with other factors, the nature of adolescence, time and will for teachers to teach literacy within their content areas, much as and few strategies provided pupils at the end of their third grade for dealing with a rapid shift from narrative to expository text (Carnegie Council on Advancing Adolescent Literacy 2010: 8), often make the school subjects a daunting task.

The aspects listed above focus on the need to teach literacy within the subjects, i.e. teaching the language of content areas. Not only do teachers need to teach the relevant vocabulary of

the content, but the discourse patterns in which it is expressed (Christie 2012: 107).

Some of the school subjects presenting difficulties for students are History, English studies, and Science. I will present some of the features relevant to these subjects in section 2.5 below.

At a very early age children produce recounts in which they learn some of the skills required to recreate aspects of the past in an ordered way. Nevertheless, history involves interpreting past events and evaluating them for their significance, taking readers and writers into more abstract fields of knowledge. Students need to use prepositional phrases that create circumstances of time, since this is the most common way to express the passage of time: in the past, during *World War II*, at the beginning of *World War II*, etc.

Another resource is the way information is presented, i.e. new information can be reinstated as an abstraction in Theme position in the subsequent clause, thereby building some unity in the unfolding of the text.

(137) Ever since the colonization of Australia ~~Aborigines have been treated extremely poorly.~~
Such treatment has included forcible eviction of Aborigines from their land, murdering Aborigines who resisted and more recently.... (Christie 2012: 112).

A great deal of writing in history relies heavily on such abstraction to create its experiential meanings, where metaphor in both senses is involved (Christie 2012: 108-13).

In summary, grammatical metaphor, dense lexis, and many abstract meanings are hard to handle for many young people because they lack the necessary language resources. It is important, then, that teachers have a thorough understanding of the various discourses in which their subjects are expressed, so that they are better equipped to intervene in and enhance their students' learning (Christie 2012: 147).

2.3.4 Late adolescence to adulthood

This phase covers the last years of school when young people are sixteen to seventeen or even eighteen years old. Ideally, the last years of schooling serve to extend, strengthen, and consolidate the language capacities established in earlier years, preparing young people for entry into either work or further study.

The knowledge dealt with in all school subjects in the last years of schooling is uncommonsense in that each deals with abstract phenomena and ideas. Each subject has a distinctive method of inquiry and knowledge creation, generally drawn from university

disciplines, for it is in universities and related research institutions that new knowledge is normally generated. Achieving such access to theoretical knowledge depends on attaining a mastery of the discourse patterns in which it is expressed.

One important implication of this is that young people should finish their school years confident in their grasp of the language system, able to face new contexts and challenges with some facility in their oral language and literacy. This knowledge of the language system will require facility in offering observation, description, generalization, and abstraction, and these depend on considerable skill in manipulating oral language and literacy (Christie 2012: 140-50).

In the subject of history, talking, writing, and reading at the senior levels are all very much about interpretation of events. Historical scholarship requires the capacity to construct knowledge of the historical field (experiential information), to offer some interpretation of its significance (interpersonal and attitudinal information), and to organize the information so that it creates a coherent argument (textual information) (Christie 2012: 151).

Linguistically, interpretations depend on such factors as the capacity to:

- compress relevant historical information, often using the resource of expanded noun group structure to do so;
- employ grammatical metaphor, often turning the actions of life into the phenomena of historical concern and eliding meanings that are otherwise expressed in conjunctively linked clauses;
- elide meanings related to agency, so that human actions and interventions are sometimes rendered invisible;
- employ abstract material processes to link the phenomena dealt with; and
- construct and sequence the information in such a way that an argument having to do with the interpretation and explanation unfolds, where this depends in particular on well-structured thematic progression (Christie 2012: 155).

Comparing to History, the language of analysis, interpretation, and evaluation is very different if we turn to the sciences in the latter years of schooling. In these years the demands on young people's language are of a very different order from those in the humanities. In order to sharpen our sense of how considerable the differences are between the horizontal

knowledge structures of history and the hierarchical knowledge structures of science¹⁵, I now present some aspects of scientific discourse (2012: 165).

Christie claims that sciences concern exploration of all things having to do with the natural world, whether physical or biological, and they build their knowledge by careful investigation of phenomena, constructing explanation and interpretation out of the observations that are made. What adolescents need to master at this level is an overt attention to the results of research by others. This is what Bernstein calls hierarchical knowledge, since what is investigated and learned is understood as part of an emerging body of ideas with established procedures and principles (2012: 167).

After analyzing some texts with students, Christie outlines a series of features that adolescents need to know in order to master experimental scientific discourse:

- use of dense technical language, often built using grammatical metaphor;
- frequent simplicity of clauses and clause relations, part of outlining clearly defined steps;
- use of images, graphs, statistics, or formulas;
- absence of attitudinal expressions, especially having to do with feelings;
- an associated absence of human agency and an adoption of a rather neutral tenor;
- use of overall schematic structures with headings and subheadings, their function established in constant reiteration and practice, their overall purpose being to give direction to the unfolding of information (2012: 169).

Next section outlines the main linguistic features students need to master in order to succeed in school. These features are put in connection to the different school subjects.

2.4 Developing literacy across school years and subjects

Christie's model of language development in schooling explains how children and adolescents achieve a grasp of language and literacy from age six or seven to about age seventeen or eighteen. The entry to school takes children into learning literacy. Learning to

¹⁵ Bernstein argues that the sciences have hierarchical knowledge structures because they amass knowledge and understandings through a variety of established research procedures, and they tend to integrate these into reasonably coherent knowledge structures, as in physics, astronomy, or the biological science. On the other hand, the studies in the humanities are said to have horizontal knowledge structures, in that they build their knowledge by creating a series of specialized languages with specialized modes of interrogation and criteria for the construction and circulation of texts (2000: 161).

talk, read, and write for the purposes of schooling is quite challenging for all children, even the most advantaged, and those from less advantaged backgrounds experience noticeable challenge. In this phase, children's written texts use simple lexis, and they tend to offer series of simple clauses linked by additive or temporal conjunctions; Theme choices are simple unmarked Themes, with some occasional uses of marked Themes realized in clauses or circumstances of time. The tense choice for most writing is typically simple past. Modality is not normally used, and where attitude is expressed, it tends to be in simple processes of affect (2012: 187).

In the second phase children's resources of the language expand as they learn to make meanings in new discourse patterns. For example, they achieve a growing control of thematic patterning, with which to shape and direct lengthening passages of written discourse, and they show control of internal reference, helping build unity in written texts. They also learn to exploit the resource of noun group structure, they increase the range of clause types and clause interdependencies, and their lexis expands, allowing them to express more nuanced meanings in which experiential and interpersonal meanings are often fused (2012: 188).

The third phase (mid-adolescence) is marked by consolidating all the knowledge gained, while the discourses of the various subjects become more specialized for building subject-specific literacies, so that they show much expanded lexes of the different fields, including technical language. Grammatical metaphor becomes more frequent, the logical relationships between the meanings of different clauses are rendered less visible, and attitudinal expressions become more marked (2012: 188).

In the final phase, the discourses of the various school subjects all reveal abstraction, interpretation, and evaluation, expressed in different ways, depending on the fields and knowledge involved. The humanities of English literacy studies and history tend to make considerable use of attitudinal expressions, offering evaluation, judgment, and interpretation. The sciences make much less use of attitudinal expressions, though assessment of the significance of scientific meanings is found. Successful students reveal considerable confidence in their control of the various resources, ideational, interpersonal, and textual (2012: 189).

It is important remembering that all individuals progress at different rates and their life experiences and their social locations differentially prepare children and adolescents to deal

with the language of schooling. Moreover, language development is not linear, i.e. in coming to terms with new and demanding ideas and information, young people may well regress, relying on earlier understandings in order to understand new ones (Christie 2012: 189). Such regression is perfectly understandable. This is the main reason behind Bruner's notion of the spiral curriculum with his argument that basic ideas should be repeatedly revisited, building on them in greater detail as students advance (1960: 55). In similar fashion, Muller argues for learning sequences in which topics are repeated across learning levels, but differently (2007: 81).

All Christie's observations were made in classrooms involving students for whom English was a second language, who, though their background experiences no doubt differed from those of the native speakers, nonetheless needed to master the discourse patterns that were required for learning the forms of knowledge valued in an English-speaking culture. This is why her observations have been brought here. ESL students need to master literacy and the mastery of Theme and reference is particularly important for learning to read coherent texts while also learning to write simple genres (2012: 222).

Christie argues for the importance of a pedagogy that is explicit about both its general goals and language usage. The latter has never meant teaching and learning all that might, or could, be known about language at any time. A good pedagogy is always selective about the knowledge of language taught, though once having taught it, teacher and students need to retain the knowledge, the better to build incrementally across the years of schooling. Above all, a good knowledge of functional grammar would be beneficial for teachers and teacher educators so that they could make considered decisions about what knowledge to teach, and when to teach it, in the education of the young (2012: 223). In line with this perspective, I consider that teachers need to make visible and explicit to students some of the relevant linguistic detail in order to guide their language development and enhance their KAL (cf. Martin 1993b: 221). Some of these details might be Thematic development, register, and coherence (reference, conjunctions, etc.) among others. Otherwise students, in the best case scenario, receive a graded composition with corrections they are unable to understand. And consequently, students will not be able to focus, to pay attention to linguistic details such as structure.

The next section looks in more detail some of the school subjects students have to face. We

can see how the features already mentioned in the previous sections apply equally to the texts, since learning is a continuum beginning in the primary years of school up to the adulthood and the world of specialization.

2.5 School subjects

As I mentioned before, when children first enter school they encounter a second-order symbolic system with which they learn to reconstitute language itself into a new, more abstract mode (Halliday 1993: 109). The present section tries to summarize some of the features students should master in order to read and write successfully in some subjects taught in school. Some of these features cover different subjects. This is important because education, as Ouane (2003: ii) posits, is perceived as the terrain par excellence where language-related inequalities and discriminations are manifested. Therefore, we need to pay a closer attention to school subjects and educational frameworks, which in the present thesis has been a systemic-functional one.

One of the features students need has to do with vocabulary. The concept of *field* was already introduced in Part I (section 1.2.6) and it is brought here to connect it to school subjects. Field is closely linked to experiential meaning in grammar, and is realized through patterns of transitivity and lexis. It is a characteristic of all fields that they name the things concerning them. Therefore each field develops its own vocabulary, and from looking at the lexis used in a text, its field can usually be identified. However, fields not only name the things that interest them. They also order those things taxonomically. It has already been demonstrated how the grammar has resources for creating taxonomic relationships among things. A field is not just a collection of things related taxonomically. It is also a set of related activities: that is, what the things in the field do. For example, the field of 'dog' showing implies sequences of activities such as breeding, grooming, nurturing, showing, judging, prize giving, and the like (Wignell et al. 1993: 160-1).

The extent to which one can be considered an insider of a particular field depends upon the knowledge of the lexis, taxonomies, and activity sequences it contains. For example, given the terms *backwash squeeze*, *end play*, *dummy reversal*, *double dummy*, *duck*, and *turkey*, one's control of this field can be judged by one's ability to use these terms appropriately. To be an insider means understanding the meaning of the terms, their taxonomic relationships

to each other, and the activities that the field involves.

It is the resource a discipline uses to name and then order its emic phenomena in a way distinctive to that field. Through technicality, a discipline establishes the inventory of what it can talk about, and the terms in which it can talk about the things included in the inventory (Wignell et al. 1993: 162).

Thus, it is important to unpack a term the first time it appears. This is what gives the definition and allows the term to be used throughout the rest of the text. The evidence thus suggests that technicality is not meaningless jargon. Technicality functions as a field-creating process, allowing the setting up and taxonomizing of areas of human interest. The use of a technical lexis makes it possible to distill or compress meanings. One result of distillation is that those who share a particular field are saved the time-consuming process of continual elaboration and can get on with their primary concern: the observing, ordering, and explaining of new phenomena. Moreover, it seems that the more a field is concerned with explaining phenomena – rather than just ordering them – the greater the distillation offered by technicality.

I will outline some subjects without the intention of covering every single subject in school but the more technical, and usually the subjects learners find more difficult and challenging in both reading and writing.

2.5.1 History

As the *Syllabus in History* (Years 7-10) from New South Wales Secondary Schools Board states:

the teaching of history requires the inculcating in students of an ‘historical perspective’ which involves a sense of time, a sense of cause/effect relationship, an understanding of the interaction of past and present, and an understanding that history is a dynamic relationship of people, place and time in which some events can be judged to be more significant than others (1980: 10).

Among the fields that cause most difficulty to young learners is history because it is full of judgements and valuations (Goom 2004: 121). In its turn, Eggins et al.’s analysis suggests that far from being a dynamic account of people and events, when history gets written down it is neither a story nor it is about people. In the process of arranging, interpreting and generalizing from recoverable facts, people are effaced, actions become things, and sequence

in time is replaced by frozen setting in time (1993: 75).

Grammatical metaphor, particularly nominalization, is a typical feature of many types of written texts and is usually associated with the notions of 'abstraction' and 'distance'. Texts with a high degree of grammatical metaphor tend to be considered prestigious in our culture (Eggins et al. 1993: 77).

This grammatical metaphor can be expressed in many different ways and the authors make them explicit when naming the general characteristics of the discourse of history, when written down, which are: nominalizing actions; giving things existence (e.g. 'there was a turning away from mediaeval interests. '); making things act; setting in time; phase; doings acting; doings acted on (e.g. 'Renaissance man abandoned *mediaeval ways of looking at life*'); and people as Actors in history (e.g. 'Michelangelo was another outstanding man of the Renaissance. Initially he concentrated on sculpture. ') (Eggins et al. 1993: 77-80).

The final step is to reduce the number of generic participants as Actors and to increase the number of nominalized Processes as Actors (e.g., 'the new *society* developed first in central and northern Italy...').

It is possible also for historians to insert themselves into the text. They are always encoded as either Agents or Actors, even when left implicit (e.g., 'it is impossible (for historians) to name an exact date...').

The cumulative effect of these various forms of nominalization is to remove the story from history. For the historian, history involves a number of successive periods in which similar kinds of things go on and differ from what went on in periods before and after. Thus it is doings, not people, that begin, spread and die out. And generic classes of people or doings that act on other doings (Eggins et al. 1993: 81).

The discourse of history involves many different types of texts. Eggins et al. mention a few of them such as narratives, reports, argument, and introductions (1993: 82-9), but they will not be treated here for reasons of space.

According to Martin (1993c) abstraction in the humanities, as in science, can be very challenging. Literary criticism and historical interpretation may in fact be much more heavily nominalized than scientific writing, and so no less of a problem for students to learn to read and write. For many students abstractions probably form more of a problem than technicality, since science teachers do teach to the concepts and terms that make up scientific discourse

whereas English and history teachers do not focus explicitly on nominalization as their main interpretative tool. It should be noted however that science teachers make much more use of talk than writing to unpack technicality. In general science students write many more single sentence definitions than reports or explanations, although they must certainly learn to read the latter where text book material is used. The result in English, history and the humanities-oriented parts of social science is that many students continue to write as they talk (Martin 1993c: 213).

What exactly does it mean to make abstract writing ‘plain’? Essentially what we are looking at is the relationship between semantics and grammar – between meaning and form. In ‘plain’ English there is a ‘natural’ relationship between the two. Actions come out as verbs, descriptions as adjectives, logical relations as conjunctions. And logical relations are expressed in nominal and verbal form: cf. *in the event of* vs. *if*; *insure* vs. *so that* (1993c: 218), as examples (138) and (139) illustrate.

(138) ... and *in the event of* any attempt being made to coerce such labor... vs. *if* they try to coerce such labor...

The former being abstract and the latter plain.

(139) ... the combined ‘Associations represented at this Conference will take all possible means to *insure* their personal safety.’ vs. ... the combined ‘Associations represented at this Conference will do everything they can *so that* they will be safe.’ (Martin 1993c: 219).

The former being abstract and the latter plain.

These congruent correspondences are outlined in the table 28. Nevertheless, these relations are no longer always the case in abstract writing where, for example, an event is expressed by a noun instead of by a process.

SEMANTICS	GRAMMAR
Participant	Noun
Process	Verb
Quality	Adjective
Logical relation	Conjunction
Assessment	Modal verb

Table 28: Relationship between semantics and grammar (after Martin 1993c: 218)

This brings out the essential continuity between humanities and science as far as interpreting the world is concerned. Both use writing as a tool to analyze the world as if it was simply a collection of thing-like phenomena with various sorts of relationships among them. But whereas the humanities tend to take this process only as far as the interpretations coded in the discourse patterns of the texts, science goes one step further and technicalizes the phenomena and their relationships, translating common-sense understandings into specialized ones. One might say, in summary, that for the historian texts *interpret* the world from a nominal point of view, while for the scientist they *reconstruct* the world as a place where things relate to things (1993c: 220).

2.5.2 English Literary Studies

Frances Christie (2012) considers that all school subjects value interpretation, analysis, and evaluation in varying degrees and in varying ways. Perhaps none is more committed to evaluation than English literary study, since the engagement with producing texts that respond to other texts foregrounds evaluation. The study of English literature is one of the humanities, and like other aspects of school subject English, it has often had a controversial history. In fact, a great deal has been written over the years about the subject of English in general, its purposes and its history. A range of points of view are represented in the literature to review the various models of English offered in detail. Suffice it to note that the various models or approaches to the teaching of literature have differed in many ways. Though the models differ, all have this much in common: a requirement that students offer some kind of response to the text(s) studied, involving interpretation and evaluation. The knowledge differs, depending on the texts examined, purposes in considering them, and the theoretical position espoused. Often, however, and ironically, given the commitment to English studies, the linguistic resources needed to express the necessary knowledge about texts remain elusive for many students, not well explicated in many English classrooms (2012: 174-5).

Christie (2012) posits that based on the text type students are exposed to, they need to use language generally marked by such features as: abstract issues and themes; experiential and evaluative language; dense language; frequent use of “showing” processes and associated abstract material processes that realize abstract aspects of interpretation; and a relative absence of reference to self in expressing evaluation, though evaluation is primarily what

such texts are about (2012: 178-9).

According to Christie (2012) English literary studies build knowledge structures in ways different from science, for their concern is not with verifiable truths of the physical world, but with perceptions, understandings, and interpretations of literary texts, where the object is to evaluate and appraise the texts as art. The knowledge built in English is not subject to “proof” in the sense that scientific knowledge is, so that the requirement for replication of procedures, so fundamental to science, does not apply. Yet the knowledge gained and developed in English nonetheless builds, or should be built, incrementally (2012: 184).

The language of evaluation and interpretation of other texts, so prized in English literary studies, is difficult for many students, who often find it hard to understand the principles by which literary interpretation is constructed. Teacher intervention, enabling access to the discourses of literary discussion, is of critical importance if young people in their last years of schooling are to achieve some confidence and facility in discussing texts of many kinds. This will involve, among other matters:

- Extensive shared reading and discussion of the texts studied and their meanings;
- Particular discussion of the cultural significance attaching to texts interpreted and evaluated. This is a very considerable challenge for all young people, and a special challenge for those whose cultural and language backgrounds are different from those of native speakers of English;
- Opportunity to deconstruct sample target genres for writing and active discussion of these; and
- Modeling some of the language for evaluation, including playing with different patterns of attitudinal expression to test their effects (2012: 184-5).

2.5.3 Geography

Wignell, et al. (1993) suggest that in the discourse of geography, language is used in three distinctive ways, which corresponds to the three tasks geography sees itself as fulfilling. First, language is used to ‘observe’ the experiential world through the creation of a technical vocabulary: a process of dividing up and naming those parts of the world which are significant to geographers. Second, language is used to ‘order’ the experiential world, through the setting up of field-specific taxonomies. And third, language is used to ‘explain’ the

experiential world, through the positing of implicational relations among natural or manmade statistics.

A 'taxonomy' is an ordered, systematic classification of some phenomena based on the fundamental principles of superordination (where something is a type of or kind of something else) or composition (where something is a part of something else). This system is based on superordination, that is, where something is a kind of or type of something else. For example, plants can be divided into their component parts (roots, stem, buds, and leaves) (1993: 137-8).

Phenomena classified formally and scientifically often already have vernacular names and vernacular classifications. Much scientific taxonomizing, then, is a process of renaming in order to reclassify the vernacular. This is not to suggest that a formal or scientific taxonomy is just a renaming of an existing vernacular one. Technical language cannot simply be dismissed as jargon, because alongside a renaming, there is also a reordering of things (Wignell et al. 1993: 142).

Halliday points out that the Participant doing the identifying can specify the identity of the target Participant in one of two ways: (a) by specifying its form, how it is recognized; (b) by specifying its function, how it is valued. These two sides to an identifying relationship give the two grammatical functions of Token and Value (section 1.2.1.2.4). Halliday glosses the Value function as realizing the 'meaning, referent, function, status, role', and the Token function as realizing the 'sign, name, form, holder, and occupant' (1985a: 115).

The relationship of elaboration can be realized in a variety of other grammatical ways, to which the labels of Token and Value can also be generalized (e.g., in geography, the biome is the living part of the ecosystem). Some examples of these other ways of elaborating technical terms include:

- embedded clauses (defining relative clauses). Examples (140-144) are taken from (Wignell et al. 1993: 150-2):

(140) Desert streams usually drain down into the lowest portions of nearby desert basins which are called bolsons.

- elaborating nominal groups;

(141) At the lowest level, trophic level 1 at the next lowest level, trophic level 2 at the final level, trophic level 3.

- and elaborating conjunctions (group/clause)

(142) At the lowest level, tropic level 1 that is, where life forms are the simplest... Reference can also be used to establish a relationship between a technical term and the activity sequence which produced it

(143) You have probably learned the meaning of the term transpiration in your science lessons. In *this* process, plants lose water in the form of vapor through their leaves, this water is replaced with water containing plant food collected by the plant roots... (Wignell et al. 1993: 151).

Elaboration is a recursive system in the technicalizing process, so that one technical term can have two, three, or even more elaborations on a single term. It is quite common to find a sequence of elaborations, exploiting different grammatical structures, such as

(144) At the lowest level, tropic level 1 that is, where life forms are the simplest...

Geographers besides observing and describing the experimental world, have the task of grouping and classifying. Language embodies a number of lexical and grammatical resources for creating the taxonomic relationships of superordination (*a* is a kind of *b*) and meronymy (*a* is part of *b*). In the geography texts the main grammatical resources used to realize these taxonomic relationships are relational processes and nominal groups (Wignell et al. 1993: 157).

In the field of Geography there is a tendency to turn processes into things, and then finding a way of turning them back into verbs again. The reason for this curious cycle is that nominal group resources in English allow for the possibility of classification, qualification, and description, whereas the verbal group resources do not. In order to be classified and described, processes must be made into a thing, even though, for all intents and purposes, scientists still conceive of them as processes, and commonly refer to them as happening, occurring, taking place, and so on (Wignell et al. 1993: 159).

The field of geography is thus made up of a number of interrelated taxonomies and sets of implication sequences, realized by technical terms. The major task of a geography textbook is to elaborate the technical taxonomy and generate terms for how things come about.

Geography teachers and textbooks are fond of emphasizing that geography is all about interrelationships. The linguistic evidence adds substance to this claim, for indeed much of geography is about the interrelationships between terms in taxonomies. However, while the

natural sciences sometimes make their taxonomies explicit, geography almost never takes this step. The taxonomies are there and are built up through the lexico-grammar but are not explicit, in that they are not displayed. The relationship between terms has to be extracted from the text. Thus, the student has not only to find order and meaning in the experiential world but also to uncover the order and meaning latent in the discourse of geography (Wignell et al. 1993: 164-5).

Martin names some types of Geography texts such as reports, explanations, and definitions each with specific linguistic features (1993c: 207-10). These text types will not be treated here for reasons of space.

2.5.4 Science

Halliday and Martin consider writing science an important task for students. Firstly, they do little science writing in schools; and secondly, because in some classrooms science textbooks are no longer used, with the result that suitable models of written science discourse are no longer readily available (1993: 135).

Martin claims again the importance of textbooks, since they are the main source of models of written scientific language for most students. They are also focal because most extended writing in science is in fact copied more or less directly from such books. The reason for this is that writing in science is not taught, and students have no better way to learn. An increasing number of students are exposed to fewer and fewer models of scientific discourse (1993a: 167).

And it is not just the words, the grammar is special too. The text is not written in sentences, but in long nominal groups. One of the findings in the classroom research I conducted was precisely the students' difficulties in recognizing NGs, especially when their length exceeded two words. The point of both the technical terms and the grammar is to compress as much information as possible into a short space. To be literate in science means to be able to understand the technical language that is used. To understand this we have to look more closely at what scientists are trying to do (1993a: 168) (cf. Frances' *invisibility of language*). This has important implications for teaching practice. It means that *common sense knowledge* can be a very useful starting point for learning science, since it organizes the world in ways that can be clearly related to scientific understandings. At the same time it is clear that

common-sense understandings differ from scientific ones and that schools have a crucial responsibility to induct students into the alternative scientific world views. Teachers need to be constantly aware of the dangers of stranding students in their own words. This guiding role, bridging across common sense and science, is put very clearly by Britton:

Surely it is the links between ‘commonsense’ and ‘theoretical’ concepts, the links between ‘ordinary language’ and ‘theoretical language’ that make learning possible – whether in school or out – and it is the ability to move back and forth across that continuum that characterizes thinking at any mature stage (1979: 27).

In this sense Martin points into the need of translating common sense into specialized knowledge in order to build up the required uncommon sense interpretation of the world characteristic of the scientific discourse (1993a: 221).

Alongside classifying the world, science also reorganizes the world in terms of composition – the ways in which parts are related to wholes, as example (145) illustrates.

(145) All animal cells have a number of parts in common. They all have a cell membrane. This is a thin ‘sack’ that controls the chemicals that can enter and leave a cell. The liquid contents of a cell are called the protoplasm. These liquid contents are divided into the nucleus and cytoplasm (Heffernan and Learmonth 1981: 152).

Here we find the same pattern of highlighted technical terms and definitions as with classification. Diagrams model what is known as taxonomic relations and are referred to as *taxonomies*. They are commonly used to represent processes (Martin 1993a: 181). Textbooks containing mere diagrams are really little more than supplements to teacher explanations and xeroxed notes; they cannot function on their own as resources of science information. They lack texts defining terms and explaining relationships among them (Martin 1993a: 175) (cf. SIOP and CLIL in section 3.1.7). Morris and Stewart-Dore use the term *structured overview* to refer to diagrams displaying relationships of classification and composition (among others) in text (1984: 48-56).

In preparing students to write science, for example, teachers can work with them to build taxonomies of relevant scientific information on the board, discussing with them the kinds of relationships between the phenomena being considered. Here, a great deal of teacher-guided talk, in which the students rehearse and clarify their understanding of such relationships, will be an important part of preparing for writing. A subsequent step will involve beginning to plot the overall pattern of the scientific genre to be written. At this point

teachers will need to prepare students for some of the linguistic features of the written genre, and, depending on their previous experience, considerable care will need to go into the examination of the genre to be produced. This is critical because of the differences between talking about science and writing science (Martin 1993a: 176).

The sheer volume of information prescribed for students to digest in secondary school and the high cost of much of the relevant technology means that experiments are mainly used to exemplify scientific understandings. Teachers have to be selective about which areas they choose to approach inductively, because using experiments to build up observations as the basis for constructing a theory can take a long time. The strong emphasis on processes in current Australian Science syllabi puts teachers in a difficult position (Martin 1993a: 184-5). What worries science teachers is that if you just tell students things, they won't learn them – involvement in a process is felt to lead to 'real understanding'. The price that must be paid on the other hand for working inductively is that much less science can be taught. Some kind of balance must be struck. The present trend is to emphasize inductive processes in primary and junior-secondary school, which puts tremendous pressure on the upper secondary to shift radically away from process and experimentation in order to make up the lost ground. In sorting this out it needs to be kept in mind that scientific language has evolved so that it can accumulate information making it unnecessary to repeat the same research from one generation to the next. Students can be taught to access these genres, beginning in infants' school (Martin 1993a: 186).

Martin claims that a necessary part of becoming a proficient science student is learning to read and write the various genres particular to science fields, and for that reason teachers need to be careful in thinking about the various genres they want their students to learn. Genres more appropriate to other fields than science are recommended to be taught. The lack of specific genres of science leaves many students rather uncertain about what is expected. The major genres¹⁶ in science textbooks are: reports, explanations, experiments, biography, exposition, and narrative (1993a 186-96).

Table 29 summarizes some of the school subjects covered in the previous sections, text types within them, and their main linguistic features.

¹⁶ Notice here that I have maintained Martin's terminology. This is to help readers identify the concept dealt with here and the authors' different use of the terms.

SUBJECT	MAIN FEATURES	TEXT TYPES
History (Eggins et al.1993)	<ul style="list-style-type: none"> - Nominalization - Abstraction: organizing and generalizing - Distance 	<ul style="list-style-type: none"> - Narrative - Report - Argument - Introduction
English Literary Studies (Christie 2012)	<ul style="list-style-type: none"> - Abstraction - Nominalization - Evaluative language 	<ul style="list-style-type: none"> - Thematic interpretation - Critique - Review article - Exposition
Geography (Wignell et al. 1993)	<ul style="list-style-type: none"> - Rename (technical) - Ordering: grouping and classifying - Possessive attributes - Nominalization 	<ul style="list-style-type: none"> - Reports - Explanations - Definitions
Science (Martin 1993a)	<ul style="list-style-type: none"> - Technical terms - Nominalization - Identifying relational clauses - Taxonomies - Classifying processes 	<ul style="list-style-type: none"> - Reports - Explanations - Experiments: procedural and recount - Biography - Exposition - Narrative: stories; definitions; notemaking, etc.

Table 29: Linguistic features across texts and subjects (after Martin, Eggins, Wignell and Christie)

2.5.5 Final remarks on school subjects

Unfortunately, as De Beaugrande states, in schooling the issue of register is usually treated on a purely negative basis. Learners are alerted when they have committed a violation of register, but are given fairly little systematic assistance in developing or diversifying their range of registers. This neglect is all the more grievous in that the entry to specialized fields of knowledge, particularly to prestigious ones like science and technology, depends materially on commanding the appropriate register (1993: 18).

As Leckie-Tarry summarizes in order to teach students how to operate in an academic context, they must know the language of English academic texts, and this in turn will involve developing in them an understanding of how academic texts function in society; how academic texts are produced; how academic discourse relates to the English language as a whole, and the extent to which the linguistic structures of academic discourse are registerially specific (1993: 27).

Martin et al. propose that students of language need to develop a conscious recognition of the mechanisms of adaptation, and a conscious recognition of the differences between these mechanisms from one language to another. For language teachers to develop this recognition in their students, teachers themselves need a model that shows systematically how text is related to context, and this model must be of such a kind that it may be effectively applied to classroom use (1987: 63).

Control over register is something that unfortunately educators have too often taken for granted (Martin 2005: 162). Halliday claims that a theory of register aims to uncover the general principles which govern the variation in situation types, so that we can begin to understand what situational factors determine what linguistic features (1978: 32) (cf. Christie 2012 in section 2.4).

This scenario seems to point to the need of explicit teaching of grammatical features across technical texts. This is what Martin calls *deconstruction* and the underlying purpose of it is to facilitate intervention in the process of literacy development in primary and junior-secondary school (1993a: 221). In order to do this students need to have some basic knowledge of the grammatical elements governing these texts.

The grammatical features present in texts throughout school subjects (seen in section 2.5) and the need to narrow the plausible gap between what is expected at secondary school and the kind of input/instruction students receive is what led Martin and Rothery to develop a genre-based pedagogy analyzed in the next section to which I turn now.

2.6 The Australian case

The Systemic functional model of language has had an enormous impact on educational contexts in Australia. From its origins in the work of the Sydney School, the influence of this model has spread to the point where the curricula of all the states of Australia draw on the theory in some major way. Genre-based pedagogy has been embraced by teachers because they were convinced by the argument that they needed to teach a much broader range of texts than narrative and personal responses. They have also found invaluable another of its central ideas, making explicit the generic structure of key curriculum texts (Polia and Dare 2006: 123).

As is well known education is central to the knowledge base of society, groups and

individuals. It is education that can eradicate inequalities but as Bernstein puts it:

Education can have a crucial role in creating tomorrow's optimism in the context of today's pessimism. But if it is to do this then we must have an analysis of the social biases in education. These biases lie deep within the very structure of the education system's processes of transmission and acquisition and their social assumption (1996: 5).

Australia has tried to eliminate these inequalities by developing an educational model based on teaching language explicitly. In the late twentieth century Australia was a microcosm and in some ways a harbinger of changes that were under way around the world. For one thing it was a nation of immigrants and for the other the nation had unfinished business with its Indigenous peoples whom the British immigrants had dispossessed and oppressed for generations. There were secondary schools for only half the population, as further education was not required for farm and factory laborers, and just 7% of the population held a university degree. It was in this context that Joan Rothery approached Jim Martin at Sydney University in 1979 with the problem of teaching children to write in school (Rose and Martin 2012: 2-3).

Genre-based literacy pedagogy has always been a project with the ambitious goal of democratizing the outcomes of education systems. The Sydney School project has involved researching the kinds of reading and writing that schools expects of students. Their main inspiration for this work was the educational sociology of Basil Bernstein and Michael Halliday (Rose and Martin 2012: 4).

This approach is to make the entire language-learning task explicit, and this means building up a lot of new knowledge about language (KAL) for both teachers and students (2012: 10). This is what Bernstein called *visible pedagogy* contrasting with the *invisible pedagogy* typical of the constructivism approach (1975: 119-20).

Genre pedagogy is designed to work across all sectors. One aspect of the Sydney School project has been to design teaching strategies that can be applied at different levels in different subject areas. This pedagogy has grown from the systemic functional linguistic theory developed by Halliday and colleagues (Rose and Martin 2012: 17-8). As it was already described in part I language has three general functions because of the way it is used, so the social contexts of language use can be viewed from three perspectives: the relationships that are enacted by language, the experiences that are constructed by it, and the role that language

plays in the context. These three dimensions of social context are known as the tenor, field, and mode respectively, which together are known as the register of a text (see 1.2.6).

SFL theory has been applied in Australia for over thirty years. The project was firstly applied in primary schools (students aged 5-12 years) and in the New South Wales system with the name of the *Writing Project*. It was later implemented in secondary schools with the name of the *Write it Right Project* and during the 2000s it developed activities from the early years to the tertiary education and it was known as *Reading to Learn Project*. These three phases are developed below to finally show some international results where Australia seems to have achieved a good result.

2.6.1 The Language and Social Power Project

During the 80s Rothery and Martin undertook the project of building a classification of the kinds of writing done by students, focusing on infants and primary school (Years K-6 in the New South Wales system with students aged 5-12 years) (2012: 29).

They found that observation/comments and recounts made up the great majority of the writing they collected. Colleagues working around Australia at the time confirmed comparable results. Gray (1986), for example, found that 100% of writing by Indigenous students in Northern Territory rural schools comprised recounts. This was shocking considering that the literacy demands of the primary curriculum ranged across themes including science, geography, history, health and government as it does. Looking ahead to secondary school it was clear that most students were receiving no preparation whatsoever for writing in different subject areas. And many of the migrant students were the most fluent English-speaking members of their family, and therefore responsible in some measure for liaising with various community and professional services in a predominantly English-speaking environment (Rose and Martin 2012: 34). This confirmed Bernstein's fears about locking students into her or his 'present tense' (1979: 300-1).

Their reflection was that constructivist pedagogy in fact proscribes teaching students how to write. Models of what is expected are not given; knowledge about language that might be used by teachers to discuss writing with students is dismissed as useless (because it supposedly cannot be used to improve writing) and harmful (since learning it takes time away from writing itself); students are encouraged to write stories across the curriculum (since

‘narrative’ is supposedly the ‘primary act of mind’ and children rely on to understand their world); and teachers do not compose texts jointly with their class for fear of intruding on students’ creativity and subjectivity. In a knowledge vacuum of this kind, most students have no choice but to draw their own experience of language, which is an oral one, featuring language like that scribed in texts. The only real ‘progress’ we noted from K-6 for most students was that the texts got longer, as students got faster at writing their spoken language down (2012: 35).

Factual texts or reports were virtually absent from the panorama since only 2% of their sample they collected could account as factual texts (2012: 40). The result was that according to this input students were arriving in secondary school with the implicit idea that writing was simply spoken language written down (Rose and Martin 2012: 45).

As a consequence the first thing they did was to build a model of language in social context that teachers could use to plan and deliver writing lessons, and evaluate their students’ progress. Without such a model, these pedagogic activities depended on teachers’ intuitive knowledge about language, and their students’ writing depended on their even more limited intuitive awareness. Their goal was to bring the linguistic nature of their students’ writing to consciousness, to make the teaching of language explicit. To do so they needed to find a way to build teachers’ and students’ knowledge about language (KAL).

They presented knowledge as *ideation* or the nature of knowledge, including everyday, specialized and academic knowledge. The complementarity between everyday and scientific knowledge is also highlighted by resources for identification. Identification is used to introduce people, things and places into a text and to keep track of them from sentence to sentence. Furthermore, the concept of Theme was introduced and finally, with respect to conjunction, the strongest contrast between texts was highlighted in terms of the use of concessive relations (2012: 46-52).

They began to refer to these recurrent configurations of meanings as genres and characterized them as ‘staged, goal-oriented, social processes.’ Social because we are inevitably trying to communicate with readers, goal-oriented because we always have a purpose for writing and feel frustrated if we do not accomplish it, and staged because it usually takes us more than one step to achieve our goals (2012: 53-4).

At this point they had two levels of metalanguage they could provide to teachers: (i) the name

of each genre, linked to its social purpose; and (ii) the stages they could expect each genre to go through. Both teachers and students in infants and primary school took readily to this kind of KAL (2012: 55-6).

For knowledge about genre to be effective in classrooms it was necessary to change not just how teachers looked at student texts, but how they taught students as well. So was it to issues of pedagogy as far as teaching writing was concerned (2012: 57).

Their model of learning was informed by Halliday and Painter's language development studies, noting correlations with Vygotskian learning theory (Rose and Martin 2012: 61).

Joan Rothery was the first member of this group to try and translate the notion of 'guidance through interaction in the context of shared experience' into literacy teaching practice. Rothery referred to her model as a *language based approach*, which consists of seven steps, namely:

1. - introducing a genre: modelling a genre 'implicitly' through reading to and by class.
2. - focusing on a genre: modelling a genre 'explicitly' by naming its stages.
3. - jointly negotiating a genre: teacher and class compose the genre under focus; the teacher 'guides' the composition of the text through questions and comments that provide the scaffolding for the stages of the genre.
4. - researching: selecting material for reading; note making and summarizing; assembling information before writing.
5. - drafting: a first attempt at writing the genre under focus.
6. - conferencing: teacher/pupil 'consultation' – direct reference to meanings of the writer's text.
7. - publishing: writing a final draft that may be 'published' for the class library, thus providing another input of genre models and a great deal of enjoyable reading (2012: 62).

Rothery's curriculum as a whole is front-loaded – it introduces what students need to know up front, and constructs a text interactively with them before asking them to write on their own.

This model was presented by Jim Martin in a plenary address to the 1986 meeting of the Australian Reading Association in Perth and this led to the *Language and Social Power Project*, which ran successfully with a focus on infants and primary schools in collaboration with Sydney University's Linguistics Department over the next few years. One of the first

steps was to recontextualize Rothery's sequence of stages as a teaching/learning cycle (TLC) which could be entered at different points and re-cycle specific stages depending on the needs of students. Over time the teaching/learning cycle was reconceptualized in various forms, which developed and foregrounded different aspects on the pedagogy. In the initial phase the major stages were referred to as Modelling, Joint Negotiation of Text and Independent Construction of Text (2012: 63).

Modelling involved setting the genre in its cultural context and discussing its stages and language features. Joint Negotiation of Text involved first building up the field for a new text on a different but related topic in the same genre and then jointly constructing a text, with the students making suggestions and the teacher adapting them for writing on the board. Independent Construction of Text involved a sequence of sub-stages: building up another field, writing the text, submitting it for consultation with the teacher, editing and publishing, and as a final step making time for creative exploitation of the genre once it had been mastered (2012: 65).

This can equally be applied to ESL students, but they might need more language instruction depending on their L2 level. In this sense, students' errors can be interpreted in a global context; for example, the errors concerning personal pronouns can be seen as a problem of tracking participants and/or keeping track of elements, instead of just as a faulty or incomplete learning of these pronouns (see part III below for classroom research).

By the early 1990s a student could leave primary school, arrive in secondary school, and when given a written task put their hand up and ask 'What genre Miss?' their change of getting an informed answer was, unfortunately, very small, since their intervention had not had any significant impact on secondary school teaching. This situation made clear the need to continue with the project in secondary school.

As Rothery and Martin established the foundations of social literacy in infants and primary school, they then turned their attention to secondary school writing. This meant they had to focus on embedding genre writing in subject areas and carefully consider the nature of disciplinary knowledge from a linguistic perspective. To this project I turn to now.

2.6.2 Write it Right/the Right to Write

This second phase of the project focuses on the genres that students are expected to read and write in the secondary school. The knowledge realized in these genres is described in terms of three broad semantic ropes, viz. classification, cause-and-effect and evaluation. These semantic themes are exemplified in a range of genres in science and history. The critical resource for building uncommonsense knowledge (grammatical metaphor) is then explored (Martin and Rose 2012: 83).

Around the time the *Language and Social Power* was taking off in Sydney, Martin and Rose began to explore the nature of literacy in specific subjects' domains such as geography and history. It was clear from their work in disadvantaged schools that they needed to extend their work on genre to more effectively address writing across the curriculum in primary school and writing in different subject areas in secondary school. Sue Doran was focusing on the relation between secondary school and workplace discourse. This work developed through the early 1990s concentrating on three workplaces¹⁷ (science industry, media and administration) and on several subject areas (English, geography, history and mathematics). This project followed the *Language and Social Power*, a project which has as a crucial element the shared experience, key to the genre-based pedagogy since genres are always about some kind of knowledge (Rose and Martin 2012: 84).

An important feature in secondary school is classification, i.e. building up a specialized classification of uncommonsense experience (table 24 in section 2.2) becomes even more important as students move into science and related subjects (2012: 90) (see school subjects in section 2.5 above). This classification process starts at an early moment in the life of children, in fact Halliday argues that in their second year of life children are no longer restricted to naming individuals with what are essentially proper names but are already developing the ability to use words to refer to classes of things, in order to generalize across phenomenal instances with common nouns (2003c: 334-5).

This uncommon knowledge is made of meaning and has to be learned through specialized language and images through which it is construed. Some subject areas are more technical than others; historians, for instance, when it comes to classifying historical events do

¹⁷ At a broader level, the function of schools is to produce groups of students who will go into universities or into trades training. One problem of Australian system nowadays is that there are fewer and fewer jobs for people with no further education (Martin and Rose 2012: 5).

establish classifications of their own. Compositional reports in history introduce students to the structure of physical phenomena and human agencies. Almost all specialized decomposition is borrowed, typically from the fields the historian is addressing (2012: 96-7). Another central feature of language development is cause/effect relations. Nevertheless, in primary school science there is a tendency for explanations to foreground sequence in time over cause/effect, since these are apparently seen as more transparent for young learners (2012: 100).

Rose and Martin's concern is to establish the fundamentals of knowledge structure in commonsense fields. These fundamentals include the use of language and supporting images to construe (i) a reclassification of familiar concepts and classification of new ones, (ii) a recomposition of familiar concepts and composition of new ones and (iii) alternative explanations of familiar processes and novel explanations of new ones. Because it is made of language, this knowledge is packaged as the genres that science has evolved to consolidate its uncommonsense perspective on the universe, and is stored as writing (2012: 103).

Besides the uncommonsense knowledge already described, in some subjects in secondary school, for instance history, a lot of emphasis is put on interpreting primary sources. And sources often include judgements that students will have to read and adjudicate. These sources also include evaluation (2012: 110). The challenge of being critical yet objective is solved by composing a text which backs up contestable evaluations with historical facts, i.e. to contextualize thoroughly and sensitively, and provide criteria for judgements. They are also about the specialized evaluation students learn to make about this knowledge. As part of this, students have to also learn to argue in favor of their judgements of character and behavior and appreciations of the significance of events. In general, the evaluations students learn reflect the stance of the curriculum, textbooks and their teachers, who keep an eye on these kinds of attitude that school examinations reward (2012: 115).

On the other hand, in science opinions may matter, especially where an ecological perspective is taken up, but generally it is the facts that counts. Contesting hypothesis arise, but in secondary school science, students are not expected to argue for one or another of these; they are not after all in a research environment where they can contribute to a resolution. This is because science resolves differences through experimentation that brings relevant evidence to bear, not through arguments; and students are apprenticed into this reasoned perspective

on evolving knowledge about the physical and biological world (2012: 116).

Another relevant element in construing meaning is *grammatical metaphor*, where the relationship between semantics and grammar has been altered (see table 28). In terms of grammar entities are realized by nominal groups and events by verbal groups. When this realization is altered we encounter a grammatical metaphor (2012: 117).

Scientific and historical understandings, like all uncommonsense ones, are built up through incongruent language; and learning to read and write language of this kind is thus the most important task faced by students in secondary school. Teacher need to introduce the names of genres, organize them in taxonomy so that the intuitive knowledge about them is brought to consciousness, which is a first and necessary step in being able to teach them explicitly (2012: 127-8). Rose and Martin classify these genres after their main purpose, namely: engaging, informing and evaluating. In the first group there are five main types of stories: recounts, narratives, anecdotes, exempla, and new stories. In the second group they mention: chronicles, explanations, reports, and procedures. And finally, in the third group arguments and text responses are mentioned (2012: 129).

Any genre has multiple purposes, but science and history texts will not engage students who are not sufficiently literate to read them. An unfortunate path that publishers and education departments have taken in reaction to this growing problem is to try to make curriculum texts more engaging for these students and less informative - so they look more like magazines and less like textbooks. Rose and Martin's position is directly opposite: every student has a right to engage confidently with curriculum texts at the same level as the top students in their own or another school. For this to happen, teachers need a better set of teaching strategies, not a dumbed down set of texts (2012: 132).

In this light, ESL students need equally extra support to narrow the language level gap that might exist with the native speakers. ESL teachers need to pay a closer look to those students' level of language to determine the kind of activities and exercise they might benefit from. The present thesis tries to show how a basic and common error made by students can be turned into an effective classroom practice, not only to solve the problem, but also to provide students with some KAL useful for future lessons.

2.6.3 Reading to Learn (R2L)

This program is the third generation of genre pedagogy and it extends the principle of embedded literacy, to integrate the teaching of reading and writing across the curriculum at all levels of school and beyond. Although this program is now implemented in mainstream education programs across Australia and internationally, it was initially designed to meet the needs of Indigenous school students from remote communities in central Australia, with whom David Rose had worked for many years (Rose and Martin 2012: 133).

The R2L program and professional learning program has taken root in South Africa, Afghanistan, Kenya and Uganda, and in Scandinavia. At an academic level it has been implemented with international, Indigenous and mainstream students at universities around Australia, and in South Africa, China, Indonesia and Latin America (2012: 138).

R2L methodology involves a set of strategies for reading and writing that can be applied in various teaching contexts. These strategies have drawn from eight principles, which are as follows:

1. Reading involves four levels of meaning: decoding, identifying, inferring, and interpreting.
2. Children learn to read through explicit guidance by caregivers and/or teachers.
3. Guidance takes highly predictable forms as cycles of interaction, in which the parent focuses attention on a feature of the text, the child identifies the feature, and the parent affirms their response. In addition the parent may prepare the child by saying what to look for, and may elaborate with further information after affirming the child's response.
4. Elaboration may be interactive, in which the parent asks a focus question, the child proposes a response from their experience, and the parent affirms, and may further elaborate.
5. Classroom interactions follow similar patterns as in 3 and 4.
6. Reading development occurs over time.
7. In early stages, parents provide most of the literal, inferential and interpretative meanings in a text, and in later stages children may be guided to identify, infer and interpret meanings themselves as the text is read.

8. Children are not expected to start decoding themselves until they are thoroughly familiar with written ways of meaning; and learning to decode letter patterns becomes easy once they are familiar with the meanings of words (2012: 146).

Rose and Martin then have applied these principles to designing a pedagogy for explicitly teaching reading and writing at all levels of education. The R2L pedagogy constitutes a set of tools that teachers can apply at any point in their curriculum programs, whenever learning tasks involve reading or writing. There are nine sets of strategies in the program, which provide three levels of support for reading and writing. In the first level we have: preparing for reading; joint construction; and individual construction. In the second level we encounter: detailed reading; joint rewriting; and individual rewriting. And in the third level there is: sentence making; spelling; and sentence writing (2012: 147).

Rewriting is a beneficial for successful students as it is for struggling writers, for first language speakers as well as for speakers of other languages, and for senior secondary and tertiary students as it is for beginning readers and writers. Like Detailed Reading, it enables students to write texts that may be well beyond their independent competence, by supporting them to recognize and use the language resources of accomplished authors. This closely supported analysis and application enhances the skills of all students (2012: 167).

To support students to follow such elaborate techniques, the model text is projected on the board or wall. The teacher then guides the class to identify each phase in the text, and writes a label for it beside the relevant paragraph. The students also need their own photocopies of the text. As the class text is labelled, they label their own copies. This serves to reinforce both the structure of the model, and the metalanguage used to discuss it (Rose and Martin 2012: 168).

The first step in Rewriting is to write the highlighted information as notes. A very fruitful strategy for doing so is for students to take turns scribing the notes on the class board, as other students tell them what to write from their own highlighted texts. This is a cooperative activity in which the dictating student must clearly articulate the words, and spell them out if necessary, as the scribing student writes the words. The students are largely in control of the task at this point, since they understand the words they have highlighted, and can focus on saying and writing them. But this negotiation also provides many opportunities for the teacher to further discuss meanings as the words are written up, and to enhance students'

skills in spelling and handwriting. Guiding students to spell in syllables using this activity can rapidly enhance the spelling skills of all students (2012: 189).

A central goal for working with factual texts is to develop skills that students can use for independent research projects. These skills include (i) reading technical and abstract texts with understanding, (ii) identifying key information in the texts, (iii) making notes from this information, and (iv) using these notes to write new texts. These are essential skills for research tasks in primary and secondary school, and ultimately for mitigating the escalating pandemic of plagiarism in tertiary institutions, as students undertake research by downloading texts from the web and cutting and pasting them into submissions. Joint construction of whole texts is an essential step in developing these skills (2012: 192).

The starting point for this unpacking is Preparing for Reading. As texts are usually relatively dense, they can be prepared by paraphrasing each sentence in more commonsense terms. This means *de-nominalizing* many of the abstractions – by turning them back into activities that involve people and concrete things, and making logical relations between activities explicit with conjunctions (2012: 195).

This construal of the events is more like the everyday grammar that students are used to, in which people undertake activities in place and time. It follows the same sequence as the text, and uses many of the same lexical items, but in a form that all students will understand. They are now in a position to follow the wording of the text as it is read aloud (2012: 196).

Metalanguage becomes even more useful when it comes to teaching students how to write abstract discourse, once they can read and unpack it. But learning how to read abstract discourse with understanding, and to rewrite it in more commonsense terms, are necessary first steps. These skills can be built up through continual guided practice, ideally in the upper primary years, and then into junior secondary, using the techniques outlined above. By the time they reach middle secondary at least, students need to be developing skills in writing abstract discourse in social sciences and humanities subjects. For these purposes they need to understand the functions of grammatical metaphor – for example, to condense information and package it in chunks, as starting points or Themes of clauses, and end points or News (Rose and Martin 2012: 199-200).

One of the reasons the strategies here described are effective is that they provide learners with sufficient support to do complex tasks in reading and writing in manageable steps (2012:

213).

The program applied in Australia has taken into consideration some principles:

- Learning to write should be understood in developmental terms across all the years of schooling.
- All teachers, not only English ones, should be encouraged to use selected knowledge of language as well.
- Teaching of writing should focus on genres to be written, selected for their relevance to areas of knowledge to be covered.
- Use of metalanguage is essential in terms of building consciousness about language, and teachers must constantly make decisions about when to introduce it most productively.
- The metalanguage involved should slowly build across the years, using selected traditional and functional terms.
- Teachers should use their own understanding of the various developmental phases to monitor children's progress, challenging them to move in new directions and supporting them where adequate progress does not seem to be made (Christie and Derewianka 2010: 239).

Nevertheless, in order to do this, students, especially ESL students whose language level might be very distant from what is required and expected in school, need to have been introduced to certain grammatical concepts. Part III displays how this can be done with a group of ESL students in a middle school. In this classroom research not only personal pronouns were explicitly taught but also the notion of clause and of word groups among other concepts.

Next section summarizes the results obtained by some countries in the PISA program and shows how Australia measures up.

2.6.4 The outcomes

The ability to write is prized in English-speaking cultures, bringing considerable advantage to those who can do it well in many sites, personal, occupational, political and communal. Many children do not succeed in their writing, for it is in fact quite difficult to learn to write well. All children deserve the opportunity to learn to write. We argue that where teachers are

possessed of appropriate knowledge of the ontogenesis of writing ability, of a kind that functional grammar provides, they can the more effectively guide their students as they learn to write (Christie and Derewianka 2010: 244).

Based on the ability and need to write, this genre-based pedagogy has been applied in Australia for the last three decades. It took some time to reach high school and tertiary education but the results seem promising enough to take them into consideration.

Responding to member countries' demands for regular and reliable data on the knowledge and skills of their students and the performance of their education systems, the OECD (Organization for Economic Co-operation and Development) began work on PISA in the mid-1990s. PISA was officially launched in 1997, with the first survey taking place in 2000, the second in 2003, the third in 2006, the fourth in 2009 and the fifth in 2012. Future surveys are planned in 2015, 2018 and beyond (www.oecd.org).

PISA (Programme for International Student Assessment) was designed to assist governments to monitor the outcomes of education systems in terms of students' achievement on a regular basis and within an internationally accepted common framework, in other words, to allow them to compare how students in their countries were performing on a set of common tasks compared to students in other countries. In this way, PISA helps governments to not only understand, but also to enhance, the effectiveness of their educational systems and to learn other countries' practices.

Every three years, PISA collects information on student achievement and contextual information about students, teachers and schools, and derives educational indicators that can monitor differences (and similarities) over time. Some examples of how PISA findings are being used internationally include:

- Comparisons of literacy skills of students in one country to those of students in other participating countries;
- Establishment of benchmarks for educational improvement, in terms of the mean scores achieved by other countries or in terms of a country's capacity to provide high levels of equity in educational outcomes and opportunities; and
- Understanding the relative strengths and weaknesses of individual education systems (www.oecd.org/pisa).

The following table shows the reading literacy level of some of the different countries

participating in the PISA report. Reading literacy in PISA is defined as: ‘an individual’s capacity to understanding, use and reflect on and engage with written texts, in order to achieve one’s goals, to develop one’s knowledge and potential and to participate in society’ (oecd 2009: 14).

The number of participants varies across the years, for instance in 2006 the number of participants was 57 and in 2003 only 41. In 2009 and 2012, 65 countries participated in PISA. This included 34 OECD countries and 31 partner (non-OECD) countries and economies. The OECD countries are: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States.

The Partner countries were: Argentina, Azerbaijan, Brazil, Bulgaria, Chile, Chinese Taipei, Colombia, Croatia, Estonia, Hong Kong-China, Indonesia, Israel, Jordan, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Macao-China, Montenegro, Qatar, Romania, Russian Federation, Serbia, Slovenia, Thailand, Tunisia, and Uruguay.

The 2012 results are specified in table 30.

PISA results 2012	Mean score in Maths	Mean score in Reading	Mean score in Science
Shanghai-China	613	570	580
Hong Kong-China	561	545	555
Singapore	573	542	551
Japan	536	538	547
Finland	519	524	545
Estonia	521	516	541
Korea	554	536	538
Vietnam	511	508	528
Poland	518	518	526
Canada	518	523	525
Liechtenstein	535	516	525
Germany	514	508	524
Taiwan	560	523	523
Ireland	501	523	522
Netherlands	523	511	522
Australia	504	512	521
Macao-China	538	509	521
New Zealand	500	512	516

Switzerland	531	509	515
United Kingdom	494	499	514
Slovenia	501	481	514
Czech Republic	499	493	508
Austria	506	490	506
Belgium	515	509	505
Latvia	491	489	502
OECD average	494	496	501
France	495	505	499
Denmark	500	496	498
United States	481	498	497
Spain	484	488	496
Lithuania	479	477	496
Norway	489	504	495
Italy	485	490	494
Hungary	477	488	494
Luxembourg	490	488	491
Croatia	471	485	491
Portugal	487	488	489
Russian Federation	482	475	486
Sweden	478	483	485
Iceland	493	483	478
Slovak Republic	482	463	471
Israel	466	486	470
Greece	453	477	467
Turkey	448	475	463
United Arab Emirates	434	442	448
Bulgaria	439	436	446
Serbia	449	446	455
Chile	423	441	445
Thailand	427	441	444
Romania	445	438	439
Cyprus	440	449	438
Costa Rica	407	441	429
Kazakhstan	432	393	425
Malaysia	421	398	420
Uruguay	409	411	416
Mexico	413	424	415
Montenegro	410	422	410
Jordan	386	399	409
Argentina	388	396	406
Brazil	391	410	405
Colombia	376	403	399
Tunisia	388	404	398
Albania	394	394	397

Qatar	376	388	384
Indonesia	375	396	382
Peru	368	384	373

Table 30: 2012 PISA results in maths, reading, and science (www.oecd.org/pisa)

From table 30 it can be drawn that Australian students possess a higher literacy level than most of the other countries. They performed at a high level in the subjects that require more literacy skills such as reading and science. Australia was placed at number thirteen in reading among the sixty-five countries taking part in the program. All in all, Australia performed above the OECD countries in the three competencies.

Part III of the present thesis is an example of how a classroom instruction based on SFG can be implemented with students whose L1 is not English or the class mainstream language. This part is divided into three subparts: (1) first considerations where some background information is provided in relation to language learning/teaching methods; (2) classroom research on personal pronouns; and (3) results of the research are presented.

PART III. SFG: A CLASSROOM RESEARCH

“If a theory is allowed to stand still, it soon ceases to be useful.” (Halliday et al. 1966: 39)

The third part of the present thesis is divided into three subparts. The first explains the motivations for this classroom research, previous studies on the topic, theories on language teaching and language learning and some linguistic concepts related to the process of learning a language. The second is devoted to the design of the research, as well as the collection of the students’ exercises. Finally, the third presents the results of the research.

3.1. First considerations

3.1.1 Motivations for the present research

The present research is the result of two main observations on personal pronouns. First of all, their high frequency, and secondly, the myriad of errors observed in ESL students (see 3.2.3.1 below).

On the one hand, the common use of personal pronouns, both in written and spoken English, is a good reason in itself to pay a closer attention to them. Biber et al. (2010) summarize the distribution of personal pronouns across different genres in table 31 below.

Furthermore, Biber et al. explain that most typically, personal pronouns are used to refer to definite specific individuals identified in the speech situation (first and second person) or the preceding text (third person). However, the specific reference is often far from straightforward and, whether in speech or writing, the interpretation of pronouns requires a great deal of cooperation between the speaker/writer and the addressee. In conversation, uncertainty can be cleared up in the course of the exchange:

(146) A: *We’re* coming to eat in a minute.

B: *We? You and who?* (conversation) (2010: 328)

(147) A: I mean *she’s* got a bit of a reputation. I suppose everyone has, but I hear about her a lot, in school and everything.

B: *Which one* was that?

A: Pardon?

B: *Which one* was this?

A: *The skinny one.* (conversation) (2010: 329)

	CONVERSATION	FICTION	NEWS	ACADEMIC
I	38,000	18,000	5,000	2,000
Me	4,000	4,000	1,000	0 ¹⁸
We	7,000	3,000	3,000	3,000
Us	1,000	1,000	1,000	0
You	30,000	11,000	2,000	1,000
He	11,000	17,000	7,000	1,000
Him	2,000	5,000	1,000	0
She	8,000	10,000	2,000	0
Her	1,000	3,000	1,000	0
It	28,000	13,000	7,000	7,000
They	10,000	5,000	4,000	3,000
Them	4,000	3,000	1,000	1,000

Table 31: Distribution of individual personal pronouns (occurrences per million words) (after Biber et al. 2010: 334)

On the other hand, the frequency of errors produced by ESL students caught my attention and made me look into the reasons behind them. In 2008 I conducted a non-experimental research where some exercises were provided to learners. Students (from 6th to 8th grade) both native of AmE and non-native (ESL students) were given a number of exercises with different types of tasks: they had to provide missing personal pronouns; circle the pronoun and relate it to its antecedent within a sentence; read a passage and make corrections where necessary; and finally, read a passage and provide the missing personal pronouns.

The results showed no much difference between native and non-native speakers. They both had a tendency to favor contiguity and human elements over non-human elements within the sentence. Regarding number, in many an occasion students did not make the difference between singular and plural using the wrong pronoun. In the reading activity, students produce, what I called at the time, *the hauling effect*, since once they selected a pronoun at the beginning of a paragraph, they would use it for most of the occurrences required (see 3.2.3.1 for more details).

As will be seen throughout this case study, ESL students and native speakers did not greatly differ neither in the number of errors, nor in the type of them. One of the conclusions is that transfer was not the source of the errors, or, at least, not in all cases. Both types of students

¹⁸ 0 represents less than 500.

used the same strategies when relating the personal pronouns to their antecedents favoring two factors: contiguity and the human participant.

Some authors in the past, like Gleason, considered that pronouns contributed little or nothing to meaning, functioning as pure structural signals (1961: 156). On the other hand, many authors have turned their attention to pronouns. Nuttall, for instance, emphasizes the importance of readers' mastery of cohesive devices by saying:

Pronoun reference, elliptical sentences and so on are often so straightforward that their potential difficulty is overlooked, and it is only when he [sic] encounters problems that the student will think them worth attending to. The problems that arise concern the signification of sentences: the reader who does not know what a pronoun refers to, or who cannot supply the full version of an elliptical sentence, will not be able to establish its signification (1985: 83).

In line with this idea, Zalewski (1993) proves the connection between number/person errors and a failure and/or deficient text comprehension. He points out that pronouns –sometimes referred to as empty placeholders, are obviously not completely washed out of all meaning. In addition, Downing and Locke claim that if the references of the pronouns in a text are not transparently clear, the text will be difficult to understand (1995: 416).

A concept I consider worth revisiting here is that of closed vs. open sets (see footnote 9). The former means any word class whose membership is limited to a small number of items, e.g. pronouns and conjunctions (Crystal 2011: 459), thus, no more items can be added to it. The latter means the list is open and susceptible of receiving new items. The system of personal pronouns is a closed system while lexical items are examples of open sets. Halliday (1989: 63-4) claims that a grammatical item, such as pronouns, enters into a closed system whereas lexical words or items enter into an open system. The issue worth pointing out here is frequency. Whereas grammatical items tend to be considerably more frequent in occurrence, lexical items are repeated much less often.

Additionally, Halliday et al. (1966: 23) state that closed systems lend themselves to more abstractions and generalizations than do open sets. That is to say, the natures of grammar and lexis are such that a statement made in grammar can account for a larger number of events than a statement made in lexis. Grammar deals with closed system choices, which may be between items (*this/that; I/you/he/she/we/they*) or between categories (singular/plural; past/present/future). Lexis, on the other hand, deals with open set choices, which are always between items (chair/settee/bench/stool, etc.).

This is different from Huddleston and Pullum (2005: 327), who in turn, establish the difference between nouns and pronouns by saying that the latter permit a narrower range of dependents (see section 1.2.5.1.4.1). This is why SFG has been selected, since it treats words in closed systems not as subsidiary but as a crucial part of the meaning, since they link parts of the message to each other (Thompson 1997: 15).

Personal pronouns are intrinsically related to reference. The cohesive resource of reference refers to how the writer/speaker introduces participants and then keeps track of them once they are in the text. Whenever a participant is mentioned in a text, the writer/speaker must signal to the reader/listener whether the identity of the participant is already known or not. That is, participants in a text may be either presented to us or presumed. Only the latter participants create cohesion in a text (Eggins 2007: 33; Martin and Rose 2003: 145).

I have already commented on how some authors like Linde (section 1.2.5.1.4.3) relate the use of pronouns to the focus of attention, thus with the construction of discourse. I will show (section 3.3.1) how the inadequate use of pronouns has effects on topicality and it might have its origin in an alleged asymmetrical grammar producing differences in the comprehension and in the production.

In Fawcett's words, 'this part of the grammar simply has a degree of complexity' (1988: 210) or as Halliday posits, the topic of pronouns and gender is vastly more complex than just saying 'she' stands for female and 'he' for male (1985a: xxv). One example of the many complex issues concerning the use of pronouns is the difficulty posed when writers/speakers have to establish gender in things such as the moon and/or the sun (Halliday 1966: 159-60). Finally, I would like to add some findings on the use of reference by children with different social-class backgrounds. Joan Tough (1970 in Bruner 1973a: 149) reported that the percentage of anaphoric references was three times higher in favored children than in less favored children, from middle- and lower-class backgrounds. Pronouns can be used with an exophoric reference (deictically), pointing at something in the environment, or an anaphoric reference, referring to an antecedent previously supplied in words. In this sense, Basil Bernstein states that the use of pronouns has to do more with the universalistic order of meaning rather than with the particularistic one. Universalistic meanings are those in which principles and operations are made linguistically explicit, whereas particularistic orders of meaning are meanings in which principles and operations are relatively linguistically implicit.

If orders of meaning are universalistic, then meanings are less tied to a given context. Where meanings have this characteristic, then individuals have access to the grounds of their experience and can change grounds. Where the meaning system is particularistic, much of the meaning is embedded in the context of the social relationship. In this sense the meanings are tied to a context and may be restricted to those who share a similar contextual history. Where meanings are universalistic, they are in principle available to all, because the principles and operations have been made explicit and consequently public. Bernstein argues that it is the parochializing effect of a culture of poverty that keeps language tied to context, tied to common experience, and restricted to the habitual ways of one's own group (1974: 79).

In this sense Hawkins found that 'middle-class children used more specific referents, while working class children oriented towards a type of reference which is less specific and takes for granted a greater degree of common knowledge shared by speaker and addressee'. When they were asked to describe a detailed picture, working-class children used exophoric reference (*that; this*), whereas middle-class children used nouns such as *the house, the book*. When they were unsure, middle-class children used verbs of tentativeness and first person pronouns, whereas working-class children used sentences like 'you see', or interactive tags 'isn't it, don't they' (1977: 183).

3.1.2 Some concepts

In the present classroom research I will refer to the students' mother tongue or native language as L1 and the target language, the language that a learner is trying to learn, (Ellis 1994: 144) as L2.

3.1.2.1 Learning and acquisition

An important distinction that needs to be made at this point is the difference between learning and acquisition. The first author to establish a difference between them was Peter Strevens (in Halliday et al. 1966), and since then the basic difference has been that a person acquires a language when it is done under natural conditions, whereas a person learns a language when there is an external guidance or direction. The problem is the lack of consistency in the use of both lexical items, resulting in the fact that one and the same phenomenon is termed

differently by different authors (Manchón Ruiz 1987: 37).

Krashen (1982: 17; 1987: 10) posits that there are two ways for an adult to approach an L2 and these are: subconsciously, through informal, implicit learning; or through a conscious learning, and this is knowing about language, explicit, formal linguistic knowledge of the language or knowing about language. Krashen adds that learning does not turn into acquisition. Halliday (1986) describes the difference according to the role of the child; if it is an active participant in the process, then we talk about learning language while when it remains neutral in the process, it is acquisition, i.e. the child is not conscious of being acquiring a language.

From this description I can state that learning is conscious while acquiring is unconscious. Yet, Ipek (2009: 162) points out that especially in L2 education, these two terms are very often used interchangeably. And many authors (see e.g. Krashen 1982, Ellis 2000, and Hälté 2006) refer to acquisition when an L2 is being learned/acquired in a natural way.

Larsen-Freeman and Long explain that in spite that learning is different from acquisition, most researchers in the field use acquisition as the superordinate term for all settings. She uses the term ‘learners’ to refer to those in the process of acquiring a second language. The term L2 simply implies that it is acquired later than a first language (1999: 6).

It is important to remark here that Halliday prefers the term *language development* instead of the term *language acquisition*. He considers the latter an unfortunate one because it suggests that language is some kind of a commodity to be acquired (1978: 16). Nevertheless, I will use the terms *language acquisition* and *language learning*, since they are more common in the literature.

In the present research I will refer to L2 as a learning process since: all students possess already an L1; the research is conducted in a formal environment, namely, a classroom; it is carried out in a conscious way; and all the subjects are over the Critical Period (see 3.1.2.2 below). Another aspect to bear in mind is the distinction between second and foreign language. This is widely explained in section 3.1.7.

3.1.2.2 The Critical Period Hypothesis (CPH)

The concept of CPH, first introduced by Penfield and Roberts (1959) and later developed by Lenneberg (1967), posits that once a subject reaches puberty the process of acquiring

language becomes learning and the process becomes difficult and typically incomplete. Lenneberg echoed Penfield's notion of the 'unphysiological' nature of later language learning. Penfield and Roberts (1959: 240) based this statement on the evidence that children are normally able to re-learn language when injury or disease damages speech areas in the dominant language hemisphere (usually the left), whereas speech recovery in adults is much more problematic. Furthermore, Penfield used this evidence to assert that 'for the purpose of learning languages, the human brain becomes progressively stiff and rigid after the age of nine' (1959: 236). With regard to the starting point of the critical period, Lenneberg (1967) claims that whereas 'children deafened before completion of the second year do not have any facilitation [in relation to oral skills] in comparison with the congenitally deaf', those who lose their hearing after having been exposed -even for a short time- to the experience of oral language subsequent to this point can be trained much more easily in all the oral language arts (1967: 155).

There is another interesting idea related to the CPH and that is the notion of lack of contact with language. Singleton presents the cases of 'wolf-children' such as Victor and Genie – children who have grown up in isolation from normal human society and who have then been rescued – who were unable to develop L1 because they were not exposed to verbal language and they had reached puberty by the time they were rescued (2003: 6). As Matthiessen states: 'there can be no social man without language, and no language without social man' (2009: 18).

Authors such as Hyltenstam and Abrahamsson claim there is no case on record of a post-pubertal L2 beginner who has been demonstrated to behave in every last linguistic detail like a native speaker (2000: 155). Nevertheless, some cases of older beginners achieving a native-like proficiency level have been reported (Marinova-Todd et al. 2000). These cases are characterized by very high levels of motivation. Furthermore, there are accounts in the anthropological literature of other societies where adults achieved native-speaker abilities in second languages (Sorensen 1967; Hill 1970), suggesting that it might even be culturally induced expectations, more than age-bound neurological barriers, which impede older-learner SLA.

Ellis (2000: 68), for instance, claims that the so called critical period does not appear to be a sudden cut-off age, beyond which full competence is impossible but rather a *gradual decline*

(emphasis added) in the capacity to achieve full competence by the age of sixteen. There is some evidence that not all learners are subject to critical periods. Some are able to achieve native-speaker ability from an adult start. In this sense, authors such as Singleton argue that more important than the maturational issue is the very fact of the possession of knowledge of another language (2001: 85).

I can conclude that humans are born with the capacity and ability to acquire any language, yet we need to receive some exposure/input before puberty, otherwise the access to language is closed or with limited accessibility. This is why Bruner claims that the acquisition of any language could not possibly succeed but for the presence of a Language Acquisition Support System (LASS) (1986: 77). Nevertheless, when it comes to L2 the threshold seems to be unclear and I prefer to use the term of *sensitive period* introduced by Lamandella (1977) to represent the time when language acquisition is most efficient, usually during childhood, but not impossible after the period of heightened sensitivity or *gradual decline* (Ellis 2000) instead of the critical period.

Furthermore, there are many other factors influencing L2 learners and consequently their production or output. Some of these factors will be briefly mentioned in the next section. Learning a language is a complex process and any theory trying to reduce its explanation to a single factor is doomed to fail, to be biased, or may simply not be looking at the process from all the different angles. I could mention as many factors as subjects but the time and percentage that every factor plays in every subject is hard, if not impossible, to measure. What we need to do is to focus on students who are tackling language and help them to overcome difficulties along the process. In Halliday's words (1980b) 'learning language means learning language, learning through language and about language.' Halliday adds that it is a complex and demanding task which needs to be understood not only in psychological but also in sociocultural terms (1976: 305). As Schleppegrell explains 'literacy learning goes on throughout one's lifetime and is never finished' (2010: 152).

3.1.2.3 Factors influencing language learning

Omaggio points out that many authors, included herself, believe that learner factors such as age, aptitude, attitude, motivation, personality, cognitive style, and preferred learning strategies need to be considered in any comprehensive theory of SLA (2001: 75). Or as

Halliday explains: ‘learning a language is not by any means the same task to all learners, and in a class of thirty students there will probably be thirty different ways or styles of learning. It would be surprising if any one conception of the process was equally suited to all’ (1976: 305). This is important to bear in mind when approaching learners and can be summarized in layman’s terms ‘what is good for the goose, *might not be* good for the gander’.

As already mentioned before, learning a language is a complex process with a myriad of factors influencing it. I can account here for the following:

a. - **Age**. This has already been treated in section 3.1.2.2 in relation to the CPH. The general idea is that ‘younger is better’ but nothing is conclusive, nor is the agreement about the age at which to place the *sensitive period*.

b. - **Aptitude**. Following the psychologist Carroll:

Aptitude corresponds to the notion that in approaching a particular learning task or program, the individual may be thought of as possessing some current state of capability of learning that task. That capability is presumed to depend on some combination of more or less enduring characteristics of the individual (1981: 84).

Carroll proposed that foreign language aptitude consisted of four independent abilities, namely: phonetic coding ability; grammatical sensitivity; rote learning ability; and inductive language learning ability (1981: 105).

At this point, it is worth introducing Cummins’s distinction between Cognitive Academic Language Proficiency (CALP) and Basic Interpersonal Communication Skills (BICS). Since in this thesis I am dealing with written language in an academic environment, it seems necessary to distinguish between these two concepts. Whereas BICS is more spoken production oriented, CALP is more academically oriented (1980: 176).

This difference led Neufeld (1978) to suggest that all humans are equipped to master basic language skills, but that humans vary with respect to their mastery of the higher-level skills and that the extent of the mastery of these latter skills is determined by an individual’s intelligence (cf. Halliday 1989).

This is important since I consider quality of instruction one of the key factors in the process of learning along with IQ and motivation. In relation to *instruction* I would like to make two comments. First of all, although Vygotsky does not see learning as development, he considers that properly organized learning results in mental development (1978: 90). In this sense, Vygotsky claims that the relationship between instruction and development is paramount

(1978: 102). And secondly, as Bruner states: ‘it is the proper function of the teacher to present information in such a way and in terms of such a structure that the learner can get maximum regenerative travel from the material to which he has been exposed’ (1959: 33-4).

c. - **Motivation.** Gardner and Lambert (1959: 266) were probably the first to draw attention to this factor. The lack of predictability between aptitude and grades in language courses suggests that variables other than linguistic aptitude are involved. Motivation and interest have been mentioned but perhaps they are difficult to measure.

Gardner and Lambert (1972) distinguish between ‘instrumental motivation’, which occurs when a learner has a functional goal (such as to get a job or pass an examination), and ‘integrative motivation’, which occurs when a learner wishes to identify with the culture of the L2 group (cf. Sorensen and Hill 3.1.2.2 above). Other types of motivation have also been identified, such as ‘task motivation’ or ‘intrinsic motivation’ (the interest that learners experience in performing different learning tasks), ‘Machiavellian motivation’ (the desire to learn a language that stems from a wish to manipulate and overcome the people of the target language), and ‘resultative motivation’ (the one resulting from success in learning the L2).

In general, motivation refers to the effort which learners put into learning an L2 as a result of their need or desire to learn it (Ellis 1994: 715).

d. - **Attitude.** Larsen-Freeman and Long include some aspects here such as parents, peers, learning situation, teachers, ethnicity, and in general the attitude people have towards languages. But since these are beyond the scope of the present thesis, they will not be treated (1999: 178-9).

e. - **Personality.** Finally, Larsen-Freeman and Long enumerate some of the individual features that have an effect in the learning of an L2, which are: self-esteem; extroversion; anxiety; risk-taking; sensitivity to rejection; empathy; inhibition; and tolerance of ambiguity (1999: 184-91).

This is not an exhaustive list but only a few aspects that may have an influence on the process of learning an L2, making evident the complexity of such a process and the diversity of learners.

3.1.2.4 Language transfer

When learning an L2 we often come across the concept of *language transfer* (henceforth LT).

We will use here the definition provided by Odlin: ‘transfer is the influence resulting from similarities and differences between the L2 and any other language that has been previously (and perhaps imperfectly) acquired’ (1993: 27).

The concept of transfer refers to two different situations, namely borrowing transfer and substratum transfer. The former refers to the influence a second language (L2) has on a previously acquired language (which is typically one’s native language). Whereas, the latter is the type of cross-linguistic influence investigated in most studies of SLA; such transfer involves the influence of a source language (typically, the learner’s L1) on the acquisition of a TL/L2 regardless of how many languages the learner already knows (1993: 12).

In addition, LT can be positive or negative. The former occurs when similarities between L1 and L2, for example in vocabulary, can reduce the time needed to develop good reading comprehension and facilitate the acquisition. The latter involves divergences from norms in the L2 and it may be due to language distance¹⁹. Negative transfer may result in learners underproduction (few or no examples of the L2), overproduction (more than is necessary), and misinterpretation (the structures in L1 can prompt a wrong interpretation of the message in the L2) (1993: 36-8).

Nevertheless, authors such as Dulay and Burt (1974) and Larsen-Freeman (1975), among others, have argued that transfer plays only a minimal role in the acquisition of grammar (see below 3.1.3.2). For instance, Dulay and Burt (1974: 52) conclude that it is the universal cognitive mechanisms that is the basis for the child’s organization of an L2 and that it is the L2 rather than the L1 system that guides the acquisition process.

3.1.2.5 Interlanguage

Another concept that needs to be defined here is *interlanguage* (henceforth IL). This term was coined by Selinker (1997) but has been used by many authors with different names such as *error analysis* or *contrastive analysis*, for instance. Selinker considers IL as a separate linguistic system, clearly different from both the learner’s L1, and the L2, and is linked to

¹⁹ It is the distance between the L1 and the TL. Language distance can be viewed both as a linguistic phenomenon (i.e. by establishing the degree of actual linguistic difference between two languages) or as a psycholinguistic phenomenon (i.e. by determining what learners think is the degree of difference between their native language and the TL). Language distance can affect L2 learning either through positive transfer or through negative transfer (Ellis 1994: 327).

both. Thus, IL is any stage in-between the subject's L1 and the L2. It could be seen as any occurrence of language that diverges from the target L2 (1997: 259).

Factors shaping IL are, but not limited to: native language transfer; overgeneralization of L2 rules; transfer of training; strategies of communication; strategies of learning; age; and social context and discourse domains.

Authors like Quingxue see L2 learning basically as a creative process of rule discovery and hypothesis by means of various cognitive activities on the part of the learner. This process is strongly influenced by L1 and L2, thus creating a new language system called IL (2002: 7).

I adopt Selinker's concept of IL in the present thesis, since I consider IL to be any stage in-between the learner's L1 and the L2. In this sense, all deviations can be seen as a source of information about the students' language development phase and plan instruction accordingly in order to be more effective.

3.1.3 Previous studies on pronouns

In this section, I will briefly describe some of the researches conducted on the topic of acquisition and learning of personal pronouns. The first section deals with the studies carried out in L1 acquisition and the second deals with the research done in L2 learning, although the boundaries overlap at times.

3.1.3.1 Acquiring personal pronouns

Roger Brown (1973) conducted the most comprehensive longitudinal study in first language acquisition to date. Unlike Halliday (1986) and Painter (1984), who study language development from proto-language through a transition into adult language, in *A First Language*, Brown (1973) describes the different stages a child goes through when acquiring a language and the order of acquisition for the English morphemes. This is an important difference, since Halliday and Painter do not consider the means length of utterance (MLU, see below) as a unit of measure, but rather in terms of expansion or reorganization of the paradigmatically defined resources for communication (Painter 1984: 29).

Brown claims that for English as an L1 (mother tongue), there is an order of acquisition for the English morphemes, viz.

1) Present progressive; 2) past regular; 3) past irregular; 4) 3rd person singular present

indicative; 5) plural; 6) possessive ('s); 7) in; 8) on; 9) indefinite article *a*; 10) definite article *the*; 11) contractible copula; 12) contractible auxiliary; 13) uncontractible copula; 14) uncontractible auxiliary (1973: 308).

Brown divides the phases the child goes through when acquiring L1 into stages. Each stage measures the length of an utterance (MLU), which reflects the number of items produced by the child. There are five stages, namely: Stage I = 1.75 (on average 1.75 words per utterance); Stage II = 2.25; Stage III = 2.75; Stage IV = 3.50; and Stage V = 4.00 (1973: 271).

Pronouns as functors²⁰ tend to be omitted in Stage I (Telegraphic Speech where one word stands for a whole sentence), which is made up of content words (non-functors). In the experiment, children had to imitate 13 simple English sentences and they were able to imitate pronouns correctly in 72% of the time. Nevertheless, they tend to be omitted when they make sentences in a natural way. Yet, the various personal pronouns used are limited to *I*, *you*, *me*, and *my* as well as the demonstrative pronouns *this* and *that*. These, together with *here* and *there*, are among the words most reliably found in this Stage in the English language (1973: 75-7).

It is in Stage II when children show a more frequent and constant use of pronouns (78%) but limited to *I*, *you*, *it* (or *that*), *it* or *that* functioning as object of action or as stimulus. It is clear that pronouns in child speech, as in adult speech, are a kind of nouns (cf. Huddleston and Pullum 2005). If, in a Stage I grammar, nouns were to be marked as +animate or –animate, the same marker might be used for pronouns. The prominence of *it* and *that* as objects is matched by inanimate NP objects (1973: 210).

Brown studies the acquisition of the 14 morphemes listed above in English as L1 and shows the following order of acquisition: contractible copula \geq contractible auxiliary \geq uncontractible copula \geq uncontractible auxiliary. Nevertheless, he does not specify whether children omit the pronoun in the cases of uncontractible copula/auxiliary or which pronouns are used. In Stage IV children are able to use singular/plural nouns/pronouns correctly most of the time (1973: 271).

What is interesting for the present research are the observations the study throws. Firstly, he considers frequency, along with saliency, a major factor in the acquisition of morphemes. Secondly, children seem to first acquire the rules of order (semantic roles) and then the rules

²⁰ Brown uses the term *functors* for function words such as prepositions, pronouns, articles and conjunctions.

of categorization (syntax) (1973: 118). This has to do with the linear position being a major syntactic aspect of English. Thirdly, the acquisition of pronouns has to do with the element of +animate or –animate. And fourthly, although children are to be credited with a distinction between one and more than one at the stages III and IV, the morphological overgeneralizations (*feets, *mans, *sugars) and the back formations creating nonexistent singular stems (*one bok from box and *one pant from pants) are difficult to explain (1973: 331).

In this light, Leopold had previously observed:

The child whose attention is at first drawn only to the major elements of the mechanism of communication neglects the morphological devices for a considerable length of time. The elements affected by this neglect are not only morphological endings and other modifications of the word-stem, but also form-words, that is, small words like prepositions and auxiliary verbs used for the same purposes (1970: 76).

In this same direction, since personal pronouns are little words (functors), they may be neglected and may require some attention later. This is not exclusive of L1; it also concerns L2, where personal pronouns are acquired at a very early stage and then neglected.

Rosalind Charney states that children are aware of speech roles only when they themselves occupy those roles. In her study (1980) twenty-one girls' (aged 1 to 6) knowledge of *my*, *your*, and *her* was assessed when they were speakers, addressees and non-addressed listeners. *My* and *your* were at first understood correctly only when referring to the child's own speech role. *Your* was comprehended when the child was addressed, though not produced correctly by the child. Finally, *my* was used by the child as speaker, while still not comprehended correctly when used by others.

Shulamuth Chiat (1981) investigates the consolidations under which children make linguistic generalizations and the pronoun systems provides a fruitful example of the conditions under which children make those generalizations. The analysis indicates that children do not make maximal generalizations which extend a particular feature to all related contexts. Rather, they acquire specific complexes of features, and are quite conservative in extrapolating from one feature complex to another. This is connected to Felix and Hahn's results mentioned in the next section (see 3.1.3.2 below).

Childers and Tomasello (2001) carried out two studies where they investigated the linguistic representations underlying English-speaking 2 ½ - year-olds' production of transitive

utterances. The results suggest that children build many of their early linguistic constructions around certain specific lexical or morphological items and patterns, perhaps especially around particular pronoun configurations. They coined the term *pronoun islands hypothesis* because some high-frequency pronouns, such as *I*, and *it*, occur with regularity in certain utterance positions with consistent semantic functions. The suggestion is that English-speaking children's earliest syntactic constructions are structured not just by the verbs involved but also by the particular lexical and morphological material surrounding the verb, especially pronouns.

Germane to Brown's study, but one step ahead, Adam Hodges et al. (2004) explore the item-based nature of child language acquisition by examining data from the CHILDES database, such as 'I wanna help...', 'I have to invite...', 'I got ta get...' The study provides empirical evidence to show that children initially acquire grammar via item-based units and gradually break down complex constructions as units into smaller pieces in a process that leads towards the organization of language into the abstract categories consistent with a fully competent adult grammar.

Finally, the study conducted by Spenader et al. with 83 Dutch children (age range 4;5-6;6) proved the existence of an asymmetry²¹ between pronoun production and pronoun comprehension, with production being more or less perfect and comprehension significantly worse. In addition, the presence of a clear topic influences children's comprehension of pronouns. It seems to be a delay in acquiring pronouns but not in mastering them. They conclude by suggesting that 'the strong and selective effects of topicality emphasize the need to take *discourse coherence seriously in acquisition studies*.' (2009: 51) (emphasis added). This problem has been observed in many languages, namely English (Chien and Wexler 1990; McDaniel, Smith Cairns and Hsu 1990; McDaniel and Maxfield 1992; McKee 1992), French and Danish (Jakubowicz 1984, 1991; Hamann, Kowalski and Philip 1997), and Dutch (Koster and Koster 1986; Koster 1993; Philip and Coopmans 1996).

All the previous studies seem to suggest that the acquisition of pronouns is item-based. Children acquire pronouns from aspects such as +animate/ -animate; when the presence of a topic is clear; when they themselves occupy a speech role; and when the verb is surrounded

²¹ Hendriks and Spenader posit a dissociation between a comprehension grammar and a production grammar. If these grammars develop at different rates, this might explain why children's comprehension of certain forms lags behind their production of these forms (2005/2006: 322).

by a particular pronoun. Another interesting aspect is that children acquired specific complexes of features and do not tend to extrapolate these features into another context. That is to say, pronouns contain many features and nuances that are acquired independently.

3.1.3.2 Learning personal pronouns

In 1974 Dulay and Burt studied the order of eight functors in Spanish and Chinese children learning English. The result is that, regardless of L1 background, children reconstruct English syntax in similar ways. Along with articles, auxiliaries, prepositions, copulas, verb inflections, long plural and regular past, they also studied pronoun case (nominative and accusative). They also scored number and gender, but these were eliminated from the study since the singular pronouns *he-him*, *she-her*, and *it* were much more frequent than the corresponding plural pair *they-them* (*we-us* was not elicited).

This study may have some relevance for the present classroom research because regardless of the students' L1, children used similar strategies to reconstruct English syntax. Thus, the study seems to suggest the absence of transfer from L1 to L2, which has most of the time been pointed as the source of errors in learners' output.

Similar results were found by Larsen-Freeman (1975), albeit in adults. She studied the acquisition of ten morphemes in twenty-four ESL adult learners from different background (Arabic, Japanese, Persian, and Spanish). Subjects were administered five different tasks: reading, writing, listening, imitating, and speaking. The results showed that L1 background does not seem to radically influence the way in which learners order English morphemes, and a common difficulty order does not seem to occur for all the skill areas tested in the study. Anthony Seow (2004) conducted an experiment with 7-year-old ESL students in Singapore trying to determine the effects of formal vs. informal environment classroom learning for the use of personal and possessive pronouns. The results showed that the formal learning environment (explicit instruction in grammar) could have initially heightened students' level of linguistic awareness about the existence of certain grammatical differences in pronoun types and functions. Although, the 'deep retention' of pronouns was not immediately apparent following explicit instruction, through a longer exposure to the L2 the learners in the formal learning environment were able to sort out the rules of pronoun usage for themselves. What Seow's study might suggest is a restatement of the relations of input, intake

and output, i.e. input is a crucial but not sufficient condition for the acquisition of grammatical accuracy to occur; a learner would need ‘the opportunity for meaningful use of her linguistic resources to achieve this’. Figure 12 below summarizes Seow’s point of view on the relationship among input, intake and output.

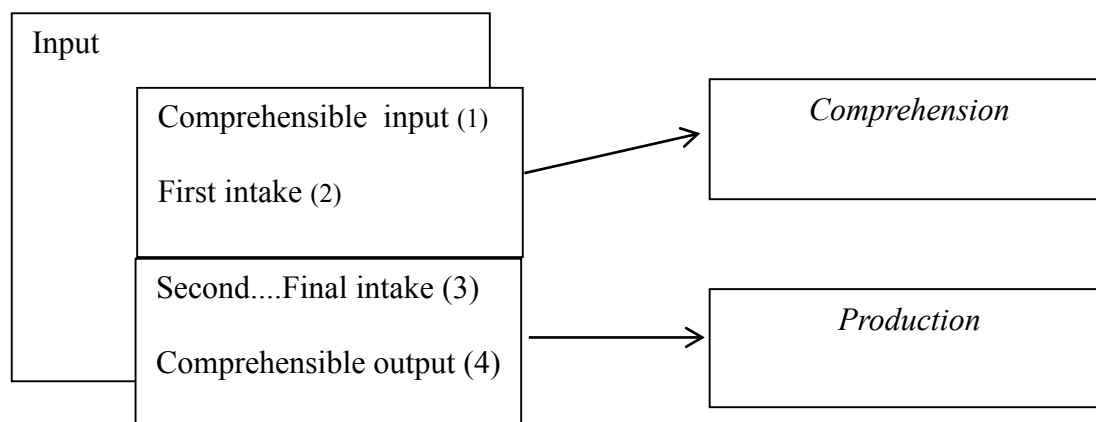


Figure 12: Input, intake, and output (after Seow 2004)

(1) Krashen (1981)

(2) and (3) Chaudron (1985)

(4) Gass (1988); Schmidt (1990); Sharwood Smith (1986); Swain (1985) (in Seow 2004).

The re-statement of the input-intake-output hypothesis may hint that input is a crucial but not sufficient condition for the acquisition of grammatical accuracy to occur; a learner would need ‘the opportunity for meaningful use of her linguistic resources to achieve this’ (Ellis 1990: 171). Chaudron (1988: 4) agrees that instructional contexts appear to contribute to the acquisition of the L2 but some other factors need to be controlled, such as age and duration of exposure (cf. 3.1.5 below).

Felix and Hahn’s (1981) research on the English pronominal system learning by two German high school classes (10/12-year-old) showed that the students learned pronouns on the basis of individual features rather than individual morphemes. This means that students do not learn or internalize all the features at the same time. In this sense, Larsen-Freeman and Long explain that although the English pronoun system is not as complicated as that of many other languages, there is a considerable detail for students to master in learning the forms and uses of the pronoun system. She finishes by saying that it is the teachers’ job to give students continued exposure and meaningful practice to aid them in their acquisition and use of these

forms (1999: 317).

Annie Collin (1988) used Tarone's hypothesis²² to test the learning of English pronouns, articles, and auxiliaries in an EFL environment. She tested the learning and speed of the verb 'to be' and 'modals', 'articles', and 'pronouns' in different styles (formal to colloquial). The study provides no information either on the frequency of pronouns, or the occurrences within the different styles. Yet, what we know is that the order of learning is different in every student, the learning of auxiliaries seems to be the most difficult, and the order of acquisition is independent of the style.

To sum up, the studies on the acquisition of personal pronouns show that children first acquire the first and second person singular pronouns *I, you, me*, especially when they occupy those roles (Charney 1980) and *it* is matched by inanimate NP objects (Brown 1973), and that children earliest syntactic constructions are structures characterized not just by the verbs involved but also by the particular lexical and morphological material surrounding the verb, especially pronouns (Childers and Tomasello 2001). This is what Hodges (2004) claims when he says that pronouns are acquired via item-based units. Finally, Spenader et al. (2009) posit the strong and selective effects of topicality across languages and the importance on discourse coherence. On the other hand, the studies on the learning of personal pronouns show that learners use similar strategies to reconstruct English syntax, thus language transfer does not seem to be the source of errors (Dulay and Burt 1974; Larsen-Freeman 1975). In addition, students seem to benefit from formal instruction (Seow 2004) and to learn individual features at a time (Felix and Hahn 1981) regardless the style (Collin 1988).

3.1.4 Language learning and language teaching

Before I delve into the different approaches and methods in language teaching, I need to briefly define three terms that are sometimes used indistinctively. The concepts of *approach*, *method* and *technique(s)* are related but different and we can go from the broadest, i.e. approach, to the narrowest, i.e. technique.

Following Anthony (1963), an approach to language teaching is something that reflects a certain model or research paradigm or a theory. On the other hand, a method is a set of

²² This hypothesis states that during the learning process an L2 structure first appears in the IL in the formal style and then shifts along the IL continuum to progressively more colloquial styles (Tarone 1983).

procedures that tell us how to teach a second or foreign language (see section 3.1.7), and all of which is based upon the selected approach. Hence, an approach is axiomatic, while a method is procedural. This is how we can have various methods under the same approach. Finally, a technique is a classroom device or activity that implements methods. Some techniques are widely used and found in many methods, while others are specific to or characteristic of a given method. When we walk into a classroom what we usually see are techniques (1963: 63-7). In the most recent literature, these techniques are referred to as *methodologies*, which are a set of practices teachers choose to explain or teach material to students so they can learn it (Echevarria et al. 2004; Richards 2010).

This is why I name section 3.1.4.1 approaches and section 3.1.4.2 methods.

3.1.4.1 Approaches to language learning

The question of how humans learn languages remains unanswered. Ellis comments that there has been a great deal of theorizing about SLA, especially since the early 1970s, and that the research literature abounds in approaches, theories, models, laws, and principles (1985: 248). The theory should be ample enough to allow us to do many things with it. As Halliday (1985a: xxix) explains ‘a theory is a means of action [...] and one may not want a theory so specialized one can only do one thing with it’ (1985a: xxi). And in this sense, McLaughlin states that a theory must be comprehensive enough to explain more than a very limited range of phenomena (1987: 9).

Figure 13 below summarizes what linguists, psychologists, and sociologists have said up to now on this issue and the names of their best known proponents. The main difference (already mentioned in section 3.1.2.1) lies between the rationalists and the empiricists. These two trends are rooted in the 17th century philosophy, John Locke and David Hume being the main proponents of empiricism and Emanuel Kant and Schopenhauer the major proponents of nativism. Nowadays this opposition still underlies the differences between approaches to language learning. The rationalists consider that humans have an innate capacity for the development of language, and that we are genetically programmed to develop our linguistic systems in certain ways. The empiricists, on the other hand, maintain that it is the learner’s experience that is largely responsible for language learning and is more important than any specific innate capacity (Omaggio 2001: 54).

Behaviorists consider human learning and animal learning similar, humans having no specific innate pre-programming for language learning at birth. Behaviorism therefore aligns itself with an empiricist view of learning. This together with the S-R (stimulus-response) theory are the pillars of this theory (Omaggio 2001: 55).

As Hilgard et al. explain, according to S-R psychology, all behavior is viewed as a response to stimuli, whether the behavior is overt (explicit) or covert (implicit). Hence, behavior happens in associative chains; all learning is thus characterized as associative learning, or habit formation, brought about by the repeated association of a stimulus with a response (1971: 253-74). Critiques made to this theory were basically that language learning is not like any other kind of learning and that it seems that imitation and reinforcement have a much smaller role to play in child language than Skinner and his colleagues imagined (Omaggio 2001: 57).

Although the Parallel Distributed Processing (PDP) model is placed on the left side of the continuum with the empiricist, its proponents (Rumelhart and McClelland) favor the perspective of the interactionists. According to McClelland (1989) PDP models are based on a parallel view, neural models, or connectionist models. In connectionist models, learning consists of adjusting the strengths of connections so that a given teaching input eventually results in a desired output. That is, connections are either strengthened or weakened in response to regularities in patterns of input that are presented to the system. Therefore, the network of connections is trained to make certain associations between inputs and outputs. As Rumelhart and McClelland explain, 'knowledge is in the connections rather than in the units themselves' (1986: 132). They suggest that there is probably a good deal of genetic specification of neural connection, as well as a good deal of plasticity in the pattern of connectives latent at birth (1986: 140).

The critiques addressed to this model have been, on the one hand, that because a computer model behaves intelligently without rules that does not imply that humans lack rules. On the other, the way in which the computerized model begins to make overgeneralized errors (Omaggio 2001: 74). Pinker and Prince (1989: 187-9) show evidence of the linguistic constructs that this model leaves out. First of all, this model does not contemplate the morphology system of representation. In the same way people say *understood* or *overcame*, they would find natural to say *broadcasted*, *joy-rided*, or *grandstanded* and not **broadcast*,

**joy-rode*, or **grandstood*. This is because speakers have a sense, usually unconscious, that these verbs are derived from nouns. Secondly, when the model is given 72 new verbs in a test of its ability to generalize simple past, it made errors on 33 per cent of the cases. A crucial aspect of the psychology of language is that irregular forms preempt regular ones in people's speech – not only do people say *went* and *came*, but they avoid saying **goed* and **comed*.

On the other side of the continuum, we have the rationalists or nativists. Larsen-Freeman and Long state that nativists are those which purport to explain acquisition by positing an innate biological endowment that makes learning possible (1999: 227).

Chomsky's theory of language acquisition is based on the hypothesis that humans are innately endowed with universal language-specific knowledge, or what Chomsky calls Universal Grammar (UG). The main argument is that without some such endowment (first or second) language learning would be impossible because the input data are insufficiently 'rich' to allow acquisition ever to occur, much less to occur in about five years for child language, and especially not if the child (or adult) were only equipped with general inductive learning procedures with which to attempt to make sense of that input (Larsen-Freeman and Long 1999: 228).

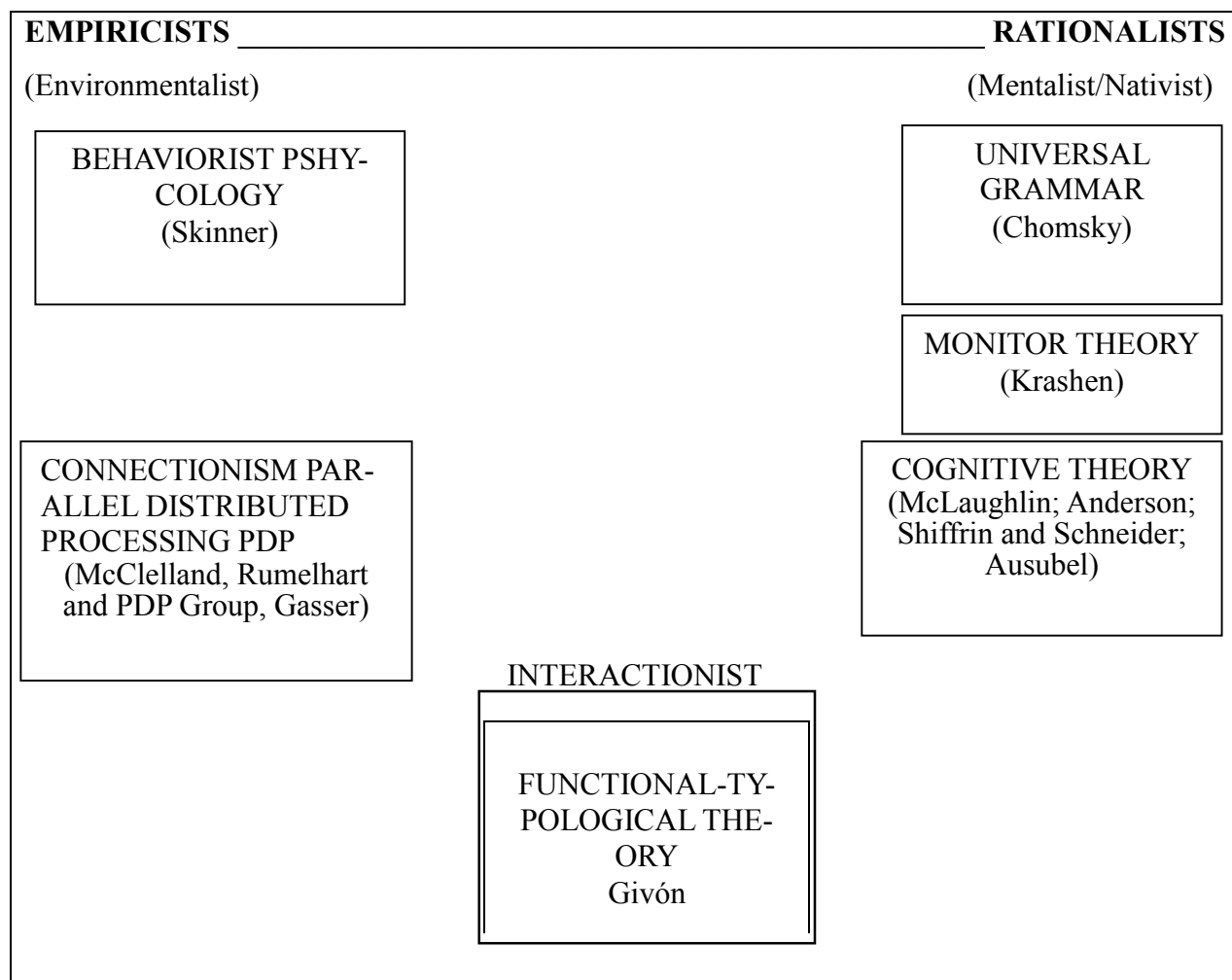


Figure 13: The Rationalist-Empiricist Continuum (after Omaggio 2001: 55 and Larsen-Freeman and Long 1999: 266)

Chomsky's explanation of language acquisition involves, in my opinion, at least three questionable assumptions. The first is that learning occurs quickly and is mostly complete by age five. However, a good deal of complex syntax is not mastered until much later; English dative movement, for example, is not fully learned until about age sixteen. A second crucial assumption is that certain syntactic principles are unlearnable, and therefore innate. This is increasingly being challenged. For instance, in the verb-copying in initial position as a strategy for question-formation prior to attaining the target construction, Parker (1989 in Larsen-Freeman and Long 1999: 237) suggests that it is impossible to explain within a UG framework without recourse to a learning theory. A third assumption is that the input available to learners is inadequate and therefore the only way individuals learn is by having access to a UG. It seems to be that learning happens gradually, by strengthening or weakening of

associations, based upon the frequency with which the learner encounters various form-meaning pairs (Larsen-Freeman and Long 1999: 236-9).

Krashen's theory in SLA has had a great influence on L2 teaching practice. His model comprises five hypothesis which are as follows (1982: 10-32):

1. - The acquisition-learning hypothesis. There are two ways for adults to develop knowledge of an L2: acquisition and learning. According to him, learners acquire as they are exposed to samples of the L2 which they understand. On the other hand, they learn via a conscious process of study and attention to form and rule learning. For Krashen, acquisition is the most important process. He asserts that only acquired language is readily available for natural, fluent communication. Furthermore, he states that learning cannot turn into acquisition, as already mentioned in section 3.1.2.1.

2. - The monitor hypothesis. It implies that formal rules, or conscious learning, play only a limited role in L2 performance. Learners can use conscious rules only when three conditions are met, namely: sufficient time to think about and use conscious rules effectively; the performer must also focus on form, on thinking about correctness; and the performer must know the rule.

3. - The natural order hypothesis. There seems to be a predictable order in the acquisition of certain grammatical morphemes for both L1 and L2 learners.

4. - The input hypothesis. Learners acquire by understanding language that contains structure a little beyond our current level of competence ($i + 1$). This is done with the help of context or extra-linguistic information.

5. - The affective filter hypothesis. This captures the relationship between affective variables (motivation, self-confidence, and anxiety) and the process of L2 acquisition by positing that acquirers vary with respect to the strength or level of their 'affective filters'.

Krashen's theory has had a strong influence on thinking in the field over the past twenty years. Nevertheless, it has received critiques, especially from McLaughlin. These critiques are basically that: the acquisition-learning distinction is not clearly defined; various studies have shown that the 'monitor' does not work the way Krashen originally thought it would; the case for the 'natural order hypothesis' is quite weak due to methodological problems; there is no a clear definition of comprehensible input; and finally, he has not explained how the 'affective filter hypothesis' develops, nor does it take individual differences among

learners into account (Omaggio 2001: 63-4).

Finally, Cognitive theory posits that learning results from internal mental activity rather than from something imposed from outside the learner. Language learning is a type of general human learning and involves the acquisition of a complex cognitive skill. In the process of learning a language subskills must be practiced, automatized, and integrated into organized internal representations, or rule systems, in cognitive structure. Furthermore, these internal representations of language are constantly restructured as proficiency develops (Omaggio 2001: 65).

Some researchers like Tarone and Ellis maintain that learners' production is variable, depending on the degree of attention they pay to language form as they carry out various tasks. Informal tasks that demand little active attention elicit the *vernacular style*, while tasks that require active attention and monitoring elicit the *careful style* (Omaggio 2001: 67).

Some critiques to this theory of language come from McLaughlin, who considers that conceiving language learning as a complex cognitive skill is not comprehensive enough. Besides, this theory is not capable of explaining some of the constraints on the development of language that may result from linguistic universals. Last but not least, it needs to be linked to linguistic theories of SLA. Ellis, in the same way, feels that SLL might be different from other kinds of learning and this theory is not able to account satisfactorily for the fact that there are quite a number of regularities in the way in which L2 knowledge is acquired in classroom learning (Omaggio 2001:69-70).

A third group called the Interactionist invokes both innate and environmental factors to explain language learning. They consider SLA too complex to be handled by simply nativist or environmentalist factors alone (Larsen-Freeman and Long 1999: 266).

Although there are different models within the interactionist group (Givón's Functional-Typological Theory, Hatch's Experience Model, or Clahsen, Meisel and Pienemann model inspired by work in experimental psycholinguistics and cognitive psychology), I will just refer to Givón's Model as an example of these theories.

Givón's goal is a unified theory of all kinds of language change, including language acquisition. To this end, he has developed an approach called 'functional-typological syntactic analysis' (FTSA), which is functionalist in its view that syntax 'emanates from properties of human discourse' and typological in its consideration of a diverse body of

languages, not simply a single language or language family. Givón claims that syntactic change is driven primarily by psycholinguistic and pragmatic principles relating to speech perception and production in face-to-face interaction. He posits that speakers and linguistic systems move from a discourse-based, pragmatic mode of communication to a more syntactic mode. This process of syntacticization operates over a number of features such as speech speed, intonation, and structure of the utterances (1979: 49).

Critiques to this theory are basically that, based on the mixed results in SLA, it is too early to judge how well the distinction serves researchers as a point of departure for the functionalist analysis of language change. Further, acquisition researchers cannot take as given, as FTSA does, the presence of a wide array of linguistic devices whose division of labor shifts through syntactization of a particular language over time. Rather, in acquisition research, it is necessary and desirable to document the emergence of the devices themselves. This exposition of approaches to language learning has not meant to be complete but a mere presentation of the basic approaches existing in the field. The approach where teachers position themselves is not a trifle issue because it has direct effects and consequences in the way language is perceived and taught. From the different approaches on language learning derive a plethora of language teaching methods to which I turn in the next section.

3.1.4.2 Language teaching methods

From the approaches to language learning presented above, differences derive in the way language is taught. Hence, empiricist methodologies treat language learning as habit formation through mimicry, memorization, and drilling. Rationalist methodologies, on the other hand, emphasize meaningfulness and understanding of psychologically real rules of grammar. Rationalists place priority on identifying form as meaningful, using problem-solving strategies whilst empiricists place highest priority on reproduction of correct forms (Omaggio 2001: 86-7).

From empiricists we have three traditional methods, viz. the Grammar-Translation Method, the Direct Method, and the Audiolingual Methodology. In the Grammar-Translation Method the focus is on first learning the rules and vocabulary, and their comprehension depends much on the ability of the students to translate directly or indirectly. There are few opportunities for listening and speaking practice and most of the time in the classroom is spent talking

about the language rather than talking in the language (2001: 107).

Omaggio explains how in the Direct Method, unlike the grammar-translation method, grammar rules are not explicitly taught and students hear from the beginning of instruction, complete and meaningful sentences in simple discourse. Pronunciation is important in this approach so it is corrected and phonetic notation is often used to achieve this goal. It has been criticized though that the lack of correction often leads to early fossilization (2001: 109).

The combination of structural linguistics and behaviorist psychology resulted in a new theory of language learning which described the learning process in terms of conditioning. This theory was translated into practice in the 1940s in the Army Specialized Training Program intensive language courses, first taught at the Defense Language Institute (Omaggio 2001: 110). This theory derived in the Audiolingual method, summarized by Chastain (1976) as having the following basic tenets: first, the native language is banned from the classroom; second, the goal of L2 teaching is to develop in students the same types of abilities that native speakers have; third, students learn through stimulus-response techniques; fourth, the use of pattern drills without explanation; and fifth, in developing the four skills, the natural sequence followed in learning the L1 should be maintained. A negative aspect of this methodology is that it does not encourage creation on the part of the learner except in very minimal ways (1976: 111-2).

As a reaction to Audiolingualism two methods appeared: the Cognitive Anti-Method, articulated by Newmark and Reibel and the Cognitive-Code Method, articulated by Chastain. Ellis (1990) summarizes the Cognitive Anti-Method as follows: the learner controls the SLL rather than the teacher; learners have an innate ability to learn languages; there is no need to sequence instruction; errors should be tolerated; and L1 interference will disappear with more exposure to the L2 (1990: 35-7).

The most controversial aspect of this method was the proposal that structural features should not be taught overtly and that language materials need not be ordered grammatically. Many practitioners, as well as scholars, thought this view was too extreme (Omaggio 2001: 114).

Contrary to this method, the Cognitive-Code Method considers grammar should be overtly explained and discussed, new material should always be organized, students should be introduced to situations that will promote the creative use of the language, the instruction must move from the known to the unknown, and this teaching is to develop in students the

same types of abilities that native speakers have (Chastain 1976: 146-7).

From the early 1970s, various approaches to language teaching have employed humanistic strategies and psychotherapy. These are the Community Language Learning (CLL), the Silent Way, and Suggestopedia.

For the CLL the basic premise is that the human individual needs to be understood and aided in the process of fulfilling personal values and goals. The Silent Way introduced by Gattegno (1976) is based on the learner's independence, autonomy and responsibility. Learners must work their own inner resources to absorb learning from the environment and the teacher's role is to guide students in the hypothesis-testing process in which they are constantly engaged.

Finally, Suggestopedia introduced by Lozanov (1978) is based on eradicating anxiety from the learners since it is a hindrance that limits learning potential. In order to do this, he uses two principles, namely infantilization and pseudopassivity. The first one tries to recapture the kind of learning capacities learners had as children, and the second one refers to a relaxed physical state of heightened mental activity and concentration.

From the Direct Method we have two approaches quite different but both evolved, to some extent, from it: Total Physical Response (TPR) and the Natural Approach.

TPR is based on the belief that listening comprehension should be developed fully, as it is with children learning their L1, before any active oral participation from students is expected. Further, it is based on the belief that skills can be more rapidly assimilated if the teacher appeals to the students' kinesthetic-sensory system. The approach, developed by Asher (1974), utilizes oral commands that students carry out to show their understanding. Like with the direct method, the L2 is the exclusive language of instruction. Students are exposed to language based in the here-and-now and that is easily understood through mime and example. Nevertheless, TPR is not really designed to be a comprehensive method in and of itself, but to represent a useful set of teaching ideas and techniques that can be integrated into other methodologies for certain instructional purposes.

The Natural Approach, based on Krashen's theory of SLA, was developed by Terrell (1977: 325), whose main premise is that 'it is possible for students in a classroom situation to learn to communicate in an L2.' Terrell (1977: 330-1) provides the following guidelines for classroom practice:

- If communication is more important than form in beginning and intermediate levels of instruction, then most, if not all, classroom activities should be designed to evoke communication.
- Correction of speech errors has a negative effect on students' motivation, attitude, and embarrassment, among others.
- Responses in both L1 and L2. In initial classroom instruction activities involving listening comprehension, students are permitted to respond in their L1.

One potential drawback of the Natural Approach is the lack of form-focused instruction or corrective feedback in classroom instruction.

In the 1980s a new method broke into the scenario, the Communicative Language Teaching. Richards and Rogers (1986) emphasize notional-functional concepts and communicative competence, rather than grammatical structures, as central to language teaching. Some of the principles of this method are: the meaning has to be contextualized; learners are encouraged to communicate in the L2 from the beginning; materials are sequenced by content, function, and meaning that will maintain students' interest; L1 use is acceptable when students find it beneficial or necessary; activities and strategies are varied according to learner preferences and needs; and accuracy is judged in the context (1986: 65-8).

The enumeration above does not exhaust the methods. There are others such as the Reading Method or Comprehension-Based Method but the intention was simply to outline the well-known and the most influential ones. Providing a comprehensive and detailed list is beyond the scope of this section.

As Omaggio summarizes, today many teachers are adopting an eclectic approach to language learning and teaching, believing that the age-old search for the 'one true way' can be futile and frustrating. *"Eclecticism, however, needs to be principled if instruction is to be effective, and techniques and activities need to be chosen intelligently to relate to specific program objectives"* (Richards and Rodgers 1986 in Omaggio 2001: 129) (emphasis added). As we realize that learning is an extremely complex process and that learners are individuals with different personalities, styles, and preferences, we have begun to look for a multiplicity of ways to respond to the challenge of teaching (Marinova-Todd 2003: 60).

I consider that the use of a method does not preclude the use of others. They can all contribute to the techniques that may be applied in the classroom. The ultimate goal is to endow teachers

with an ample repertoire of activities so that students' needs can be met and expectations fulfilled.

This reflection leads me to the next section, devoted to form-focused instruction. I would also like to draw attention to the differences between 'spoken' and 'written' language since my classroom research deals with the latter and it is in this area where form-focused instruction seems to be beneficial. By focusing on a particular aspect, we are directing students' attention to what is needed (Bruner 1973b: 171). Bruner defines attention as a feature extracting routine in which there is a steady movement back and forth between selected features and wholes; a process of positing wholes (topics) to which parts or features may be related (1975: 4). As Vygotsky puts it, 'language and perception are linked' and the ability to direct one's attention is an essential determinant of the success or failure of any practical operation (1978: 33-5). Attention should be given first place among the major functions in the psychological structure underlying the use of tools because the child may pay attention in order to see the stick while the ape must see the stick in order to pay attention (1978: 36). I will continue with a brief exposition of the SFG perspective on language teaching/learning, to finish with an exposition of the reasons for this thesis.

3.1.5 Form-focused instruction (FFI)

First of all, the term 'form-focused instruction' (hereafter FFI) needs to be defined. The difficulty is that in some instances different terms have been used to express the same meaning and in others, the same term has been used to express different meanings. Under the umbrella term of instructed SLA (likewise the term *acquisition*. See section 3.1.2.1) we come across terms such as *focus-on-form*, *focus-on-forms*, *explicit/implicit instruction*, *corrective feedback*, and *analytic/experiential teaching*.

I follow here the definition provided by Spada:

FFI [...] means any pedagogical effort which is used to draw the learner's attention to language form either implicitly or explicitly. This can include the direct teaching of language (e.g. through grammatical rules) and/or reactions to learners' errors (e.g. corrective feedback) (2008: 73).

This definition differs from the one provided by other authors (Long 1991: 45-6; Ellis 1994: 41), who distinguish between focus-on-meaning or meaning-focused instruction and focus-on-forms or form-focused instruction. They see the first one as an attempt that overtly draws

students' attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning or communication, while the second one is limited to instructions on discrete points of grammar in isolation, with no apparent focus on meaning. It is important to highlight here that both types of instruction should be combined in language teaching. The use of one type does not preclude the other, their use will depend on what type of structure language teachers want their students to learn. Written language and spoken language are different, therefore the strategies and techniques should accordingly be different (see section 3.1.6 below for more information).

In this sense, a distinction between spoken and written language needs to be made. Halliday states that speaking and listening come naturally; however, to get students to read and write is usually taught. This is perhaps the most important step in the process of education. Reading and writing are associated with educated practice from the start (see sections 2.1 to 2.4). Writing and speaking are not just alternative ways of doing the same things; rather, they are ways of doing different things. Writing evolves when language has to take on new functions in society. These tend to be the prestigious functions, those associated with learning, religion, government, and trade. We achieve different goals by means of spoken and written language (1989: xv).

The key to language is grammar, i.e., the level of 'words-in-structure' since that is where the meanings are organized, processed, and packaged in a form that can be turned into an expression of some kind (Halliday 1989: 12), or the level of formal organization in language (Halliday 1973: 98). As Vygotsky claims, the study of grammar is of paramount importance for the mental development of the child, and both grammar and writing help the child to rise to a higher level of speech development. Vygotsky makes it clear that the act of writing requires deliberate analytical action on the part of the child. Written language demands conscious work because language is deployed to its fullest extent (1962: 99-101). Furthermore, Vygotsky established why this is so by claiming that:

Communication in writing relies on the formal meanings of words and requires a much greater number of words than oral speech to convey the same idea. It is addressed to an absent person who rarely has in mind the same subject as the writer. Therefore it must be fully deployed; syntactic differentiation is at a maximum; and expressions are used that would seem unnatural in conversation (1962: 142).

That is to say, written language provides an occasion in which one must deploy language *out*

of the immediate context of reference (see section 2.2). Writing virtually forces a remoteness of reference on the language user. It is then training in the use of linguistic contexts that are independent of the immediate referents (Vygotsky 1961 in Bruner 1973a: 47).

This is brought up here because the way we learn to read and write is different from the way we learn to listen and speak. In this sense, Crystal points out that, for instance, a long and detailed course on clause-analysis and parsing is unlikely to have any lasting effect on spoken English, but it does seem to be of greater relevance for improving written composition (1990: 25).

When Long (1983: 359) posed the question ‘does second language instruction make a difference?’ he was basically reacting to the theoretical position that gained prominence in SLA research in North America in the early 80’s. This position maintained that all L2 learners needed, in order to successfully acquire an L2, was exposure to comprehensible input and motivation to acquire the L2 (Krashen 1985). In his article, Long concludes that there is considerable evidence that instruction is beneficial for children and adults, for different language levels, on integrative and discrete-point tests, and in acquisition-rich as well as acquisition-poor environments. Later on, he confirms this idea by stating that ‘the concern is how best to achieve such a focus, not whether or not to have one’ (1991: 41).

In this sense, Chaudron (1988: 7) emphasizes that if instruction is to make a difference, the L2 input must provide the learner with the information necessary for identifying the elements (sounds, morphology, lexis) and to organize them in their syntactic combinations, according to their pragmatic functional applications. But he concludes that we still ignore the precise extent of the effect of formal instruction on acquisition of the wide range of the L2 phonological, grammatical, or pragmatic rules, and the relevance of such instruction to learners of different ages, learning styles, or aptitudes (1988: 166) (see 3.1.2.3).

Since I am following the SFG model it is relevant here to remember that according to Halliday there cannot be focus on grammar without focus on meaning, even if indirectly. Halliday posits that the internal organization of language is not accidental; it embodies the functions that language has evolved to serve in the life of social man. In the linguistic system of the young child, the utterance has in principle just one structure; each element in it has therefore just one structure function and that function is related to the meaning potential – to the set of options available to the child in that particular social function (2003a: 317).

Chaudron (1988: 7) posits that the instruction in order to be effective needs to reveal the different elements in the structure being learned or uttered (Halliday 2003a). This is relevant since it is directly connected with the type of knowledge elicited by each, i.e. explicit and implicit. According to Ellis implicit knowledge is about the distributional properties of language that can only be revealed to the learner through substantial and repeated experiences with input. This implicit knowledge is derived from the explicit one, which draws students' attention to the target structure (2002: 224).

Furthermore, Corbeil highlights the connection between each knowledge and the task(s) that elicit them, i.e. explicit knowledge through constrained tasks/exercises while implicit knowledge through free-production tasks (2005: 28). Nevertheless, she highlights that recent focus-on-form approaches include a variety of communicative themes and meaningful activities. And she concludes that there is a dearth of studies looking at the effectiveness of instruction on both explicit and implicit knowledge and more studies conducted in this specific area of research are necessary (2005: 32).

Marinova-Todd (2003: 61-8) posits that '[...] not the age of the learner but the availability of and *access to good L2 input and instruction* must be considered in producing best outcomes in the L2' (emphasis added). The key is in the nature of beneficial L2 environments and the quality of effective foreign language (FL) teaching practices. Therefore, the main focus of FL educators would shift from providing early FL instruction to a more quality-oriented FL instruction that is focused on diminishing the wide variation in outcomes for older learners. They studied a native speaker of English who achieved native-like proficiency in her L2 – Arabic. This success in L2 learning was attributed to her high degree of motivation to learn the language, her exposure to a naturalistic environment and her conscious attention to grammatical form.

Ellis claimed that the necessity for some explicit instruction, as well as the need for conscious attention to grammatical form (Ioup et al. 1994), may be characteristics of greater value to the older learner. It appears that older learners benefit from some formal instruction of grammatical rules and thus tend to accelerate at least in the initial stages of L2 learning (1993: 69). Ellis later confirms that there is sufficient evidence to show that form-focused instruction can result in definite gains in accuracy. But, in order for this to happen, the instruction has to work in accordance with the natural sequence of acquisition, i.e. with the learner's stage of

development. The learner needs to be ready to acquire the new structure (1997: 60-3). Moreover, the effects of instruction will be durable only if learners experience communicative opportunities for using the structures afterwards (1997: 72). Finally, Ellis appeals to teachers' knowledge about whether learners can benefit from form-focused instruction and, ideally, they need to investigate this question for themselves, and consequently engage in action research in their own classrooms (1997: 44).

Larsen-Freeman and Long argue that instruction clearly has an impact on SLA (1999: 45). Furthermore, studies conducted so far have already revealed some potentially very positive contributions instruction can make (1999: 304). They point into the direction of conducting more longitudinal studies to establish the causal relationship between instruction and L2 development/performance (1999: 309). These authors also highlight the growing attention given to the teacher-initiated action research whose intention is to help teachers gain new understanding of their teaching and enhance it (1999: 327).

Spada concludes that the studies conducted on this issue were favorable to FFI, i.e. learners who benefited most in these studies were those who received FFI. In addition, she states that there is considerable evidence that a great deal of L2 learning takes place through exposure to language in the input (2008: 77). This reinforces Schmidt's (1990) noticing hypothesis²³ and his claim that getting learners to attend to forms in the input is the basic prerequisite for learning. Furthermore, what learners do need is to get exposed to input just above the current level of understanding (Ponniah 2009: 114; Krashen 2002).

Krashen, who on many occasions manifested his opposition to teaching grammar, considers that formal instruction is useful for the adult but not for the child. Following this distinction, he ponders on the possibility that the main contributions formal instruction make are in just those areas where the LAD (Language Acquisition Device) is affected at puberty. It is precisely after puberty when the classroom setting seems to be of great benefit (1975: 173-4).

More recently, a study conducted by Ziemer Andrews (2007: 6) also proved L2 instruction to be beneficial for adults. This has been supported by many authors (Swain 1995; Doughty and Williams 1998; Genesee 2000; Sheen 2003; and Brown, H.D. 2014: 98) who are against

²³ Schmidt claims that subliminal language learning is impossible, and that intake is what learners consciously notice. This requirement of noticing is meant to apply equally to all aspects of language (lexicon, phonology, grammatical form, pragmatics), and can be incorporated into many different theories of SLA (1990: 149).

the non-interventionist position.

Nevertheless, there is still a need for more classroom and laboratory research to examine the separate and combined effects of instructional, learner and linguistic variables on SLA. While the advantage of laboratory research is the ability to isolate and control variables, the benefit of classroom research is the ecological validity that comes from working with real learners, teachers and languages.

I point to the teacher as a key element in these investigations. Teachers are the professionals in regular contact with students and have access to their difficulties, advances, set-backs and differences; therefore they are capable of programming or re-programming classroom activities. It is the teacher's job to decide what to instruct, when, for how long, and how to instruct it. In other words, teachers need to take decisions based on the teachability hypothesis²⁴ and according to Ellis, to assess the teachability of grammatical structures based on linguistic features such as saliency, frequency, complexity, markedness and redundancy (1997: 67-71). In addition, he suggests that it is precisely in this area where researchers and teachers can usefully collaborate in designing studies to investigate how the inherent properties of grammatical structures influence their learnability in different groups of learners (1997: 73).

As Chaudron concludes:

Formal instruction is beneficial but it is also an essential role of the 'well-trained L2 teacher' to interpret learners' TL production in class in the light of knowledge of SLA universals, and to intervene at appropriate moments to urge the learners' developing rule systems along. In order to do this, teachers and researchers need to work more closely with test and materials developers to construct the optimum input and evaluation procedures for such studies to demonstrate the validity of this perspective (1988: 191-2).

In this sense, L2 instruction has been gaining in importance, as more people throughout the world find the need to acquire one or more L2 (cf. 1.1.4). There is a diversification in the specific purposes of language instruction, an increase in language schools and programs, and an expansion in training programs for L2 teachers, researchers, and program developers. For

²⁴ Pienemann posited this theory predicting that instruction can only promote language acquisition if the IL is close to the point when the structure to be taught is acquired in the natural setting (so that sufficient processing prerequisites are developed) (1985: 37).

these reasons alone, L2 classroom research has an important role to play.

In conclusion, it would be beneficial in a close future to see language teachers and language researchers doing more work together. In this way they could design research and activities more effectively and more appropriately to the classroom setting. Also, it would be very productive to see more teachers conducting classroom research. The present research has been conducted in this light and it has tried to be one of those grains to language teaching. It also highlights the importance of classroom research and form-focused activities, especially for those students who have crossed the threshold of puberty.

3.1.6 Language teaching/learning from a SFG perspective

I have named this section teaching/learning because Halliday considers them to be two aspects of a single process (2007: 354).

Kuhn claims that ‘the purpose of a theoretical work is to display a new application of the paradigm or to increase the precision of an application that has already been made’ (1996: 31). In the present research, I am using SFG to, besides testing a serial of hypotheses, test the pedagogical relevance of a theory as well.

As was already mentioned in 1.2.6, *register* as the manifestation of context is a key feature. Register is the term used for the configuration of lexical and grammatical resources which realizes a particular set of meanings. Halliday defines register as ‘a set of meanings that is appropriate to a particular function of language, together with the words and structures which express these meanings. Register is not just about lexical choices. Registers also involve new styles of meaning, ways of developing an argument, and of combining existing elements into new combinations’ (1978: 195-6). Because meanings are construed through language, the language that construes particular social meanings comprises the register of that social context.

Although the concepts of register and context were already treated in section 1.2.6, I would like to add a table, table 32, with some of the particular grammatical features associated with realization of field through ideational choices, tenor through interpersonal choices, and mode through textual choices. These are features that can be analyzed in any text. In table 32 the linguistic realizations in italics correspond to the areas on which my classroom research concentrates.

Cohesive elements are one set of resources for forming texts. Cohesion refers to the way that linkages are made in texts across clause boundaries (Halliday and Hasan 1976). Reference is one resource for cohesion by which pronouns and deictic expressions such as ‘this’ and ‘that’ refer to elements in the text or outside of the text. Cohesive elements, personal pronouns in particular, are the core of this research, which has utilized processes and participants during the instructional sessions.

Contextual Variable	Linguistic Realization
Field	<i>Ideational Choices</i> <i>Noun phrases/nominal groups (participants)</i> <i>Verbs (process types)</i> <i>Prepositional phrases, adverbial adjuncts, and other resources for information about time, place, manner, etc. (circumstances)</i> <i>Resources for marking logical relationships</i>
Tenor	<i>Interpersonal Choices</i> <i>Mood (statements, questions, comands)</i> <i>Modality (modal verbs and adverbs)</i> <i>Other resources for evaluative and attitudinal meaning (e.g. appraisal)</i>
Mode	<i>Textual Choices</i> <i>Cohesive devices</i> <i>Clause-combining strategies</i> <i>Thematic organization</i>

Table 32: Grammar and the Context of Situation (based on Halliday 1989, 1994a) (emphasis added)

The content, as well as the medium, of schooling is, to a large extent, language. Schooling is primarily a linguistic process, and language serves as an often unconscious means of evaluating and differentiating students. The texts they read and write present knowledge in ways that are different from the interactional co-construction of meaning in more informal situations. So the patterns of language chosen by students to express and share their understanding are of major importance in presenting themselves as knowers and sharers of knowledge. But language patterns themselves are rarely the focus of attention of students and teachers. Precisely these reasons have led Christie to call language the “hidden curriculum”

of schooling (1985: 38-9). This is not specific to high school, many staff in higher education are aware of the language difficulties faced by international and local students. However, few of them feel equipped to deal with this issue in any concrete way. Largely, academic staff see it as their responsibility to convey discipline knowledge and not language skills although there is a sort of hovering anxiety about the latter, which often remains unexpressed (Briguglio and Watson 2014: 70).

Students who do not use language in the way expected at school may even be thought to have learning difficulties, especially if their spoken English is fluent, as is often the case with speakers of nonstandard dialects or immigrant students who have been in the United States for many years.

Teaching should be seen as what Christie calls a *deliberate* act of instruction to achieve a set of goals (1991: 255). Fundamental to teaching is the notion of scaffolding – what Martin calls ‘guidance through interaction in the context of shared experience’ (1999: 126). Scaffolding requires a ‘visible’ pedagogy (Bernstein 1996; Martin 1999) that provides teachers with expertise that makes the criteria for success explicit to students. Yet, as we mentioned before, ‘language is the hidden curriculum of schooling’ (Christie 1985: 38-9). Bruner defines *scaffolding* as the adults’ ability of controlling those elements of the tasks that are initially beyond the learner’s capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence (1976: 199).

Christie suggests that the teaching of a functional grammar develops a critical capacity to interpret and challenge the ways language makes meaning. This calls for an active role by educators in raising students’ awareness of the power of language (1999: 157).

Schleppegrell explains how with a functional linguistic perspective, we have a means of focusing on the forms through which knowledge is construed. This can inform pedagogical practice and enable teachers to make explicit the ways that meanings are made through language. Teachers need greater knowledge about the linguistic basis of what they are teaching and tools for helping students achieve greater facility with the ways language is used in creating the kinds of texts that construe specialized knowledge at school. Finally, researchers and teacher educators need a more complete understanding of the linguistic challenges of schooling (2010: 3).

SFG highlights the ways linguistic choices contribute to the realization of social contexts. It

connects the linguistic and the social by offering descriptions of language form that show the meanings those forms realize and by offering descriptions of the meanings construed by language in relation to social contexts. SFG uses the notion of linguistic register to illuminate the relationship between language and context. SFG theory provides a means of identifying the grammatical features that make a particular text the kind of text it is, so that the relationship of linguistic choices to the situational contexts in which the language is used can be explained in functional terms (2010: 18-9).

As students move into middle school and secondary school, the tasks they are asked to do become more and more dependent on control of a wide range of linguistic resources. Learning and language are closely related, and for success at school, students need to come to understand the context of schooling and the linguistic choices that realize that context (2010: 22).

Language use in the classroom differs from language use in other social situations in many ways. The ability to draw on the linguistic features that construe academic contexts depends on experience with those contexts that may not be available in the home or community for many students, especially those who speak ESL, who speak nonstandard dialects of English, or whose home and community experience has not socialized them into the ways of making meanings that are expected at school. How we learn and what we learn about language depends on the context of learning (Schleppegrell 2010: 24).

The language of schooling, whether spoken or written, is typically organized in patterns that are different from the organization and structure of informal spoken language. Students need to develop new ways of structuring language for academic tasks. The grammatical choices that are functional for engaging in informal interaction are not effective in accomplishing many school-based tasks (2010: 44).

Functional analysis identifies how grammatical structures realize social meanings and how the meanings construe different contexts. Clause-level elements are explained by reference to their functions in the total linguistic system and are linked with contextual variables to show how the situational context is realized through linguistic choices. This makes functional grammar a powerful tool for analysis of spoken and written texts. A text that realizes the expected register is most likely to be considered effective (2010: 45-8).

An example that illustrates the different use of cohesive devices such as personal pronouns

is seen in interactional texts vs. academic texts. While the former heavily rely on pronominal subjects, the latter draw on lexical subjects. The subjects of interactional texts are pronouns, with the most frequent subjects *you* (a generalized third person singular pronoun meaning *a person*), *she/he*, and *I*. Various studies have confirmed that, in conversation, pronominal subjects are typical (Scott 1988; Chafe 1992; Halliday 1994b). The subjects of textbooks, on the other hand, are lexicalized and include expanded nominal groups. The *you* and *I* that characterize interactional speech do not appear here, and lexicalized subjects appear instead. This text is not about propositions that hinge on *you* and *me*, but instead on the *formations*, *types* and *methods* that are discussed in the textbook (2010: 70-1).

These differences need to be taught and, as Larsen-Freeman and Long state, teachers are to give students continued exposure and meaningful practice to aid them in their acquisition of the different structures and nuances. This is another difference between spoken and written language (1999: 130).

This understanding of the nature of school-based texts has implications both for research and for teaching. In research on language development, it is important to focus on the linguistic features that are relevant for advanced literacy tasks when examining students' performance. In teaching, it is important to understand that students have to learn to manipulate the grammar in new ways in order to adopt the expected registers for their academic work. To reason in the ways expected in schooling, students need to develop strategies for organizing written discourse that are different from the typical organizing strategies of speech. This means learning the constellation of interacting grammatical and discourse features that realize the new situational context of schooling (2010: 76).

Writers learn to pack more information into each clause as their writing develops. As successful children learn to write, they gradually become competent in adopting the structural and semantic properties of academic registers, coming to understand how language is structured differently when it is used in school-based tasks. They learn to compact clauses, expand their vocabulary, and present logical relationships in new ways, making the register choices that present them as effective academic writers (Schleppegrell 2010: 80).

Many of the students who have difficulty developing their writing to meet these academic register challengers speak ESL or a second dialect. Students whose community language is a nonstandard variety of English have been shown to draw heavily on oral language features

in their writing (Shaughnessy 1977; Whiteman 1981; Kutz 1986), as have second language writers (Schleppegrell 1996; Hinkel 2002). It is difficult to generalize about second language students, since they come from a variety of backgrounds, have begun learning English at different ages, and have different experiences of literacy in their mother tongues. The structure of their first languages and differences in their experiences also contribute to the variability of second language writing (Hinkel 2002 in Schleppegrell 2010: 80).

However, Silva's (1993) review of 72 research reports comparing the composing processes and written text features of ESL and non-ESL writers finds that, in general, adult L2 writing is simpler and less effective than L1 writing. Silva found that L2 writers' texts were less fluent (fewer words), less accurate (more errors), and less effective (lower holistic scores). L2 writers' sentences included more but shorter T-units²⁵, fewer but longer clauses, more coordination, less subordination, less noun modification, and less passivization. L2 writers also evidenced distinct patterns in the use of cohesive devices, especially more conjunctive and fewer lexical ties, and less lexical control, variety, and sophistication overall. These are the same features that are typical of the less developed L1 writer (1993: 668).

Similar conclusions are reported by Hinkel, who compares 68 linguistic features of texts by university level L2 writers with those of native speakers in first year composition courses. She described oral features in L2 writing, including more use of conjunctions, especially causal conjunctions, exemplification markers, and demonstrative pronouns for establishing text cohesion, with few lexical ties. She linked this functionally to her finding that L2 writers provide personal stories rather than evidence for arguments in their essays, and concluded that these students 'have a shortfall of syntactic and lexical tools to enable them to produce competent written academic text' (2002: 160).

Thus, to understand the challenges of schooling it is important to recognize that there are text types that students are expected to write, and that those text types are constructed with lexical and grammatical resources that are functional for making it the kind of text it is. Analyzing some genres that have been identified as relevant to schooling reveals the lexical and grammatical challenges. The language used to realize these different kinds of texts can be analyzed to reveal what the linguistic challenges are in reading and writing the different

²⁵ Hunt defines a T-unit as one main clause plus all the subordinate clauses attached to or embedded within it (1965: 141).

genres of schooling. In school, every genre uses different linguistic resources in different ways, i.e. personal pronouns, passive voice, Themes, pronominalization, processes, etc. The genres of schooling become increasingly demanding in terms of the grammatical expectations that underlie them (Schleppegrell 2010: 83).

A major challenge that students face as they learn to write is moving from the linguistic choices that are typical of informal interaction to draw on linguistic elements that are effective in school-based writing. Although children draw on the grammar of informal interaction as they first learn to write, they need to go beyond those choices if they are to become successful in school-based ways of using language. Studies of students writing development show the slow evolution that leads toward ability to realize school-based registers and genres. Both L1 and L2 development seem to follow a similar path in this, with movement from a clause-chaining, loosely organized approach to the more condensed clause structure of academic registers (2010: 111-2).

It is important for students to develop academic register options in different disciplines because particular grammatical choices are functional for construing the kinds of knowledge typical of a discipline. Academic registers are not just pretentious ways of using language that only serve to exclude the uninitiated. The kinds of meanings that are created in academic contexts often cannot be expressed in the language of ordinary interaction (see 2.5). Instead, school-based tasks require particular ways of presenting information; the ways construed through academic registers (2010: 137).

An important goal in education, then, should be to help students understand the ways that language choices made by scientists, historians, and other academic writers actively construct disciplinary knowledge. In addition, they need to be able to use these features in their own writing in order to demonstrate their learning and participation in disciplinary contexts. Understanding about the role of language is also important in the creation of pedagogical texts and tasks and in the ways assignments are structured and scaffolded for students (2010: 138-9).

For the past generation, pedagogical approaches for both L2 learners and native speakers have de-emphasized any focus on form. This theory was initially a reaction to an ineffective pedagogy focused on learning grammar rules (see 3.1.5 above). But in devaluing any focus on form, this approach ignores the differences between interactional registers and academic

registers and the role of language in construing meanings in school subjects. Students with fluent oral English, but little experience outside of school that leads to development of academic language, may need explicit focus on form in the context of purposeful learning of the registers and genres which enable them to participate in today's complex society (2010: 151).

Without an understanding of the differences between ordinary interactional language and the language of schooling, teachers are inadequately prepared to address the challenges of the registers of advanced literacy. Literacy learning goes on throughout one's lifetime and is never finished (2010: 152).

The learning of new registers, like learning an L2, requires appropriate input, opportunities for interaction and negotiation of meaning, and relevant focus on the form that language takes in different settings and as it is used for different tasks. But classroom contexts, as currently constituted, are seldom sites where such language development can flourish. SLA research also shows that language development requires meaningful and purposeful interaction with an interlocutor who is willing to pursue the meaning-making moves of the learner (Larsen-Freeman and Long 1999; Ellis 1994 in Schleppegrell 2010: 153).

As Schleppegrell (2010) explains, schools in the United States currently serve many L2 learners, speakers of nonstandard dialects of English, and other students with little experience outside of school with academic ways of making meaning. These students need meaningful input and opportunities to engage with texts and tasks in purposeful ways if they are to develop new language resources. They need interaction with knowledgeable interlocutors in ways that enable them to explore and negotiate meaning. And finally, they need a pedagogy that scaffolds language learning and learning through language. None of these conditions is typically available to the learners in American schools. Whether or not this participation structure is effective in helping students learn depends on how the teacher uses it, and at what point in the lesson. The kind of language students hear and read at school is also an important element in promoting academic language development (2010: 153-4) (cf. Bruner 1975).

Schleppegrell (2010) claims that teachers also need to use academic registers and help students understand new ways of using language. Students cannot learn academic registers and academic content when the spoken explanations they hear lack the technicality they need to develop language resources for disciplinary work in different subject areas. Such an

understanding implies that focus on language itself is important for helping students learn the concepts of school subjects (2010: 55).

Christie points out that all teachers are teachers of language in this sense, ‘for language is the behavioral resource of central significance in the forms of learning for which schools are particularly responsible’. She suggests that ‘where curriculum activities are designed so that children explore new experiences and acquire new information, they are encouraged to employ their linguistic resources, thus mastering an expanding range of new registers’ (1989: 197-8).

To effectively help all children develop competence with the registers and genres that are powerful for learning in school, teachers need to recognize, build on, and expand the language resources students bring to school to help them develop new ways of using language to think about the world (Schleppegrell 2010: 156). The linguistic challenges of schooling come from the specialized ways that language construes experience and social roles simultaneously in the densely structured texts of various subject areas. The value of the SFG perspective on these findings lies in that it situates the difficulty of learning academic content in the language through which content is taught and learned, and it views the learning of language and content as inextricably linked, rather than as separate processes (2010: 163-4). More research from the SFG perspective is needed to provide a deeper understanding of the challenges of the language of schooling; both the challenges of the genres and the challenges of developing facility with the register features. This research also needs a pedagogical dimension, examining when different genres can be introduced, how best to introduce them, and studies of the development of students’ linguistic awareness about them. In addition, research is needed on how teachers develop an understanding of the functionality of language, more research is needed on ways of preparing teachers to focus on how language construes meanings in the disciplines they teach (2010: 164). The linguistic framework provided by Halliday’s theory offers tools for expanding the awareness about language of all those engaged in education and other social processes (2010: 165).

To sum up, this section has tried to highlight the appropriateness of the SFG in school so that students become aware of differences among texts. The section has also made clear the differences between spoken and written language and consequently the differences in approach. Furthermore, the need to explicitly teach patterns and structures of language and

the teacher as the human factor who has the power to decide what to teach, how to do it, and when to do it is essential. In a nutshell, the quality of instruction and its explicitness are key factors in the process of developing language at school.

Now I will show the differences between ESL and EFL and the consequences for students and especially for teachers who need to be aware of those students' needs and differences.

3.1.7 ESL different from EFL

Chaudron (1988: 5) distinguishes between the two contexts where the L2 instruction may occur. In the first language context, the learners acquire the L2 (EFL) when there is little natural use of the language in the surrounding society. In the second context, the L2 (ESL) is not only the content of instruction but the medium of instruction, because of either programmatic decisions (as in *immersion settings* in which the community around the school is still a native language environment) or linguistic necessity (as in most multilingual settings). Especially in the latter case, when only the L2 can be used for communication, the social relationships and the curriculum content are conveyed to learners in a cultural and linguistic medium that surpasses their competence to some degree, and there is usually little recourse to L1 sources of interpretation. The learner's task is therefore threefold: first, making sense of instructional tasks posed in the L2; then attaining a sociolinguistic competence to allow greater participation; and finally learning the content itself. Attitudes may again have an influence, but the cognitive demands of communication and socialization into the L2 community are dominant.

As a result, in the ESL context, teachers need to anticipate learners' needs for additional assistance in understanding both the instructional processes and the linguistic medium that conveys them. Classroom-oriented research must not only take these differences into consideration when comparing results across the contexts, but it must adopt the secondary goal of understanding the nature of the contextual demands on learners and teachers. In this way, research would derive principles for instructional decision making that are valid across contexts.

Although there are many differences between the way language is acquired and the ways other forms of knowledge and skills are acquired, there is at least one deep parallel in all forms of knowledge acquisition; the existence of a Zone of Proximal Development and the

procedures of aiding the learner to enter and progress across it (Bruner 1986: 78). Vygotsky (1978) defines this ZPD ‘as the distance between the actual developmental level as determined by independent problem solving, and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers’ (1978: 86). This concept can be applied to both the learning and development of L1 and L2.

Paula Menyuk (2005: 82) draws the relationship among sources of knowledge but in our context, we need to add students’ L1 as an important source of knowledge. Menyuk draws the relationship in students’ L1 but when dealing with ESL students we also need to add to that relationship the students’ L1 development and this is reflected in figure 14. As Fillmore (1982 in Menyuk 2005: 107) puts it, a classroom context demands an enormous amount of knowledge of language that can be overwhelming for second-language learners. Teachers must be aware of these demands and they must facilitate and scaffold comprehension to avoid miscommunication and unnecessary disciplining of students.

As Menyuk (2005) points out, ESL students need background knowledge as well as literacy and language knowledge. They also need explicit instruction on how the English language works. A combination of literacy with content area helps keep students interested in the task.

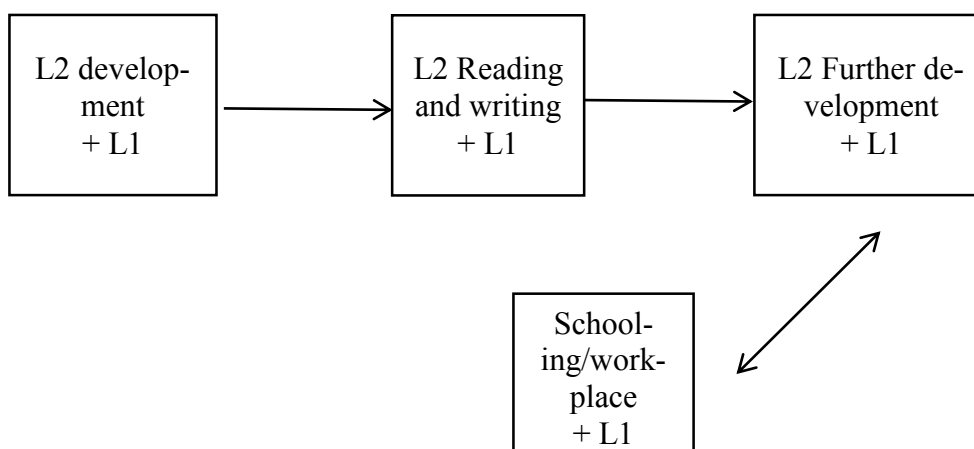


Figure 14: Relations among sources of knowledge (after Menyuk 2005: 82)

The years of middle school are considered to be from 9 to 12 or 13 years, and high school from 13 to 18. Nevertheless, we will see that most of the times one runs into ESL students who are one or two years older than their peers. This is because some of them start school in

the middle of the academic school year and they are usually retained one grade to catch up with language level.

As Menyuk puts it, the developmental changes that occur in both linguistic and cognitive achievements as well as physical development over this period are dramatic. In school, there are some changes within each area of language and besides the language use (pragmatics), students also need knowledge of the structural aspects of language (2005: 118-9). L2 learners need to catch up in order to handle school work. Even high school students have not mastered the appropriate use of anaphora, for instance (2005: 184).

It is precisely during the years of middle school when students have problems with particular sentence types and the use of pronouns, for example. And it is at this point of schooling when students need to develop structural awareness in reading sentences. Children need to recognize that written language is different from oral language production in order to progress from talking about the here-and-now to talking or writing about events that have not been shared by listeners or readers (2005: 132). Grammaticality and correct spelling in the L2 takes a long time to develop. Valdes (1999) demonstrates that the nature of the instruction and the teacher's perception of the students' abilities greatly influence the progress students make (2005: 133). In this sense, D'Warte explains how students achieve (in her study) higher educational outcomes when teachers hold high expectations for their students' abilities (2014: 28). This was already mentioned by Cummins, who suggests that how teachers talk about and with their students is determined by how they view their students as learners (2000 in D'Warte 2014: 28).

Example (148) illustrates how the misuse of cohesive devices such as referentiality may difficult the comprehension of a text:

(148) James glared at his brother, took the money from the box and threw *it* angrily into the fire, where *it* crackled swiftly into flame. This appeared to amuse *him*, for *he* burst out laughing and walked towards the door, which did not improve matters. Mary marveled that *he* could be so nonchalant. Surely its loss could not leave *him* unmoved? (Nuttall 1985: 90).

In this example, the first and second *it* could refer either to the money or to the box. Then, *him* and *he* could refer to *James* or to his brother. Actually, the fact of burning an object could be the source of amusement for both characters.

ESL learners may be new to the language in these middle childhood years. Not only do they need to learn English, but they also need English to be able to learn in subject-matter areas.

Their ability to read and write is essential for their academic development (Menyuk 2005: 133). This is what the SIOP (Sheltered Instruction Observation Protocol) model has been trying to achieve in the United States (1996-2003). In my opinion, one downside is the adaptation and modification of the original source (language) (Echevarria et al. 2004: 23) and the content, therefore, is to some extent diminished. This is precisely Martin's caveat (1993a in section 2.5.4), i.e. the lack of exposure to original sources and to academic language will shunt students from the academic level required in school. On the other hand, in Europe CLIL (Content Language Integrated Learning) is the approach to bilingual education in which the study of academic content is combined with the use and learning of a foreign language. The main differences with the immersion programs or the Australian model are: a) the language of instruction is a foreign language, which is not present in the students' local communities; b) teachers are non-native speakers of the language used as a medium of instruction; c) learners often start studying content in the new language late, although this varies among European countries; and, most importantly, d) CLIL materials may be adapted or written specifically for a CLIL programme (Llinares et al. 2012: 1-2).

There are many factors affecting L2 and literacy development. Just to mention a few are attitude, motivation, and sense of identity. Especially the sense of identity and the positive attitude toward the native language and willingness to use it supports second-language development (2005: 134). This is especially true in ESL students and crucial when in school. There are many factors and many different situations, probably one per student. Yet this is beyond the scope of the present research and I just meant to mention that other factors, beside the linguistic, play an important role in the development of students' language. It is important to bear them in mind and to raise teachers' understanding and comprehension of the process and difficulties students go through. Reception in the new society is another factor that affects students' identity and school performance. Often society develops negative images of particular groups (2005: 136).

Another aspect to take into consideration is the great differences among ESL students. They differ in their L1, years in the host country, background, reasons to be in the country, different social origin, and different level of literacy in their L1 (Menyuk 2005: 143).

By the time children reach high school much of the language-acquisition task has been accomplished (2005: 157). Nonetheless, the children, who can be very different from their

age peers in their knowledge of the English language, are those who are in the process of acquiring ESL. By the time they get to high school some of these children may be 4 or more years behind in their reading abilities, and their writing abilities may be severely limited (2005: 158).

Academic language, required in school, is very different from the conversational discourse used by adolescents. Reading, writing, and specific school experiences support this development. L2 learners have great difficulty with this type of language. For these learners teaching content and teaching language must occur simultaneously if they are to develop the language and absorb the content. There are many sources of language difficulty in academic language such as relation between participants and events, passive voice, and representation of participants (2005: 168).

Many of the characteristics of academic language cause great difficulty in comprehension of academic texts. At this age, for students in the early stages of acquisition of ESL, ability to read a text in the L2 largely depends on knowledge of that language and educational background. For students with limited education or low literacy, the task of developing reading ability in the L2 is much more difficult. Not only do they have to develop the knowledge of literate students described above, but they also need to become literate, particularly in school-based literacy. These students need to develop new understandings of the demands of academic life at the high school level, the function of literacy in school, and the demands for literacy ability in their new country. In addition, they need to develop the discourse of academic L2 language and acquire literacy strategies that will help them decode and comprehend text in the L2 (2005: 174).

Middle school is crucial in detecting and remediating students' language problems. The academic level and the amount of language make this intervention a keystone for those students to success. Learning academic content may be difficult for students either because they do not have the background to understand the concepts or because they have difficulty with the academic language. Such may be the case for students who are new to the language and culture or for students with academic experiences that have not prepared them for high school courses (Menyuk 2005: 188).

There are individual differences among ESL students, as well as native speakers of English, already mentioned above. Some of these differences are due to innate characteristics: that is,

some children are quick learners and others are slower. However, a large amount of the difference among these children in their language learning behavior, is due to their experiences both in the home and at school. The task for the teacher during these years is a complicated one. One way of being able to deal with this complication is to have some understanding of the variability of children in how they learn language during the school years. This requires that teachers learn about language development, both in L1 and L2, as well as learning how to teach (2005: 199).

When children who have been brought up in a language other than English enter school at any of these stages, their L1 development is disrupted as they try to acquire the L2 in order to function at these expected levels. The level of education strongly influences the readiness for such a challenging task. First, there is the necessity of understanding what the teacher is saying in all these academic areas. In addition, knowing how to read the language in these areas and to write about what they know plays a very important role in acquiring mathematical, scientific, and cultural knowledge. Reading and writing, in turn, is highly dependent on language knowledge. Being able to decode, understand the meaning of words, understand the meaning of sentences, and understand the structure of the various kinds of texts that they are required to read are dependent on understanding various aspects of language (2005: 201).

When working with L2 learners teachers must realize that the L2 level is not a reflection of the students' cognitive level (2005: 205). Children and families largely influence school success. However, educators can have a significant impact. This impact depends on their expectations, instructional and assessment practices, and willingness to help all children regardless of language and cultural background or individual abilities to succeed (Menyuk 2005: 207).

3.1.8 Reasons behind this research

The selection of the clauses for the tasks of the present research has been based on two main considerations, viz. the fixed word order in English and the semantic orientation of SFG (structure, constituents, and clause). These considerations, along with some other aspects, are expounded below.

The combination of these two elements seems to create 'a prototype clause', which is not an

arbitrary product but the result of psychological principles of categorization (Rosch 1978: 27). Basic level objects are structured so that there is a generally one level of abstraction at which the most basic category cuts can be made. By *category* is meant a number of objects that are considered equivalent. Categories are generally designated by names (dog, animal). A *taxonomy* is a system by which categories are related to one another by means of class inclusion. The greater the inclusiveness of a category within a taxonomy, the higher the level of abstraction. Each category within a taxonomy is entirely included within one other category (unless it is the highest level category) but is not exhaustive of that more inclusive category. Thus the term *level of abstraction* within a taxonomy refers to a particular level of inclusiveness. In the same way, basic level objects are the most inclusive level of classification at which objects have numbers of attributes (1978: 32), as example (149) illustrates.

(149) <u>Superordinate</u>	<u>Basic level</u>	<u>Subordinate</u>
Furniture	chair	kitchen chair living-room chair
	table	kitchen table dining-room table (Rosch 1978: 32)

The pervasiveness of prototypes in real-world categories and of prototypicality as a variable indicates that prototypes must have some place in psychological theories of representation, processing, and learning (Rosch 1978: 40). The prototypical clauses are good examples of categories and as Anglin (1976 in Rosch 1978: 38) puts it, there is evidence that young children learn category membership of good examples of categories before membership of poor examples.

These clauses are what Bruner calls ‘kernel sentences’, i.e. simple sentences frames that help children discover some deeper features of grammar, and transform them progressively into negatives, interrogatives, and passives or any two or even three of these (1965: 93).

The line between grammar and semantics is not clear but it is not arbitrary. A functional grammar is one that is pushed in the direction of the semantics (Halliday 1985a: xix). As Kucer puts it the relation between the semantic role and syntactic assignment of words within a sentence is an intimate one (2005: 35).

Moreover, the systemic-functional framework that emerged during the 1960s was tested out most thoroughly in English and the clause was the center of action in the grammar. Halliday

realized that the clause did not seem to exist as a general organizing category – only ‘compound / complex sentences’ had clauses; the ‘simple sentence’ was a sentence but not a clause. But the clause had to be introduced because it was the place, or the locus where fundamental choices in meaning were acted out (Halliday 2005: xv). This makes the systemic-functional framework appropriate for this research.

According to Brown, linearity seems to be a major syntactic aspect of English, often signaling the semantic role of a noun phrase, and it seems to be the first aspect of syntax to which children are sensitive (1973: 8). Halliday states that the order of elements in the clause realizes the texture of the message, this being the manifestation in English of the functional sentence perspective (1985b: 216). Halliday adds that if something is said to be an ‘exception’, this is a way of proclaiming that there is a rule for it to be exception to (2009: 69).

Bruner (1975) states that the structure of language is not arbitrary and it reflects both attention structures (via predication) and action structures (via the fundamental case grammatical form of language). He argues that ‘language acquisition is not LINGUISTIC innateness, but some special features of human action and human attention that permits language to be decoded by the uses to which it is put.’ For Bruner, the central issue of language acquisition is thus predication (SVO) and the nature of human attention processing, being the latter the relationship between linguistic case structure and the organization of action (Processes + Semantic roles). Bruner considers attention vital in this process and defines it as a steady movement back and forth between selected features and wholes (1975: 1-4). Furthermore, Bruner states that the initial structure of language and the universal structure of its syntax are extensions of the structure of action. Syntax is not arbitrary; its cases mirror the requirements of signaling about action and representing action: agent, action, object, location, attribution, and direction are among its cases. Whatever the language, the agent-action-object structure is the form soon realized by the young speaker (1972: 150).

In addition, predication seems to be the basic syntactic form of inner speech (Vygotsky 1962: 139). These notions (social, inner and written speech) go beyond this thesis and therefore are not treated in detail. What is relevant for the research is the connection between predication and processes and the input the subjects received on them.

In section 1.2.5.1.4.3 I mentioned how pronouns can be interpreted in terms of focus of

attention within the discourse. Pronouns represent the pointer that moves from node to node (among parts within the discourse) (see section 3.1.3.1). It is interesting here to mention that the ability to differentiate or abstract oneself from a task, to turn around on one's own performance and see oneself and one's performance as differentiated from another is a phenomenon known in linguistics as deixis and it is a deep problem in language learning (Bruner 1972: 139). This is relevant when dealing with written language because it is here where language is deployed out of the immediate context of reference (Bruner 1973a: 47).

Bruner does not support a rationalist approach to language acquisition, since he does not think that the child is born equipped with a finished conceptual schema, rather the child has the innate capacity to construct such a schema. What is crucial in this is the people with whom he comes in contact. Also, it is the 'play' that has the effect of drawing the child's attention to communication itself, and to the structure of the acts in which communication is taking place. Neither does he share an empiricist approach, since he does not believe that imitation be the keystone to acquisition. It is an extension of rules learned in action to the semiotic sphere. Grammatical rules are learned by analogy with rules of action and attention. This is possible by the presence of an interpreting adult who operates not so much as a corrector or reinforcer but rather as a provider, an expander and idealizer of utterance while interacting with the child (1975: 8-18).

This in the classroom context makes the teacher the interpreting adult who has to provide utterances and qualified instruction. One way is to place attention on word order and semantic roles in order to facilitate the learning of grammatical rules.

Halliday (1985a) posits that the functions in structure and the functions of language are linked. The former, when interpreted semantically, imply the latter. The functional roles that combine to make up a linguistic structure, such as Agent + Process + Goal + Location, reflect the particular function of language which that structure has evolved to serve – in this case the interpretation of experience of the external world (1986: 5; 1985a: 32). Constituent structure in language is only a mechanism for the organization and expression of meaning (1985a: 18). The lexical unit where all the functions are organized and wrapped up together is the clause (see 1.1.5). The clause is the grammatical unit in which semantic constructs of different kinds are brought together and integrated into a whole. The clause serves for the realization of a number of very general meanings (Halliday 1989: 66; 2002: 175).

Halliday defines structure as the representation of an item in terms of its constituents, with the linearity that such a representation implies. Every structural feature has its origin in the semantics; that is, it has some function in the expression of meaning and the different types of structure tend to express different kinds of meaning (2003a: 181-93). It is this statement that makes Halliday to consider the so-called innateness of grammar problematic. In this sense he does not agree with the rationalist approach to language acquisition, and his view agrees with Bruner's, which was described above (2003c: 263).

As Halliday posits, this grammatical exploration offers a way of looking at the language teaching process and at the sentence. And that is something that language teachers will always need to do, whatever their conception of the task (2005: 305).

The idea posited by Fillmore (1968) that the universal base component in linguistics consists of semantic roles, led some authors (Nilsen 1971 and Cook 1998 among others) to propose language teaching materials focusing on the English word order, the case frames of verbs, and the semantic roles. Another feature to bear in mind is what Halliday mentions about the percentage (90%) of positive clauses found in a reasonably sized corpus of English (2009: 69).

The selection of the clauses in this research considered all the above factors that can be summarized as follows: linearity as a major syntactic aspect of language first acquired by children (Brown 1973: 8); the fixed word order in the English language (Halliday 1985b: 216); the semantic orientation of SFG (Halliday 2005: xv); the clause as the meeting point of all functions of language (Halliday 1989: 66; 2002: 175 among others); constituents as a mechanism for organizing and expressing meaning (Halliday 1985a: 18); and the overriding number of positive clauses (Halliday 2009: 69). All this considered, the result is the prototypical clause based on the principles of categorization of predication that helps students draw attention into the clause structure and the relationship among its participants.

As Long (1985) argued, research which follows a well-developed theory is in the end more powerful and efficient as a guide to further research and to practical applications in teaching (cf. Chaudron 1988).

In the next section I will explain in detail the classroom research conducted with ESL students in a middle school in the USA. This research has been designed according to the tenets of SFG and has followed all the criteria mentioned above. It has also taken into consideration

the differences between ESL/EFL, spoken/written language, and commonsense knowledge/academic knowledge.

3.2 Research design

3.2.1 The teacher as researcher

I would like to start this section by explaining the difference between some related concepts, namely *action research*, *teacher research* and *classroom research* in language teaching. Nunan stresses the importance of *action research* in language education and argues that it has three defining characteristics, i.e. it is carried out by practitioners (here classroom teachers); it is collaborative; and it is aimed at changing things. A distinctive feature of *action research* is that those affected by planned changes have the primary responsibility for deciding on courses of critically informed action which seem likely to lead to improvement, and for evaluating the results of strategies tried out in practice (1992: 17-8). According to Kathleen M. Bailey (2001) *action research* is an approach to collecting and interpreting data that involves a clear, repeated cycle of procedures. The researcher begins by planning an action to address a problem, issue, or question in his or her own context. This action is then carried out. Later on, the researcher proceeds to a systematic observation of the outcomes of the action. After observing the apparent results of the action, the researcher reflects on the outcome and plans a subsequent action, after which the cycle begins again (2001: 490).

Kemmis and McTaggart describe *action research* as:

a form of ‘self-reflective enquiry’ undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of these practices and the situations in which these practices are carried out (1989: 2).

Bailey (2001: 490) defines *teacher research* as research conducted by classroom teachers. The idea behind this is that by investigating teaching and learning processes in classrooms, ‘we ourselves learn more about the craft and the science of teaching so that we may improve our work as teachers.’ The need of teachers becoming researchers has been supported by many authors (Chaudron 1988; Nunan 1992; Ellis 1997; and Larsen-Freeman 1999 among others).

According to Long (1980: 3) *classroom research* is research on L2 (but is not limited to) learning and teaching, all or part of whose data are derived from the observation or

measurement of the classroom performance of teachers and students. In this definition both qualitative and quantitative research methods are included.

To summarize, *classroom research* refers to the location and the focus of the research, *teacher research* refers to the agents who conducted the research, and *action research* denotes a particular approach, a codified but flexible set of reiterated procedures, for participants to conduct research in their own settings. *Action research* might or might not be conducted in classrooms, and it might not be done by teachers. Figure 15 depicts the overlapping relationship of the three concepts, where 1 is *classroom research* conducted by teachers using approaches other than *action research*, 2 is research conducted by teachers outside classrooms using approaches other than *action research*, 3 is *action research* conducted by teachers outside classrooms, and 4 is *classroom research* conducted by teachers using the action research approach.

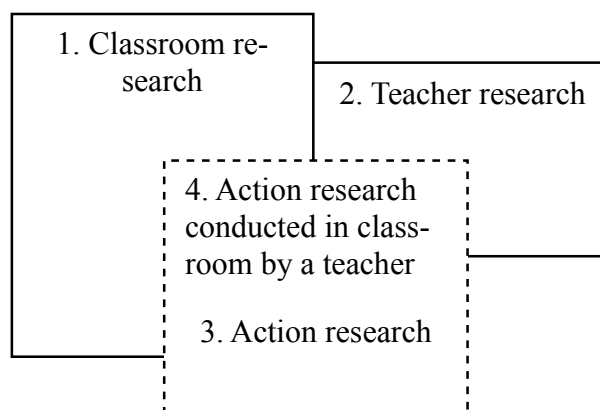


Figure 15: Classroom Research, Action Research, and Teacher Research (after Celce-Murcia 2001: 491)

As will be seen below, the research carried out here is to be considered classroom research, teacher research and action research; hence, it corresponds to No. 4 in figure 15.

Allwright and Bailey state that *classroom research* is a cover term for a whole range of research studies on classroom language learning and teaching. The unifying factor is that the emphasis is solidly on trying to understand what goes on in the classroom setting (1991: 2). Chaudron (1988: 1) explains how the researcher wants to identify those characteristics of classrooms that lead to efficient learning of the instructional content. In order to do this the researcher, on the one hand, will not approach this objective with any rigid notion of the

principal sources of those characteristics. On the other hand, effective research will be based on well-reasoned theory and synthesis of previous knowledge, so that these sources are not investigated randomly (cf. Long 1985).

It should be evident, however, that the investigation of these issues is a very time-consuming and difficult task, requiring careful design of classroom observations or experiments and laborious analyzes of the data. It is most encouraging, however, to note the increase in studies focused on this area in the past five years. Nevertheless, it is highly recommended for teachers to conduct their own research. In doing so, they can come up with questions and answers to problems that they never thought they could exist or that represent a hindrance to students.

Ellis (1997: 199) believes that research has a potential for developing teachers' understanding of how learning takes place and, in so doing, creating the possibility of change. Teachers are invited to reflect on their current teaching in order to identify a problem related to their own teaching context. Zeichner and Liston (1985: 4) define reflective teachers as those who 'are willing and able to reflect on the origins, purposes and consequences of their actions, as well as the material and ideological constraints and encouragements embedded in the classroom, school, and societal contexts in which they live.'

In his introduction to a collection of action research papers by his own students, Wells (1994: 27) emphasizes 'the importance of reading about other work, both theoretical and practical, that bears on the topic of inquiry, and of writing about it, both for self and for others.' Teachers need to become familiar with what researchers have found out about L2 acquisition, not just because this may help them in their teaching but because it constitutes an effective way of getting started as researchers themselves. Theory and previously published research can assist the teacher-researcher in various ways.

Ellis summarizes the three principal ways of getting started: reflecting on one's teaching context; reading and writing about theory and previous research; and planning a micro-evaluation. Teachers can identify issues from their own ideas about what constitutes sound practice based on their personal theories and practical experience of teaching. Alternatively, teachers may choose to investigate innovations that are supported by theory and research they have read about. Or they may identify specific tasks they want to evaluate to find out if they work. Of course, in many instances teachers will arrive at a research question by drawing on

more than one source (1997: 203).

Freeman (1994 in Ellis 1997: 240-51) distinguishes three views of teaching: teaching as behavior; teaching as cognition; and teaching as interpretation. According to the first, teaching is seen as the transmission of knowledge from teachers to students. In the second view, however, the emphasis is placed on developing students' understanding of the principles that underlie a body of knowledge and its uses. Finally, in the third, teaching is viewed as a craft that teachers exercise in deciding what to do in a particular situation at a given moment. This third view emphasizes the contextualized nature of all teaching. No matter what, the teacher is a major – probably the major - factor in classroom life (cf. Halliday 1976). Nevertheless, the three views are compatible and should be kept in mind while teaching.

Chaudron states that SL instruction has been gaining in importance, as more and more people throughout the world find the need to acquire one or more foreign languages (see 1.4). There is a diversification in the specific purposes of language instruction, an increase in language schools and programs, and an expansion in training programs for second language teachers, researchers, and program developers. For these reasons alone, second language classroom research has an important role to play (1988: 191-2).

The research I conducted is a combination of the researches mentioned above. It is a *classroom research*, since it was conducted in a classroom, it is a *teacher research*, since it was conducted by a teacher, and it is an *action research*, since the aimed of the research was to change the manner in which linguistic features are introduced to students (ESL in this particular case) to improve their reading comprehension and, to a lesser extent, their writing production. Before delving into the classroom research, I will describe the learning environment in which it was conducted in next section.

3.2.2 The learning context: school, setting and subjects

3.2.2.1 School

The research was conducted in a public middle school located in a rural area of North Carolina, USA. I worked there through the Spanish Ministry of Culture program of PPVV (Profesores Visitantes) for five years (2006-2011), the first one teaching Spanish in high school and the other four teaching ESL in middle school, both in the same school district.

Table 33 below shows the distribution of inhabitants and students based on ethnicity of the state, area, and middle school.

North Carolina is divided into 100 counties. Sampson is located in the Eastern part of the state, one hour from the coast and one hour from Raleigh-Durham airport. The town's facilities, among others, are: a public library; a community college; a hospital, and a fitness center. The main economy over the past century has been agriculture, farming, financial services, and manufacturing. The state's industrial output—mainly textiles, chemicals, electrical equipment, paper and pulp and paper products—ranked eighth in the nation in the early 1990s. There are two school districts in the county distributed as follows: Kindergarten and K1; elementary (grades 2-3); primary (grades 4-5); middle school (grades 6-8); and high school (grades 9-12). Every school district may have one or more schools within each level (after www.city-data.com).

Population	North Carolina	Sampson County	Middle School
White	6,569,947 (68.9%)	35,955 (59.8%)	252 (36%)
African American	1,811,741 (19.0%)	18,018 (29.9%)	273 (39%)
Hispanic	0,734 (1.282%)	6,477 (10.8%)	98 (14%)
American Indian	0,123 (1.3%)	1,086 (1.8%)	35 (5%)
Others	0,295 (3.1%)	4,183 (7.0%)	35 (5%)
Total	9,535,483	65,719	700

Table 33: Sampson's population by ethnicity 2010 (<http://www.census.gov/field> and www.sampsonedc.com/page/population)

Middle school covers from 6th to 8th grade (equivalent to last year in primary and 1st and 2nd year of ESO in Spain) and students' age spans from 11 to 14/15. Students have four sessions, each concerning a different block²⁶; three of these daily blocks are devoted to content areas, namely Science, Social Studies, Language Arts, and Mathematics. Students have Social

²⁶ Every school is part of a school district, which is in charge of deciding the type of schedule the different schools will have. Therefore this can vary much in number of blocks, duration of them, and the exploratory subjects students are allowed to choose.

Studies the first semester and Science the second semester or vice versa. Language Arts and Mathematics are content areas instructed throughout the entire school year. The fourth session corresponds to a block devoted to an exploratory subject from which students can choose: Music, Art, P.E. (Physical Education), Dance, Computer, and ESL (English as a Second Language). P.E. and Computer are compulsory over a semester and students choose another subject for the other semester. This does not apply to L2 students, who have to take ESL during the entire academic school year, at least in some cases.

The daily schedule is Monday through Friday from 8:05 to 15:05 and students have five minutes to move from one classroom to the next since teachers remain in their classrooms during all the blocks. The schedule is distributed as follows:

Distribution by blocks	Time	Activity
First Block	8:10 – 9:30	Content Area
	9:35 – 9: 50	Breakfast (15 minutes)
	9:50 – 10:25	Reading Workshop (35 minutes)
Second Block	10:30 – 11:50	Content Area
	11:50 – 12:15	Lunch (25 minutes)
Third Block	12:20 – 13:40	Content Area
Fourth Block	13:45 – 15:05	Exploratory (A-B)

Table 34: Daily school schedule

The exploratory subjects were alternate and they were distributed as A-Day or B-Day. For example, in relation to ESL classes, students would have A-Day: Monday; Wednesday; and Friday one week and the following week it would be Tuesday and Thursday.

North Carolina is one of the thirty-five states that belong to the WIDA Consortium (www.wida.us). This is an Educational Program in charge of evaluating foreign students' English language level and progress. This is done through an annual test (ACCESS) and an initial test (W-APT).

Concretely, the ESL program of the school where the classroom research took place was

organized and supervised by the school district central office. It was a federal funded program, i.e. the government provided the means to cover those students' needs. The program served students from pre-K to K12. In addition, the school district was to determine the students' language level through the tests mentioned above.

3.2.2.2 Setting

The main difference between instructed and naturalistic settings lies in the type of input the learner receives. Pica succinctly summarizes the difference as follows:

...in the classroom setting, language is organized according to the presentation of rules, often given one at a time and in strict sequence, and with the provision of teacher feedback on error, particularly for violations of rules in the linguistic code (see especially Krashen and Seliger 1975). In naturalistic settings, there is no formal articulation of rules and emphasis is on communication of meaning. Error correction, if it occurs at all, tend to focus on meanings of messages communicated (1983: 102).

What these learning environments have in common is that they elicit or facilitate learning through interaction with the learners (Kramsch 1991: 17).

The lessons took place in a classroom, hence an instructed setting. Desks were arranged in a U-shape, since students never exceeded the number of fifteen in any group and it was easy and convenient to arrange them in this way. The discourse was either oral on the teacher's side or written, because some written material was provided to the students, and both the whiteboard and the Smart Board were used during the instruction of the research. The instruction was deliberate, i.e. the sessions, had been thoroughly prepared to be easily understood by the students and the sentences were sometimes modified to become age and level appropriate or simply to relate to their closest environment such as their town or their school. The sessions were always interactional, in that they elicited or facilitated learning through interaction with the learner. And the teacher/researcher adopted a front position in most of the sessions. The acquisition context was mixed, since there was a combination of classroom instruction and natural exposure in the L2 environment (cf. Pica 1983). Among the ESL students, some used the L2 as their regular language of communication with friends and even with family members, while some others tended to use Spanish at home and at school due to their language level.

3.2.2.3 Subjects

In relation to terminology there is a difference between ELL²⁷ (English Language Learner) and ESL. All ESL students are labeled as ELL but the opposite does not apply. In this middle school many ELL students did not receive ESL classes. The main criterion was students' academic performance and ability to manage in a regular class without any extra help such as a dictionary or the help of a classmate. In this sense, most of the students were already diagnosed as ELL, but not all were in the ESL program. For instance, when they were promoted from primary school if they were receiving ESL classes, they continued receiving them.

When students first arrived at school, having an L1 different from English and/or coming from another state, they were to take the initial test mentioned above (W-APT) to determine their English level and their plausible eligibility to the ESL program. If they qualified for ESL classes, then they were assigned to a group which was distributed according to grades, not to students' language level. Parents could refuse the service by signing a waiver but not in the cases in which students' level was very low. As a result, the groups could be, and actually were, groups where newcomers with virtually no English were assigned to the 8th grade class together with students who might have been in the country for around three or four years. For this reason the grade the students were in did not provide much information about their language skills, nor perhaps about their maturation and language development in their L1.

Teachers can provide ESL students' instruction in different ways: by inclusion; by pull-outs; and by regular ESL lessons. In this middle school ESL teachers did neither inclusions, nor pull-outs, so that students' tuition consisted wholly on regular ESL lessons. In the former, teachers would go to the content area classroom where the ESL students were receiving instruction. In pull-outs, the teacher, after having received instructions from the content area teacher or having attended the lesson for around the first 15 or 25 minutes, would pull students out of their regular classroom and take them to the teachers' classroom to continue the lesson there applying the necessary modifications.

The scale used in the research was the reading level (applicable to all students) and the

²⁷ The acronyms LEP (Limited English Proficiency) or EAOL (English as other language) are sometimes used instead.

reading and writing results in the ACCESS for ESL students. The reading level was done through a test elaborated by Renaissance Learning Company. Students attended daily a Reading Workshop class and it was graded as any other subject. During thirty minutes they had to read a book of their choice, within their reading range level, and then take a test on the computer. Renaissance Learning based the scaling system on the concept of ZPD²⁸ (Zone of Proximal Development). Renaissance Learning Readability Formula takes into consideration a number of aspects, some of which are:

- Sentence length
- Words difficulty
- Kinds of texts

The result would be that a book with a readability estimate of grade 4.5 is written in a way that is understandable to individuals who have reading comprehension skills typical of a student in middle of grade 4. The readability measure does not reflect either the content of the book, which may or may not be appropriate for a fourth grader, or the background and interests of the reader.

The ACCESS was the annual exam ELL students had to take, thus in my research all students from the Experimental and Control Groups had to take it. There were different clusters depending on whether they were taken by students in the primary or secondary level. In middle school the cluster was 6-8 and within it there were three different tiers (A, B, C) based on the difficulty of the exam. Students could only exit the program through tiers B and C. When students were newcomers, the tier A was administered. In order to exit the program students needed an overall score of 4.8 but in reading and writing skills a minimum of 4.0 in each skill was required. The minimum score is 1.0 and the maximum is 6.0. The exam takes place around February and March (schools are given three weeks to complete all the tests) and it is done in three different sessions: speaking (individually); listening and reading; and writing. For the test students are grouped according to the tiers (A – B – C) they are going to

²⁸ Vygotsky (1962: 103; 1978: 86) asserts that the child is able to copy a series of actions which surpass his or her own capacities, but only within limits. By means of copying, the child is able to perform much better when together with and guided by adults than when left alone, and can do so with understanding and independently. The difference between the level of solved tasks that can be performed with adult guidance and help and the level of independently solved tasks is the Zone of Proximal Development.

take and not the grade they are in.

Through this research, students' anonymity and confidentiality were protected through a codified system where the first letter(s) stands for the type of group the students belong to (Experimental Group, Control Group, or Native), followed by the number of the subject (usually by alphabetical order in each group), and followed by the grade they were in. Figure 16 below illustrates how this was done and the meaning of every letter or digit.

The system also contains information about subjects' age and gender. In the case of the newcomers, the result of the W-APT has been included.

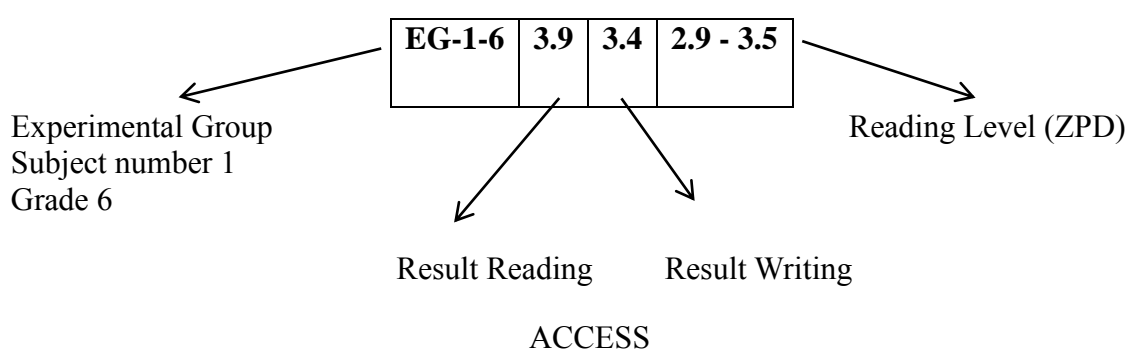


Figure 16: Coding system to protect students' confidentiality

3.2.3 The classroom research

Research is a systematic approach to finding answers to questions (Hatch and Farhady 1982: 1). Based on this definition, there are two main approaches or paradigms, namely the qualitative and the quantitative. Both paradigms differ in method, process, orientation and results. These differences are summarized in table 35 below.

The basic difference between quantitative and qualitative research lies on the fact that data can be quantified and answers the question how much/many instead of the qualitative research that answer the question how something is (Rasinger 2009: 10-1).

There are two major types of quantitative research –experimental and non-experimental research. Experimental research is classified as true experimental, quasi-experimental, and single-case research. Non-experimental research includes descriptive, correlational, causal-comparative (ex post facto), and meta-analysis research (Dimitrov 2009:41).

A scientific research is systematic, controlled, empirical, and critical investigation of natural phenomena guided by theory and hypotheses about the presumed relations among such phenomena (Kerlinger 1986: 10).

Qualitative Paradigm	Quantitative Paradigm
<ol style="list-style-type: none"> 1. Advocates the use of qualitative methods. 2. Concerned with understanding human behavior from the actor's own frame of reference. 3. Naturalistic and uncontrolled observation. Subjective. 4. Close to the data; the insider perspective. 5. Process-oriented. 6. Valid: real, rich, and deep data. 7. Ungeneralizable; single case studies. 8. Holistic. 9. Assumes a dynamic reality. 	<ol style="list-style-type: none"> 1. Advocates the use of quantitative methods. 2. Seeks the facts or causes of social phenomena with little regard for the subjective states of individuals. 3. Obtrusive and controlled measurement. Objective 4. Removed from the data; the outsider perspective. 5. Outcome-oriented. 6. Reliable: hard and replicable data. 7. Generalizable; multiple case studies. 8. Particularistic. 9. Assumes a stable reality.

Table 35: Summary of the attributes of the qualitative and quantitative paradigms (after Reichardt and Cook 1979: 10)

The present research is a quantitative and experimental research but it is also qualitative, to a lesser extent, since it tries to understand students' strategies when dealing with written information (Trochim 2006, 2008; Rasinger 2009; and Dimitrov 2009). It is a deductive (top-down) approach, i.e. the research begins with a theoretical framework (SFG in this case) and derives a hypothesis from it (Mehdi Riazi and Candlin 2014: 136). In the research there were two control groups (CG), one experimental group (EG) and three groups of native speakers (Ns) to compare with. Two CGs were selected because the 'mortality' among these subjects is very high. Students were randomly assigned, since they belonged to groups already formed. It is common to have students enrolling in school in January or moving to another school in the middle of the academic year. As a result, they did not complete the tasks thus making their exercises unusable for the purpose of the present research, because I could not

see their evolution, which is necessary, since this research is longitudinal. The experiment consisted of four phases: pre-tasks; post-tasks (after the instruction); follow-up1; and follow-up2.

For this study, I also considered that sometimes along the school year a student is diagnosed as EC (Exceptional Children)²⁹. These students may suffer from a learning disability that can go from low IQ to dyslexia. These subjects' results were not tallied, and neither were the newcomers with a beginning level of English.

The major steps in conducting this empirical research are: (a) identification of a problem in the area of interest; (b) statement of the general purpose of the research; (c) statement of the research question(s) and related hypotheses; (d) description of the research design and procedures; (e) data analysis; and (f) interpretation of the results and generalization of the findings (Dimitrov 2009: 39). The following sections will deal with these steps in depth.

3.2.3.1 Identification of a problem

The lack of consistency in the use of personal pronouns was first observed during the school year 2007-08. At that time, I realized that ESL students produced many errors when using personal pronouns. I conducted a non-experimental research (López Bermudo 2008) and collected students' exercises on personal pronouns, subject and object. Exercises from ESL as well as Ns of AmE were collected and tallied.

The exercises were meant to test reading skills and, to a lesser extent, writing skills. Although it would be reasonable to think that LT (Language Transfer) would be the cause for the numerous errors, the results were neither clear-cut nor conclusive. Language level was not a reliable indicator either, since errors occur randomly throughout students' exercises regardless their L2 level.

The pronoun *it* in final position with object function was replaced by the majority of students with the demonstratives *this* or *that*, as example (150a) illustrates.

(150a) Here is another souvenir. I don't know what to do with *that*.

(150b) Here is another souvenir. I don't know what to do with *it*. (www.ego4u.com)

²⁹ Exceptional Children did not take part in the research due to the wide range of differences among them. In this category we may encounter children who suffer from dyslexia, children with a low IQ, children with ADD (Attention Deficit Disorder) or ADHD (Attention Deficit Hyperactivity Disorder). I am not an expert and I do not believe my conclusions reached after their results could be of any accuracy.

This could be because *it* is the only personal pronoun which is almost always unstressed. One reason why *it* is rarely stressed is that when a stressed nonpersonal pronoun is needed, *it* is supplanted by *this* or *that* (Quirk et al. 1985: 348). This fact exemplifies the young learners' tendency to use exophoric references, and is also coherent with the end-focus principle (closely linked to end-weight and informativeness principles). This principle states that in normal, unemphatic discourse, it is customary to start our message from what we think our hearer knows and progress to what s/he does not know. In other words, the unmarked distribution starts with the *Given* and progress towards the *New* (Downing and Locke 2006: 241).

It in temporal expressions and in subject initial position did not cause problems; for this reason they have not been used for the clauses. Yet, the pronoun *it* caused some problems when students had to connect it with an abstract antecedent, with a long sentence, or when the distance of the antecedent was longer than four words.

Regarding number, results showed that it was not clear for students how to make the distinction between singular and plural. Half of the students made errors and some of them had an advanced or proficiency level (see 2.1). This contradicts what Brown states about number: 'the pronouns *some*, *they*, and *them* contrast in number with *one*, *it*, *he*, and *she*. By the time the noun inflected for plurality attained criterion the children also almost always used pronouns with singular or plural number correct according to the reference situation or to the NP antecedent' (1973: 331).

When gender was tested the results showed that students lacked consistency in the use of personal pronouns, especially, third person singular, which produced a choppy effect in their writings. When students used a pronoun, the tendency was to maintain it in the following examples (hauling effect), resulting in an awkward text and presumably poor comprehension. These observations hint that students, both ESL and Ns of AmE, do not master personal pronouns, even students with a proficiency level of language. The results did not differ much between Ns and ESL students with advanced language level. Pronouns seem to interfere in the overall reading comprehension, but this interference was not tested (López Bermudo 2008). At the time students were only asked to complete some sentences with missing personal pronouns to see their knowledge on them, together with the tracking of participants in a reading passage. The present research takes precisely those results as a point of departure

and tries to confirm the deep relationship between cohesive devices such as personal pronouns and a breakdown in reading comprehension.

3.2.3.2 General purpose of the research

This research focuses on the learning of personal pronouns in English as a second language from a Systemic-Functional approach. It examines the effects of an eleven-session experimental pedagogical treatment centered on teaching the basics of transitivity (see 1.2.1.2.10), in terms of the main kinds of processes and the semantic roles of participants, as well as their position within the sentence, and their substitution by a personal pronoun, subject or object. In addition, it aims at students gaining a deeper understanding of the different constituents, including processes, within a clause and correlating them to their syntactic function. A general purpose is to raise language awareness to help students understand the structures, patterns, and word order in the English language.

The main purposes can be summarized as follows:

- The primary purpose is to examine the effects of the instruction on semantic roles on the learning of personal pronouns, subject and object, after an instruction on semantic roles and type of processes.
- The second is to determine the effect(s) that the instruction on semantic roles can have on students' knowledge of syntax.
- A third purpose it is to determine the plausible effects of that instruction on reading comprehension and on writing production.

Based on the linearity of the English language and on the idea that children acquire a language through semantic roles, and human action and human attention being what permits language to be decoded, the researcher/teacher developed exercises in order to provide patterns and structures to students so they can focus their attention on language and thus become aware of the structures behind the language (see 3.1.8).

3.2.3.3 Research questions

Five major linguistic aspects are analyzed in this research: the knowledge of personal pronouns, i.e. the recognition of them within a sentence or text; the capacity to relate a pronoun to its antecedent, namely the tracking participants; the effects of that knowledge on

syntactic functions; the relationship between pronouns and reading comprehension; and the effects of the instruction on the students' production and usage of pronouns.

There are eleven variables the present research tries to measure. They are grouped under four research questions:

Question 1: will instruction on semantic roles help students identify personal pronouns and find their antecedents?

Variable 1.1: recognize personal pronouns, subject and object

Variable 1.2: relate personal pronouns to their antecedents

Question 2: will instruction on semantic roles help students identify constituents within the clause and relate them to their corresponding syntactic functions?

Variable 2.1: recognize constituents/groups (NG, AdvG, VG) within a clause

Variable 2.2: relate semantic roles/groups to syntactic functions (S-V-O)

Question 3: will instruction on type of processes help students to understand and use complex language structures?

Variable 3.1: usage of passive voice

Variable 3.2: usage of subordination

Variable 3.3: usage of different processes

Question 4: will instruction on semantic roles and processes help students to produce more accurate and construe more cohesive writings?

Variable 4.1: usage of cohesive devices

Variable 4.2: usage of Themes

Variable 4.3: relate pronouns and abstract antecedents in a reading passage

Variable 4.4: sentence structure and word order

3.2.3.4 Description of the research design

There comes a point where models and theories need to be translated into daily classroom lessons. In this sense, SFG has been used and adapted for students to be able to understand some basic ideas and not to confuse them with excessive and new terminology. Otherwise, the instruction could produce an inimical result.

The present research is a quantitative, experimental and longitudinal research. The purpose of it is to measure the effect(s) of formal instruction on ESL students' knowledge of groups,

clauses, personal pronouns, referentiality, reading comprehension and writing production. Six different groups participated in the research, distributed as follows: one EG; two CGs (reasons mentioned above); and three Ns groups. The CG1 belongs to the same school district as the EG, and the CG2 to a different yet adjacent county to Sampson. The research took place throughout the school year 2010 (October to December), and in 2011 (March and June). The research consisted of collecting students' exercises at four different times during the school year. First, the pre-tasks, then the post-tasks after the instruction, which took place in November (and one week of December) 2010, and in 2011 two follow-ups were collected. Table 36 below summarizes the groups and treatment received.

Pre-tasks (October 2010)	Treatment (November 2010)	Post-tasks (December 2010)	Follow-up1 (March 2011)	Follow-up2 (June 2011)
EG	X	EG	EG	EG
CG1		CG1	CG1	CG1
CG2		CG2	CG2	CG2
Ns6		Ns6	Ns6	Ns6
Ns7		Ns7	Ns7	Ns7
Ns8		Ns8	Ns8	Ns8

Table 36: Summary of groups, tasks, and treatment

This experiment was devised to be conducted in a regular instructional context. Working in the classroom setting increases the generalizability of the results and provides information as to the feasibility to apply this type of pedagogical practice in other classroom contexts. The research was conducted by the teacher, therefore the students did not suffer from the anxiety of having a different person in the classroom doing the instruction. They felt at ease and made all the questions they considered necessary. Nevertheless, all sixth graders were new and I had been in contact with them only for two months before the research started. I was acquainted with some of the subjects but not with all since some of the 7th and 8th graders were also newcomers.

Tables (37-42) present students' information related to age and gender, reading level, and results in the annual English test. All ESL students had Spanish as their L1. There was one student with Arabic as L1 but she was not included due to her low level of English. She was a newcomer and was in the alphabetization stage.

The reading level was paralleled to Vygotsky's ZPD; although this author considers that the ZPD is the zone learners can achieve with the help and/or collaboration of the teacher or peers (1962: 103), students did not receive such a help. In this middle school students had to read silently and independently during Reading Workshop and after finishing a book, they were to take a computer-based test. According to the number of mistakes they were assigned a reading level. Probably the ZPD was understood in terms of what students could achieve by reading; the two digits probably interpreted as the first one being the actual mental stage and the second as the stage he/she could achieve.

The first conclusions obtained from this information are: firstly, that ESL students tend to be slightly older than Ns in the same grade; and secondly, that almost half of the students who did not exit the ESL program was because of the writing part. In section 3.2.2.3 it was already mentioned that in order to exit the program students needed an overall score of 4.8 but with a minimum of 4.0 in reading and writing. Among the Experimental Group nine students did not exit because of the result in the writing part; among the Control Group 2 twelve students did not exit due to the score obtained in the writing part.

This confirms something already highlighted, i.e. the difference between spoken and written language and the academic level of schooling language (see 3.1.6). This information does not show the level of listening and speaking because the research does not deal with oral language. Yet the results in those two areas are usually higher than in the others, except for the newcomers, who score low in the four skills. Another difference is that Ns' level of reading is higher than ESL students, which is something expected.

As mentioned above, the 'mortality' of these students tends to be high. The CG1 had fewer subjects than the CG2, it started with thirteen students but one was diagnosed EC (Exceptional Children) and another moved to another school. The CG2 started with 30 subjects but three moved and one was diagnosed as EC. In the EG two newcomers did not participate due to their low level of the language (a 6th grader and an 8th grader), one student was EC (a 7th grader), and two subjects moved some time around January (two 8th graders) leaving a final number of twenty-one subjects. At the beginning of the school year I was serving a total of twenty-six students. As a result all ESL students had Spanish as L1.

'Mortality' among Ns was not as high as in ESL and the number of subjects was enough to compare results. In group Ns 6th grade, twenty-six students started the tasks but three of them

moved and other three did not complete the tasks due to absences. And in the Ns 8th grade there was initially twenty-five students, three of them moved to another school and two of them did not complete the tasks. The only group that remained constant throughout the experiment was the Ns 7th grade, from which the eighteen students started and finished the tasks.

Student Code	Age and Gender	ACCESS Reading	ACCESS Writing	School Reading Level (ZPD)
EG-1-6	12 - F	3.9	3.4	2.8-4.0
EG-2-6	14 - M	5.0	3.4	2.2-3.2
EG-3-6	12 - M	2.9	3.3	2.1-3.1
EG-4-6	13 - M	5.0	3.1	2.6-3.6
EG-5-6	12 - M	5.0	3.9	3.6-5.6
EG-6-6	12 - F	5.0	3.6	3.3-5.2
EG-7-6	11 - F	3.5	3.0	3.9-5.9
EG-8-6	12 - F	5.0	3.3	3.5-5.5
EG-9-6	11 - M	5.0	3.8	3.1-4.7
EG-10-6	11 - F	5.0	2.7	2.4-3.4
EG-11-7	12 - F	3.5	3.0	4.1-6.3
EG-12-7	13 - F	4.2	3.6	2.7-3.8
EG-13-7	12 - F	3.9	3.7	2.1-3.1
EG-14-7	13 - F	3.2	3.0	3.1-4.8
EG-15-8	16 - F	W-APT 1.5 ³⁰		1.7-2.7
EG-16-8	14 - F	2.4	2.2	1.0-2.0
EG-17-8	14 - F	3.5	2.5	1.5-2.5
EG-18-8	15 - F	1.9	2.1	1.0-2.0
EG-19-8	13 - M	3.5	3.5	4.0-6.1
EG-20-8	14 - F	3.2	3.7	2.2-3.2
EG-21-8	14 - M	3.2	3.4	2.5-3.5

Table 37: Experimental Group information

³⁰ As mentioned before (3.2.2.3), newcomers were administered the W-APT test if no previous record of their language level was available. In those cases, only one result shows the overall literacy level.

Student Code	Age and Gender	ACCESS Reading	ACCESS Writing	School Reading Level (ZPD)
CG1-1-6	13 – F	3.3	2.9	2.2-3.2
CG1-2-6	12 – M	3.3	3.7	2.2-3.2
CG1-3-6	11 – M	3.9	2.9	2.5-3.5
CG1-4-6	12 – F	W-APT 2.0		1.7-2.7
CG1-5-7	12 – M	3.1	3.7	2.2-3.2
CG1-6-7	14 – M	2.3	3.4	1.0-2.0
CG1-7-7	12 – F	2.3	2.7	1.5-2.5
CG1-8-7	14 – F	2.3	2.2	1.0-2.0
CG1-9-7	15 – M	4.8	3.7	2.7-3.8
CG1-10-8	14 – M	W-APT 1.0		1.0-2.0
CG1-11-8	13 – F	2.6	3.3	2.2-3.2

Table 38: Control Group 1 information

Student Code	Age and Gender	ACCESS Reading	ACCESS Writing	School Reading Level (ZPD)
CG2-1-6	11 – F	5.0	3.2	2.7-3.8
CG2-2-6	11 – F	4.8	3.4	3.2-5.1
CG2-3-6	12 – M	5.0	3.4	3.1-4.7
CG2-4-6	11 – F	W-APT 2.4		3.3-5.2
CG2-5-6	13 –F	5.0	2.6	2.7-3.8
CG2-6-6	12 – F	3.9	3.2	2.4-3.4
CG2-7-6	13 – M	5.0	2.7	2.4-3.4
CG2-8-6	12 – M	3.3	1.9	2.6-3.6
CG2-9-6	12 – F	4.8	3.4	2.9-4.2
CG2-10-6	12 – M	5.9	2.6	2.2-3.2
CG2-11-6	11 – F	5.0	2.7	3.5-5.5
CG2-12-7	13 – F	3.9	4.0	2.3-3.3
CG2-13-7	14 –M	3.2	4.2	2.9-4.2
CG2-14-7	13 – F	3.2	3.3	2.9-4.2
CG2-15-7	12 – F	W-APT 1.0		2.4-3.4
CG2-16-7	12 – M	3.9	3.9	2.8-3.9
CG2-17-7	12 –F	5.0	3.9	2.2-3.2
CG2-18-7	13 –M	2.9	3.6	2.2-3.2
CG2-19-7	14 – M	5.0	3.6	2.8-3.9
CG2-20-7	12 – M	3.5	3.9	2.2-3.2
CG2-21-7	12 – M	5.0	3.7	3.2-5.0
CG2-22-8	14 – M	2.6	2.9	2.2-3.2
CG2-23-8	14 –F	W-APT 2.5		2.6-3.6
CG2-24-8	13 – F	W-APT 2.2		3.4-5.3
CG2-25-8	14 –M	4.0	3.2	2.3-3.3
CG2-26-8	14 - M	3.2	3.7	3.2-5.0

Table 39: Control Group 2 information

Student Code	Age and Gender	School Reading Level (ZPD)
N-6-1	11-F	3.6-5.6
N-6-2	11-F	3.1-4.8
N-6-3	11-F	3.2-5.1
N-6-4	12-F	3.7-5.7
N-6-5	12-F	3.8-5.9
N-6-6	11-F	4.0-6.1
N-6-7	11-F	3.4-5.4
N-6-8	11-F	4.1-6.3
N-6-9	11-F	3.4-5.4
N-6-10	12-F	5.0-12.9
N-6-11	13-F	3.4-5.3
N-6-12	12-M	3.6-5.6
N-6-13	11-M	4.2-6.4
N-6-14	12-M	2.7-3.8
N-6-15	11-M	3.2-5.0
N-6-16	11-M	3.6-5.4
N-6-17	11-M	2.8-4.0
N-6-18	11-M	3.5-5.5
N-6-19	12-M	4.5-8.1
N-6-20	12-M	5.0-12.8

Table 40: Natives 6th grade information

Student Code	Age and Gender	School Reading Level (ZPD)
N-7-1	12 – M	3.6-5.6
N-7-2	12 – M	3.3-5.2
N-7-3	12 – M	2.9-4.3
N-7-4	12 – M	4.4-7.4
N-7-5	13 – M	3.4-5.4
N-7-6	12 – M	4.0-6.2
N-7-7	12 – M	3.3-5.2
N-7-8	12 – M	4.4-7.4
N-7-9	12 – M	4.5-8.0
N-7-10	12 – F	4.5-8.1
N-7-11	12 – F	3.7-5.7
N-7-12	12 – F	4.5-8.2
N-7-13	12 – F	3.3-5.2
N-7-14	12 – F	3.0-4.5
N-7-15	12 – F	5.0-12.9
N-7-16	12 – F	4.4-7.3
N-7-17	13 – F	3.5-5.5
N-7-18	12 – F	3.2-5.1

Table 41: Natives 7th grade information

Student Code	Age and Gender	School Reading Level (ZPD)
N-8-1	13 – M	3.2-5.1
N-8-2	14 – M	4.1-6.3
N-8-3	13 – M	4.4-7.5
N-8-4	14 – M	3.4-5.4
N-8-5	14 – M	3.3-5.2
N-8-6	14 – M	2.9-4.2
N-8-7	14 – M	4.2-6.7
N-8-8	13 – M	5.0-12.9
N-8-9	14 – M	2.8-3.9
N-8-10	13 – M	4.0-6.2
N-8-11	14 – M	3.2-5.0
N-8-12	14 – F	3.5-5.5
N-8-13	13 – F	4.6-6.8
N-8-14	13 – F	4.3-6.8
N-8-15	13 – F	4.9-12.1
N-8-16	14 – F	4.5-8.0
N-8-17	15 – F	4.2-6.5
N-8-18	14 – F	3.1-4.7
N-8-19	13 – F	2.3-3.3
N-8-20	14 – F	3.1-4.8

Table 42: Natives 8th grade information

3.2.3.4.1 Procedures

This section describes the experimental pedagogical treatment. Firstly, an overview of the pedagogical sequence of units and treatment is provided. And secondly, a list of learning objectives expected after each session as a result of the instruction.

Unless otherwise stated, the sentences used in the pedagogical treatment were taken from Matthiessen (1995) and Martin et al. (1997) and in some cases modified so as to make sense in the real world of the students (cf. Menyuk 2005: 117), thus facilitating the finding of the

actor, the act and the acted-upon. They were also modified to be age-appropriate as well as content related. For example, in some cases words such as ‘clerks’ and ‘Mr. Carver’ were replaced with ‘students’ and ‘Manuel’. The source of the reading passages are specified after each excerpt.

The number of clauses in the sessions varies depending on the type of processes, for instance in Processes of Doing, Processes of Behavior were also included, and therefore the number of clauses was higher. In addition, I included a reading passage in the revision sessions and in three more sessions. In these cases, the number of clauses was reduced and more language in context was introduced. The passages were selected based on the genre and grade level. Some of them are for 6th graders and some others for 8th graders (specified below). The registers were mainly narrative and short stories and they were part of the school curriculum of subjects such as Language Arts and Social Studies.

Students had previously been informed about the type of instruction they were going to receive in the classroom throughout eleven sessions. Every session covered approximately the first 30 to 45 minutes of the class. I explained students two concepts mainly, namely participants and processes. The former would be the elements in the sentence (people, animals, or things) doing something. The latter would be the actions (students are familiar with the idea of ‘action words’ to refer to verbs). I also explained that there is a tendency to replace elements with pronouns the second time they appeared throughout a text, not the first time since the reader needs to know who the participants are. Some time, approximately five to ten minutes, was spent to answer students’ questions.

In the first four sessions the number of sentences was higher. First of all, I made sure that students understood what they had to do and secondly, I wanted to make clear the correct word order of English clauses. In addition, the Processes of Doing are more prototypical, and for that reason I included Material, Behavioral, and the concept of Range (see 3.1.8).

In the Processes of Sensing and Saying two sessions were devoted, one to simple processes and the other to projection processes. Finally, Processes of Being took only one session because one type of processes was omitted.

Some excerpts were included so that students could see referentiality in context, in larger contexts, and also participants, as long as the types of processes as they were being introduced to them. Table 43 below summarizes the sessions of instruction with the type of processes

and the semantic roles in each one.

Material Processes	Processes of Doing 1 st Session: something happens [no Range] or somebody does something [Circumstance] <i>Mary ran fast.</i> <i>The girl cried in the afternoon.</i> 2 nd Session: someone causes or modifies something <i>Diana is fixing the fence.</i> 3 rd Session: someone gives something to someone else <i>My father gave me a book.</i> 4 th Session: someone does something [Range] <i>Mary walked the streets of New York.</i> 5 th Session: Revision and passive voice
Mental Processes	Processes of Sensing 6 th Session: someone senses something [+Phenomenon]. Present <i>Students heard the teacher.</i> 7 th Session: someone senses that something/someone... [+Phenomenon]. Present continuous <i>Students are learning a lot.</i>
Verbal Processes	Processes of Saying 8 th Session: someone says something to someone else <i>John told me a pack of lies.</i> 9 th Session: someone says that something/someone... <i>Vivian said that Charles was not coming.</i> <i>Vivian said: "Charles is not coming"</i>
Relational Processes	Processes of Being 10 th Session: intensive <i>Tanisha is big.</i> [attributive intensive] <i>Latoya is my doctor.</i> [identifying intensive] Attributive possessive <i>Trevor has some pencils.</i> Attributive circumstantial <i>Mrs. Moore is in the cafeteria.</i> 11 th Session: Revision

Table 43: Summary of the instructional sessions

There were nine sessions and two for revision, making a total number of eleven sessions. The instruction took the month of November and one day of December, due to the alternate system of the exploratory subjects already explained (section 3.2.2.1).

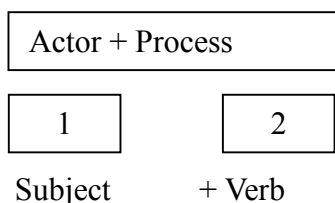
Sessions 1-5: Material Processes

The main features of these processes are:

- Material with middle or effective AGENCY [transitive-intransitive]
- Doing and happenings [actions, events,...] requiring some input of energy
- Characteristics – Roles: Actor, Goal, Recipient, Client, Range. These roles are replaceable with pronouns.

Session one: ‘something happens or somebody does something’ (physical)

Pattern:



In this session I explained to students that some clauses only take two constituents. Students were already familiar with the concepts of Subject and Predicate. As a consequence, it was easy for all levels to grasp the concept. I also added the concept of *manner* and explained that it shows or tells how the action is done, namely by adverbs which in most of the cases end in *-ly*. This is included here because adverbs of manner tend to describe the action words, i.e. verbs, are the first element introduced in school. Also, they are marked morphologically and this marking can be related to the Spanish ending *-mente*. The other two Adjuncts, time and place, would be introduced in the following sessions. These two Adjuncts, contrary to those of manner, are normally realized by Prepositional Phrases.

Meteorological processes were omitted for two reasons: firstly, students did not make mistakes with these types of processes, and secondly, they always take ‘it’ as Theme, since there is no possibility of having a different personal pronoun as subject (see 3.2.3.1). Sentences (151) and (152) are examples provided to students.

(151) The sky darkened. [rapidly]

(152) Mary ran. [fast]

The two constituents were marked and replaced with Subject pronoun.

(153) The sky darkened. It darkened.

(154) Mary ran. She ran.

Exercise 1: Read the following sentences and underline the process (what it is going on) and the constituent that is Actor/Medium. Then, replace the right element with a subject pronoun.

E.g. John ran away. He ran away.

1. The baby grew up.
2. The show began.
3. The door opened suddenly.
4. Henry fell unexpectedly.
5. The glass broke completely.
6. The cheerleaders won.
7. The principal spoke clearly.
8. The workers resigned.
9. The house collapsed.
10. The lump of sugar dissolved.
11. The volcano erupted.

I also explained that the first constituent is the *Subject* in the traditional syntactic terminology. In this way the notion of *Theme* would also be fixed but students would not be exposed to it. I included Behavioral Processes in this group. This type of processes overlaps with Mental and Material Processes and I included them here, since the Actor does something and does not need another constituent to make sense.

(155) The baby cried. He/she/it cried.

(156) The dogs barked. They barked.

Exercise 2: Read the following sentences and underline the two elements. Then replace the correct one with a Subject pronoun.

1. The elephant bellowed.
2. Jonathan chuckled.
3. The kittens meowed.
4. The toddler burped.
5. The lambs bleated.
6. The students whined.
7. The donkey brayed.

8. Manuel giggled.
9. The custodians grunted.
10. The principal simpered.

Feedback: the instruction was delivered in English and in Spanish when the students' level of English was too low to understand the explanation. The main questions posed by students were about number and about gender, whether an animal could be 'she' or 'he'. Ten students used 'he' to replace 'monkey' and the rest used 'it'. 'The principal' was replaced by 'she', probably because in school the principal was a woman.

Another issue was the vocabulary, which was explained to students when necessary, as in the case of words such as 'bellow' and 'bray'.

One 8th grader asked if the sentences could start with a verb. This question was due to negative transfer.

Session two: 'someone does or causes something'

Actor/Agent + Process + Goal

Pattern:

I explained that in this session they would see three elements within the clause. The first one is going to be 'the person/thing that does something'. The second element is going to be 'the action'. And the third element is going to be 'the person/thing affected by the action'. The expression 'the person that does something' was utilized just for pedagogical reasons. Students tend to be confused when too much grammatical terminology is included. The aim of the research is precisely to see if this instruction based on semantics is more effective than instruction based on syntax.

The concept of circumstance of time and place was included. I explained *manner* and *time* and *place* in different sessions because *manner* tends to have a suffix and to be expressed by a single word, while *time* and *place* can have different positions within the clause and most of the time they are realized by a PP.

Again I exemplified the three elements, and substituted the first and the third one with the corresponding Subject/Object pronoun.

1	2	3	+ Location
Somebody	does something	to somebody else	
Subject	Verb	Object	
I		me	
You		you	
It		it	
He		him	
She		her	
We		us	
They		them	

(157) John cleaned the room.

He cleaned it.

(158) Peter cut the cheese into cubes.

He cut it into cubes.

(159) My friends pushed the closet.

They pushed it.

(160) Diana is fixing the fence.

She is fixing it.

(161) The cat broke the glass.

It broke it.

Exercise 3: Read the following clauses and underline the three elements within them. Then replace the first and third elements with a Subject/Object pronoun accordingly.

1. The workers were building a new school.
2. The teacher hit the table.
3. The student shouted at the teacher.
4. The builder chose the color.
5. My neighbor broke the teapot.
6. The cat stole the food.
7. The teenagers painted the school walls.
8. The child's parent made an extra room.
9. Some types of fish develop legs.
10. The protesters created chaos.
11. My neighbor painted the house green. [attribute]
12. The waiter serves the dishes hot. [attribute]
13. Henry put his feet on the table.

14. The tornado destroyed the town.
15. The custodian polished the floor.
16. The family weaved a quilt.
17. The college student opened a bank account.
18. My sister and I baked a birthday cake
19. My siblings made Christmas cards.
20. The building company dug holes all over the place.

Feedback: in this session the main questions were about the length of a unit. Students have a tendency to relate one word to one function. I explained that elements can be realized by more than one word. I also told them to spot and underline the circumstantial elements but not to replace them with any pronoun

I told them to spot the action first, the verb, the process and then what comes before and after is usually the Subject and the Object, with the exception of the circumstances.

Most of the students used 'they' to replace 'the child's parent'; many considered 'the building company', 'the family', and 'the school' as plural; and some used the plural form when replacing 'the student' and 'the builder'.

Two students were absent and made up the following day. When a student was absent, the exercises were done the following day after school when possible because students needed to arrange a ride home.

Session three: 'someone gives something to someone else'

Pattern:	Actor/Giver + Process + Medium + Recipient/Beneficiary			
	1	2	3	4
Subject		Verb	Direct Object	Indirect Object
I			it/them	her/him/them
You				
He/she				
We/they				

The following list of verbs was provided to the students:

give, issue, donate, advance, leave, offer, promise, hand, pass, throw, bring,
deliver, send, rush, cable, lend, loan, lease, rent, and sell

(162) My father gave Mary a book.

(163) The company rented an apartment for the new employee.

(164) The child brought a toy to the group.

I explained the difference between ‘for’ and ‘to’. When someone gives something to someone else, this person receives the good from me/us, and, in this case, it is called ‘the Recipient’ but it does not mean that this person is going to benefit from it. In (165), if I give a present to ‘Peter’, for instance, it is ‘Mary’ who receives it from me, therefore she is the Recipient. The present is for ‘Mary’s brother’, yet ‘Mary’ is going to receive it so she can give it to him.

(165) I gave a present to Mary for her brother. I gave it to Mary for him.

In this clause, Mary’s brother is a Circumstance of Behalf, and Mary is the Recipient.

Exercise 4: Read the following sentences and underline the different elements. Then replace the Subject with a subject pronoun, and the Object with an object pronoun.

1. The nanny ran a bath for the baby.
2. The science teachers bought a present for the new teacher.
3. The librarian gave me the book.
4. The page brought water to the king.
5. The old chief passed some pieces of advice to the new chief.
6. The family sold the house to the first buyer.
7. The students threw a paper ball to the teacher.
8. The Principal Assistant sent an e-mail to the staff.
9. The school donated one hundred books to the library.
10. The parents promised a new bike to their child.

Exercise 5: Read the following text and mark personal pronouns and their antecedents. Try also to underline the verb (process). The excerpt is from *Hatchet* (Paulsen 1996: 1).

Brian Robeson stared out of the window of the small plane at the endless green northern wilderness below. It was a small plane, a Cessna 406-a bush-plane- and the engine was so loud, so roaring and consuming and loud, that it ruined any chance for conversation.

Not that he had much to say. He was thirteen and the only passenger on the plane with a pilot named- what was it? Jim or Jake or something- who was in his mid-forties and who had been silent as he worked to prepare for take-off. In fact since Brian had come to the small airport in Hampton, New York to meet the plane- driven by his mother- the pilot had spoken only five words to him.

“Get in the copilot’s seat.” Which Brian had done. They had taken off and that was the last of the conversation. There had been the initial excitement, of course. He had never flown in a single-engine plane before and to be sitting in the copilot’s seat with all the controls right there in front of him, all the instruments in his face as the plane clawed for altitude, jerking and sliding on the wind currents as the pilot took off, had been interesting and exciting. But in five minutes they had leveled off at six thousand feet and headed northwest and from then on the pilot had been silent, staring out the front, and the drone of the engine had been all that was left. The drone and the sea of green trees that lay before the plane's nose and flowed to the horizon, spread with lakes, swamps, and wandering streams and rivers.

Feedback: students had more trouble in this session due to the length of the clauses and to the number of participants. I told them to first spot the action/process, since it functions as the pivot element within the clause. All the elements around it would be Giver/Recipient/Medium, i.e. the one who gives, the one who receives, and the thing given/received. This is equivalent to dO for the thing and iO for the recipient.

Students also asked about the number of words in the processes and I told them that they could contain several words, the same as the other constituents. All students used ‘they’ for ‘school’ except one who used ‘we’. Regarding the reading passage the main problem was the vocabulary.

Session four: 'somebody does something things/places'

Pattern:	Actor + Process + Ranged/Non-Ranged		
	1	2	3
Subject	Verb	Object/Location	
I		it	
You		them	
He/she...		here/there	

In these cases the Actor is doing something but its actions are not affecting anything.

(166) She walked the streets of New York.

In these cases [ranged] the Range can be replaced by an object pronoun.

She walked them.

There are other cases [non-ranged] where the Range is a Location (direction and/or time). In these types of clauses, the Range can be substituted with 'here' and/or 'there' when the Range is Location, Direction.

(167) He went to Kilburn. He went there.

Exercise 6: Read the following clauses, underline the Actor and Range, and replace them with a suitable personal pronoun.

1. Mary climbed the Mount Everest.
2. The kids walked through the park.
3. Pete and I traveled the country.
4. John walked the alley.
5. My aunt went to Rome.
6. Electrons orbit about the nucleus.
7. The students roamed around the school facilities.
8. The team is going to play football.
9. Ashley will sing a song.
10. Peter drove to Las Vegas.

11. The nurse wandered around the hospital.
12. The police officer was following the suspect.

Feedback: PP were reviewed and some circumstances were added at the beginning of the clauses so students could see their position and function.

Students were also reminded that constituents can take more than one word and this applies to processes as well. Students tended to underline only the lexical verb (see 3.3.3.1 below). Students were also taught that Range is sometimes an extension of the Process, that ‘they go hand by hand’ and it is part of the Process.

Session five: Revision of the previous sessions. The concept of passive voice was also introduced and students were taught how to tell the difference between active and passive voice and why they are used.

(168) Mary told Peter a lie. A lie was told to Peter (by Mary)
 S V iO dO

(169) The students built a new playground. A new playground was built (by the students)
 S V dO

Exercises 7: Read the following sentences, identify the processes and the different constituents, and put them into the passive voice.

1. The teacher hit the table.
2. The student shouted at the teacher.
3. The builder chose the color.
4. My neighbor broke the teapot.
5. The cat stole the food at night.
6. The teenagers painted the school walls
7. The child’s parent made an extra room in the summer.
8. The tornado destroyed the town.
9. The custodians polished the floor in the evening.
10. The family weaved a quilt.
11. The college student opened a bank account.
12. My sister and I baked a birthday cake.
13. The building company dug holes all over the place.
14. The family sold the house in June.

15. The students threw a paper ball.
16. The Principal Assistant sent an e-mail in August.
17. The school donated one hundred books at the fair.

Exercise 8: Read the following text and mark the personal pronouns and their antecedents. Underline the verbs (processes). The excerpt belongs to the book *A Game of Catch* (Wilbur 1994: 1-2).

Monk and Glennie were playing catch on the side lawn of the firehouse when Scho caught sight of them. They were good at it, for seventh-graders, as anyone could see right away. Monk, wearing a catcher's mitt, would lean easily sidewise and back, with one leg lifted and his throwing hand almost down to the grass, and then lob the white ball straight up into the sunlight. Glennie would shield his eyes with his left hand and, just as the ball fell past him, snag it with a little dart of his glove. Then he would burn the ball straight toward Monk, and it would spank into the round mitt and sit, like still-life apple on a plate, until Monk flipped it over into his right hand and, with a negligent flick of his hanging arm, gave Glennie a fast grounder.

They were going on and on like that, in a kind of slow, mannered, luxurious dance in the sun, their faces perfectly blank and entranced, when Glennie noticed Scho dawdling along the other side of the street and called hello to him. Scho crossed over and stood at the front edge of the lawn, near an apple tree, watching.

Feedback: this session was difficult especially for the passive voice explanation. In some cases students did not have enough knowledge about the tenses and verbal forms and some past participles were provided. The main idea was to make students aware of the position of the participants and how one can be highlighted over the other or simply be hidden.

One student used the form 'got' in all the clauses and another student commented that the clauses in the passive voice would be longer.

I reviewed the exercises together to make sure that the main notions (constituents and roles) were clear and students received help with verbal forms.

Sessions 6-7: Mental Processes

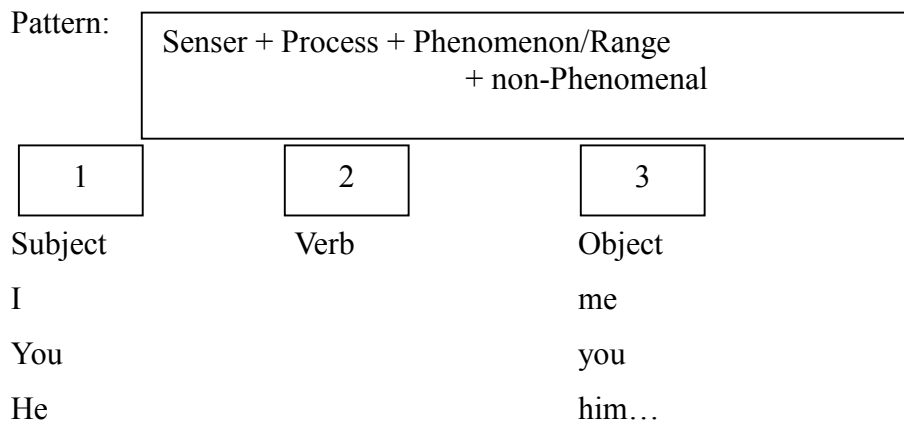
The main features of these processes, in contrast with Material Processes, are:

- Human-like involved (conscious/unconscious). Perceptive [senses]; cognitive [mind]; desiderative [want]; and emotive [feelings] or perceptions, thoughts, desires, and feelings
- Thing or fact
- Tense: present-time and present-in-present
- Two-way processes
- Senser-Phenomenon

The criterion followed to divide these processes into two sessions is that all of them can appear as *projecting* and/or *non-projecting*. In the former case, there is going to be a subordination, and in the latter case, the Range will be expressed by means of a NG.

Session six: ‘someone perceives, feels, desires, and/or thinks something’

Pattern:



In mental processes the verbs can be divided into four groups. The verbs italicized are usually expressed in present tense, namely present simple while the others can be expressed in present-time and in present-in-present, i.e. present continuous.

a. - Perceptive: *see*, *hear*, *overhear*, smell, feel, perceive, sense, strike, occur, hit, assail, glimpse, spot, notice, spy, observe, taste.

b.- Cognitive: *believe*, dream, *forget*, guess, *know*, reckon, *remember*, *suppose*, think, *understand*, convince, strike, accept, acknowledge, anticipate, ascertain, assume, calculate, conclude, conjecture, consider, deduce, discover, doubt, estimate, expect, gather, hold, imagine, infer, learn, mean, presume, presuppose, pretend, realize, reason, recall, recognize,

reflect, suspect.

c. - Desiderative: *want*, desire, wish, *like*, hope, *need*, determine, plan, prefer.

d. - Emotive: there are two groups within them: 1) normal emotive: *like*, *amuse*, *interest*; and 2) high emotive: *terrify*, *thrill*, *devastate*, etc. Fear, dread, rejoice, regret, deplore, marvel, resent, relish, distress, worry, frighten, amuse, annoy, trouble, upset, surprise, devastate, intrigue, mystify, break-up, hate, *loathe*, *detest*, thrill, *love*, terrify, horrify, scare, like, fancy, enjoy, please, *dislike*, tickle, interest, puzzle.

All the modes of perception exist both as Behavior and as Sensing. One significant grammatical difference is that present Behavior would normally be reported as present-in-present (the present progressive or continuous):

(170) What are you doing? I'm watching the last whales of August.

Yet, present sensing would not:

(171) I (can) see the whales in the distance.

- Sensing: only Sensing can involve a Metaphenomenal Phenomenon like in:

(172) I saw that he had already eaten

But not

(173) I watched he had...

Exercise 9: Read the following sentences and underline the different constituents. Then, replace some of them with the corresponding personal pronoun.

1. Mr. Smith discovered the secret.
2. Mrs. Highsmith detests the morning duty.
3. The President wants a new health care system.
4. The Chinese students need extra English lessons.
5. The teacher planned the lessons.
6. I imagined the States differently.
7. The ESL students are learning a lot.
8. The flu frightens the parents.
9. Mrs. Hills forgot the notebook.
10. My siblings and I anticipated the rows.
11. I will consider your offer.
12. We miss Carla very much.

Exercise 10: Read the following text and mark the personal pronouns and their antecedents. Underline the verbs (processes) as well. The excerpt has been taken from the textbook *Grammar and Composition Handbook, grade 8* (2001: 125-6). Some words are underlined because they were explained in footnotes and with illustrations in the textbook. They were considered difficult and, probably, new to learners.

“Ghost of the Lagoon” by Armstrong Sperry

The island of Bora Bora, where Mako lived, is far away in the South Pacific. It is not a large island –you can paddle around it in a single day- but the main body of it rises straight out of the sea, very high into the air, like a castle. Waterfalls trail down the faces of the cliffs. As you look upward, you see wild goats leaping from crag to crag.

Mako had been born on the very edge of the sea, and most of his waking hours were spent in the waters of the lagoon, which was nearly enclosed by the two outstretched arms of the island. He was very clever with his hands; he had made a harpoon that was as straight as an arrow and tipped with fire pointed iron spears. He has made a canoe, hollowing it out of a tree. It wasn’t a very big canoe – only a little longer than his own height. It had an outrigger, a sort of balancing pole, fastened to one side to keep the boat from tipping over.

Feedback: in this session the main remark was about singular/plural (it/them). Students tend to see *them* only as the plural form for humans but not for objects or ideas. Most students favored *it* over *them* because they did not see the more ample scope of *them*. Half of the students used *it* to replace: English lessons; the new plants; news; and bags.

One student asked about the position of the circumstantial elements and they were explained and reviewed.

Session seven: ‘someone senses that something/someone...’

Pattern:

Senser + Process + that Phenomenon

1	2
Subject	Verb that...
I	
You	
He	

Exercise 11: Read the following sentences and underline the different constituents. Then, replace some of them with the corresponding personal pronoun.

1. Henry thought that the students enjoyed the play.
2. Jennifer saw that the cat had eaten.
3. The tutor heard that the children were playing in the park.
4. Parents want their children to be perfect.
5. The Superintendent hopes for Tanisha to finish by May.
6. Students believe that teachers were never young.
7. Teenagers are convinced that Hanna Montana will show up.
8. The family considered the foreign student to be a friend.
9. The girl understood that the instructor was absolutely right.

Exercise 12: Read the following text and mark the personal pronouns and their antecedents. Underline the verbs (processes). This excerpt also belongs to the textbook *Grammar and Composition Handbook, grade 8* (Glencoe 2001: 401-2).

“The Dog of Pompeii” by Louis Untermeyer

Tito and his dog Bimbo lived (if you could call it living) under the wall where it joined the inner gate. They really didn’t live there; they just slept there. They lived anywhere. Pompeii was one of the gayest of the old Latin towns, but although Tito was never an unhappy boy, he was not exactly a merry one. The streets were always lively with shining chariots and bright red trappings; the open-air theaters rocked with laughing crowds; sham battles and athletic sports were free for the asking in the great stadium. Once a year the Caesar visited the pleasure city and the fireworks lasted for days; the sacrifices in the forum were better than a show.

But Tito saw none of these things. He was blind – had been blind from birth. He was known to everyone in the poorer quarters. But no one could say how old he was, no one remembered his parents, no one could tell where he came from. Bimbo was another mystery.

Feedback: there were some problems with vocabulary (it was explained) and with the processes since some of them contained lexical and auxiliary verbs.

Sessions 8-9: Verbal Processes

Session eight: 'someone says something to someone else'

Pattern:

Sayer + Process + Verbiage + Receiver/Addressee

1	2	3	4
Subject	Verb	Indirect Object	Direct Object
He	told	me	a pack of lies.

Verbs: say, tell, acknowledge, add, admit, affirm, announce, assert, bet, boast, claim, comment, concede, confess, confirm, convey, convince, declare, deny, disclose, exclaim, explain, forecast, guarantee, hint, insist, maintain, mention, object, persuade, predict, proclaim, promise, pronounce, prove, protest, remark, repeat, reply, report, state, submit, suggest, swear, testify, vow, warn, ask, ascertain, elicit, enquire, query, question, advice, answer, demonstrate, disclose, explain, indicate, inform, notify, point out, predict, prove, show, argue, debate, discuss, negotiate.

Although this is a long list, some of the verbs were very familiar to the students because they were cognates and because some others were recurrent in the content area subjects, such as 'demonstrate', 'predict', and 'declare'.

Examples:

(174) The witness said the truth. He/she said it.

(175) The jury read the verdict. They read it.

Exercise 13: Read the following sentences, underline the different constituents and then replace the right ones with the corresponding personal pronoun.

1. The criminal admitted the crime.
2. The President announced the new reform to the journalists.
3. The girls explained the lesson to the boys.
4. John told his mother a pack of lies.
5. The receptionist announced the visitor.
6. The seller guaranteed Mrs. Allen the final price.
7. The child revealed the secret place to his friends.
8. The teacher showed the answer to the students.

9. Noam Chomsky recently gave a conference to the new students at George Town.

10. The mayor notified the decision to the Chamber of Commerce.

Feedback: the explanation of some words was necessary.

A reminder needs to be done at this point. Since the aim of the research is to improve students' knowledge on vocabulary, syntax, etc., they received help when they had problems while completing the exercises. At this stage help was provided.

Session nine: 'someone says that... vs. someone says: "...'"

Pattern:

Sayer + Process + [that] Verbiage

1

2

3

Subject

Verb

Direct Object

Exercise 14: Read the following sentences and spot the different constituents, tell whether the sentence is direct or indirect, and replace some of the participants with the corresponding personal pronoun.

1. Caroline said: "I'm happy"
2. The newspaper said that prices were going up.
3. The student says: "How strange!"
4. Neville predicted that the harvest was going to be excellent.
5. The Rabbit asked the Skin Horse: "What is REAL?"
6. The citizens complain about the school system to the Board of Education.
7. The general warned that the military might switch its support to another party.
8. Vivian commented: "This is not what I had in mind"
9. The cook admitted that he had stolen the meat.
10. The wizard remarked: "You are not following instruction to the letter!"

Feedback: students were a little confused about direct and indirect style and how to use the quotation marks. There were still some questions about the length of constituents. This was again explained.

Existential Processes were omitted since there is no initial Subject that could be replaced with a personal subject pronoun. Besides it is a fixed structure and students would be exposed

to it later during the school year.

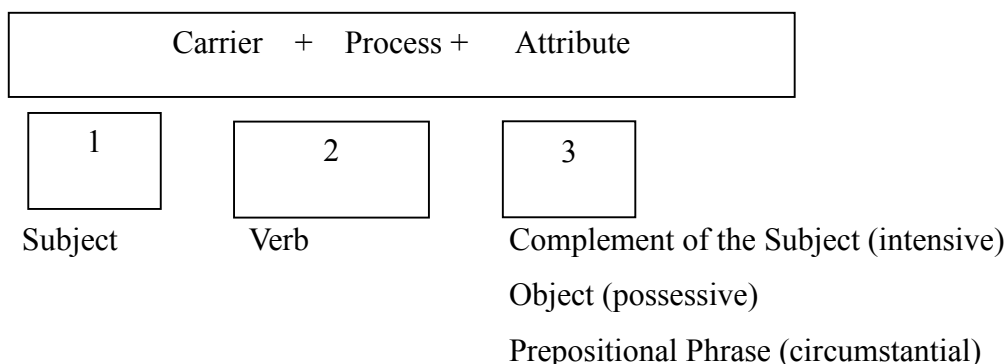
Session 10: Relational Processes

The main features for this type of processes are:

- The use of linking verbs vs. lexical verbs
- No passive voice or reverse order
- For pedagogical reasons *identifying relational processes* have been omitted. The study of these processes has not much interest for the purposes of my research. The replacement with personal pronouns would be absurd, as in *Dr. Jekyll is Mr. Hide*, the result being *He is him*.

Session ten: 'somebody is X', 'somebody has X', 'somebody/something is at time/place'

Pattern:



(176) Manuel is not *a baby*.

He is not a baby.

(177) Some granite has *large crystals*.

It has large crystals.

(178) The meeting is *at nine*.

It is at nine.

Linking verbs that are not 'actions': possessive (have, own, belong, possess); circumstantial (be, take place, old, celebrate), and intensive (be, cost, weight, look, become, sound, turn, appear, seem, and feel).

Exercise 15: Read the following sentences and identify the different elements. Then, replace the right one with the corresponding personal pronoun.

1. Sandra is not a boy.
2. Postcards cost one dollar.
3. My suitcase weighs thirty pounds.

4. The new President is Obama.
5. Some reptiles are snakes, lizards, and turtles.
6. The students had no money for lunch.
7. Mrs. Parker is the new teacher.
8. These books belong to the school.
9. The teachers are in the library.
10. The movie is at 8:00.

Feedback: some students replaced ‘the new president’ and ‘the new principal’ with ‘it’.

Session eleven: Revision of the previous sessions

Exercise 16: Read the following sentences; underline the different constituents; replace the right one(s) with a personal pronoun; and mark the different syntactic functions.

1. The houses collapsed after the earthquake.
2. The volcano erupted in summer.
3. The three lambs bleated in the field at night.
4. Manuel and Luis giggled during the science lesson.
5. The children’s parent was making an extra room in the attic.
6. The custodians polished the floor in the evening.
7. My three siblings were making Christmas cards in school.
8. Last Monday, the family finally sold the house to the first buyer.
9. The Principal Assistant sent an e-mail to the staff.
10. The students roamed around the school facilities.
11. The police officer followed the suspect for an hour.
12. Charles didn’t understand the problem.
13. Mr. Pope saw the book bags in the hallway.
14. The teachers were planning the lessons for the new school year.
15. The custodian was regretting his decision.

Exercise 17: Read the following text and mark the personal pronouns and their antecedents. Underline the verbs (processes) as well. This excerpt belongs to the textbook *Grammar and Composition Handbook, grade 8* (Glencoe 2001: 102).

While the explorers of the American West faced many dangers in their travels, at least game and water were usually plentiful; and if winter with its cold and snow overtook them, they

could, in time, expect warmth and spring. For Matthew Henson, in his explorations with Robert Peary at the North Pole, this was hardly the case. In many ways, to forge ahead into the icy Arctic took far greater stamina and courage than did the earlier explorers' travels, and Henson possessed such hardiness. As Donald MacMillan, a member of the expedition [journey toward a goal], was later to write: "Peary knew Matt Henson's real worth.... Highly respected by the Eskimos, he was easily the most popular man on board ship.... Henson... was of more real value to our Commander than [expedition members] Bartlett, Marvin, Borup, Goodsell and myself all put together. Matthew Henson went to the Pole with Peary because he was a better man than any one of us."

Feedback: all in all students were able to do the exercises. There were still some questions about 'it' and 'them' such as in number fourteen for 'the lessons' and 'the book bags' in number thirteen.

Two students found the paragraph difficult. These students had a lower level even though they were 8th graders.

3.2.3.4.2 Learning objectives

The complete experiment pursued raising language awareness especially of language structures, patterns, and relationships among elements within the clause. In every session the objectives were different, albeit related. The specific learning objectives were developed by the researcher/teacher for each session of the pedagogical treatment, and were fulfilled through the preparation of explanations and tasks. It was thought that students' completion of these learning objectives would result in a better comprehension of personal pronouns and the concept of *referentiality*. Likewise, one could expect a better comprehension and relationship between roles and syntactic functions and word order in the English language. Ideally, students would enlarge their vocabulary and they would improve their reading comprehension, resulting in a better writing production in the L2 as well.

The learning objectives designed for each session are specified below. Some of them overlap as is the case with enlarging vocabulary, relationship between semantics and syntax, and word order.

Session one (Monday 11/03/2010): at the end of the session students will

- be able to distinguish elements within the clause, namely participant and processes

- be able to identify Actor = Subject; relate that most of the times the Subject holds first position in the sentence; and be able to replace it with a subject personal pronoun
- be able to identify Material Processes = the verb being the second constituent in the clause
- be able to tell the word order SV in declarative sentences
- be able to identify the Circumstance be it of manner, place, or time

Session two (Wednesday 11/05/2010): at the end of the session students will

- have enlarged vocabulary, mainly verbs
- be able to tell the three main parts of the sentence, i.e. Actor + Material Processes + Goal and relate them to their corresponding syntactic functions, namely Subject + Verb + Object and their subject/object personal pronouns
- have reinforced word order SVO

Session three (Friday 11/07/2010): at the end of the session students will

- be able to identify Medium = Direct Object and Recipient/Beneficiary = Indirect Object
- understand the difference between 'to' and 'for'
- have reinforced SVO word order
- have enlarged the number of verbs expressing translation of goods

Session four (Tuesday 11/11/2010): at the end of the session students will be able

- to use object personal pronouns *him/her/it/them*
- to use *it/them* to replace more than one word
- to use *it/them* when they are not substituting living things but things and/or ideas
- to distinguish Prepositional Phrases indicating location

Session five (Thursday 11/13/2010): since this is a revision of the previous sessions, all the learning objectives apply here plus

- reinforcing the ability of students to distinguish between the passive and active voice
- understanding the reasons behind the use of the passive voice

Session six (Monday 11/17/2010): at the end of the session students will

- have enlarged vocabulary (not only *like, think, want*)
- be able to identify Senser = Subject
- be able to identify Mental Processes = Verb

- be able to identify Phenomenon = Object
- be able to recognize some verbs that are used in present time vs. present-in-present

Session seven (Wednesday 11/19/2010): at the end of the session students will be able to

- recognize that some verbs are used in present-in-present tense
- understand projection of that-propositions
- identify the circumstances within the sentence
- substitute clauses, ideas, and facts in general longer than one or two words with a personal pronoun

Session eight (Friday 11/21/2010): at the end of the session students will

- have enlarged vocabulary, not only 'say' and 'tell'
- be able to identify Sayer = Subject
- be able to identify Verbal Processes = Verb
- be able to identify Verbiage = Direct Object
- be able to identify Receiver/Addressee = Indirect Object
- be able to distinguish between Direct Object and Indirect Object

Session nine (Tuesday 11/25/2010): at the end of the session students will be able

- to replace clauses and phrases with pronouns
- to identify the 'that clause' with the Object
- to distinguish between direct speech and indirect speech
- to utilize quotation marks for direct speech

Session ten (Thursday 11/27/2010) at the end of the session students will

- have learned some linking verbs
- be able to distinguish between linking verbs and lexical verbs
- be able to identify the third element of these sentences
- be able to identify Carrier = Subject
- be able to replace only the first element in this type of sentences
- recognize Prepositional Phrases

Session eleven (Monday 12/01/2010): this session was dedicated to review the previous contents, thus all the objectives mentioned above apply.

3.2.4 Data collection

All data was collected through the student's writing exercises and transcribed on the computer. The schedule for the collection of data was to coincide with a pre-holiday time: winter break; spring break; and summer holidays. In this sense, students had received input and were ready to show their learning and progress in a more accurate way.

Exercises were manifold and went from construed to open, both in the pre/post-tasks and the follow-ups. The first two exercises were structured where subjects were asked to perform some grammatical manipulation. The third exercise was neither structured nor free but guided in the sense that subjects, after having read an excerpt, had to find the antecedent of some personal pronouns. Finally, exercise four was a free composition where the only controlled element was to establish a common topic for all the subjects (Larsen-Freeman 1999: 27-9). In the pre- and post-tasks a third exercise was provided to test students' comprehension of the *passive voice*.

The number of words for the compositions was based on the number of words required for ELL students when taking the ACCESS test and for the criteria of other exams such as FCE where the number of words is 120-150 in the first writing and 120-180 in the second. For the CAE the number goes up to 260 but this is a much higher level than the level of middle school students. Since the research was conducted in USA, AmE spelling was utilized for the exercises so that some students would not notice the difference and consequently think there were spelling mistakes.

3.2.4.1 Pre-tasks

Exercises were collected during the last week of October 2010. They were completed during the first 15/20 minutes of the session (overall four), which were devoted to a warm-up activity. There were four exercises and in the following order:

Exercises 1: in the following sentences, underline the personal pronoun and draw an arrow to connect the pronoun to its antecedent. The sentences have been taken from *Language Network Series. Grade 7* (McDougal 2001: 67).



E.g.: Stories about Pecos Bill claim that he was America's greatest cowboy.

1. Some tall tales are about real people, but the stories about them are exaggerated.

2. Other characters in tall tales are imaginary, but they are fascinating!
3. For example, steel-driving man John Henry challenged a steam drill to a contest and beat it.
4. Johnny Appleseed planted seeds with the hope they would sprout, grow, and provide fruit for new settlers.
5. Slaves, yearning for freedom, told stories of a time when they could fly.
6. Sally Ann Thunder Whirlwind claimed she could defeat a grizzly bear and make a lasso out of six rattlesnakes.
7. Old coyotes can remember when Bill was little and lived with them.
8. Bill tamed a wild mustang and named him Widow-maker.
9. Some people say that Bill once caught a cyclone and rode it around the country.
10. When Bill met Sue, she was riding a catfish as big as a whale.

Exercise 2: in the following sentences, underline the different constituents and label them with Subject, Verb, and Object. Then replace the right ones with a subject or an object pronoun. Sentences were taken from Matthiessen (1995).

E.g.: Charles didn't understand the problem. He didn't understand it.
 S V O

1. My neighbor broke the teapot.
2. The cheerleaders danced during the game.
3. The donkey brayed in the field.
4. The students threw a paper ball to the teacher.
5. Electrons orbit about the nucleus.
6. All eighth graders enjoyed the dance.
7. The newspaper said that prices were going up.
8. The receptionist announced the visitor.
9. The cat stole the food.
10. The parents promised a new bike to their child.

Exercise 3: Read the information in the box and answer the questions below. Use the present passive, personal pronouns, and write complete answers. The exercise belongs to *Step Forward Language for Everyday Life* (Podnecky 2007: 58).

Saturday Pool Parties at the Community Center this Summer!
Join us every Saturday from June to September!

Park opens: 10:00 am
Pool games: 2:00 pm
Pizza delivery: 4:45 pm

Dinner: 5:00 pm
Movies: 7:00 to 8:30 pm
Pool closes: 9:00 pm

E.g.: When is the park opened for the pool parties?

It's opened at 10:00.

1. When are the pizzas delivered?

2. When is dinner served?

3. When are the movies shown?

4. When is the pool closed?

Exercise 4: Read the following text and answer the questions below. This excerpt belongs to the book *Bridge to Terabithia* (Paterson 2003: 2).

- (1) **Jess** tiptoed out of the house. The place was so rattly that
(2) it screeched whenever you put your foot down, but Jess had
(3) found that if **you** tiptoed, it gave only a low moan, and he
(4) could usually get outdoors without waking Momma or
(5) Ellie or Brenda or Joyce Ann. May Belle was another
(6) matter. She was going on seven, and she worshipped **him**,
(7) which was OK sometimes. When you were the only boy
(8) smashed between four sisters, and the older two had
(9) despised you ever since you stopped letting **them** dress you
(10) up and wheel you around in their rusty old doll carriage,
(11) and the littlest one cried if you looked at her cross-eyed, it
(12) was nice to have somebody who worshiped you. Even if **it**
(13) got unhandy sometimes.

1. What gender is Jess? How do you know it?
2. Who is 'you' in line (3) referring to or replacing?
3. Who is 'him' in line (6) referring to or replacing?
4. Who is 'them' in line (9) referring to or replacing?
5. What is 'it' in line (12) referring to or replacing?


Exercise 5: Writing

There is a new person moving to your neighborhood. How would you like the neighbor to be like? (200 words) (designed by the teacher to relate to subjects)

3.2.4.2 Post-tasks

Exercises were collected during the second week of December 2010 the same way as the pre-tasks.

Exercise 1: Read the following sentences, underline the personal pronoun(s) and then draw a line to the antecedents. These sentences belong to *Grammar and Language Workbook, grade 7* (Glencoe 2000: 109-10).

E.g.:  Norway has many mountains and fiords. It has little farmland.

1. Many people knew little about Norway before the Olympics. They learned more about it by watching the Olympics on television.
2. Much of Norway is covered by mountains. They make transportation difficult.
3. The Norwegians invented the sport of skiing. They often ski daily during the long winter.
4. Thousands of skiers participate in the annual Birkerbeiner ski race. Many people consider it the world's toughest ski race.
5. After an Olympic career, Sonja Henie made many movies. They were popular around the world.
6. Sigrid Undset, a Norwegian author, wrote many novels. They often describe life in the middle Ages.

7. In 1928 Undset won the Nobel Prize for literature. It is one of the world's most prestigious awards.
8. Vikings left traces in Newfoundland and Canada. They called this area Vinland.
9. If you happen to see your parents this weekend, give them my best regards.
10. Abigail helps her mother. She carries things from the house.

Exercise 2: Read the following sentences and underline the different constituents. Then label them as Subject, Verb, and Object(s). Then, replace the right ones with the correct personal pronoun. The sentences are from Matthiessen (1995).

E.g.: The show began at 9:00 pm. It began at 9:00 pm.

S V O

1. The students whined all the time.
2. The school donated one hundred books at the fair.
3. The tornado destroyed the town.
4. The nurse wandered around the hospital.
5. In summer, the teenagers painted the school walls.
6. Last night, Marina overheard the news.
7. Sixth graders loved the club day.
8. At 9:00, the receptionist announced the visitor.
9. Last week, John explained to his mother the white lie.
10. The teachers are in the library.

Exercise 3: Read the following sentences and write in front of them whether they are passive (P) or active (A). Then draw a line under the receiver of the action in the passive ones. This exercise is from *Grammar and Language Workbook, grade 7* (2000: 97-8).

E.g.: P The heavens were studied by ancient astronomers.

1. A solar eclipse was predicted by Thales of Miletus in 585 B.C.
2. In 1543, a new theory was suggested by a Polish astronomer, Copernicus.
3. In this theory, Earth and other planets orbited the sun.
4. The use of Copernicus's theory was forbidden by religious leaders until 1757.

5. _____ We call Mars “the Red Planet”.
6. _____ This planet was named by ancient Romans after the red god of war in Roman mythology.
7. _____ In 1976, the United States landed Viking I near the planet’s equator.
8. _____ Photographs of the surface of Mars were sent back to Earth by both Viking I and Viking II.
9. _____ Two big booster rockets launch the space shuttle into orbit.
10. _____ It uses its wings to land like a glider.

Exercise 4: Read the following text and answer the questions below. The excerpt belongs to the book *Bridge to Terabithia* (Paterson 2003: 72-3).

- (1) Christmas was almost a month away, but at Jess’s house the girls were obsessed with **it**.
- (2) This year Ellie and Brenda both had boyfriends at the consolidated high school and the
- (3) problem of what to give them and what to expect from them was cause of endless
- (4) speculation and fights. Fights, because as usual, their mother was complaining that there
- (5) was hardly enough money to give the little girls something from Santa Claus, let alone a
- (6) surplus to buy record albums or shirts for a pair of boys **she**’d never set eyes on.
- (7) “What are you giving your girlfriend, Jess?” Brenda screwed her face up in that ugly way
- (8) she had. He tried to ignore her. He was reading one of Leslie’s books, and the adventures
- (9) of an assistant pig keeper were far more important to **him** than Brenda’s sauce.
- (10) He tried to figure out later what had made him so angry. Partly, of course, it made him
- (11) furious that anyone as dumb as Brenda would think she could make fun of Leslie. Lord,
- (12) it hurt his guts to realize that it was Brenda who was his blood sister, and that really, from
- (13) anyone else’s point of view, he and Leslie were not related at all. Maybe, he thought, **I**
- (14) was a foundling, like in the stories. Way back when the creek had water in **it**, I came
- (15) floating down it in a wicker basket waterproofed with pitch.

1. What does ‘it’ in line (1) refer to?
2. Who is ‘she’ in line (6) referring to?
3. Who is ‘him’ in line (9) referring to?
4. Who is ‘I’ in line (13) referring to?

5. What does 'it' in line (14) refer to?

Exercise 5: Writing

You and your best friend are going on a trip. Write about it, place, time, weather, how you are going to get there, who you are going with, things you plan to do, and anything else you want to add. (200 words) (designed by the researcher)

3.2.4.3 Follow-ups

Some exercises were collected after the experiment to see if subjects had retained some of the instruction and if it had triggered some other structures.

During the first week of March exercises were collected using the first 15/20 minutes of the sessions as a warm-up activity. During the second week of June, just after the EOGs exams (End of Grade exams or final exams mandated by the state) the exercises from the follow-up 2 were collected. In this way, the activity would not interfere with the official exams and students would be more relaxed.

3.2.4.3.1 Follow-up 1

Exercise 1: Read the following sentences, underline the personal pronoun(s) and draw an arrow to its/their antecedent(s). The sentences are from *Grammar and Language Workbook, grade 7* (Glencoe 2000: 109-10) and *Language Network Series. Grade 7* (McDougal Littell 2001: 53-5).

←
E.g.: Trygve Lie is another famous Norwegian. He was the first secretary general of the United Nations.

1. Puccini and Verdi wrote many great operas. They wrote them in Italian.
2. Unlike the United States, Norway is a kingdom. It also has a primer minister.
3. Trygve Lie was elected to the top post at the United Nations in 1946. He led it for seven years.
4. In northern Norway live the people known as Sami, or Lapp. They have raised reindeer for hundreds of years.

5. A famous Viking is Leif Ericsson. Many historians believe him to be the first European to land in North America.
6. Oliver Twist didn't have any parents; you could call him an orphan.
7. Oliver Twist's workhouse treated him badly.
8. Because of the horrid conditions at the workhouse, Oliver Twist ran away from it.
9. Fagin took care of other boys as well, but in return, he expected them to steal.
10. *Suffrage* is an unusual word, but it simply means the right to vote.

Exercise 2: Read the following sentences, underline the different constituents, label them according to their syntactic function (Subject, Verb, and Object), and then replace the right ones with a personal pronoun. These sentences are from *Language Network Series. Grade 7* (McDougal Littell 2001: 1-7).

E.g.: Last night, Sophie slept very well. Last night, she slept very well.

A S V A

1. Long ago inventors introduced the steam engine.
2. The teacher disclosed the secret to Stephen.
3. Last week, Marina forgot the car keys at work.
4. Solar energy cells can heat homes even in winter.
5. Participants in these sports sometimes ignore the danger.
6. People walk through the forest with little trouble.
7. Flowering plants bloom all year long.
8. During the EOG students didn't say a word.
9. Mrs. Smith didn't see the student in the hallway at 5:00 pm.
10. Every night the nanny would prepare the hot coco for the kids.

Exercise 3: Read the following text and answer the questions below. The excerpt is from *Bridge to Terabithia* (Paterson 2003: 120-1).

- (1) Jess was awake, jerked suddenly into consciousness in the black stillness of the house. He sat up, stiff
- (2) and shivering, although he was fully dressed from his windbreaker down to his sneakers. He could
- (3) hear the breathing of the little girls in the next bed, strangely loud and uneven in the quiet. Some
- (4) dream must have awakened him, but he could not remember it. He could only remember the mood

(5) of dread it had brought with **it**. Through the curtainless window he could see the lopsided moon with
 (6) hundreds of stars dancing in bright attendance.
 (7) It came into his mind that someone had told **him** that Leslie was dead. But he knew now that that had
 (8) been part of the dreadful dream. Leslie could not die any more than he himself could die. But the
 (9) words turned over uneasily in his mind like leaves stirred up by a cold wind. If he got up now and
 (10) went down to the old Perkins place and knocked on the door, **she** would come to open it, P.T.
 (11) jumping at her heels like a star around the moon. It was a beautiful night. Perhaps **they** could run
 (12) over the hill and across the fields to the stream and swing themselves into Terabithia.
 (13) They had never been there in the dark. But there was enough moon for **them** to find their way into
 (14) the castle, and he could tell her about his day in Washington. And apologize.

1. What does the second 'it' in line (5) refer to?
2. Who does 'him' in line (7) refer to?
3. Who does 'she' in line (10) refer to?
4. Who does 'they' in line (11) refer to?
5. Who does 'them' in line (13) refer to?

Exercise 4: Writing

Four new students have just come to your class. Tell them what they need to know in order to get by in school and in the community. (200 words) (designed by the researcher)

3.2.4.3.2 Follow-up 2

Exercise 1: Read the following sentences, underline the personal pronoun(s) and draw a line to its antecedent. These sentences are from *Grammar and Language. Workbook, grade 7* (Glencoe 2000: 105-6).



E.g.: I looked everywhere for Sarah. She was nowhere to be found.

1. Jerod knocked over the paint cans. Then he picked them up.
2. We had lime beans for dinner. I didn't eat any because I don't like them.
3. Peter mowed lawns last summer. He earned enough money to buy a bike.
4. Pat and Mariko walked to the movie. They were tired when they got home.
5. Dad spoke to James and me about the mess. He told us to clean it up.
6. The choir recital lasted more than three hours. It had two intermissions.

7. Kangaroos are interesting. They nourish their young in pouches.
8. Claire plays the piano and the trumpet. She plays them equally well.
9. Our campground was hidden behind many trees. It was difficult to find.
10. Alberto and I joined the science club. We go every Friday after school.

Exercise 2: Read the following sentences, underline the different constituents, and label them as Subject, Verb, or Object. Then replace the right ones with a suitable personal pronoun. These sentences are from *Language Network Series. Grade 7* (McDougal Littell 2001: 5-44).

E.g.: Africans could not understand this outspoken young woman.
 S V O

They could not understand her.

1. In Australia the sport of wakeboarding is becoming very popular.
2. Colorful parrots eat fruits and nuts from the trees.
3. Last night, the famous chef gave the cooks their trophy.
4. In October we looked at the healthy crops.
5. Hikers don't hear sounds of beeping horns in the country.
6. At the gas station the attendant said he would send a tow truck.
7. Last week, Mr. Swanson showed the students a power point of his trip.
8. The tourists loved the sight of the Eiffel Tower at night.
9. At the airport, Ted gave Dad his luggage.
10. The guide gave members of the group the ticket for the boat ride.

Exercise 3: Read the following text and answer the questions below. The excerpt belongs to the book *Bridge to Terabithia* (Paterson 2003: 37-8).

- (1) Because school had started on the first Tuesday after Labor Day, it was a short week. It was a good thing
- (2) because each day was worse than the day before. Leslie continued to join the boys at recess, and every day
- (3) she won. By Friday a number of the fourth- and fifth-grade boys had already drifted away to play King of
- (4) the Mountain on the slope between the two fields. Since there were only a handful left, **they** didn't even
- (5) have to have heats, which took away a lot of the suspense. Running wasn't fun anymore. And it was all
- (6) Leslie's fault.
- (7) Jess knew now that he would never be the best runner of the fourth and fifth grades, and his only consolation

(8) was that neither would Gary Fulcher. They went through the motions of the contest on Friday, but when **it**
 (9) was over and Leslie had won again, everyone sort of knew without saying so that it was the end of the races.
 (10) At least it was Friday, and Miss Edmunds was back.
 (11) The fifth grade had music right after recess. Jess had passed Miss Edmund in the hall earlier in the day, and
 (12) she had stopped him and made a fuss over him. "Did you keep drawing this summer?"
 (13) "Yes'm."
 (14) "May **I** see your pictures or are they private?"
 (15) Jess shoved his hair off his red forehead. "I'll show you 'um."
 (16) **She** smiled her beautiful even-toothed smile and shook her shining black hair back off her shoulders.
 (17) "Great!" she said. "See you."
 (18) He nodded and smiled back. Even his toes had felt warm and tingly.
 (19) Now as he sat on the rug in the teachers' room the same warm feeling swept through him at the sound of
 (20) her voice. Even her ordinary speaking voice bubbled up from inside her, rich and melodic.
 (21) Miss Edmund fiddled a minute with her guitar, talking as she tightened the strings to the jingling of her
 (22) bracelets and the thrumming of chords. She was in her jeans as usual and sat there cross-legged in front of
 (23) **them** as though that was the way teachers always did.

1. Who does 'they' in line (4) refer to?
2. What does 'it' in line (8) refer to?
3. Who does 'I' in line (14) refer to?
4. Who does 'she' in line (16) refer to?
5. Who does 'them' in line (23) refer to?

Exercise 4: Writing

Write a story based on the pictures below. You can use some or all of them. (200 words)
 (designed by the researcher. www.google.com/images)





Illustration 1: Pictures for composition number four

To summarize, section 3.2 has presented the classroom research designed, which was based on Halliday's SFG. Thus Semantic Roles and type of Processes mainly were used to provide students' knowledge about language, namely clause structure, participants, and semantic roles. This explicit teaching was done with the main aim of improving students' use of pronouns. This research was conducted throughout an academic year (2010-2011) in a middle school of North Carolina. ESL students from two counties took part in it, as well as some Native speakers (grades 6th to 8th), in order to compare their knowledge about language and the linguistic strategies that both types of students employed.

In the next section, I present the results of these exercises, as well as comments on some

grammatical aspects and students' strategies when dealing with them. The section is divided into five parts: anaphoric reference; groups; reading; writing; and the passive voice. Each part corresponds to one type of exercise.

3.3 Results

3.3.1 Preliminary considerations

I would like to start this part with a distinction made by J. C. Richards between *error* and *mistake*. The former results from incomplete knowledge whereas the latter is caused by lack of attention, fatigue, carelessness, or some other aspect of performance. Errors are sometimes classified according to vocabulary (lexical error), pronunciation (phonological error), grammar (syntactic error), misunderstanding of a speaker's intention (interpretive error), production of the wrong communicative effect, e.g. through the faulty use of a speech act or one of the rules of speaking (pragmatic error) (1996: 127).

Another concept related to *error* is the difference made by Pain between *systematic* vs. *non-systematic* production of errors. In the first case, learners are unable to settle a rule and though they may have seemingly arrived at a hypothesis, they are not able to apply it with any degree of consistency in handling their performance data. The second case is what has been previously called as *mistake* and their production by learners may be produced due to a lack of attention, not to a lack of knowledge (1988: 203).

In the present research I use the term *error*, since the type of exercises were different and students' results show a lack or incomplete knowledge in the topics asked. There was also a lack of consistency in the use of personal pronouns across tasks. Nevertheless, it is sometimes difficult to distinguish between *error* and *mistake*, and I prefer the former to make sure students are able to settle the corresponding rule and apply it consistently.

The purpose of looking into students' errors is not so much to focus on errors as to see which linguistic areas are problematic or where students struggle, sometimes without being aware of it. The number of errors will determine whether it is worth delving into those areas or not. An example is the use of personal pronouns that, basic as it might seem, causes problems to students in tracking participants and in using them in a consistent manner when producing a written text. By looking into these *partially unlearned* areas teachers and researchers could

better understand learners' language development and how to modify instruction and adapt the curriculum in order to better serve students.

This section is divided into five subsections, each one dealing with the type of exercises students worked on. The first one deals with *anaphoric reference*, where the students had to relate a personal pronoun with its antecedent. The second one deals with *groups, syntactic functions*, and *personal pronoun replacement*, since students were asked first to underline groups, basically NG, VG, and AdvG, and then to label those groups according to their syntactic function (S, V, O) within the sentence and finally replace some of them with a personal pronoun (Subject and Object). The third subsection is titled *reading*; it corresponds to the tasks where students had to locate the antecedent of certain personal pronouns within a reading passage. The fourth subsection is titled *writing*, and students were asked to produce short narrative texts. And finally, the fifth deals with the *passive voice*.

3.3.2 Anaphoric reference

In these exercises the answers of students were marked as wrong when only the personal pronoun or a group was marked, since students were asked not only to underline the personal pronoun but also to relate it to its antecedent as example (179) shows. Locating the personal pronoun(s) within the sentence was not a problem for students.

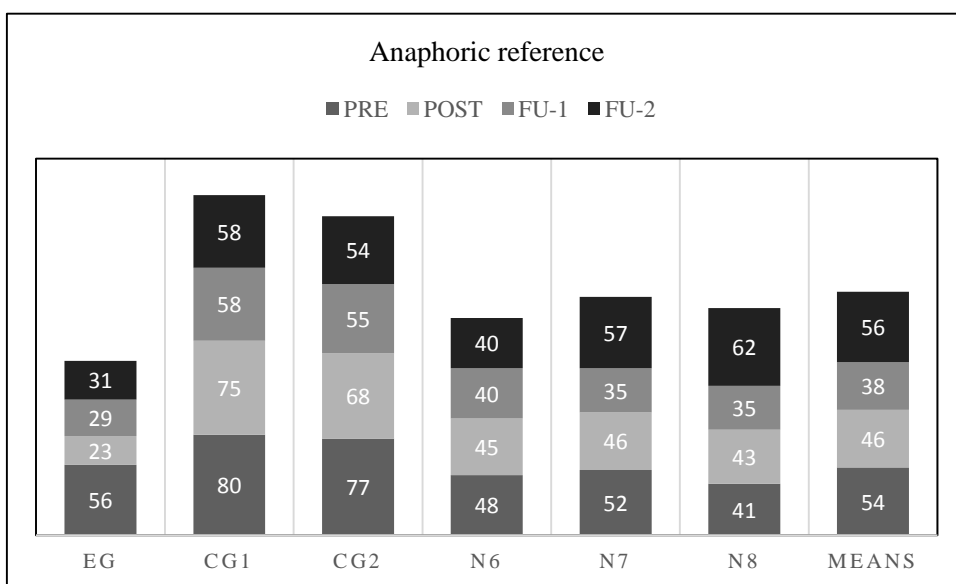
(179) Some tall tales are about real people, but the stories about them are exaggerated.

In all the exercises, but the writing one, the results have been rounded up from 0.5 and expressed in percentages of errors. For example, EG in the post-tasks had 22.9 percentage of errors and it was rounded to 23, as displayed in table 44.

Table 44 and graph 1 below show the percentage of errors across the groups and tasks and their representation in a bar graph. In graph 1 the means have been added.

	PRE	POST	FU-1	FU-2
EG³¹	56	23	29	31
CG1	80	75	58	58
CG2	77	68	55	54
N6	48	45	40	40
N7	52	46	35	57
N8	41	43	35	62

Table 44: Percentage of errors in finding the antecedent in anaphoric reference



Graph 1: Percentage of errors in relation to means

If we look at the effects of the instruction in terms of chi-square and p-value the results are shown in table 45 below.

Anaphoric reference	EG and CG1 p-value	Chi-square	EG and CG2 p-value	Chi-square
Pre- and post-tasks	0.004715	7.9858	0.004715	7.9858
Pre- and follow-up2	0.33926	0.9132	0.407339	0.6866

Table 45: Anaphoric reference results in chi-square and p-value terms

³¹ EG stands for Experimental Group, CG stands for Control Group, and N stands for Native speaker followed by a number indicating the grade.

P-value (at $p < 0.05$) shows how the result is significant in the post-tasks and not significant in the follow-up2. The classroom instruction took place in November 2010 and the follow-up2 in June, and this distance in time is a clear indicator that the knowledge gained by the students, became weaker as time passed. However, we must take into account that EG made fewer errors in the pre-tasks, so that, although the improvement of this group has turned out to be similar to the improvement of CG1 and CG2, it may be regarded as more meritorious, since the level of departure was higher.

Therefore, the EG seems to have benefited from the experiment, even if the difference becomes weaker as time passes by. The Native groups among 7th and 8th graders increase the errors dramatically in follow-up2. This could be due to the difficulties of the sentences, since three of them contained two personal pronouns and in three others the personal pronoun was farther from the antecedent. In these cases students favored contiguity and marked the closest participant.

Students, both native and non-native speakers, seem to employ similar strategies when dealing with grammar exercises. In this task, the groups of native speakers sometimes had the same or even a higher level of errors than ESL students. This could lead to think that students' KAL is weak and thus some instruction on SFG could benefit students, both native and non-native speakers of English. The present instruction made relevant to students the relationship among Participants, and revealed that the topic of cohesion is fundamental, as is acknowledged in Halliday's model.

The students' errors might be classified according to the following criteria:

1. - **Lexical substitution or synonyms.** In certain sentences students, instead of relating the personal pronoun to its antecedent, signaled another element within the sentence that they erroneously thought that it could explain the word. For example, in the pre-tasks many students related the words 'slaves' (sentence number 5) to 'freedom' or 'fly' instead of to *they*.

(180) Slaves, yearning for freedom, told stories of a time when they could fly.

In follow-up1, students related the word 'suffrage' (sentence number 10) to 'word', 'unusual word' or 'right to vote'.

(181) *Suffrage* is an unusual word, but it simply means the right to vote. (emphasis in original)

And in follow-up2 (sentence number 6) students related ‘choir’ or ‘recital’ to ‘(two) intermissions’.

(182) The choir recital lasted more than three hours. It had two intermissions.

The students’ strategy was to find or locate a word that could explain the main element in the sentence, instead of locating the referent used to replace the word. This could be the reason behind poor Thematic development or break-down in reading comprehension when the ‘Rheme’ is replaced by a personal pronoun in the following sentence becoming the ‘Theme’. This lack of thematic development produced a poor cohesion in students’ writings (see 3.3.6). In examples (183) and (184) from follow-up1, students related the personal pronoun in the second sentence with the Theme of the first sentence.

(183) Unlike the United States, Norway is a kingdom. It also has a primer minister.

(184) In northern Norway live the people known as Sami, or Lapp. They have raised reindeer for hundreds of years.

2. - **Human participant.** Most of the students tended to favor the human participant when in the sentence there was more than one entity (\pm Animate) or when there was a sequence of sentences with the same proper name in them. For instance, in the pre-tasks students related ‘them’ to ‘Bill’ (sentence number 7) instead of ‘coyotes’.

(185) Old coyotes can remember when Bill was little and lived with them.

In sentence number 8, students related ‘him’ to ‘Bill’ instead of to ‘mustang’.

(186) Bill tamed a wild mustang and named him Widow-maker.

In sentence number 9, students related ‘it’ to ‘Bill’ instead of to ‘cyclone’.

(187) Some people say that Bill once caught a cyclone and rode it around the country.

This also happens in follow-up1 where students related ‘it’ to ‘Oliver’, in sentence number 8, instead of to ‘workhouse’.

(188) Because of the horrid conditions at the workhouse, Oliver Twist ran away from it.

This happened because in sentences number 6 and 7 ‘Oliver Twist’ was the main participant and the one replaced by a personal pronoun.

(189) Oliver Twist didn’t have any parents; you could call him an orphan.

(190) Oliver Twist’s workhouse treated him badly.

Students seem to have difficulties when replacing abstract elements when these are an idea, a situation, or a longer reasoning, i.e. when the element is non-human as example (181) above illustrates.

Students' attention was in many an occasion to the human participant, ignoring the others. In the post-tasks, in sentence number 1, students related 'they' to 'many people' but forgot to relate 'it' to 'Olympics'.

(191) Many people knew little about Norway before the Olympics. They learned more about it by watching the Olympics on television.

This also happened in follow-up1 in sentences number 1 and 3, where students replaced the human elements ('Trygve Lie' – 'he' and 'Puccini and Verdi' – 'they') but forgot to relate the non-human elements ('United Nations' and 'great operas' respectively) to the personal pronouns.

(192) Puccini and Verdi wrote many great operas. They wrote them in Italian.

(193) Trygve Lie was elected to the top post at the United Nations in 1946. He led it for seven years.

In sentence number 1 of follow-up2 students related 'He' to 'Jerod' but again most of them forgot the non-human element ('paint cans').

(194) Jerod knocked over the paint cans. Then he picked them up.

3. - **Here-and-now.** In sentence number 2 of follow-up1, many students related 'it' to 'United States' instead of 'Norway'.

(195) Unlike the United States, Norway is a kingdom. It also has a primer minister.

This might be because students tend to use exophoric references instead of endophoric and they place themselves, and in this case their country, at the center of every situation. This is also something that can be seen throughout their writings, where 'I' is their favored personal pronoun.

4. - **Feature over object.** In follow-up2 a common error was to relate a personal pronoun, object and plural, to a feature or characteristic of the object expressed with a premodifying noun, such as in sentence number 1 (above) where students related 'them' to 'paint' even though the referent is plural, i.e. 'cans'. In sentence number 2 students related 'them' to 'lime' instead of to 'beans' which is the referent.

(196) Jerod knocked over the paint cans. Then he picked them up.

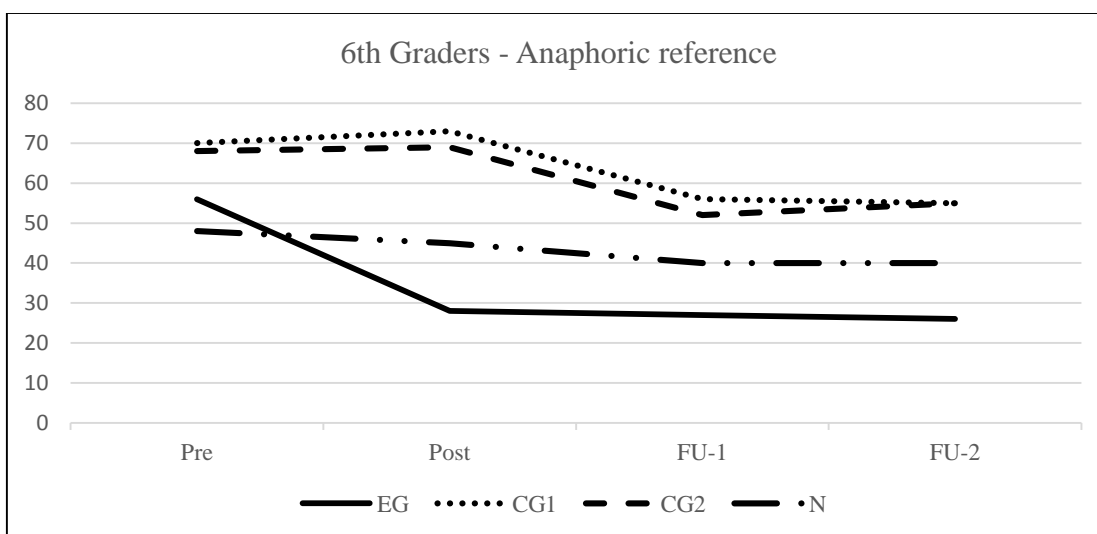
(197) We had lime beans for dinner. I didn't eat any because I don't like them.

It could easily be concluded that these errors are due to language transfer, since in Spanish premodification with nouns is much less common than in English. Nevertheless, not only did ESL students make this error, but also Native Speakers.

Tables 46 through 48 and graphs 2 through 4 show the results distributed by students' grade. Let us remember that the Experimental as well as the CGs are comprised of 6th, 7th, and 8th graders. Table 46 deals with 6th graders.

6 th Graders	PRE	POST	FU-1	FU-2
EG	56	28	27	26
CG1	70	73	56	55
CG2	68	69	52	55
N	48	45	40	40

Table 46: Percentage of errors among 6th graders across groups



Graph 2: Percentage of errors among 6th graders across groups

Although all groups underwent a decrease in the number of errors, the Native groups did not show a great difference and remained very stable throughout the exercises. By contrast, CG2 and CG1 experienced an important decrease in follow-up1, to increase again in follow-up2. Only the EG remained stable after the instruction, although it still showed some errors. Concerning 7th grade, ESL students performed at the highest level. In almost all the tasks they performed at a native-speaker level, sometimes even higher. If we turn to their Reading

Level, we can see that their level is not much lower than the Native speakers'. This improvement through their schooling seems to give ground to Vygotsky's claims of the connection between language and perception (1978: 33-5), and grammar and writing as what helps the learner to rise to a higher level of speech development (1962: 99-101).

The ESL 7th graders group was formed by four highly motivated and hard-working girls. They were always on task, followed teachers' directions, behaved and even asked for extra work to improve their grades. This might be the reason of the good result in this first task, almost at a native speaker level.

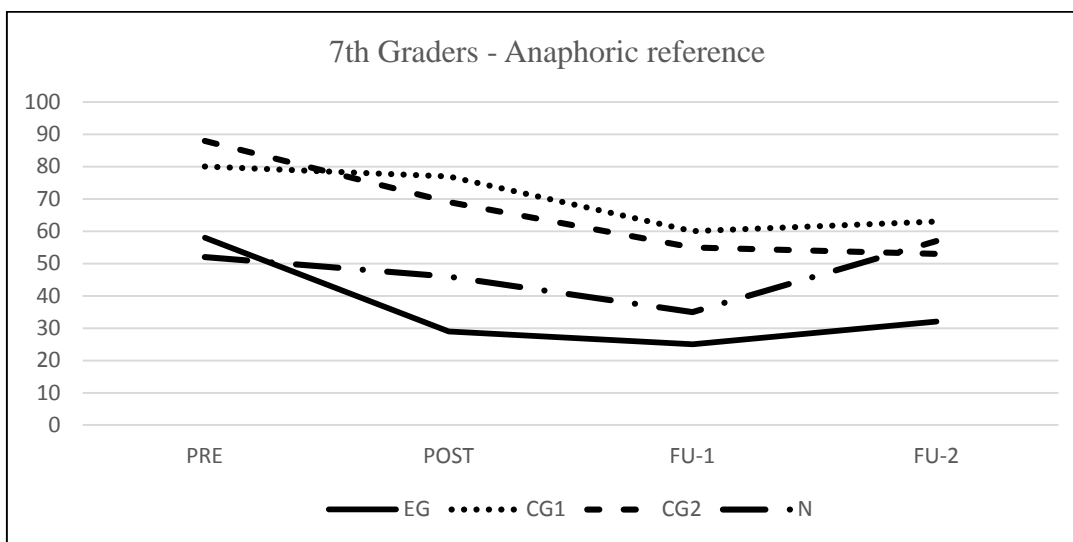
Table 47 shows the means of Reading Level of 7th graders across groups.

Groups (7th graders)	Reading Level (ZPD)
EG	3.0 – 4.5
CG1	1.6 – 2.7
CG2	2.5 – 3.7
N7	3.8 – 6.5

Table 47: Means of Reading Level across 7th graders

7th Graders	PRE	POST	FU-1	FU-2
EG	58	29	25	32
CG1	80	77	60	63
CG2	88	69	55	53
N	52	46	35	57

Table 48: Percentage of errors among 7th graders across groups

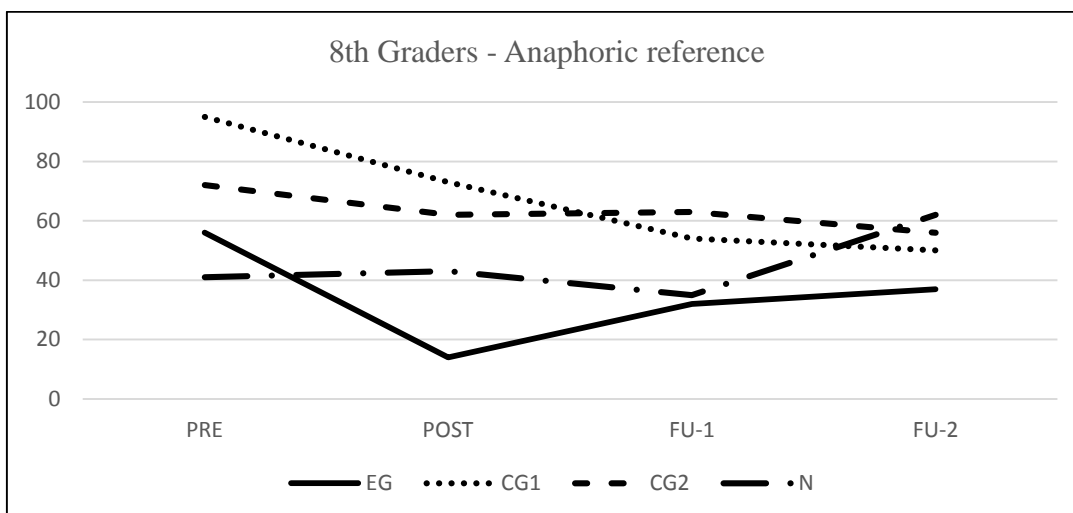


Graph 3: Percentage of errors among 7th graders across groups

All the groups reduced the number of errors but for the Native group among 8th graders, which experienced an increase. All the groups, except for CG2, increased again the number of errors in follow-up2 and it is worth noticing that all the groups but the Experimental one reached virtually the same level of errors in follow-up2. This could be due to the distance in time of the exercises. Students need to practice regularly, directly or indirectly and being exposed to some structures and knowledge and their connection to texts. It is interesting at this point to remind here what some authors have claimed to be relevant in education, i.e. the repetition and exposure to certain structures throughout time (Chaudron 1988: 4; Ellis 1997: 72; and Spada 2008: 77 among others). Bruner advocates for ‘the spiral curriculum’, where some basic ideas should be repeatedly revisited (1960), and likewise Muller argued for learning sequences in which topics are repeated across learning levels, but differently (2007: 81)

8 th Graders	PRE	POST	FU-1	FU-2
EG	56	14	32	37
CG1	95	73	54	50
CG2	72	62	63	56
N	41	43	35	62

Table 49: Percentage of errors among 8th graders across groups



Graph 4: Percentage of errors among 8th graders across groups

Graph 4 shows how the EG reduced dramatically the number of errors after the instruction but they increased again in the follow-ups, still remaining the group with fewer errors. CG1 experienced a dramatic decrease in the number of errors and again all groups but the Experimental one ended up presenting a similar level in the number of errors. Although all groups experienced an increase in the number of errors towards the end, the EG remained the group with the lowest number. In follow-up2 the sentences often contained more than one personal pronoun and most students only focused on one, thus increasing the number of errors. Examples (198) and (199) below exemplify this.

(198) Jerod knocked over the paint cans. Then he picked them up.

(199) Dad spoke to James and me about the mess. He told us to clean it up.

In other sentences the personal pronoun was far from the antecedent, as example (200) shows.

(200) Our campground was hidden behind many trees. It was difficult to find.

Next section analyzes groups, their syntactic functions, and the replacement of some participants with personal pronouns.

3.3.3 Groups, syntactic functions and personal pronoun replacement

In this subsection three aspects have been tallied: the knowledge about groups (NG, VG and AdvG); the knowledge of syntactic functions (S, V, dO and iO); and the replacement of the syntactic functions by a personal pronoun. Consequently the section is divided into three parts.

3.3.3.1 Groups

Regarding ‘Groups’, students’ answers were marked as wrong when they underlined two Groups as one.

(201) The school donated one hundred books at the fair.

In example (201) one error was marked since students should have underlined four Groups instead of three.

Similarly when there were two Objects students tended to underline both as one. In this case it was tallied as one error, as example (202) shows.

(202) The parents promised a new bike to their child.

This was a common error across groups of both Natives and ESL students.

Downing and Locke (2006) explain how NG, AdjG, and AdvG are composed of three primary elements or functions: an obligatory head optionally preceded by a pre-modifier and/or followed by a post-modifier.

(203) Those beautiful paintings by Goya (NG)

very beautiful indeed (AdjG)

quite nicely indeed (AdvG)

In the VG the lexical verb is regarded as the main element (v), which either functions alone, whether in finite or non-finite form, as in example (204).

(204) Walking along the street, I met a friend of mine

Or is preceded by auxiliaries (x), as in example (205).

(205) has been reading...

Where the first auxiliary (or the auxiliary, if there is only one) is called the ‘finite operator’ (o).

(206) must have been played (oxxv) (2006: 18).

If students only underlined the main element of the group it was considered right, since it is the obligatory head in the group. The same procedure was followed with the VG, when students underlined the lexical verb it was marked right but wrong when only the auxiliary was underlined. The reasons for this were firstly that students were used to relate to ‘verbs’ as ‘action words’ and they do not consider the copulative ‘be’ or modals such as ‘can’ or ‘should’ as action words. And secondly, I did not provide instruction of Finite + Predicator elements.

Example (207) shows how students underlined the head, and example (208) shows how only the lexical verb was underlined. In both cases, it was marked as right.

(207) My neighbor broke the teapot.

(208) Solar energy cells can heat homes even in winter.

When students underlined the Subject and the AdvG as one group it was marked as wrong. Although it is a multiple Theme, there are two different groups in it.

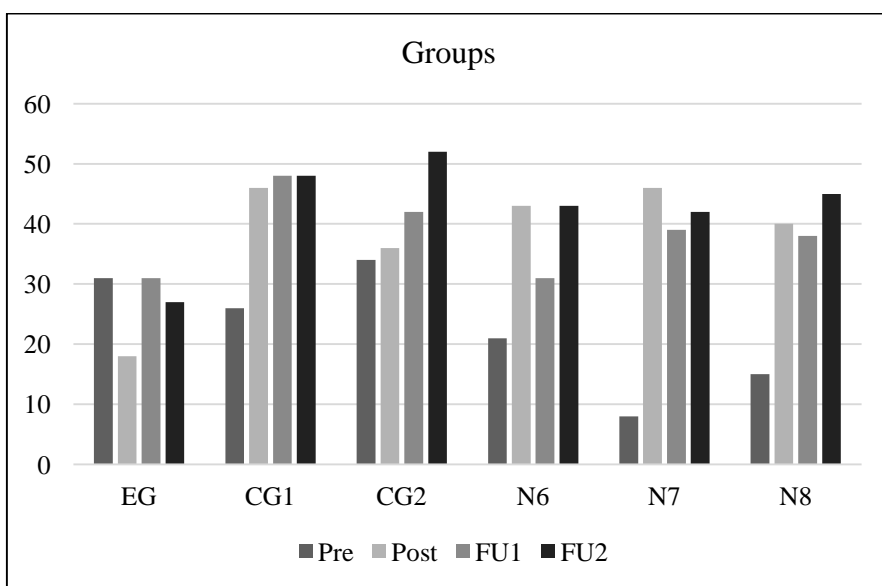
(209) In summer, the teenagers painted the school walls.

This was a common error when the sentences began with an Adjunct. Students were asked just to underline the different groups of the clauses and label only the Subject, Verb, and Objects. The existence of an Adjunct at the beginning of the sentence produced many errors not only in locating groups but also in designating the syntactic function.

Table 50 and graph 5 below show the results regarding the students' Groups.

Groups	PRE	POST	FU-1	FU-2
EG	31	18	31	27
CG1	26	46	48	48
CG2	34	36	42	52
N6	21	43	31	43
N7	8	46	39	42
N8	15	40	38	45

Table 50: Percentage of errors in Groups



Graph 5: Percentage of errors in Groups

If we look at the percentage of errors in terms of chi-square and p-value, the results are as follows:

Groups	EG and CG1 p-value	Chi-square	EG and CG2 p-value	Chi-square
Pre- and post-tasks	0.00331	8.6285	0.113071	2.5108
Pre- and follow-up2	0.035014	4.4445	0.099859	2.7078

Table 51: p-value and chi-square in Groups in EG and CGs

In this particular task, the p-value shows how the result is significant in relation to CG1 but not in relation to CG2. I have already remarked that CG2 was stronger than CG1 and this is a stable tendency, for the most part, across tasks. They seem to be more concerned with accuracy, which has led them to improve their knowledge about Groups in a comparable way to the EG even without the explicit tuition.

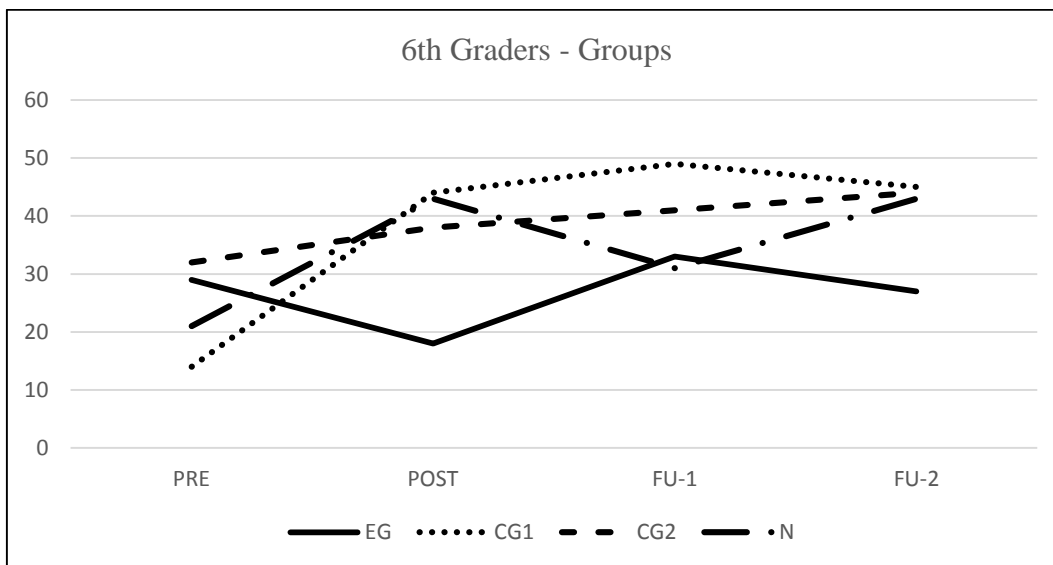
These data show how the CGs began having a high level of errors and increased them throughout the tasks while the EG reduced the number of errors. The Native speakers had a high level performance but the number of errors increased from the post-tasks onward. The difficulty in the tasks also increased and this might have been the reason for the increase, although the EG had half the errors as the other groups in the last task.

To better look at this data I will present the percentage of errors by grade across groups. Students' maturity does not correspond to the grade they are in and in a same classroom teachers may encounter as many different levels as number of students. As Halliday claims '...in a class of thirty students there will probably be thirty different ways or styles of learning' (2005: 305). This is more obvious among ESL students.

Tables 52 and graph 6 shows the outcome across groups of 6th graders.

6th Graders	PRE	POST	FU-1	FU-2
EG	29	18	33	27
CG1	14	44	49	45
CG2	32	38	41	44
N	21	43	31	43

Table 52: Percentage of errors among 6th graders across groups



Graph 6: Percentage of errors among 6th graders across groups

Among 6th graders the results were similar; they had a close start, regarding the number of errors, but for CG1 which made fewer errors. This is somewhat unusual because this group is, for the most part, quite weak, as the results show.

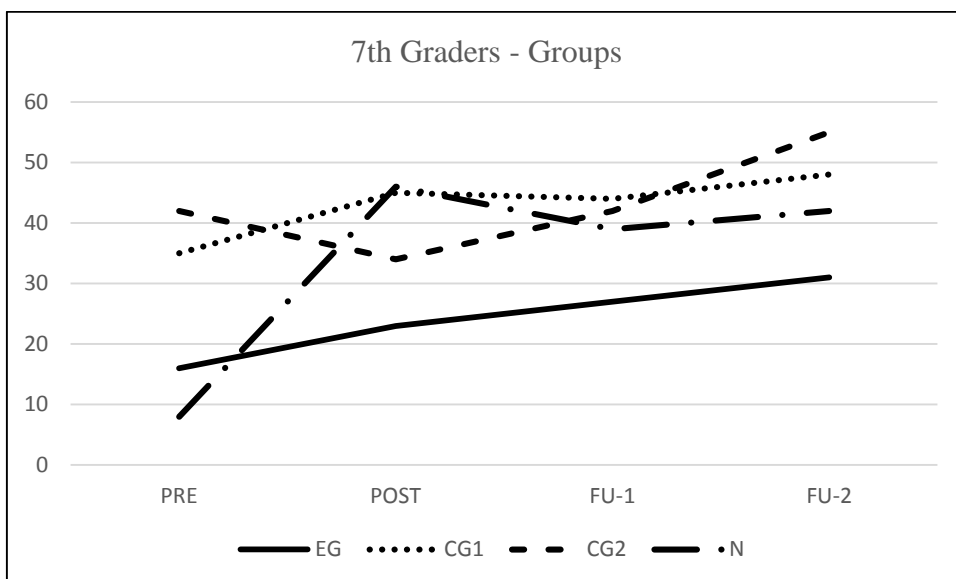
In the final outcome all the groups but the Experimental had a very similar number of errors. This might lead to think that the instruction on Participants and Processes was successful.

Table 53 and graph 7 shows the outcome across the groups of 7th graders.

Among 7th graders the EG again made fewer errors. I already commented (section 3.3.2) the reasons behind these good results.

7 th Graders	PRE	POST	FU-1	FU-2
EG	16	23	27	31
CG1	35	45	44	48
CG2	42	34	42	55
N	8	46	39	42

Table 53: Percentage of errors among 7th graders across groups



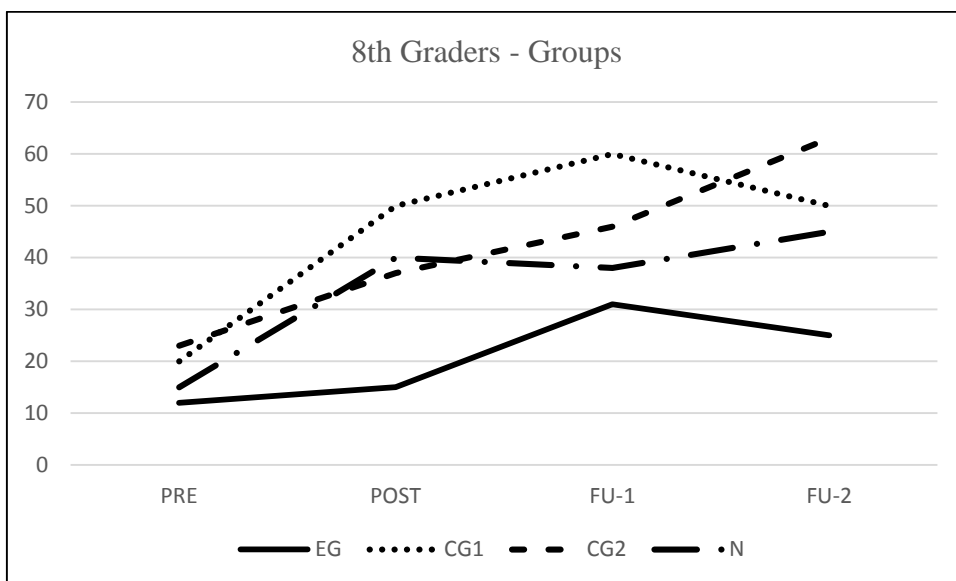
Graph 7: Percentage of errors among 7th graders across groups

After the instruction the students' number of errors increased. This might be because of the difficulty of the tasks where Adjuncts were introduced and most students marked them together with the Subjects. The results in follow-up2 show that even if the number of errors increased in all the groups, the EG threw the best results. The other three groups finished throwing a close result.

Table 54 and graph 8 shows the outcome across the groups of 8th graders.

8 th Graders	PRE	POST	FU-1	FU-2
EG	12	15	31	25
CG1	20	50	60	50
CG2	23	37	46	63
N	15	40	38	45

Table 54: Percentage of errors among 8th graders across groups



Graph 8: Percentage of errors among 8th graders across groups

Across 8th graders the results seemed to have followed the same pattern as for 6th and 7th graders, i.e. the number of errors increased as the tasks increased slightly in difficulty but the final outcome shows that the EG had the fewest errors. Nevertheless, as was described above, the EG across 7th graders had the highest number of errors in the follow-up2 in spite of being a strong group. This inconsistency in students' performance makes clear that learners, especially teenagers, tend to be erratic or even random at times.

In conclusion, it seems that all the subjects underwent the same stages. Firstly, they made few errors since the pre-tasks were easier. Secondly, the number of errors increased across them. And thirdly, the EG ended up having the fewest errors in the three grades. These students seem to have benefited from the instruction. Nevertheless, students seem to have problems with NGs when compounded of a modifying noun + a head noun. In relation to academic texts, it should be reminded here that nominalization or grammatical metaphor is a main feature throughout academic register and it is a source of difficulty for students. This is another area where SFG could benefit students and develop their KAL (see 4.3 and 4.4).

3.3.3.2 Syntactic functions

This task was introduced to see if learners could relate what was instructed on semantic roles to syntactic functions. In this middle school students received instruction on syntactic labels such as S, V, and O from a formal grammar approach. Although I follow a semantic rather

Sometimes students would mark an Object as a Subject because it was a ‘Human Participant’, consequently having two subjects in the same sentence.

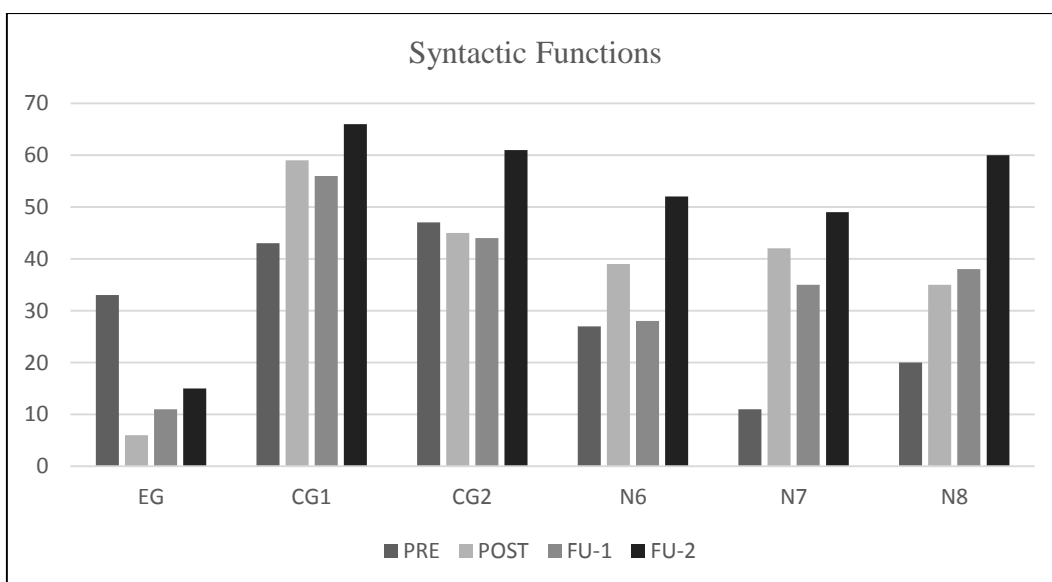
(216) The receptionist announced the visitor.

S V S

Tables 55 through 59 and graphs 9 through 12 show the percentage of errors on syntactic labels, where students were asked to write the corresponding label under the groups, only S, V, and O.

Functions	PRE	POST	FU-1	FU-2
EG	33	6	11	15
CG1	43	59	56	66
CG2	47	45	44	61
N6	27	39	28	52
N7	11	42	35	49
N8	20	35	38	60

Table 55: Percentage of errors on syntactic functions



Graph 9: Percentage of errors on syntactic functions across groups

Table 56 displays the results in terms of chi-square and p-value.

Syntactic functions	EG and CG1 p-value	Chi-square	EG and CG2 p-value	Chi-square
Pre- and post-tasks	6E-06	20.4685	0.00032	12.9506
Pre- and follow-up2	0.000713	11.4556	0.003615	8.4678

Table 56: P-value and chi-square in Syntactic functions in EG and CGs

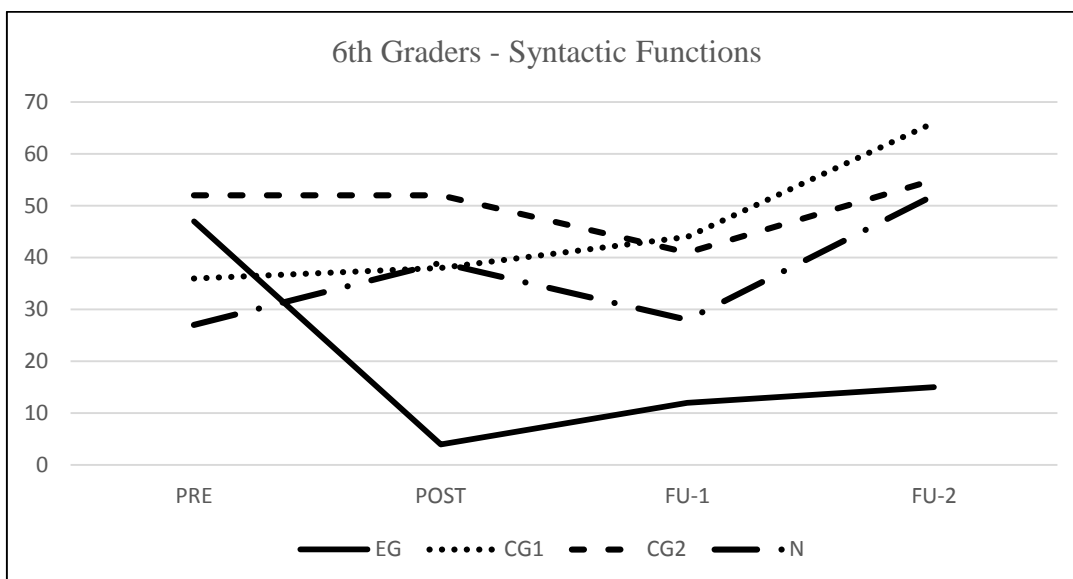
In this case the results show that p-value is significant in both groups and tasks. The instruction on constituents and their relationship with syntactic functions was clearly beneficial for the students of the EG. This significant benefit might well be due to the fact that - syntactic knowledge was probably a kind of knowledge with which students were not too familiar, or about which they had not had extensive instruction.

The first comment that can be made is that while all the groups doubled the number of errors in the final task (follow-up2), the EG reduced them by half. Students seem to have learned to discriminate Participants within a sentence and their syntactic function within it. By drawing students' attention to elements, constituents or participants within a sentence, it seems that they have learned how to look at them (cf. Vygotsky 1978: 36). This is relevant if we are to provide instruction on text types and, for instance, in nominalization, a major source of difficulty for students, in middle or high schools.

Tables 57 through 59 and graphs 10 through 12 display the information divided by students' grade.

6th Graders	PRE	POST	FU-1	FU-2
EG	47	4	12	15
CG1	32	38	44	66
CG2	52	52	41	55
N	27	39	28	52

Table 57: Percentage of errors among 6th graders across groups

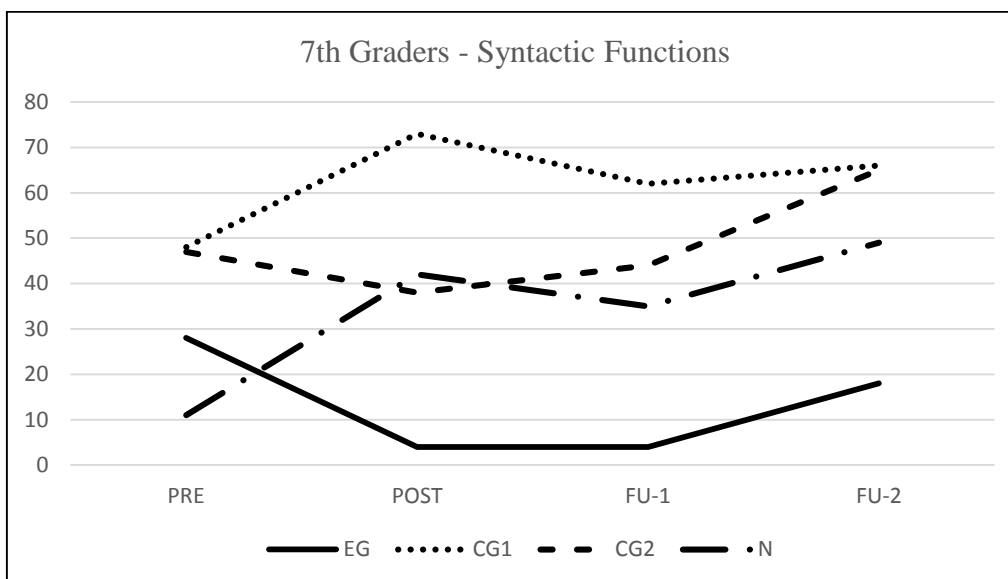


Graph 10: Percentage of errors among 6th graders across groups

The outcome shows that the EG was the only group to reduce the number of errors by a third. CGs and Natives among the 6th graders' final outcome is very similar, just CG1 being slightly higher. It was commented before that CG1 was a little weaker than the other groups.

7 th Graders	PRE	POST	FU-1	FU-2
EG	28	4	4	18
CG1	48	73	62	66
CG2	47	38	44	65
N	11	42	35	49

Table 58: Percentage of errors among 7th graders across groups

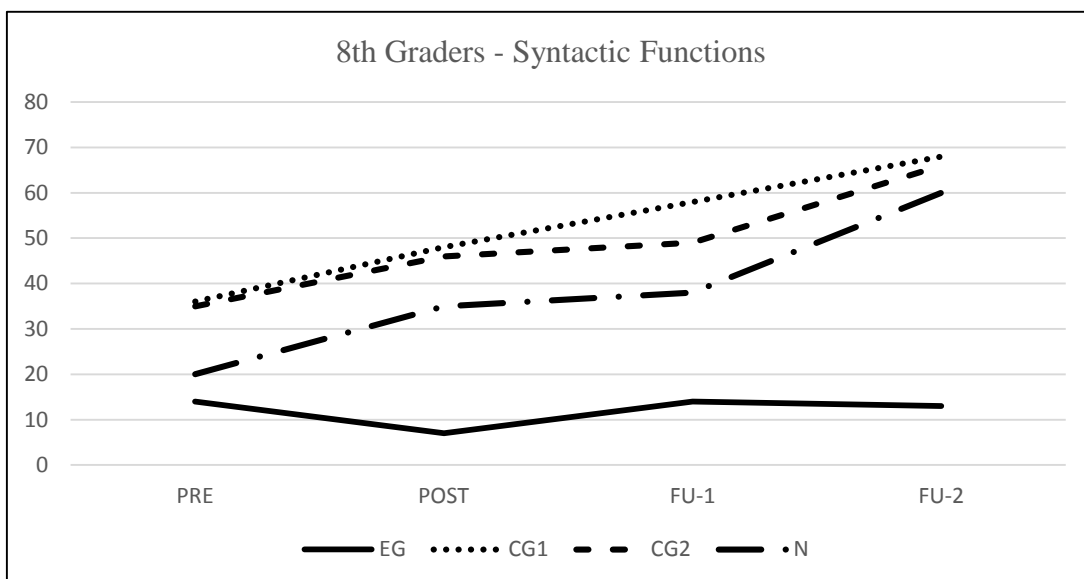


Graph 11: Percentage of errors among 7th graders across groups

Among 7th graders, the EG ended up with the lowest number of errors. This group began with a lower number of errors than the CGs but higher than the Natives among 7th graders. It needs to be reminded that this was a strong group and even in the post-tasks and follow-up1 the number of errors decreased, to increase again at the end but it still remained very distant from the others in relation to percentage of errors.

8 th Graders	PRE	POST	FU-1	FU-2
EG	14	7	14	13
CG1	36	48	58	68
CG2	35	46	49	66
N	20	35	38	60

Table 59: Percentage of errors among 8th graders across groups



Graph 12: Percentage of errors among 8th graders across groups

Across 8th graders the EG was very stable throughout the tasks and it even started with a leverage over the other groups. It is interesting to highlight that the three groups that did not receive instruction ended up having a very similar number of errors. This gives ground to the idea that students' strategies when dealing with new concepts are similar and that KAL is what can make them move to a higher level of abstraction, in this particular case, to a higher level of linguistic abstraction (see 2.1).

Overall, the final outcome across groups shows that students benefited from the instruction on semantic roles and Processes.

Next section presents the results in the task of replacing certain Groups with a Personal Pronoun, Subject or Object (Direct and Indirect).

3.3.3.3 Personal pronoun replacement

In this part students had to replace the Subject and Objects with a Personal Pronoun. The most common error students made was to omit one Object or get the gender and/or the number wrong.

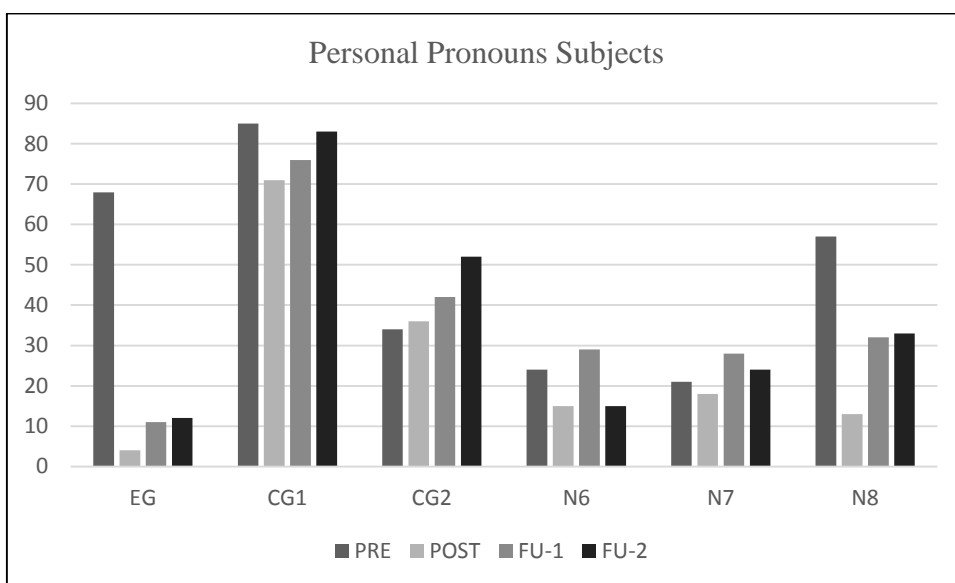
The results are presented in three categories according to the personal pronoun students had to use to replace NGs.

A. – Personal pronouns Subjects

When replacing the Subjects, students did not have many problems finding the subject pronoun. The errors were basically produced by gender and number. Table 60 and graph 13 show the results in percentage in replacing Subjects.

Subjects	PRE	POST	FU-1	FU-2
EG	68	4	11	12
CG1	85	71	76	83
CG2	34	36	42	52
N6	24	15	29	15
N7	21	18	28	24
N8	57	13	32	33

Table 60: Percentage of errors in personal pronouns Subject replacement across groups



Graph 13: Percentage of errors in personal pronouns Subject replacement across groups

If we look at p-value and chi-square, the results are as follows:

Subject replacement	EG and CG1 p-value	Chi-square	EG and CG2 p-value	Chi-square
Pre- and post-tasks	0	35.6312	0	27.1439
Pre- and follow-up2	0	36.9125	0	36.1637

Table 61: P-value and chi-square in personal pronouns Subject replacement

Concerning the replacement of personal pronoun Subjects, the results show that the instruction was beneficial for both CGs. P-value is significant in post-tasks as well as in follow-up2. In this task, as well as in the previous one, students seem to have benefited from the formal instruction.

Regarding number students tended to treat a plural as singular as in number 10 (post-tasks) and replace ‘the teachers’ with ‘he’ or ‘she’, or ‘the tourists’ as ‘he/she’ (number 8 in follow-up2).

(217) The teachers are in the library. *She is in the library*

(218) The tourists loved the sight of the Eiffel Tower at night. *He loved the sight of...*

When the Subject was a compound NG such as ‘solar energy cells’ and ‘flowering plants’ (number 4 and 7 respectively from follow-up1), students took the peripheral feature as the main element and replaced the Subject with a singular neuter ‘it’.

(219) Solar energy cells can heat homes even in winter. *It can heat homes even in winter.*

(220) Flowering plants bloom all year long. *It bloom all year long.*

Regarding gender the most common error was misread the cues in the sentence as in number 9 (follow-up1) ‘Mrs. Smith’ as ‘he’ and number 7 (follow-up2) ‘Mr. Swanson’ as ‘she’.

(221) Mrs. Smith didn’t see the student in the hallway at 5:00 pm. *He*

(222) Last week, Mr. Swanson showed the students a power point of his trip. *She*

Like in the first exercise on anaphoric reference, students’ strategy when replacing the Subject with a subject pronoun was to write a phrase with a related word. Examples of this are sentence number 1 (follow-up2) where students replaced ‘the sport of wakeboarding’ with the NG with the same head ‘this sport’ and in number 2 (follow-up2) where some students replaced ‘colorful parrots’ with the superordinate term ‘birds’.

(223) In Australia the sport of wakeboarding is becoming very popular.

(224) Colorful parrots eat fruits and nuts from the trees.

These are the main reasons why even in follow-up2 there was still a considerable number of errors.

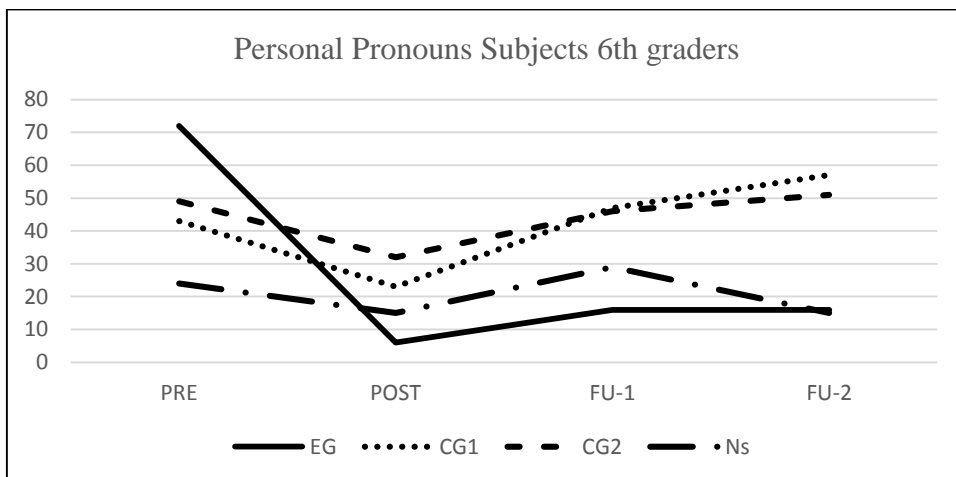
Animals were replaced most of the times by ‘he’ such as ‘the donkey’ (225) and ‘the cat’ (226), both examples from the pre-tasks.

(225) The donkey brayed in the field.

(226) The cat stole the food.

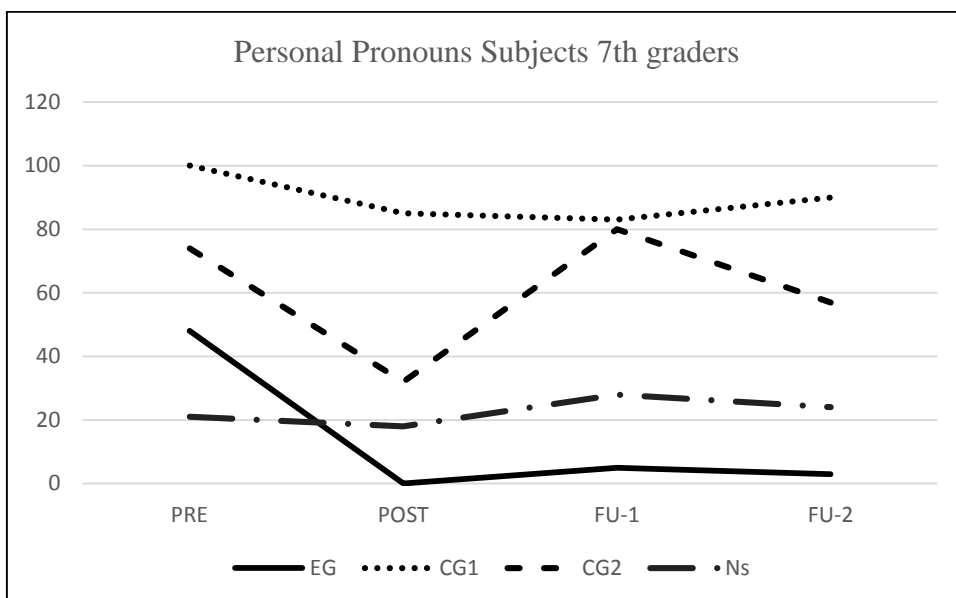
In follow-up2 there was an example with ‘colorful parrots’ (224) but in this case students replaced the Subject with ‘birds’. In this case the strategy used by students was either to use lexical substitution (*birds*) or take the head in the NG (*parrots*).

Graphs 14 through 16 show the results in personal pronoun Subjects replacement by grade throughout the groups. A first comment it is that the EG ended up having fewer errors that the rest of groups.



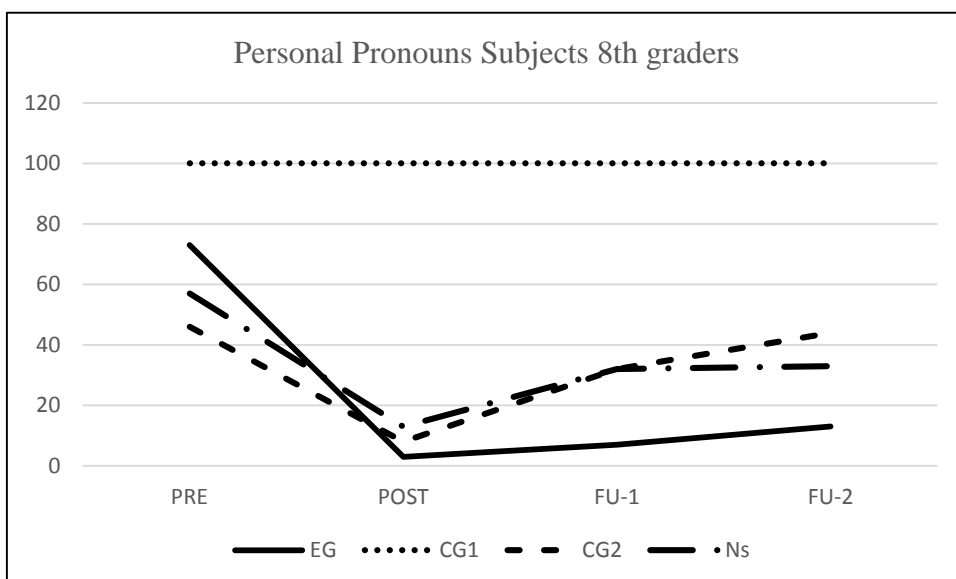
Graph 14: Percentage of errors in personal pronouns Subject replacement across 6th graders

Across 6th graders both CGs started at a similar percentage of errors and ended up having a slightly higher percentage and again similar in both groups. Nevertheless, the EG, having been the group with the highest percentage of errors, finished with virtually the same percentage of errors as the Natives.



Graph 15: Percentage in errors in personal pronouns Subject replacement across 7th graders

Across 7th graders the initial level and final results were very different. CGs had a very high percentage of errors and although CG2 reduced the number of them, still the level was very high. Natives' number of errors remained very stable throughout the tasks, and the EG the group reduced the number of errors in almost half; therefore, it is clear that it benefited from the instruction.



Graph 16: Percentage of errors in personal pronouns Subject replacement across 8th graders

On the other hand, across 8th graders the results were very different. CG1 did not show any change throughout the tasks. CG2 and Natives show a similar trajectory, while EG was the group that reduced the number of errors dramatically in the post-tasks and increased them a little in the follow-ups, but it finished with the fewest number of errors.

B. – Personal pronouns Direct Objects

Table 62 and graph 17 show students' results when replacing personal pronouns dO. The percentage shows how the EG experienced a decrease in the number of errors after the instruction but the number increased again in the follow-ups. The main reason for this was the complexity of the sentences where there were more than one object; students found it difficult to replace both. Still the EG was the group with the highest degree of improvement between the pre-tasks and the follow-ups.

The main errors were, as with anaphoric reference and subjects, using another word or part of the group, lexical substitution. Examples are in the pre-tasks, example (227) where students replaced 'teapot' with 'pot' and example (228) where 'a paper ball' was replaced by 'a ball' or 'a paper'.

(227) My neighbor broke the teapot.

(228) The students threw a paper ball to the teacher.

In the post-tasks, in example (229), students replaced 'one hundred books' by 'books' or 'stuff'.

(229) The school donated one hundred books at the fair.

In follow-up1, 'hot coco' was replaced by 'drink'.

(230) Every night the nanny would prepare the hot coco for the kids.

More examples can be found in follow-up2, such as 'fruits and nuts' (231) replaced by 'fruits' or 'food'; 'a power point' (232) replaced by 'a slide'; and 'his luggage' (233) replaced by 'carriage' or 'suitcase'.

(231) Colorful parrots eat fruits and nuts from the trees.

(232) Last week, Mr. Swanson showed the students a power point of his trip.

(233) The guide gave members of the group the ticket for the boat ride.

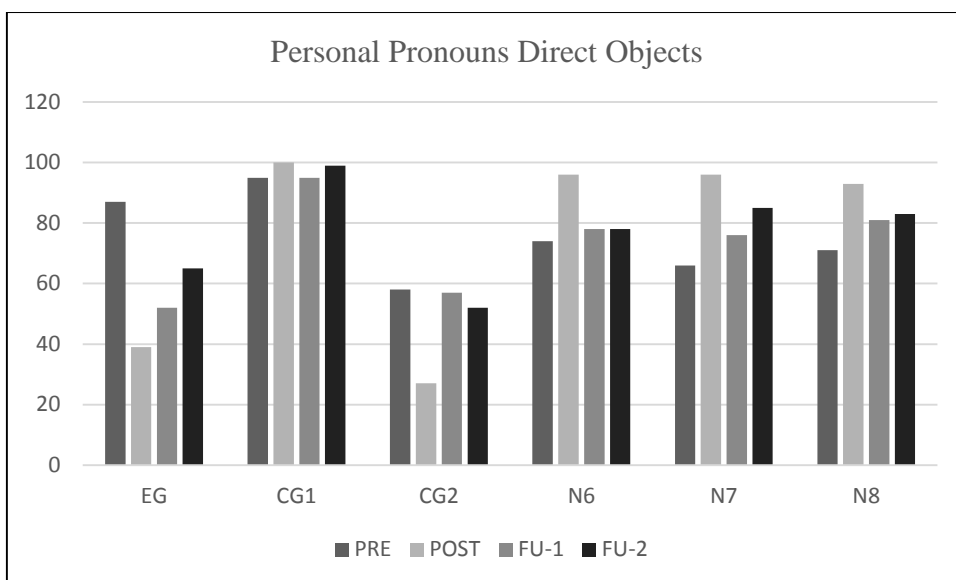
Another source of errors was number. In follow-up1 in example (234), students replaced 'car keys' with 'it' taking 'car' as the main element of the group. In example (235) 'student' was considered plural and replaced with 'them' instead of with 'him/her'.

(234) Last week, Marina forgot the car keys at work.

(235) Mrs. Smith didn't see the student in the hallway at 5:00 pm.

dO	PRE	POST	FU-1	FU2
EG	87	39	52	65
CG1	95	100	95	99
CG2	58	27	57	52
N6	74	96	78	78
N7	66	96	76	85
N8	71	93	81	83

Table 62: Percentage of errors in personal pronouns dO replacement across groups



Graph 17: Percentage of errors in personal pronouns dO replacement across groups

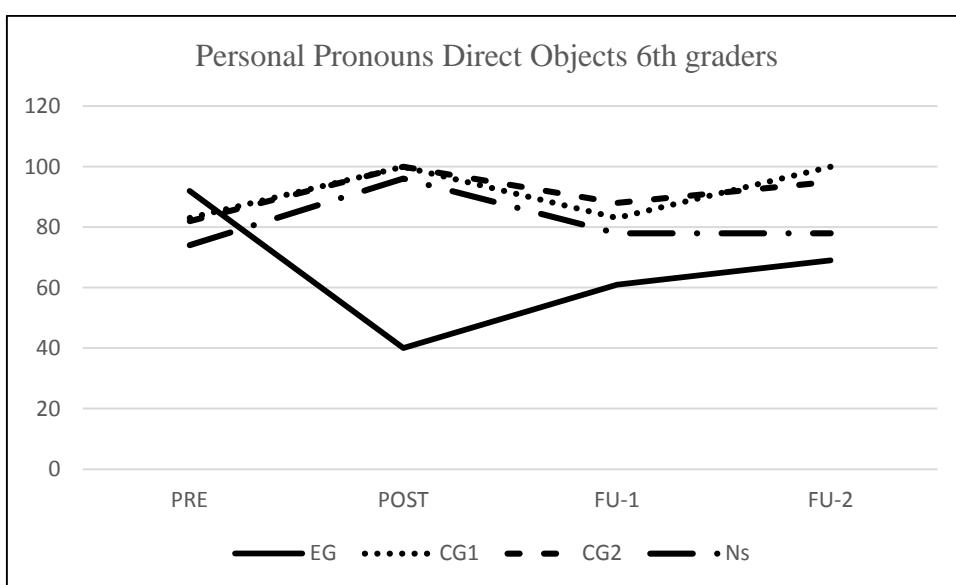
In terms of p-value and chi-square, the results are as follows:

dO	EG and CG1 p-value	Chi-square	EG and CG2 p-value	Chi-square
Pre- and post- tasks	0.000331	12.885	0.90066	2.3366
Pre and follow- up2	0.126366	0.0156	0.468668	0.5251

Table 63: P-value and chi-square in personal pronouns dO replacement

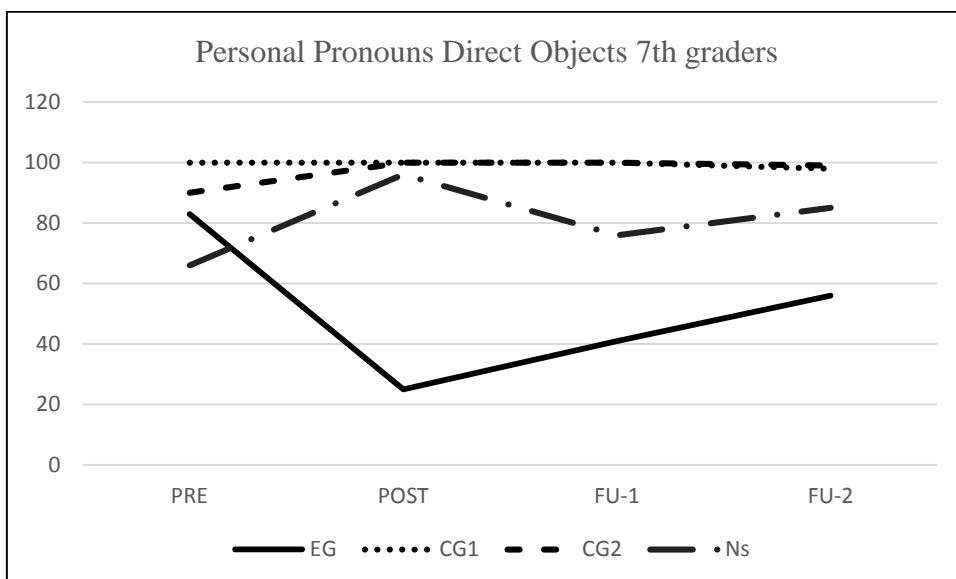
In this case the p-value is only significant in the pre- and post-tasks between EG and CG1. This limitation in the improvement of replacing the personal pronoun dO, which contrasts to the significant effects of the explicit teaching in the replacement of personal pronoun Subject (see above) and personal pronoun iO (see below), is perhaps due to the fact that the dO is more often a non-human participant, and the students found it easier to deal with human participants.

The first observation is that CG2 was the group with fewest errors in follow-up2 even though it did not receive any instruction. Nevertheless, the EG reduced the number of errors by 20%. Graphs 18 through 20 show the results in replacement dO across groups and grades.



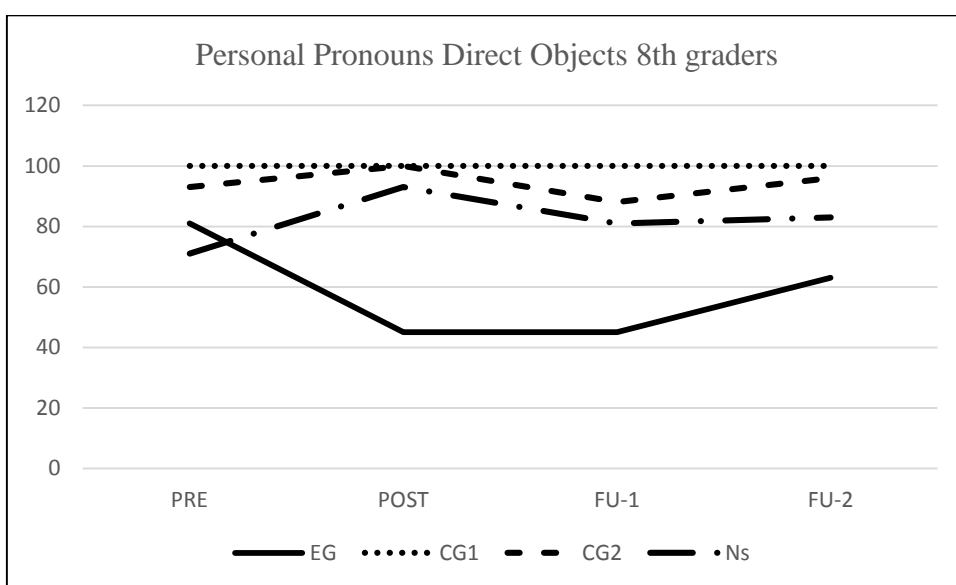
Graph 18: Percentage of errors in personal pronouns dO replacement across 6th graders

Across 6th graders all the groups started with a very similar percentage of errors and both CGs finished with virtually the same level. Natives increased the number in the post-tasks but ended up having the same level, thus the difference was not relevant. The EG had the fewest number of errors in follow-up2, although due to the difficulties in follow-ups the number increased slightly.



Graph 19: Percentage of errors in personal pronouns dO replacement across 7th graders

Across 7th graders both CGs show the same trajectory and ended up having almost 100% of errors (98% CG1 and 99% CG2). Most students did not replace the elements or just replaced one. Natives increased the number of errors in the post-tasks, decreased them in follow-up1 but ended up with a higher percentage of errors. There was a dramatic decrease after the instruction in the EG and although the number increased steadily in the follow-ups, it was the group with the fewest number of errors in the final task.



Graph 20: Percentage of errors in personal pronouns dO replacement across 8th graders

Across 8th graders the results are similar to these of 7th graders. CGs started and ended up having a very similar percentage of errors and Natives increased the number in the post-tasks but in the follow-ups then reduced them, but the final result was an increase in the number of errors in comparison with the pre-tasks. The EG underwent a similar process as the EG of 7th graders. They reduced the number of errors after the instruction and in follow-up2 the number increased but it still was the group showing the best result.

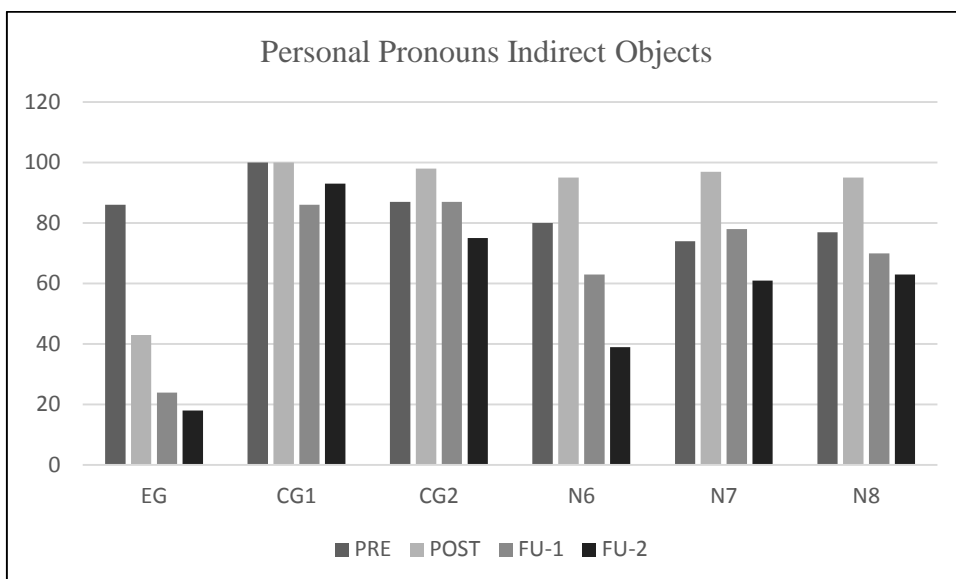
Across all the groups the substitution of personal pronouns dO was less permanent through the tasks. One of the reasons might be that students favored the human participant and in the sentences with two personal pronouns, dO and iO, they focused on the iO and paid less attention to the dO.

C. – Personal pronouns Indirect Objects

Table 64 and graph 21 show the students' results when replacing personal pronouns Indirect Objects. The first observation is that while the number of errors in dO increased, the number of errors in iO decreased.

iO	PRE	POST	FU-1	FU-2
EG	86	43	24	18
CG1	100	100	86	93
CG2	87	98	87	75
N6	80	95	63	39
N7	74	97	78	61
N8	77	95	70	63

Table 64: Percentage of errors in personal pronouns iO replacement across groups



Graph 21: Percentage of errors in personal pronouns iO replacement across groups

In terms of p-value and chi-square, the results are shown in table 65.

iO	EG and CG1 p-value	Chi-square	EG and CG2 p-value	Chi-square
Pre- and post-tasks	0.002907	8.8647	0.000577	27.5317
Pre- and follow-up2	0	11.8493	1E-06	23.4075

Table 65: P-value and chi-square in personal pronouns iO replacement in EG and CGs

In contrast with the personal pronoun dO replacement, p-value is significant in this case for both groups and tasks.

The decrease in the number of errors when replacing iO was due to the fact that students replaced the human participant (iO) and not the dO. Example (236), where students replaced ‘their child’ with ‘to him’ but maintained ‘a bike’, illustrates this.

(236) The parents promised a new bike to their child. *They promised a bike to him.*

In follow-up2, in sentence number 3 students replaced ‘the cooks’ with ‘them’ and kept ‘the trophy’. And in example (237), students replaced ‘members of the group’ with ‘them’ and maintained ‘the ticket’.

(237) Last night, the famous chef gave the cooks their trophy. *He gave them the trophy.*

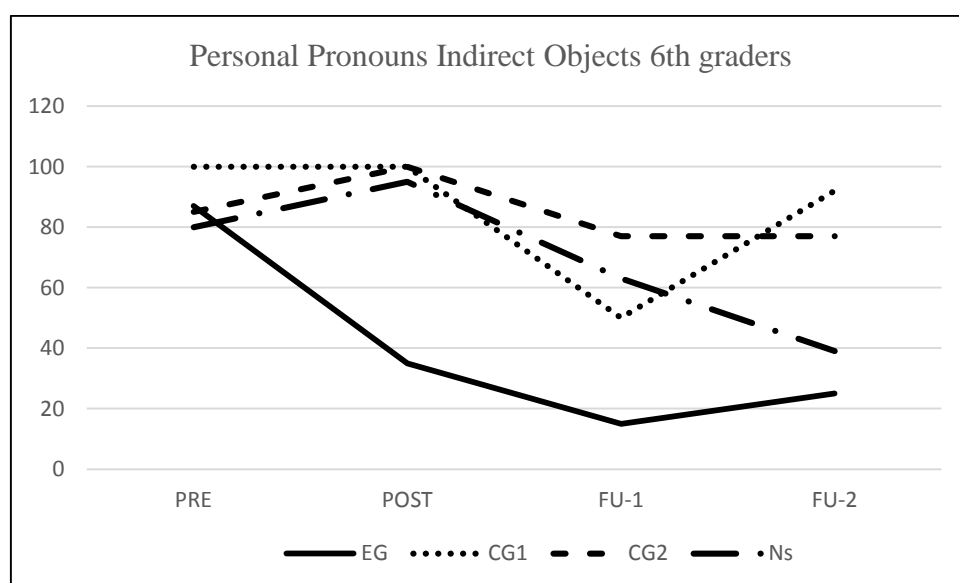
(238) The guide gave members of the group the ticket for the boat ride. *...them the ticket.*

Another common error was in the word order. Students replaced both objects but did not mark the Recipient or Beneficiary. The result was sentences like example (239) (follow-up2):
(239) *Last night he gave them it

In these cases students showed a lack of knowledge on the order in which the semantic roles occur in the sentence and the preposition introducing them.

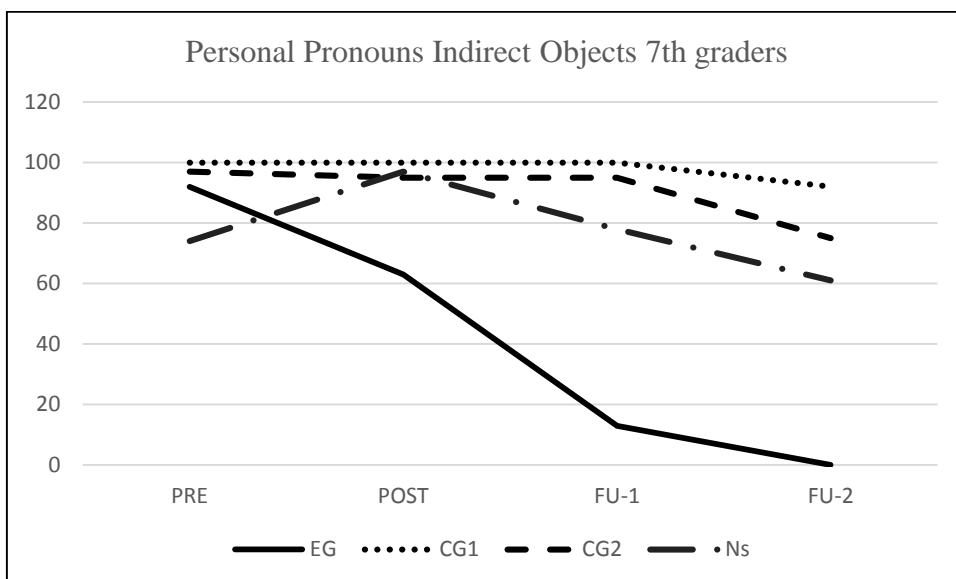
In general, it seems that the teaching received in the experiment allows students to deal with human participants in a proficient way, and, what is more important, this knowledge gets recorded in the long-term memory.

Graphs 22 through 24 show the results across groups and grades.



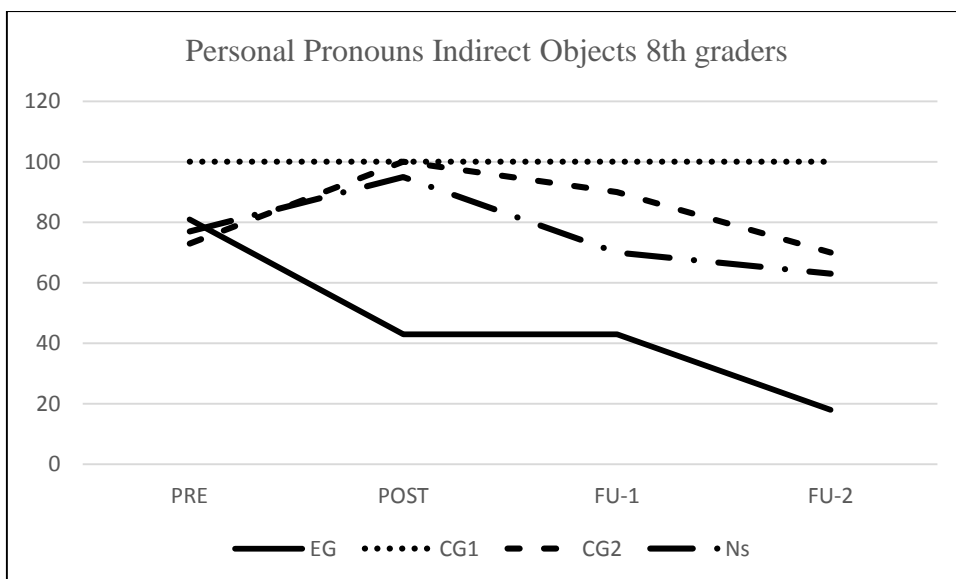
Graph 22: Percentage of errors in personal pronouns iO replacement across 6th graders

It can be seen that the students' behavior was very different across groups. For instance, CG1 reduced the percentage of errors in follow-up1 but in follow-up2 the number of errors skyrocketed. On the other hand, CG2 increased the number of errors in the post-tasks to reduce them again in follow-up1 and remained with the same level in follow-up2. The errors in Natives increased in the post-tasks and decreased in the follow-ups. The main difference with the EG is that this group benefited from the instruction and in the post-tasks and follow-up1 the errors plummeted to increase slightly in follow-up2 but still it remained the group with the fewest errors.



Graph 23: Percentage of errors in personal pronouns iO replacement across 7th graders

Across 7th graders all the groups but the Natives presented a similar number of errors and although all of the groups reduced them throughout the tasks, it was the EG's errors that plummeted after the instruction through follow-up2. Remarkably, the EG finished the tasks with zero number of errors. It is interesting to remind here that EG 7th graders was a very strong group.



Graph 24: Percentage of errors in personal pronouns iO replacement across 8th graders

Across 8th graders CG2 and Natives underwent a similar process, i.e. they increased the number in the post-tasks and reduced them in the follow-ups. CG1 did not present any change

throughout the tasks. It was the EG that reduced the errors and ended up having the best results.

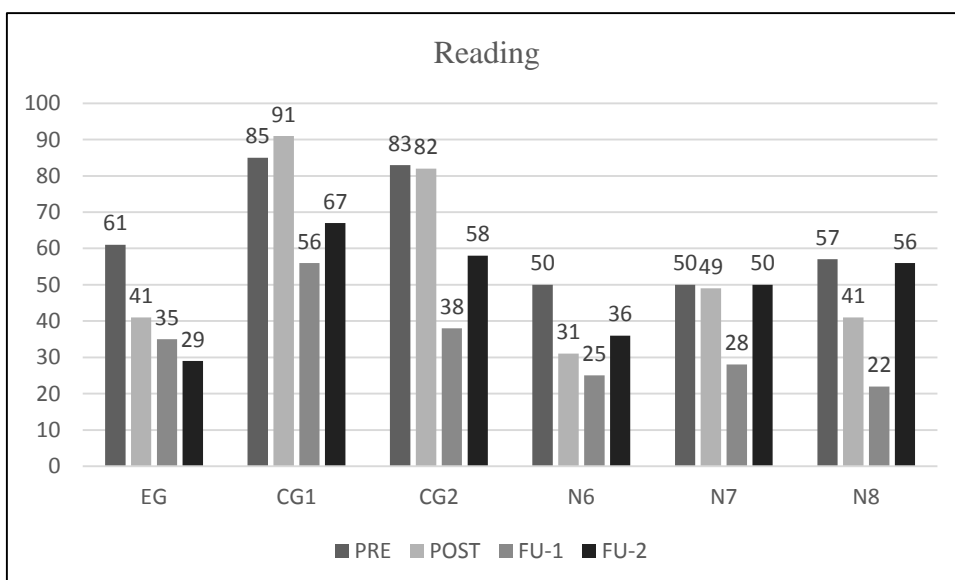
3.3.4 Reading

In these exercises students were asked to look for the anaphoric reference of some personal pronouns, Subject and Object, in a larger context. There was a selection of personal pronouns in third person, singular and plural, male and female, along with the neuter ‘it’ and ‘them’ that seemed to cause more problems among students (see 3.2.3.1).

Table 66 and graph 25 display the percentage of errors across groups. A first observation that can be made is that the EG ended up having the fewest number of errors.

	PRE	POST	FU-1	FU-2
EG	61	41	35	29
CG1	85	91	56	67
CG2	83	82	38	58
N6	50	31	25	36
N7	50	49	28	50
N8	57	41	22	56

Table 66: Percentage of errors in Reading



Graph 25: Percentage of errors in Reading across groups

Table 67 shows the results in terms of p-value and chi-square.

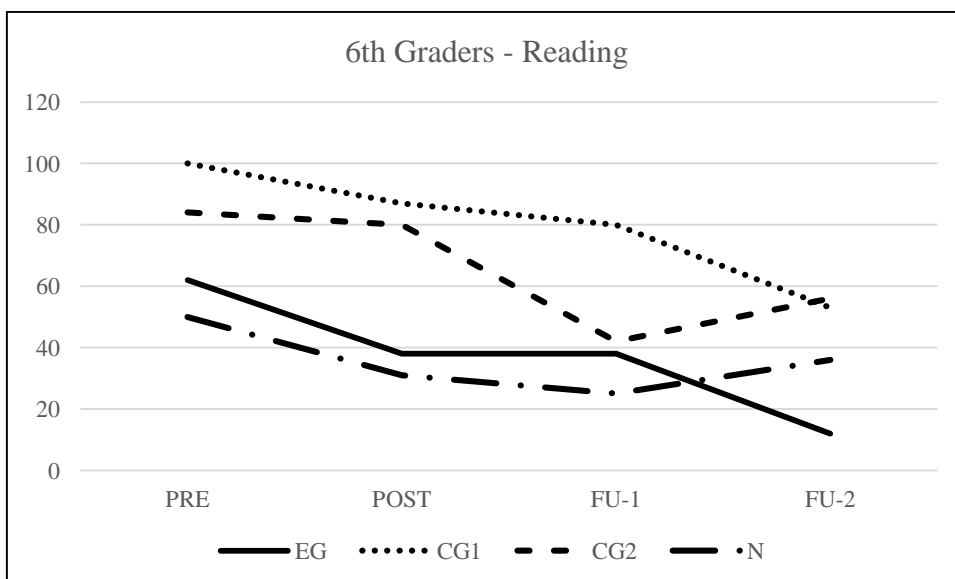
Reading	EG and CG1 p-value	Chi-square	EG and CG2 p-value	Chi-square
Pre- and post-tasks	0.064031	3.4298	0.130201	3.3205
Pre- and follow-up2	0.06842	2.2901	0.172783	1.8586

Table 67: P-value and chi-square in Reading task in EG and CGs

In this task, although p-value is higher than <0.05 , it has still some significance. Reading task being the more open activity, it is where the effects of the instruction could have been minimized and more direct instruction, together with further research, would be necessary. Tables 68 through 70 and graphs 26 through 28 show the percentage of errors throughout grades and groups.

6 th Graders	PRE	POST	FU-1	FU-2
EG	62	38	38	12
CG1	100	87	80	53
CG2	84	80	42	56
N	50	31	25	36

Table 68: Percentage of errors among 6th graders across groups

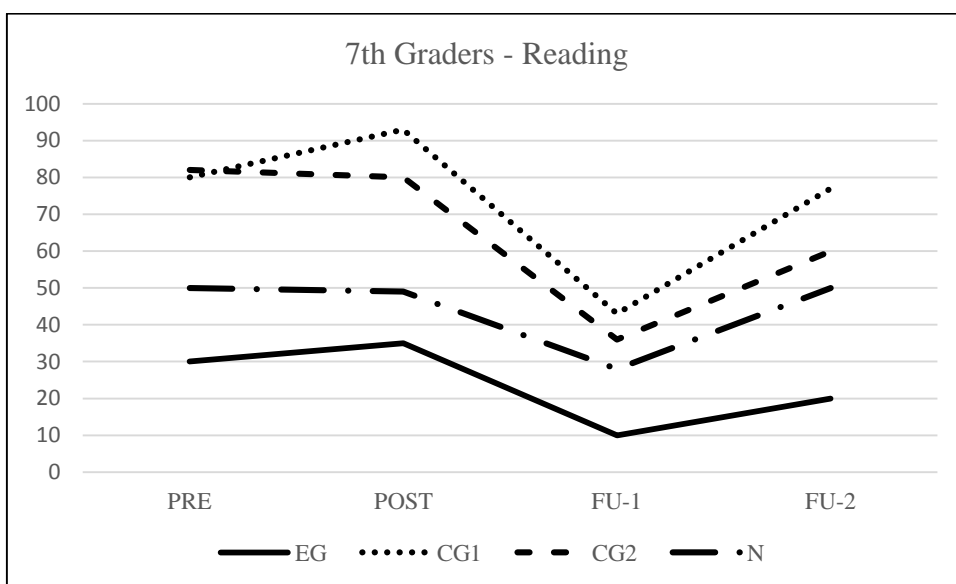


Graph 26: Percentage of errors in Reading across 6th graders

Both CGs had the same percentage of errors at the end, although CG2 reduced them in follow-up1. While EG and Natives began with a similar level, EG decreased the number of errors in follow-up2.

7 th Graders	PRE	POST	FU-1	FU-2
EG	30	35	10	20
CG1	80	93	43	77
CG2	82	80	36	60
N	50	49	28	50

Table 69: Percentage of errors among 7th graders across groups

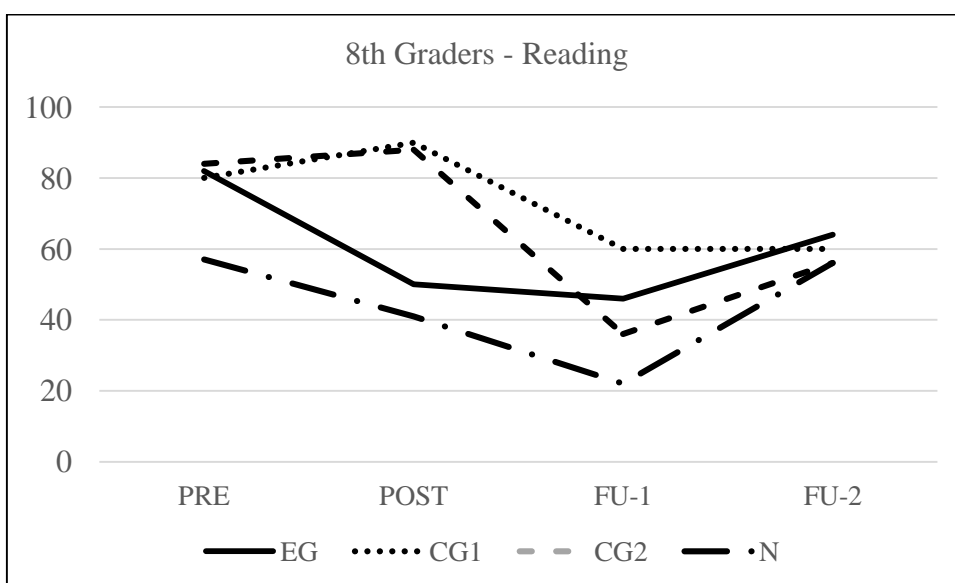


Graph 27: Percentage of errors in Reading across 7th graders

Across 7th graders it was the EG which began with the lowest percentage of errors and it also ended having the fewest number of errors. 7th graders in EG was a quite strong group of hard-working and motivated students. Both CGs show a similar behavior along the different readings. It was in follow-up1 where all students showed the lowest percentage of errors. The reason for this may well be, as commented below, that in this reading most of the questions dealt with human participants, in particular the main characters in the story.

8 th Graders	PRE	POST	FU-1	FU-2
EG	82	50	46	64
CG1	80	90	60	60
CG2	84	88	36	56
N	57	41	22	56

Table 70: Percentage of errors among 8th graders across groups



Graph 28: Percentage of errors in Reading across 8th graders

All ESL 8th graders started at the same level of errors but the EG was the one that underwent a significant reduction in errors after the instruction. The behavior of this grade seems a bit erratic, since the errors increased in follow-ups, especially in follow-up2. Curiously, this is the only instance when the EG ended up having more errors than the other groups. CG2 and Natives ended up having the same number of errors.

In general, in the pre-tasks many students were unable to determine that the antecedent for ‘them’ (240) was ‘the two older sisters’.

(240) When you are the only boy smashed between four sisters, and the older two had despised you ever since you stopped letting *them* dress you...

It seems that the students had difficulties narrowing down information when the referent is not replacing all, but only part of, the human participants involved in the Processes. This may cause some reading breakdowns when tracking participants or extracting specific information.

Also in number 5, example (241), students could not relate 'it' to 'the fact of having somebody worshipping you'.

(241) ...it was nice to have somebody who worshipped you. Even if *it* got unhandy sometimes.

In the post-tasks, questions number 2, 3, and 5 were the ones that were more problematic among students. In question number 2, example (242), many students related the personal pronoun 'she' to a plural antecedent such as 'little girls' and 'Brenda and Ellie' or to a plural object such as 'albums' or a male character such as 'Jess' or 'Brenda's boyfriend'.

(242) Their mother was complaining that there was hardly enough money to give the little girls something from Santa Claus, let alone a surplus to buy record albums or shirts for a pair of boys *she*'d never set eyes on.

In number 3, example (243), many students relate 'him' to a female character as 'Brenda' or 'Leslie', to a plural antecedent 'the Perkins' or to 'the assistant pig keeper'.

(243) He was reading one of Leslie's books, and the adventures of an assistant pig keeper were far more important to *him* than Brenda's sauce.

And in number 5, example (244), students provide a human and plural antecedent, 'Jess and Leslie'; or a plural neuter one 'stories'; or a human singular antecedent 'Leslie' and 'a foundling'.

(244) I was a foundling, like in the stories. Way back when the creek had water in *it*.

Based on the previous figures we can see that in most groups the number of errors decreased in follow-up1. This is because the personal pronouns they were asked to relate dealt with Animate Participants (Human) and in particular with the main characters in the story. The only question dealing with an abstract thing was number 1, in follow-up1, where the students had to relate the personal pronoun neuter 'it' to 'dream', this number remaining a source of errors.

(245) Some dream must have awakened him, but he could not remember it. He could only remember the mood of dread it had brought with *it*.

In follow-up2 there was a variety of personal pronouns and students found it difficult to find the antecedent for the pronoun 'they'. Students related it to 'Mountain', 'two fields', '4th graders' or '5th graders' only. In fact, only one student, an 8th grader, wrote that the antecedent was 'the students/boys that did not go to the field trip'.

(246) By Friday a number of the fourth- and fifth-grade boys had already drifted away to play King of the Mountain on the slope between the two fields. Since there were only a handful left, *they* didn't even have to have heats...

Also in number 2 students found it difficult to relate 'it' to 'the contest'. Many students related 'it' to 'the motions'; there even is a lack of accordance in number.

(247) ...They went through the motions of the contest on Friday, but when *it* was over...

In question number 5 many students related 'them' to 'Miss Edmund', this is because in number 4 the answer was 'Miss Edmund'. This was already mentioned in subsection 3.3.2 (anaphoric reference) where the students favored the human participant and took it as the main element in the following sentences.

(248) Miss Edmund fiddled a minute with her guitar, talking as she tightened the strings to the jingling of her bracelets and the thrumming of chords. She was in her jeans as usual and sat there cross-legged in front of *them* as though that was the way teachers always did.

The questions dealing with the personal pronoun neuter 'it' throughout the tasks were the ones that caused more errors.

The farther away the referent was, the more difficulties students had to locate it. This can also be seen in their written texts where there is a lack of consistency in the use of reference.

3.3.5 Final comments on construed exercises

Table 71 summarizes the students' results across groups and tasks. The lowest percentage of errors is in bold and it can be seen that the EG invariably shows the best results in follow-up2 and across tasks. Therefore, the students seem to have benefited from the instruction in semantic roles and type of processes.

The results show that the effect of the instructions decreased as time passes. This gives ground to the concept of *spiral curriculum* posited by Bruner (1960) or repetition or exposure to certain linguistic items throughout the school year presented in various forms (Chaudron 1988; Ellis 1997; Muller 2007; Spada 2008).

In Anaphoric reference task students both ESL and natives used similar strategies when finding the antecedent. Students favored the Human participant when in the sentence there was more than one entity. In addition, students tended to refer to a different element in the sentence functioning as a synonym or an explanation. Also, students related to a feature or

characteristic of the object expressed with a premodifying noun, instead of relating to the object.

In the task dealing with Groups, many students only underlined the head of the Group. This might have to do with what Brown claims that children first acquired lexical words (1973: 75), and it seems that they remain having much more linguistic weight than functors. On the other hand, in the task dealing with Syntactic functions, students found difficulties when the sentences began with an Adjunct, and in many occasions students labelled it as a Subject. Regarding personal pronouns replacement tasks, students made only a few errors because they took the Subject as either singular/plural or male/female when it was the other case. And in replacing dO and iO it is interesting to remind that students' errors decreased when replaced the latter, since they were human participants and were favored over the dO that remained unreplaced.

Finally, the Reading tasks which was the more open activity, it is where the effects of the instruction were slightly lower. Nevertheless, students seem to have benefited from the classroom instruction since EG again ended up having the fewest errors and could locate the antecedent more easily than the other groups. This gives ground to Parr and McNaughton's statement when they claim that an explicit methodology between reading and writing is necessary (2014: 147) (see 4.4).

	Anaphoric reference		Reading		Groups		Subjects		dO	iO		
	PRE	FU -2	PR E	FU -2	PR E	FU -2	PR E	FU -2	PR E	FU- 2	PRE	FU- 2
EG	56	31	61	29	31	27	68	12	87	65	86	18
CG1	80	58	85	67	26	48	85	83	95	99	100	93
CG2	77	54	83	58	34	52	58	52	58	52	87	75
N6	48	40	50	36	21	43	24	15	74	78	80	39
N7	52	57	50	50	8	42	21	24	66	85	74	61
N8	41	62	57	56	15	45	57	33	71	83	77	63

Table 71: Summary of results across groups and tasks

Next section analyzes students' writings. The main purpose of these activities was to see the impact of instruction on open exercises (vs. construed exercises, i.e. anaphoric reference and groups) such as writing.

3.3.6 Writing

In this final section the students' compositions are analyzed. There are four main elements taken into consideration: number of sentences; type of Themes; number of S and O; and the type of relationship between clauses, both simple and complex.

Each element will be analyzed trying to reach a better understanding of the students' control of written language and to determine whether the instruction on Semantic Roles, Processes, and clause structure had an impact on producing written texts.

3.3.6.1 Sentence

A first comment needs to be made on the notion of sentence. This concept has been taken from Halliday and 'it simply refers to the orthographic unit that is contained between full stops' (1985a: 193).

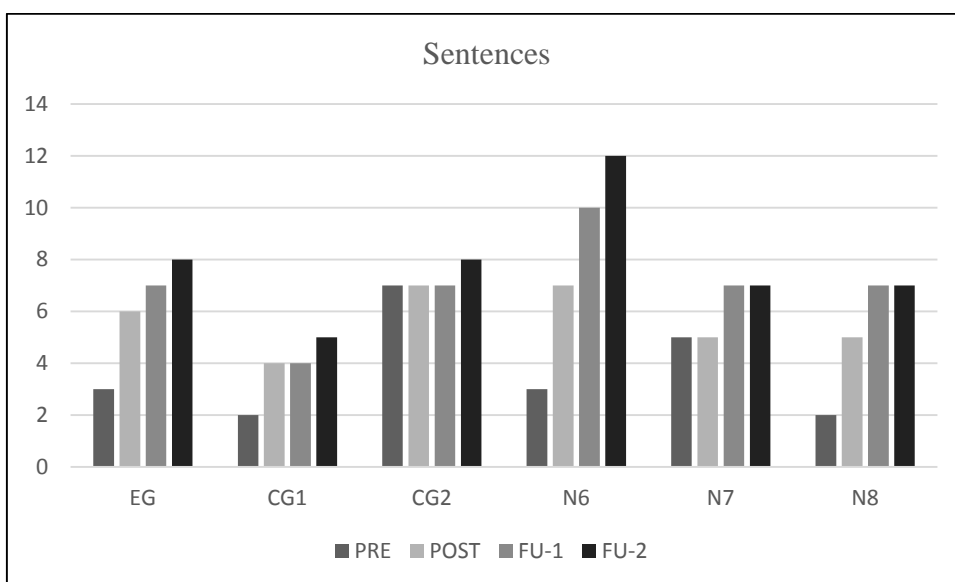
Secondly, spelling mistakes, although abundant, were not tallied. My research concentrates on errors that might affect the understanding of the meaning of the text, in accordance with Halliday's statement that 'learning a language is learning how to mean' (1973: 24). It would be interesting, paraphrasing Painter (1984) and Halliday (2007: 330), *to look into the learners' language development* to better understand the metafunctional foundation on which the child construes knowledge. Or as Bruner claims, advances in how we go about understanding children's minds are a prerequisite to any improvement in pedagogy (1996: 50).

Graph 29 shows the number of sentences per group and task. We can see that the number of sentences varies remarkably. It seems that the students do not have a clear sense of 'unit of information', since a single sentence can cover a paragraph or there might be up to six sentences in a three-line text. As a result, students' sentences were either too long or too short. Examples (249) and (250) show this lack of knowledge about 'unit of information'.

(249) One day I was in my room because my dad and my mom grauded me my brothers phone rang and I answered and they got mad at me the next day I went to the school and I was bored so I decided to read then after school my cousin call me to it we could go to a dance but I say no because my mom and dad grauded me and I had to help at home vacuuming the floor wash up dishes and tomorrow I have to ironin my clothes clean the

kitchen and go shopping buy food and stuff like that so that all I have to do the next day I wasn't graded anymore and I was happy. (EG-17-8) (FU-2)

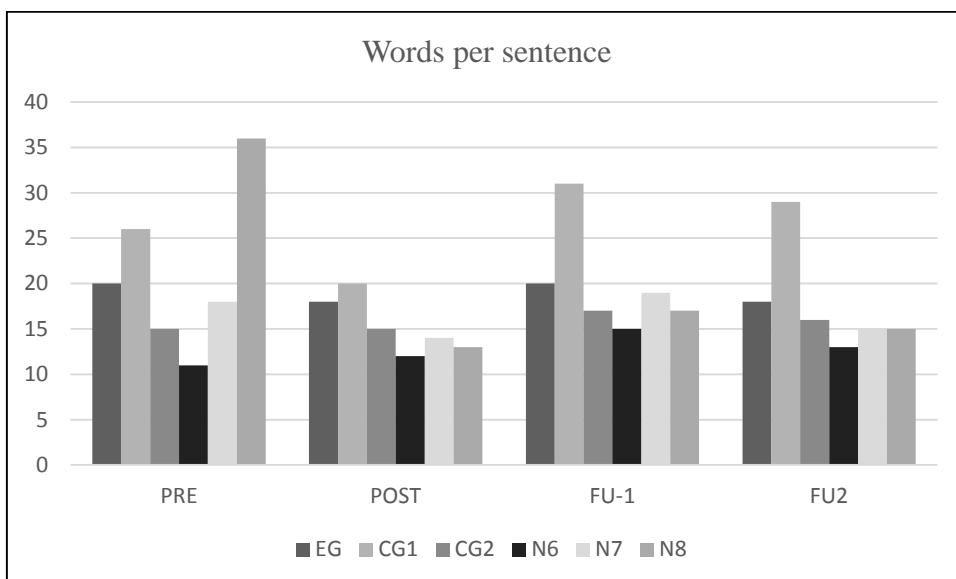
(250) One day I was sitting in class. The weird guys kept starring at me like i was dumb or something. I didn't care though. When I got home, I grabbed my new cell phone and called my friend Jenny. She was dreaming of her future paradise in the Bahama's. Later that night, we went to a party and danced away. That was the night her parents split. I was her only friend. Besides her books. Jenny loved to read. She said it takes her to another world. When we got home we had to clean up the house. Finally the house was clean and everything was Okay. (N-8-16) (FU-2)



Graph 29: Means of number of sentences across groups and tasks

The students do not seem to have a clear idea of what a sentence is and when and how sentences are to be split. Sometimes they began a sentence using capital letters but did not end the previous sentence with a period. Instead, they wrote a period at the end of the writing. Nevertheless, the number of sentences increased along the tasks in all the groups.

Graph 30 shows the means of words per sentence across groups and tasks.



Graph 30: Means of number of words per sentence across tasks and groups

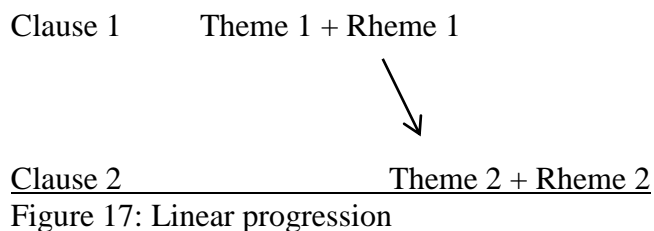
Besides CG1, which is a very weak group, the rest of the groups had a similar behavior in relation with the length of sentences. Natives across 8th graders changed dramatically to remain stable afterwards. Nevertheless, the length of the sentences has to be analyzed in the context of the students' writings in particular and with other elements in mind such as connectors, Thematic development, and tracking of participants.

3.3.6.2 Theme

This section is brought here in relation to three basic types of Thematic progression: simple linear, continuous and derived. This is an important topic when writing, especially academic texts, since an adequate choice of Theme is essential in academic writing. As was seen in section 3.1.3.1, Spenader et al. highlight the strong effects of topicality and the need to take *discourse coherence* seriously in acquisition studies. This need for future research is mentioned in part IV (section 4.4).

Thematic development is an important feature when construing written texts. It is a topic in which students need instruction. This could be one of the intellectual tools that help learners to move to a higher level of reasoning (Vygotsky 1987).

Very briefly, Downing and Locke (2006) explain the different Thematic progression, viz. simple linear, continuous and derived. In simple linear progression something introduced as new information in the Rheme of the first clause is taken up to be the Theme of the second.



Example (251) illustrates this progression where *she* is Theme 1 and *huge team of people* is the focused part of Rheme 1. A semantic sub-set, *some of them*, then becomes the Theme of the second clause.

(251) She has a huge team of people working for her. Some of them have been with her for years. (2006: 247).

In continuous progression (constant Theme), the same Theme is maintained across a series of coordinated clauses, each with its own Rheme.

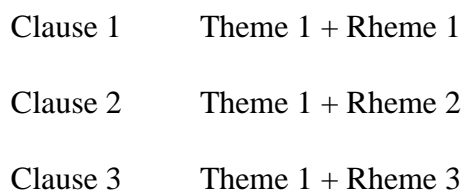


Figure 18: Continuous progression

This can be seen in example (252), where *Mum* is maintained across a series of coordinated clauses, each with its own Rheme.

(252) Mum was always a hard worker and had plenty of drive but, in a small way, she was also proving to be quite a successful business woman. (2006: 247).

And in derived Themes, the different Themes of a number of Theme-Rheme structures all relate to a 'hypertheme' or 'global topic' (Downing and Locke 2006: 246-9).

(253) *Mescaline* research has been going on sporadically ever since the days of Lewin and Havelock Ellis. *Chemists* have not merely isolated the alkaloid; *they* have learned how to synthesize it, so that the supply no longer depends on the sparse and intermittent crop of a desert cactus. *Alienists* have dosed themselves with mescaline in the hope thereby of coming

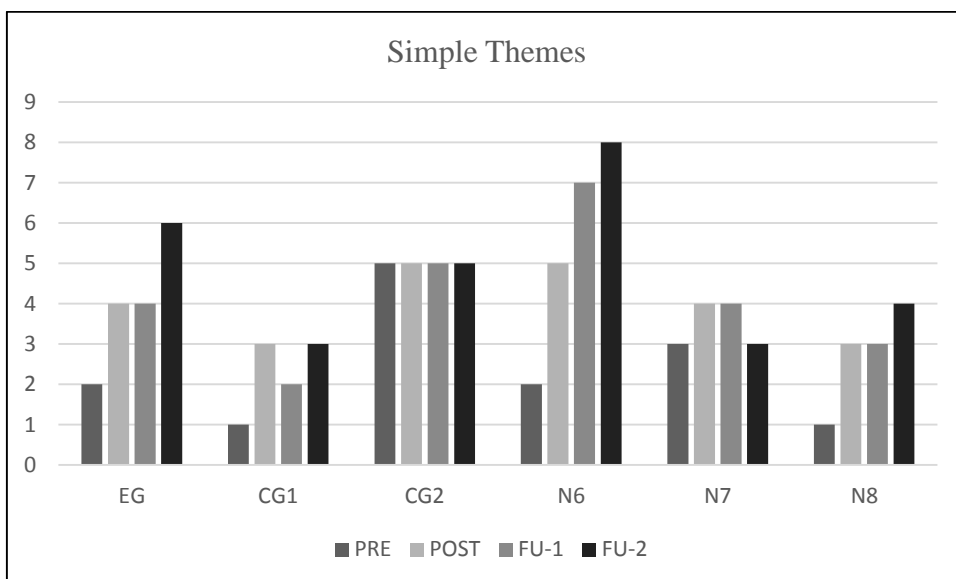
to a better, first-hand understanding of their patients' mental processes. Working unfortunately upon too few subjects within too narrow a range of circumstances, *psychologists* have observed and catalogued some of the drug's more striking effects. *Neurologists and physiologists* have found out something about the mechanisms of its action upon the central nervous system. And *at least one professional philosopher* has taken mescaline for the light it may throw on such ancient, unsolved riddles as the place of mind in nature and the relationship between the brain and consciousness. (2006: 248)

In example (253) the Hypertheme is 'mescaline research'. From this, the passage develops in terms of the classes of researchers (the Themes, derived from the Hypertheme) and what they did (the Rhemes).

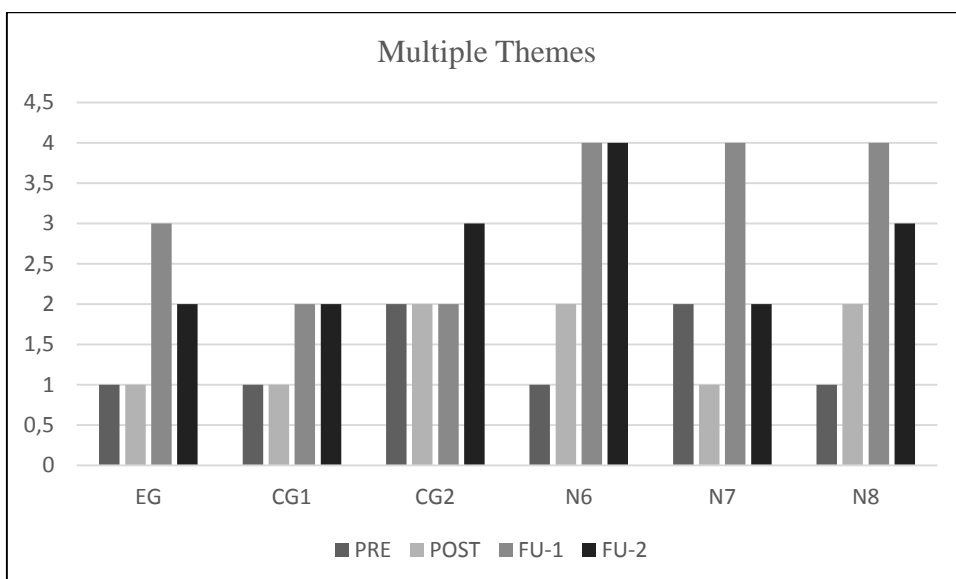
Graphs 28 and 29 show the type of Themes used by students and groups. The data show that there was a majority of simple Themes with a use of the Participants realized by a Personal Pronoun. On the one hand, when students employed a multiple Theme it was a textual one in an 85% of the cases. This was due to the fact that students began sentences with a conjunction such as *and*, *so*, *because* or *then*. On the other, students used few interpersonal Themes, which resulted in monotonous texts with little movement.

Students favored the continuous thematic progression, the constant Theme, where the same Theme is maintained across a series of coordinated clauses. In students' compositions the Rheme hardly ever became the Theme in the following sentences, thus producing a lack of movement (Halliday 2002: 190-1). This could be interpreted in relation to the concepts of *Given* and *New*³². In these learners' writings the New did not become the Given in the following sentence resulting in a list of sentences with little connection among them.

³² Halliday relates the terms of *Given* and *New* to the information structure. These are often conflated with Theme and Rheme under the single heading "topic and comment". The latter, however, is a complex notion, and the association of Theme with Given; and Rheme with New, is subject to the usual "good reason" principle already referred to – there is freedom of choice, but the Theme will be associated with the Given and the Rheme with the New unless there is a good reason for choosing some other alignment (2002: 192) (cf. Downing and Locke 2006: 240).



Graph 31: Means of the number of simple Themes across groups and tasks



Graph 32: Means of the number of multiple Themes across groups and tasks

Table 72 shows the percentage of simple Themes used by students in relation to the total number of Themes.

	PRE	POST	FU-1	FU-2
EG	67	80	57	75
CG1	50	75	50	60
CG2	71	71	71	63
N6	67	71	64	67
N7	60	80	50	60
N8	50	60	43	57

Table 72: Percentage of simple Themes in relation to the total number of Themes

The first thing we can see is that the number of simple Themes exceeds the number of multiple Themes. The second remark is that the use of this textual resource does not vary much across groups. As I already mentioned above, the majority of textual Themes were the common conjunctions *because*, *so*, *and*, and *then*.

3.3.6.3 Personal pronouns

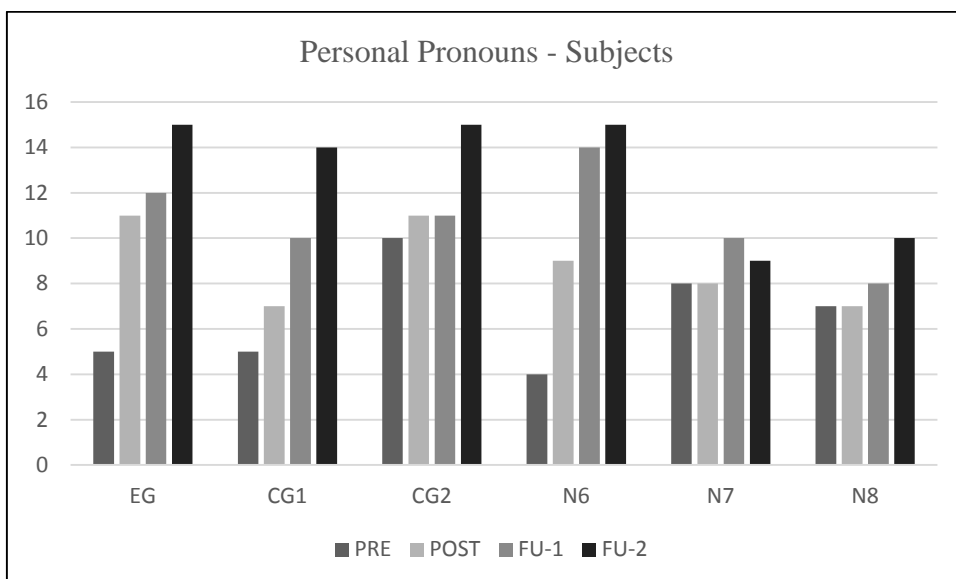
Graphs 33 and 34 show the means of personal pronouns (S and O) employed by students. By looking at the figures we can see that the number of S is three times, and even sometimes four and five times, higher than the number of pronominal O. There was an overuse of pronominal S and a paucity in the use of proper and common nouns. The result was the repetition of a structure with little interest, from the readers' point of view, and little movement.

Furthermore, a common error among students, both ESL and native speakers, was to begin a sentence with 'me and my friend' or 'my friend and me'. In the same way, there was a lack of consistency and coherence in the use of the personal pronouns producing a choppy result.

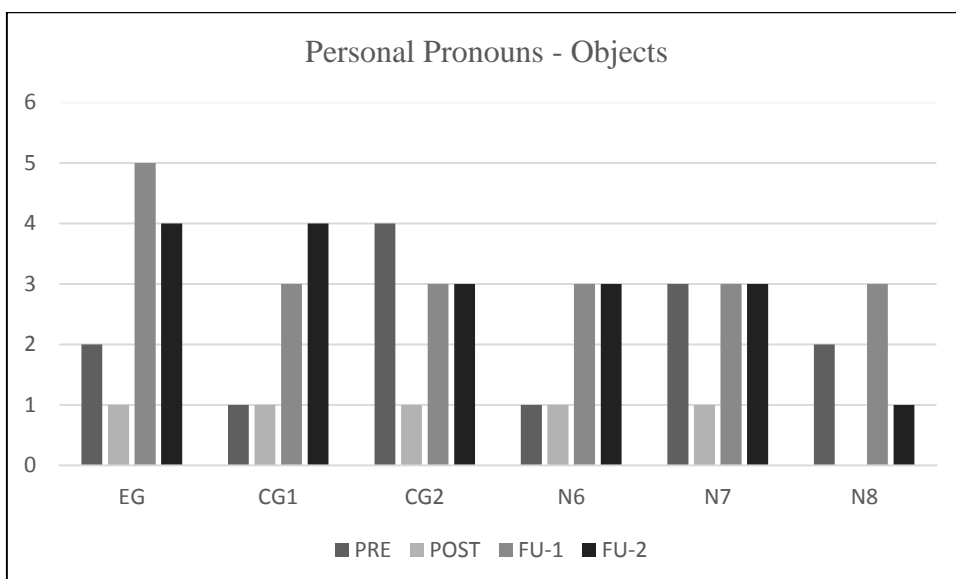
(254) One day I was watching tv and bored and thaught I wanna play with my friends. I call them and they went to a party with girss. They got busted and my parents were upset cause I was late night and used their phone.... (N-6-14) (FU-2)

(255) If there was a new person moving in to my neighborhood I would want them to be kind and clean. (N-8-16) (Pre-tasks)

(256) One day me and my Friends went to the lake and it was super hot it's was bout 12, And we was so hot we sweat out our shirts. While driving he stop and he pick to swim and fish. (N-8-4) (Post-tasks)



Graph 33: Means of the number of pronominal Subjects across groups and tasks



Graph 34: Means of the number of Objects across groups and tasks

The large number of pronominal S is mainly due to the students' tendency to start with a personal pronoun, first person singular 'I' or first person plural 'we'. This is a feature of orality that students translate into their writings (Perera 1991: 227).

The small number of pronominal Objects has to do with Thematic development. In their writings students used continuous progression (constant Theme) by introducing new

elements in each sentence. This result in a written text is more typical of an exposition register than of a narrative one.

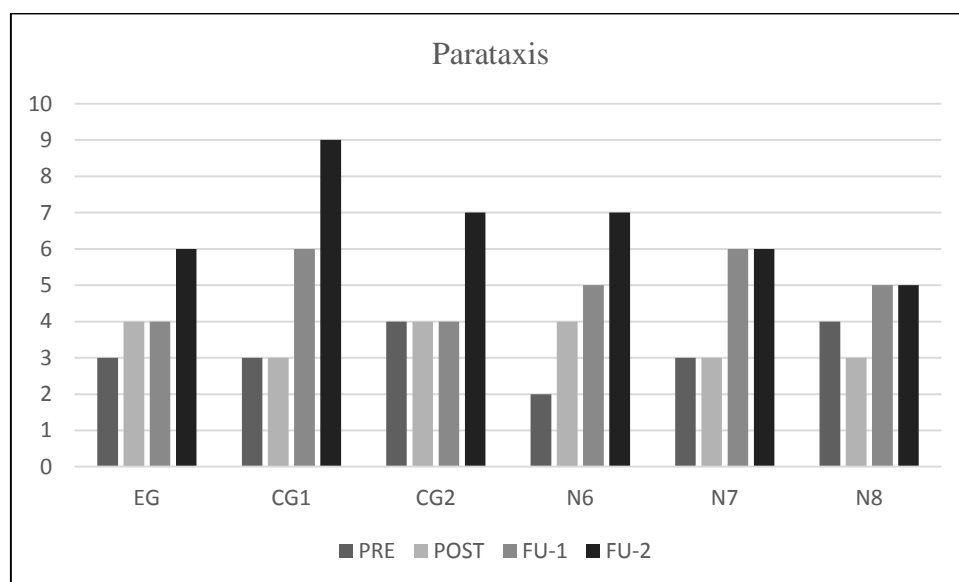
Another reason could be that students lose track of participants easily when they are not the Subject, and they would rather use proper or common names instead of personal pronouns.

3.3.6.4 Relationship between clauses

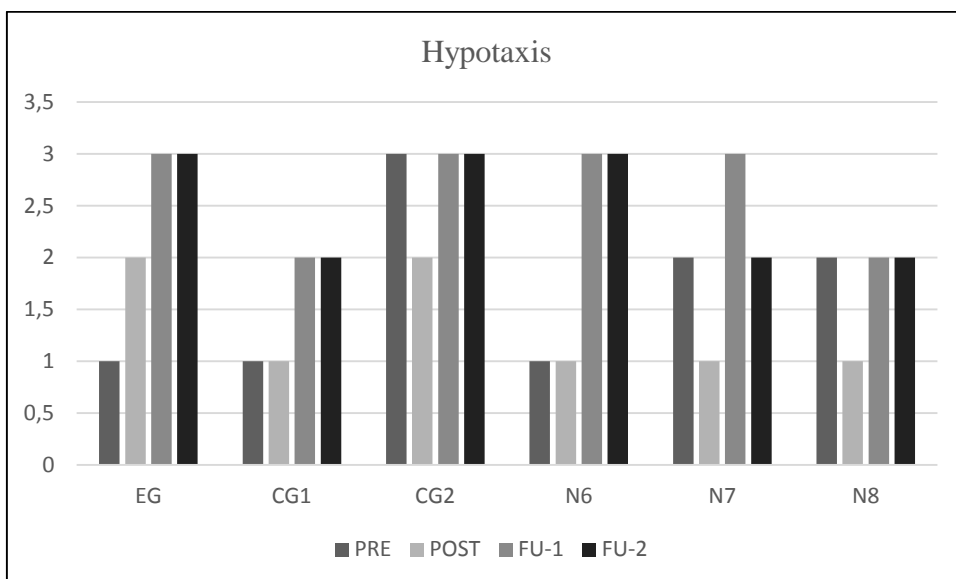
In this section the type of interdependency or ‘taxis’, thus hypotaxis and parataxis, has been analyzed. Hypotaxis is the relation between a dependent element and its dominant, the element on which it is dependent and parataxis is the relation between two like elements of equal status, one initiating and the other continuing. Within the types of taxis only the expansion has been tallied, i.e. elaboration, extension, and enhancement (Halliday 1985a: 195-7 in section 1.2.5.1.1).

Projection, i.e. the way the speaker/writer represents what has been said, has not been tallied, since most students did not use quotation marks, direct speech (only used in three cases) and since I was interested in the explicit markers used by students to relate their ideas.

Graphs 35 and 36 show the means of paratactic and hypotactic elements used by students in their compositions.



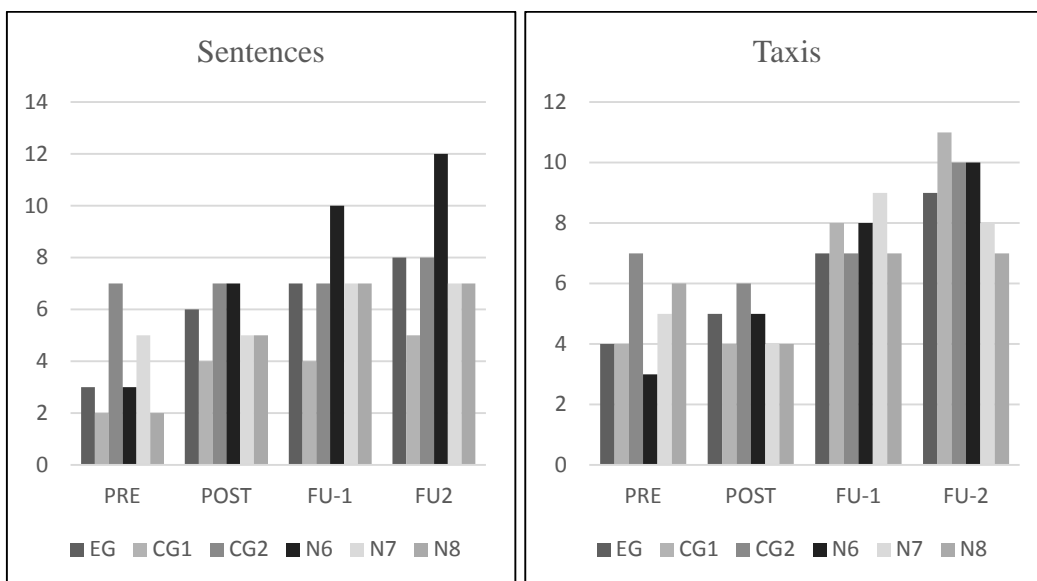
Graph 35: Means of the number of paratactic elements across groups and tasks



Graph 36: Means of the number of hypotactic elements across groups and tasks

First of all, we can see that the use of parataxis is twice as frequent as the use of hypotaxis, in some cases being even higher. Virtually the only hypotactic elements used by students were *if* and *because*.

Secondly, we can see how the number of taxis increased in the follow-ups. This was due basically to the fact that students' writings were longer. Graphs 37 and 38 show how the number of sentences increased and so did the taxis elements. Considering the length of their compositions, the students' tendency is to write very short sentences. In some cases, students did not even write a period and began a new sentence in upper case in the following line. As I mentioned in section 3.3.6.1, students do not seem to have a clear idea of a 'unit of information', since the length of their sentences can go from three words, to a line, to a whole paragraph. This is a topic, together with thematic development, which needs instruction and further research.



Graph 37: Means of sentences

Graph 38: Means of taxis

There was a low number of hypotactic elements and variations in the types of thematic development. In the same way, students showed not to have control over the reported or indirect speech nor over tenses, as examples (257, 258) below show.

(257) We got there by his mother car. We are going to meet other camper. We plan swim and fish. (N-8-1) (Post-tasks)

(258) Me and my best friend are going on a trip to Texas. It was in the summer June the 24th. The weather was sunny. To get there fast we are going in a plane. (N-8-16) (Post-tasks)

3.3.6.5 Process types

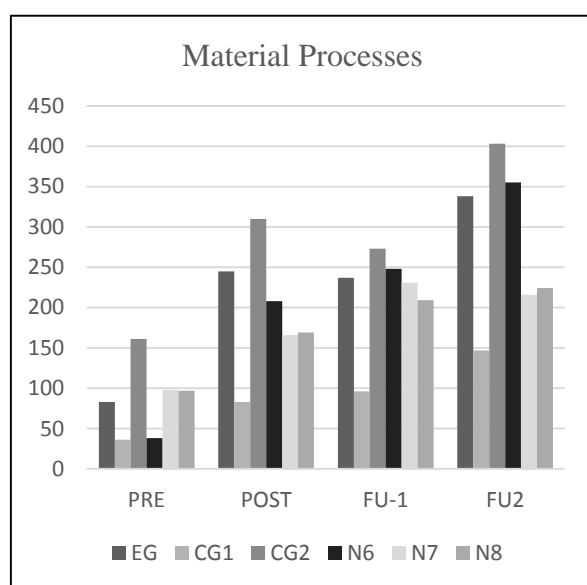
Each process determines the number and type of Participants taking part in the clause (see *transitivity* section 1.2.1.2.10). Their importance along with the notion of cohesion are at the center of register, a linguistic concept that, as was seen in 1.2.6 and throughout Part II, students need to know and master in order to succeed in high school and at a tertiary level. Students' writings show a predominance of Material Processes. They are a reflection of their spoken language, much action, and little reflection. There was a dearth in dialogue, only two students did use Verbal Processes in direct speech form. This has to be taught, since students as they move into high school and college need to produce more reflexive and static texts. They also need to be exposed to different text types and their linguistic differences in the use

of Processes, voice, modality, etc. Teachers need to make certain linguistic features explicit because even though students read on a daily basis, there was not a reflection of that reading in their writings.

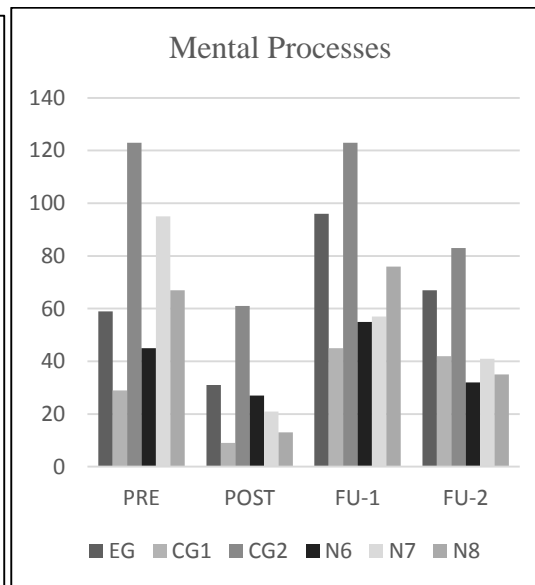
The Appendix contains tables with the number and types of processes students used in their writings. Processes were grouped into four types: Material (Material and Behavioral); Mental; Verbal; and Relational. Existential Processes were not tallied since they were not part of the instruction (see 1.2.1.2.7).

When students used a verbal substitution those auxiliary verbs were not tallied. Such as in ‘we were going to be there for a week, and we *did*.’

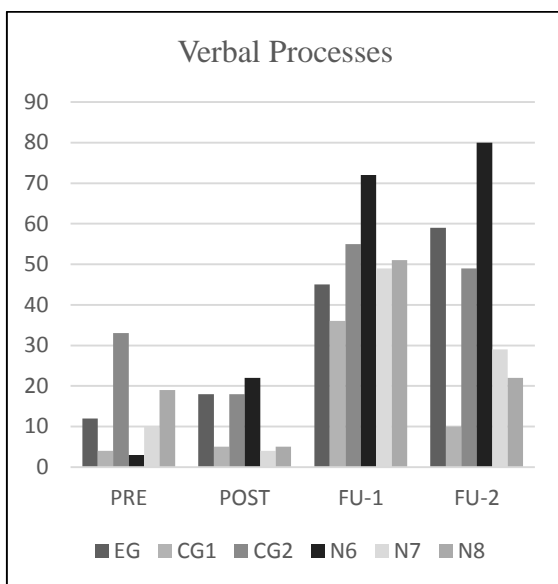
Graphs 39-42 show the number of Process types used by students in their writings across tasks.



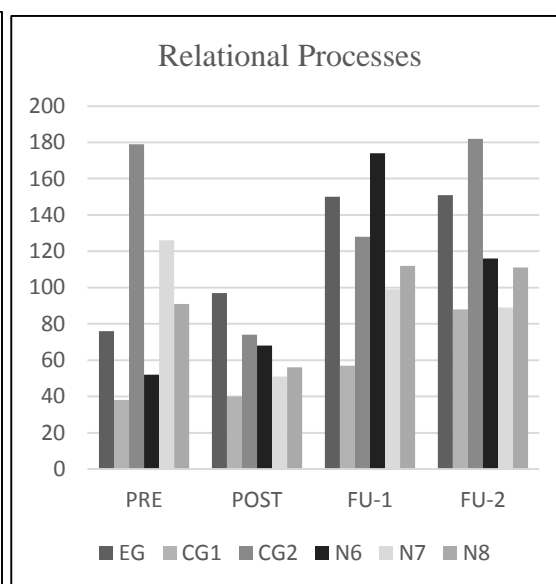
Graph 39: Number of Material Processes



Graph 40: Number of Mental Processes



Graph 41: Number of Verbal Processes



Graph 42: Number of Relational Processes

The first observation that can be made is the differences of use in processes types across groups and tasks. The second observation is the higher use of Material Processes over the others. The type of Processes students did not favor was the Verbal one, although it increased in the follow-ups as graph 41 shows. This type of Processes requires the use of projection, which is a more complicated structure than the linear one of Agent + Verb + Object; and requires more control over reported speech, thus verbal tenses.

The abundance of Material Processes can be interpreted in terms of text types. Academic texts, formal language, scientific discourse, are more static than casual conversation. In middle school students start facing the difficulties of academic language and this could be the point of departure to see the differences across processes; but first they need to have had some previous instruction on process types. This is relevant, since scientific texts are static and students need to be instructed into these differences in order to be able to construe academic texts (see Halliday 2.1).

This broad view of processes, together with nominalization or grammatical metaphor, are the two main features of written formal language that learners need to be directed into. In part IV some exercises are proposed, so that teachers and educators can expose students to the linguistic elements necessary to move to a higher level of reasoning.

All in all, the number of processes was sometimes related to the repetition of some verbs such as *think* and *like* among the Mental, *be* and *have* among the Relational, and *go*, *do*, *make*, or *walk* among the Material. The variation of these verbs was not very different among EG and Native Speakers. CG1 being the weakest group, it performed at a lower level.

In follow-up2 students tended to use exophoric referents such as *that*, and *this* over nouns such as *the students* or *the room*. This is what some authors, such as Hawkins (1977), have already drawn attention to as a difference among children whose social class is different (see 3.1.1 above).

The sixth graders (N6) performed at a better level than the other grades. It seems that students' interest in writing fades away as they move to a higher level because 8th graders (N8) show a similar behavior to the other groups but CG1 (as mentioned above it was a weak group). Vygotsky mentioned the importance of creating the right situations to make writing necessary for students and introducing writing at an early age (1978: 117). In the same direction, Newkirk highlighted that the instruction on factual writing can be introduced early (1984: 341).

3.3.7 A note on the passive voice

The passive voice was not fully treated during the instruction, and therefore there were fewer exercises. In session five students were introduced to this concept and they worked on some clauses by moving the Participants and modifying the Processes. They were given two exercises: one in the pre-tasks; and one in the post-tasks. The results are simply presented below to determine whether the instruction might have influenced their knowledge about this topic.

In the pre-tasks students had to elaborate full answers to questions by using personal pronouns and the passive voice after having provided some information, as illustrated in example (259).

(259) When is the park opened for the pool parties? It's opened at 10:00

Unlike the exercise in the post-tasks, only four questions were presented, since students had to elaborate the answers. Table 73 displays the percentage of errors by group and by grade, comparing each grade of the ESL groups with the Native groups of the same grade.

	% errors	6 th graders	7 th graders	8 th graders
EG	79	83	75	75
CG1	84	83	83	88
CG2	73	73	70	80
N6	58	58		
N7	74		74	
N8	59			59

Table 73: Percentage of errors in groups and by grades across groups

The first observation that can be made is that the number of errors was quite high across the groups, only for the Native groups among 6th and 8th graders the percentage was lower, even though it was over 50%.

The majority of errors came from the lack of replacement of the subject with a personal pronoun (again a lexical strategy was used) and with the wrong usage in the number

(260) The movies are shown at 7:00 pm.

(261) It's delivered at 4:45 pm. instead of they're delivered at 4:45 pm.

(262) It's shown at 7:00 pm. instead of they're shown at 7:00 to 8:30 pm.

In this exercise spelling mistakes were not marked as wrong, since they did not interfere in the comprehension and the analysis was not the purpose of the activities. Common mistakes, among native speakers and ESL students, were

(263) *Its served at 5:00 pm.

(264) *Thay are shown at 7:00 to 8:30 pm.

(265) *Their delivered at 4:45 pm.

It was probably the lack of attention that made the students answer the questions in the active voice, even though the questions were made in the passive voice. As Vygotsky said 'language and perception are linked and the ability to direct one's attention is an essential determinant of the success or failure of any practical operation' (1978: 33-5).

In the post-tasks the exercise was to determine whether the sentences were in the active (A) or in the passive voice (P) and then underline the Receiver (Re) of the action in the passive ones.

(266) ____ P ____ The heavens were studied by ancient astronomers.

Two elements were marked: recognizing the voice of the sentence; and recognizing the Receiver by underlining it. Table 74 shows the overall percentage of errors across groups and tasks, and table 75 the percentage of errors across grades.

	A/P voice	Receiver
EG	20	42
CG1	51	60
CG2	51	51
N6	33	84
N7	46	90
N8	42	56

Table 74: Percentage of errors in voice across groups

We can see that the EG group performed better than the others. This may be due to the fact that there seems to be a lack of KAL about the passive voice among students, both native and non-native (see 2.1).

What tables 74 and 75 show is the recognition of voice and how the order of elements is modified in the passive voice.

6th grade	A/P	Re		7th grade	A/P	Re		8th grade	A/P	Re
EG	28	44		EG	5	40		EG	19	40
CG1	37	47		CG1	55	70		CG1	60	50
CG2	55	47		CG2	42	58		CG2	60	44
N6	33	84		N7	46	90		N8	42	56

Table 75: Percentage of errors in voice across groups and grades

Many students underlined the first element in the sentence whether in passive or in active voice. Many errors came from sentence number 7, example (267), because students considered it to be passive, probably because the verb was in past and they relate regular past tense suffix *-ed* with the passive voice.

(267) In 1976, the United States landed Viking I near the planet's equator.

A large number of students underlined the Agent instead of the Receiver such as in sentences number 1, 6, or 8, examples (268-270).

(268) A solar eclipse was predicted by Thales of Miletus in 585 B.C.

(269) This planet was named by ancient Romans after the red god of war in Roman mythology.

(270) Photographs of the surface of mars were sent back to earth by both Viking I and Viking II.

In sentence number 4, example (271), many students only underlined ‘Copernicus’. This might be because there is a tendency among students to favor the ‘human element’ in the sentences.

(271) The use of Copernicus’s theory was forbidden by religious leaders until 1757.

This tendency is relevant, since students seem to struggle with NGs, especially when these are long. It is important to remind here that part II tried to summarize the main features of academic texts, which are nominalization and abstraction, among others. We must also remember that the passive voice is highly employed in scientific texts and it is in history texts precisely where people and time are objectified.

It is also interesting to highlight that native speakers were unable to locate the Receiver. They even doubled the number of errors, only the Native group among 8th graders performed at a similar level. In the first part of the task, i.e. recognizing whether the sentence was in the active or passive voice, the EG seems to have a higher level of grammar knowledge.

In the writing exercises students (especially native speakers) when they used the passive voice, they used the *get*-passive structure. This structure is much more common in speech than in writing and has an informal flavor, the reverse of the *be*-passive. The *get*-passive grammaticalizes affective meaning, and so potentially reflects speakers’ involvement, whereas the *be*-passive is more objective. The use of the *get*-passive is therefore an option. Speakers’ interest centres on the *get*-passive subject and what happens to it, while with the *be*-passive interest centres on the event. Involvement of the subject referent is also implied by the *get*-passive, in that the subject is partly responsible for the significant result, whether this is beneficial or adverse. The *be*-passive, by contrast, is neutral. Compare:

(272) She got (herself) promoted. vs. she was promoted.

 I got stung by a wasp. vs. I was stung by a wasp. (Downing and Locke 2006: 256).

In a nutshell, students seemed to lack the KAL or grammar that would help them rise to a higher level of speech development (Vygotsky 1962: 99). Students’ orality is reflected in their writings. Some of these features are:

- a. Use of the *get*-passive structure

(273) ...you will go to ISS or get suspended. (FU-1) (N-8-2)

(274) ...or they get tracked. (FU-2) (N-7-18)

b. Use of *get* as a joker

(275) I just Got Last week my Phone....the other day Got even better... I got stuff for him... I get real sad... I can get him back (FU-2) (N-7-15)

c. Personal pronouns in first person mainly: *I*, and *We*

(276) I wake up I was sleeping. I went to the bathroom... I went to the bus station... I thing that was bad luck. I got in school... (FU-2) (EG-21-8)

Such repetition of a pronominal Theme is common and unremarkable in speech (Perera 1991: 227).

d. Use of deictic constructions, heavily dependent on the situation

(277) That's what I want my neighbor to be like. (Pre-tasks) (N-8-5)

(278) ...in order to get in this school and in this community... (FU-1) (N-8-9)

e. Lack of coherence in the use of cohesive elements such as personal pronouns

(279) First of all you would need to know what if they get bullied in school, they don't have to be scared to tell the school principle, or a teacher, they could even tell an adult. You would need to pay attention... (FU-1) (CG2-16-7)

f. Inconsistency when tracking participants; in gender and number

(280) One day me and my Friends went to the lake and it was super hot it's was bout 12, And we was so hot se sweat out our shirts. While driving he stop and he pick to swim and fish. (Post-tasks) (N-8-4)

g. Use of simple Themes

(281) Hayley and I were going to Hawaii, the main island. I don't know the right time but a little over 2 hours. We flew there it to most of the day. We only rented one car sence it was just my mom, Hayley, her mom, and me. We hiked up a volcano, not all the way to the top. We only swam, hiked, and got to museums. We stayed there a week. It was fun. (Post-tasks) (N-6-3)

h. Use of paratactic over hypotactic elements

(282) and I got home and everything was so quiet and I went to my room and everything was cleaned... (FU-2) (CG1-11-8)

As Perera points out 'for a written text to be successful it is necessary for there to be links between sentences. But such links alone are not sufficient. It is possible to make up pseudo-

discourses where each sentence is linked impeccably to the preceding one and yet there is a lack of global coherence' (1991: 230).

Beside the elements mentioned above, we encounter many instances of orality in students' writings such as:

(283) ... things like that. (FU-2) (N-8-7)

(284) Well there was this time... (Post-tasks) (N-8-8)

All in all, students seem to have benefited from the instruction on Participants, Processes, and Adjuncts. EG showed the best results after the instruction in recognizing personal pronouns and relating them to their antecedents; in recognizing Groups and relating them to their corresponding syntactic label; in tracking participants within an excerpt; and their writing results were not very different from those of Native Speakers. These results seem to give ground to the usefulness of the SFG as a tool, and concretely of the explicit teaching of transitivity; the need to draw students' attention to certain linguistic aspects (depending on the age, level, and task); and the type of instruction.

Part IV presents conclusions and points into the direction of future research on the topic. I also present some exercises that teachers could use in their regular lessons to draw students' attention to linguistic aspects and to help them improve their KAL.

PART IV. CONCLUSIONS

“The value of a theory lies in the use that can be made of it.” (Halliday 2003a: 177)

This final part is divided into four sections: the first is devoted to a summary and conclusions reached after the classroom research; the second presents the contributions of the classroom research; the third explains some of the pedagogical implications of having a SFG approach in educational contexts; and the fourth points toward future research on this topic.

4.1 Summary and conclusions

The present thesis has been an example of how to use SFG (Halliday 1985a, 1994a, 2004) in an ESL classroom. SFG was selected because it sees language as a resource for meaning (Halliday 1977: 34), because it allows us to reason grammatically (Martin 1992: 3; Halliday 2002: 307;), and because its ultimate interest is an applied one, a concern with language in relation to the process and experience of education (Halliday 1978: 5; Byrnes 2006: 3).

In today's world more than half of the children are raised in environments that provide them or require them to cope with more than one language (Menyuk and Brisk 2005: x) and as a consequence schools are serving many second language learners (Larsen-Freeman and Long 1999: 1-2; Halliday 2003b: 16; Schleppegrell 2010: 153). The classroom research was conducted in a middle school (K-8) and the subjects were ESL students whose L1 was different from AmE, the language used as a vehicle in the classroom instruction.

It has been agreed by many teachers in schools and in colleges of further education that educational failure is primarily a linguistic failure (Doughty and Thornton in Halliday 1986: iii). Language is the factor that remains constant over the years of schooling and it is the fundamental resource with which teachers and students work together (Christie 2012: 2). As a consequence language needs to be taught explicitly (Christie 2012: 223; Rose and Martin 2012: 2, 46), and teaching should be a deliberate act of teaching KAL and of metalanguage (Christie 1991: 255; 2004: 168-9). In this research the focus was on a particular linguistic feature, i.e. the knowledge of personal pronouns by the students and the replacement of constituents within a clause with personal pronouns.

The difference between spoken and written language becomes obvious when children enter school and learn the second-order symbolic system (Halliday 1993: 109). These initial demands in learning to handle writing are so considerable that children typically regress in semiotic age by anything up to three years (Halliday 1993: 110). By the time students reach mid-adolescence, learning becomes more difficult since the language becomes dense and noncongruent (Christie 2012: 106), and at the same time students have various school subjects with distinctive modes of knowledge building and distinctive styles of reasoning (Muller 2000:88; Rose and Martin 2012: 34). Some of the difficulties students face when dealing with different school subjects were explained in part II. Needless to say, these difficulties become more obvious for foreign students whose academic performance is expected to be at the same level as that of a native speaker.

Written language is more dense than speech and it becomes the students' principal mode in which performance is assessed and in which information is accessed in reading (Christie 2012: 103). Written language is not anchored in the here-and-now, not tied to the environment in which it is produced in the way that conversation is (Halliday 1979: 70). Therefore, written language is deployed to its fullest extent and requires deliberate semantics, deliberate structuring of the web of meaning (Vygotsky 1962: 100). As has been shown in this classroom research, providing students with some knowledge on the clause structure and on transitivity helps them to become more aware of the linguistic features they should pay closer attention to.

Furthermore, one of the primary functions of writing is to reinforce the knowledge acquired through reading and to assess that acquisition (Rose 2004: 4). Evidence in which writing has shown to improve reading has been presented (Graham and Herbert 2010 in Parr and McNaughton 2014: 143). Reading and writing are linked and they are mutually facilitative in the development of literacy abilities but this link has to be made explicit (Parr and McNaughton 2014: 147). In order to do this, teachers need to make explicit the linguistic features that create texture and produce different registers.

In the education and learning process teachers have a major role to play. It is properly organized learning what results in mental development (Vygotsky 1978: 90) and it is instruction what makes students develop (Vygotsky 1978: 102). Since writing is usually

taught, unlike speaking and listening that come naturally, this is perhaps the most important step in the process of education (Halliday 1989: xv). It is here where teachers and instruction play a major role. Drawing students' attention to certain linguistic features of texts is crucial for learners' development (Bruner 1959: 33-4; Long 1983: 359; Chaudron 1988: 7, 191-2; Long 1991: 41; Ellis 1993: 69; Ellis 1997: 60-; Ellis 2002: 224; and Marinova-Todd 2003: 61-8). This, together with exposure to certain structures throughout time, is relevant in the education process (Bruner 1960; Chaudron 1988: 4; Ellis 1997: 72; Muller 2007: 81; and Spada 2008: 77). As I have already mentioned in the present thesis, the learning and mastering of a written language implies the increasing need to use endophoric reference, and its command is obvious in the appropriate use of personal pronouns. It is unquestionable that the literacy experienced at home has an influence, since children who are brought up in more educated environments tend to have a better command of this kind of reference. This is the reason why the education at school might be crucial for less favored children.

Australia has applied a SFG in an explicit manner for the last thirty years (Rose and Martin 2012). The PISA results (www.oecd.org/pisa) show that where language is more abundant, such as reading and science, students performed at a high level, not so high in maths though but still above the OECD average (Part II). The next assessment is being conducted in 2015 but the results will not be available until the end of 2016.

Some authors (Christie and Perera among others) have pointed out that the control over reference, together with Theme, are required in order to write simple registers (Christie 2012: 222) and to move to a higher level of literacy (Perera 1984 in Christie 2012: 62). Reference is one of the elements that give cohesion to a text and it is this cohesion together with the concept of register that effectively define a text (Halliday and Hasan 1976: 23). Personal pronouns are intrinsically related to reference and contribute to create cohesion in a text (Thompson 1997: 15; Martin and Rose 2003: 145; Eggins 2007: 33). These considerations, along with the high frequency of personal pronouns (Biber et al. 2010: 334) and the high number of errors made by ESL students, but not exclusively, were the point of departure of the classroom research presented here. Although personal pronouns are grammatical items that belong to a closed system and, according to some authors, the range of dependents they permit is narrow (Huddleston and Pullum 2005: 327), their use in a text is much more

complex and can refer to many different types of participants, either with an exophoric or an endophoric reference. In the students' writings this linguistic feature is sometimes not mastered, producing a choppy result and in some cases breaking the comprehension by the reader.

Personal pronouns have a degree of complexity that is not so obvious (Fawcett 1988: 210; Halliday 1985a: xxv; Halliday 1996: 159-60). They are related to the exophoric/endophoric references established in a text and their use seems to have a close connection to literacy level and social class backgrounds (Joan Tough in Bruner 1973a: 149; Bernstein 1974: 79; Hawkins 1977: 183).

The classroom research conducted with ESL students has thrown positive results when specific linguistic features were taught explicitly, namely Anaphoric Reference and Groups. The chi-square and p-value show the positive effects of this explicit teaching in many of the tasks, even at the time of the Follow-up2: improvement in assigning syntactic functions and replacing Subjects and Indirect Objects with the corresponding pronoun was invariably significant across time and groups. The benefits of other tasks seem to fade more with time: this is the case of tracking anaphoric reference and replacing Direct Objects with the corresponding pronoun. A case in-between is that of the tasks in which knowledge about groups was involved: in the post-tasks and Follow-up2, the benefits for the EG were significant if its results are compared with those of one of the control groups (CG1), but not if they are compared with those of the other control group (CG2). Concerning more open tasks, the effects of the instruction in the Reading task are not too visible, even though they can be interpreted to be of some significance. In their turn, the results in Writing showed that the instruction in those linguistic features did not seem to have a direct effect in students' compositions. This comes to confirm what some authors have argued about the need to teach explicitly and over time the necessary linguistic features characteristic of the different registers, so that students learn what to read and how to produce a text, and, what is more important, what is expected from them (Martin 1993a: 176; Wignell et al. 1993: 158; Eggins et al. 1993: 81; Polias and Dare 2006: 123; Christie and Derewianka 2010: 217-38; and Christie 2012: 89 among others).

ESL students' results did show that LT (Language Transfer) does not seem to play a major role in the language learning process or language development (Dulay and Burt 1974; Larsen-Freeman 1975). Students, both native and non-native speakers of AmE, used similar strategies when facing linguistic challenges such as replacing NGs or finding the antecedent in an Anaphoric Reference within a sentence or in a text. All students' compositions shared some linguistic features: spelling mistakes; overuse of personal pronouns (especially first person, singular and plural); lexical repetition; exophoric over endophoric reference; and lack of coherence in the use of cohesive devices. Thus, students' orality permeates their compositions (Perera 1991: 227-30). This is because spoken and written language are different and so is the manner in which they are approached and taught in school. Students need to learn at a very early age that both processes are different and in order to succeed in school they have to master more than just the narrative register (Vygotsky 1978: 117; Newkirk 1984: 341). One of the reasons for students' orality in their compositions might be that they have not been taught explicitly about the differences of both modes, the spoken and the written. As a consequence, students write as they speak.

Students seem to have problems in finding NGs, especially when these contain modifying noun + head noun. The knowledge about Groups within a clause is crucial for students if they aim at reaching an academic level. Students face grammatical metaphor, which is connected with Processes and NGs, and this is a key element in academic texts. To overcome this, teachers need to make those notions explicit and teach both KAL and metalanguage. These aspects and some others are further analyzed and commented in the next section.

As already mentioned, teachers play a crucial role in this process. Teachers need to read about others' work, both theoretical and practical, that bears on the topic of inquiry, and of writing about it, both for oneself and for others (Wells 1994: 27). Teachers are in contact with learners on a daily basis and there is a need for them to become researchers (Chaudron 1988; Nunan 1992; Ellis: 1997; and Larsen-Freeman 1999 among others).

SFG is an appropriate tool for teachers to use in their regular daily lessons. It has an educational orientation and it provides information on register and linguistic features necessary for students to reach an abstract level of the language and therefore an academic level rich enough to succeed in school.

4.2 Contributions of the classroom research

This thesis has presented a quantitative research conducted in a middle school in the USA with ESL students (Part III). The main purpose of the classroom research was to shed light on the effects of the explicit teaching of transitivity, in terms of participants, processes and circumstances, on the use of personal pronouns. The instruction was conducted throughout eleven sessions in which students received information on types of Participants, Processes, and Circumstances. As the clause is the basic unit in SFG and where the three metafunctions (ideational, interpersonal, and textual) of language are reflected, it was used to illustrate them.

With the instruction on these elements some basic linguistic features were revealed to students, who learned about the Groups (NG, VG, and AdvG) and their substitution by personal pronouns in some cases. KAL was provided and it was conducted in a deliberate and explicit manner.

The results show that when the instruction focused on a particular element, such as Anaphoric Reference, the EG (Experimental Group) performed at a higher level. This group (with the only exception of 8th graders in the Reading task of follow-up2) performed at a higher level in all the tasks after the instruction (post-tasks and follow-ups). As a consequence, the EG seems to have benefited from the explicit instruction on transitivity and replacement of NGs with pronouns (see table 71 above).

The outcomes in the Anaphoric Reference task show that students, both native and non-native, used similar strategies when facing a linguistic challenge. In cases where the antecedent was not clear, students pointed to another word within the clause as a synonym. Students favored and focused on Participants when these were +Animate (Human) and they tended to use exophoric reference, heavily dependent on the situation. Students had problems identifying the NGs when these were long (pre-modifier + head + post-modifier).

In the task on Groups, Syntactic Functions and Personal Pronoun replacement, the EG performed at a higher level than the other groups. The instruction on Groups seemed to have a positive effect on students who gained KAL about transitivity and could relate this knowledge to their corresponding syntactic functions. Furthermore, this KAL helped the EG

to replace Subjects and Objects at a higher level, the EG being the one that ended up having the fewest errors of all.

In the Reading task the behavior of students was similar, even though it was once again the EG that ended up performing at the highest level. Students seemed to have problems narrowing down Participants when the referent is not in the same sentence (due to distance) and when the Participants are not Human (-Animate). Sometimes students related the personal pronoun *them* to a group of people and not to another antecedent such as a group of things.

In terms of p-value, the closer in time the exercises were collected, the more significant the differences were. This indicates the need of revision and incorporation of the linguistic aspects throughout the school years (mentioned in 4.1). Another conclusion drawn from the results obtained through p-value is that in the open activities, such as reading, the effects of the instruction seem not to be so clear. The differences between CGs can also be appreciated, CG2 being much stronger than CG1. Nevertheless, even in the cases where the differences among EG and CGs were not significant, the probabilities that these differences are randomly produced are very low. This seems to confirm the convenience of incorporating explanations on linguistic aspects in the learning of languages, either L1 or L2.

Nevertheless, in the Writing tasks the results were very different, in that the EG did not seem to benefit from the specific instruction. Students' compositions showed many features of orality (*get passive, I, we, that, and, so...*). And besides the spelling mistakes, students' random use of personal pronouns made it difficult for the reader to keep track of participants, which produced a choppy result. In addition, for the most part students lack knowledge of the concept of thematic development. The use of simple Themes doubled the use of multiple Themes. When students used a multiple Theme, in 75% of the times the Theme was realized by a personal pronoun (orality). The Textual Themes selected were mainly the conjunctions *so, because, and, or then*. These conjunctions also belong to spoken language.

Regarding taxis, although this linguistic aspect was not explicitly instructed, it is worth making a comment about the students' results for further studies. The use of paratactic elements doubled the use of hypotactic ones, the ratio being in some cases even higher. This highlights the lack of knowledge students have about the creation of texture. In order to

produce effective texts, writers need to approach a text as different from being just an unconnected group of clauses and/or sentences (Halliday 1966: 87).

The outcomes show the effectiveness of the explicit instruction of transitivity, but students would also need other linguistic features to be revealed, such as Theme and taxis, if an academic level is expected. This knowledge does not come by simply reading, nor does it simply come as a result of instruction on components in the ideational metafunction. Equal positive results can be expected of instruction on Theme and taxis. As a consequence, where language was made visible, students' performance reached higher levels. Furthermore, instruction requires repetition throughout the school years with different activities. This idea is the repetition and exposure to certain structures (Chaudron 1988; Ellis 1997; Muller 2007; and Spada 2008) or the *spiral curriculum*, as some authors (Bruner 1960) call it. One exposure might not be enough and the instruction and explicitness should be conducted throughout the school years and not only in primary and middle school.

Additionally, the classroom research proves that writing needs explicit instruction and that students usually regress in semiotic age by anything up to three years when it comes to writing (Halliday 1993: 110). This gap needs narrowing by providing instruction on different registers and their main linguistic features. All the considerations mentioned above have a direct effect in the pedagogy applied in a school environment and to this I turn now.

4.3 Pedagogical implications

Using SFG in L2 teaching implies being explicit about teaching grammar and about KAL. It should also build a metalanguage for discussing and using it. This process should run parallel to learning the language, in this case for ESL students. As Halliday claims 'when children are learning language, they are not simply engaging in one kind of learning among many; rather, they are learning the foundation of learning itself' (1993: 93). This means that what students are learning is not just knowledge of some specific linguistic features, but the necessary tools to reason and to be critical about what they do on a regular basis in a classroom and in a lesson.

In school, teachers and educators should focus on texts and render visible all the features that make a text a particular token of a register. In order to do this, not only specific vocabulary

needs to be taught (*field*) but also all the grammatical features that tend to remain invisible (Christie 2012: 192) and, unfortunately, some textbooks are leaving out this practice (Rose and Martin 2012: 132). These aspects are not to be taken for granted, since students' knowledge does not equal teachers and/or educators' knowledge.

The present thesis has tried (among other aspects) to highlight how classroom instruction does not or may not reach all the students equally (Halliday 2005: 305). It is recommended that teachers and educators design activities capable of reaching all students' needs and levels and so erase potential inequalities. The aim is for students to become independent learners by reading and writing independently. Writing should be placed upfront since students arrive at school with no skills and writing is behind reading about three or four years (Halliday 1993: 110). Teachers should not procrastinate about exposing students to factual texts, which should be taught explicitly because writing is not speaking (equally valid though) but different and therefore their strategies to tackle each skill are different and should be kept in mind throughout the school years. Otherwise, students reproduce their orality in their written texts and have difficulties in comprehending the academic texts they are to read.

Students need to be exposed to real texts and not to washed-down versions. And teachers need to aim at demanding tasks, as well as revealing the differences among registers and prepare them to succeed in middle and high school, where the academic level increases noticeably. This is especially relevant for ESL students that are expected to perform at an academic level in a language other than the mother tongue. This is also at the core of CLIL program in Europe. The main difference with the Australian case is that in CLIL the language of instruction is a foreign language and sometimes L1 is used in the classroom.

It is the teacher's job to help students to transform or convert commonsense knowledge into academic knowledge. In order to do this, they need to make explicit language features and to make language itself a visible subject. This is what Halliday (1971) means when he claims that 'to be grammarless is to be totally powerless' (1971: 40) and Vygotsky (1962) adds that this grammar, together with writing, is the tool that helps the child to rise to a higher level of speech development (1962: 101). Students need to acquire some KAL in order to be able to self-assess their work and to understand why their writings received a low grade with some comments they cannot make sense of. Grammar is the necessary tool to organize language in

a formal way and this organized learning results in mental development, and it is the teachers' responsibility to provide this instruction. In this sense, all teachers must become aware of their role as language teachers, since language is the common denominator to all school subjects, including the sciences.

Walker and He (2013) claim that teachers must be highly literate, regardless of whether they teach through first or other languages, if they are to help their students master academic discourses which are valued by society, institutions and academic communities. In fact, teachers' and educators' KAL is often only operative: they know how to produce acceptable written texts, but they do not always have sufficient conscious KAL to transmit this knowledge to students effectively. In this respect, the instruction proposed here is beneficial to teachers and educators, not only to students. These authors have suggested that students seem to need a more explicit model, which articulates the precise challenge of the *particular* literacy tasks facing students. Such an explicit model is only made possible by an explicit articulation of the nature of academic literacy tasks and academic knowledge of a particular subject realized in linguistic and metalinguistic resources appropriate to the context. In other words, what is needed is a clear view of how language is used as resource for making disciplinary meaning, and ways of conveying this view which are accessible to students (2013: 181-2). In this sense, Bruner (1965) posits that the more elementary a course and the younger the students, the more serious its pedagogical aim must be of forming the intellectual powers of those whom it serves (1965: 90).

Another important aspect to explore is the relationship between reading and writing, but more precisely to search for an explicit methodology to apply in primary and secondary classrooms. This is a topic that requires further research and it will be mentioned in section 4.4.

In the next section I propose some activities that can be carried out in class through a daily lesson. Although some previous knowledge of SFG by the students would increase their effectiveness, the implementation of some of these activities does not require such knowledge.

4.4 Further research

In line with this classroom research, more research is needed on topics such as Theme, grammatical metaphor, Process types across registers, Participants, units of information, relationship between impact of instruction and learning L2 and on students' attention on linguistic aspects and the relation between this attention and academic development.

Theme and Thematic development are key in argumentative texts development. Although complex Themes are not the only factor that account for successfully organized written discourse, analysis demonstrates that they are powerful instruments for creating coherent and cohesive texts. Manipulation of grammatical and lexical complexity of Themes helps to present information in a way that displays certain organizational patterns associated with a particular communicative function of the move.

Another area where research is required is nominalization in primary and secondary education. The relationship between grammatical metaphor and academic texts is sound enough to conduct some research and verify whether there is a language development and a higher level of reasoning in students after receiving explicit instruction on this linguistic element.

Research on Participants and voice could be beneficial as well. Students come across the passive voice but it is hardly ever connected to a specific register and the meaning in its use. The instruction on this particular linguistic feature could result in a better KAL and more metalanguage on the learners' side.

In the same direction, the relationship between Processes types and registers is clear (Halliday 1978: 145). This connection should be revealed to students so that they will learn to manipulate a register by choosing different types of Processes. Students are used to narrative text and this kind of text could be used as a point of departure to move to a different type of register. An anecdote can be made into a scientific classification and/or description; and a narrative can be made into a historical piece of writing.

Based on the results drawn from the classroom research, more longitudinal research is needed in order to determine the permanent knowledge, or final intake, that students gain after formal

instruction on specific linguistic aspects. Another area where research is necessary is the differences among activities, viz. open vs. close or free vs. guided activities, where the results point into the direction of different instructional activities.

In this light, language should be taught throughout a series of meaningful activities. This section displays a battery of activities that can be conducted in any content area. These activities could be used as a base for future research in the same direction specified above. We learn by doing and by drawing attention to certain elements (section 3.1.5). The activities have been divided according to school subjects but they can be utilized in more than one specific content area subject.

A. - Language Arts:

a.1. - From a basic knowledge on Processes and Participants, present different texts to students and make them underline Processes and Participants and see the differences across texts, i.e. the amount of Processes and the resulting text.

a.2. - From a text: pinpoint NGs of different lengths and with different elements, and learn about head and modifiers. From here, students could replace the different NGs with personal pronouns. In the same way, students could be presented with simple NGs (head) and they would have to add pre- and post-modifiers.

a.3. - From Processes into grammatical metaphor. From a text, underline the different Processes and nominalize some with the necessary changes in the sentence(s).

a.4. - From students' writings, pinpoint taxis elements, types and functions. Exercise: modify the taxis elements and produce a different result.

a.5. - From students' compositions, join clauses and sentences using varied conjunctions or linking words.

In these types of activities it is relevant to begin using students' own compositions; otherwise they see the texts as distant and unconnected to them. Instead of being presented with ideal models, students work on their writings and improve them. Teachers need to help students making their commonsense knowledge into an educational knowledge (Halliday 2007: 370) (section 2.6).

B. - Social Studies:

b.1. – After having seen and studied some historical texts, students make changes in their writings (a story, a narrative text), so the result is a piece of history text.

b.2. – Using the same texts, students make nominalizations.

(285a) The Romans came towards the end of V century.

(285b) The coming of the Romans towards

b.3. - From a list of words and their different classes (processes, verbal form; nominalization) see them in context and see the result. This type of word formation exercise is very common in English language exams and Language Arts lessons, where students are asked to modify words in order to fit a particular sentence. Hardly ever is there a connection between the nominal form and the type of register used, since register is usually treated on a purely negative basis (De Beaugrande 1993: 18). An example is the following:

<u>PROCESS</u>	<u>VERBAL FORM</u>	<u>NOMINAL FORM</u>
Attempt	attempting	attempt
Change	to change	change
Force	to force	force
Persuade	persuaded	persuasion
Invade	invaded	invasion

(286a) The invasion of the Peninsula by the Romans caused a major change in the lives of their inhabitants.

(286b) When the Romans invaded the Peninsula, the inhabitants changed their lives.

This topic is inextricably connected to Thematic development and the passive voice. In the same examples, the use of the passive voice could be pinpointed or introduced as part of the register, making students aware of the register and its particular linguistic features.

b.4. - Using a text as an example: show students the concepts of Theme and Rheme; how they are related; and how they present the patterns of linear, continuous or derived progression.

C. - Science:

c.1. - From a picture or a diagram (for instance, the structure of an insect), write a scientific description.

c.2. - In scientific texts the Processes/things become Agents and students might have difficulties understanding this. The same applies to nominalization (grammatical metaphor) already introduced in Language Arts and History.

c.3.- Provide students with a list of words (e.g. types of insects); classify them; find differences (easier) and similarities; add more to the list (maybe the teacher); draw a diagram of a prototypical member of the class; write a scientific/technical description.

(287) The grasshopper is compounded of four legs and two wings.....

These exercises are aimed at revealing the linguistic features characteristic of register, thus students can understand where they need to draw attention when reading and especially when writing. Even if a text is rendered difficult by grammatical metaphors, students could eventually modify them into plain language. In some cases, the students' own writings can be used and in doing so their attention can be drawn to certain linguistic features and to the result obtained by manipulating them.

Learners' attention needs to be explored in more detail, and also the connection between instruction, attention, and production. More research is also desired on attention to develop students' language and move them to higher levels of literacy. Language and perception are linked and more research into this direction should be conducted.

An important area of research is the one highlighted by Parr and McNaughton (2014), who point into the direction of coming up with a methodology that makes explicit the relationship between reading and writing, since both are linked and mutually facilitative in the development of literacy abilities.

Compelling evidence indicates a continuing gap between research on effective teaching and the practice of teaching. Research is often seen by teachers as too theoretical, too idealistic, or too general to relate directly to the practical realities of classroom life. The dominant influences during their early development as teachers are the practices they see other teachers using or that they experienced themselves as students. The problem with this is that those practices are not research-based and although they may benefit some students, some others might be left behind. This gap is obvious in middle school, when the academic level becomes very demanding, especially for students whose L1 is different than the one in which they are supposed to perform. If something is not done, it might be virtually impossible for those students to ever catch up and they may eventually drop out.

I have already highlighted the importance of teachers to undertake classroom research, as well as teachers and researchers to cooperate. Students' errors are to be seen as a source of information of their language development stage, and from there teachers are in a good position to design the activities that can help them move to the next level in the continuum of the language learning process.

In addition to the number of children learning a *second* language - i.e. as immigrants or children of immigrants – there are many countries nowadays which are implementing bilingual programs in their education system, from primary to tertiary level. It is precisely in these schools where SFG and research based on it can be very beneficial for students who are facing reading and writing in a *foreign* language at a high level. We have an example in Australia, where this approach has been applied over the last thirty years and the outcomes point into the direction of its effectiveness.

APPENDIX

In the following tables I gathered information about students' writing. The abbreviations stand for:

- a) Personal pronouns: S-Subject; O-Object
- b) Processes: Ma-Material; Me-Mental; V-Verbal; R-Relational
- c) Themes: t-textual; i-ideational

Experimental Group

EG-1-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	90	116	68	146
# sentences	5	8	5	7
P. Pron	16: 9S; 7-O	14: 13S; 1-O	6: 6S	18: 15S; 3-O
Processes	16: 3Ma; 3Me; 4V; 5R	24: 14Ma; 1Me; 2V; 7R	12: 6Ma; 2Me; 4R	31: 19Ma; 4Me; 4V; 4R
Themes	2 simple; 3 multiple (t)	7 simple; 1 multiple (t)	4 simple; 1 multiple (t)	3 simple; 4 multiple (t)
# parataxis	3	7	1	16
# hypotaxis	3	3	2	3

EG-2-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	90	76	87	107
# sentences	5	2	6	10
P. Pron	13: 10S; 3-O	10: 10S	9: 8S; 1-O	9: 8S; 1-O
Processes	20: 9Ma; 5Me; 6R	12: 6Ma; 1Me; 5R	20: 7Ma; 7Me; 1V; 5R	20: 15Ma; 5R
Themes	5 simple	2 simple	5 simple; 1 multiple (t)	9 simple; 1 multiple (t)
# parataxis	6	2	2	4
# hypotaxis	0	2	0	1

EG-3-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	51	48	90	84
# sentences	1	1	3	5
P. Pron	7: 3S; 3-O	5: 4S; 1-O	11: 9S; 2-O	7: 7S
Processes	9: 6Ma; 1V; 2R	12: 8Ma; 2Me; 2V	19: 13Ma; 3Me; 3R	20: 10Ma; 2Me; 2V; 6R
Themes	1 multiple (t)	1 simple	3 multiple (2 t & 1 i)	3 simple; 2 multiple (1 t & 1 i)
# parataxis	3	1	5	2
# hypotaxis	2	1	5	3

EG-4-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	103	94	101	206
# sentences	5	1	2	8
P. Pron	9: 8S; 1-O	13: 11S; 2-O	21: 14S; 7-O	24: 19S; 5-O
Processes	23: 11Ma; 6Me; 6R	15: 12Ma; 3R	18: 8Ma; 7Me; 3V	36: 21Ma; 3Me; 4V; 8R
Themes	4 simple; 1 multiple (t)	1 simple	1 simple	7 simple; 1 multiple (t)
# parataxis	6	2	5	6
# hypotaxis	0	2	3	10

EG-5-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	82	151	122	164
# sentences	5	11	9	9
P. Pron	7: 6S; 1-O	17: 15S; 2-O	23: 13S; 10-O	22: 17S; 5-O
Processes	16: 9Ma; 4Me; 3R	29: 23Ma; 6R	25: 15Ma; 5Me; 2V; 3R	31: 10Ma; 8V; 14R
Themes	4 simple; 1 multiple (i)	5 simple; 6 multiple (t)	7 simple; 2 multiple (1 i & 1 t)	3 simple; 6 multiple (5 t & 1 i)
# parataxis	5	12	3	6
# hypotaxis	0	2	3	3

EG-6-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	68	99	143	144
# sentences	1	3	11	14
P. Pron	9: 7S; 2-O	10: 9S; 1-O	14: 14S; 1-O	21: 17S; 4-O
Processes	12: 7Ma; 2Me; 3R	16: 8Ma; 6Me; 2R	24: 12Ma; 3Me; 9R	33: 21Ma; 4Me; 2V; 6R
Themes	1 simple	3 simple	4 simple; 7 multiple (1 i & 6 t)	12 simple; 2 multiple (t)
# parataxis	6	4	1	6
# hypotaxis	0	0	2	2

EG-7-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	71	206	256	215
# sentences	4	13	17	17
P. Pron	7: 5S; 2-O	24: 20S; 4-O	29: 20S; 9-O	37: 21S; 16-O
Processes	10: 2Ma; 2Me; 6R	35: 18Ma; 3Me; 14R	54: 27Ma; 9Me; 3V; 15R	41: 22Ma; 6Me; 4V; 9R
Themes	4 simple	9 simple; 4 multiple (t)	10 simple; 7 multiple (t)	14 simple; 3 multiple (t)
# parataxis	2	9	4	6
# hypotaxis	1	3	9	5

EG-8-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	83	246	141	206
# sentences	2	20	9	4
P. Pron	12: 12S	32: 32S	21: 10S; 11-O	31: 25S; 6-O
Processes	17: 7Ma; 3Me; 7R	42: 20Ma; 3Me; 1V; 18R	25: 15Ma; 1Me; 6V; 3R	42: 15Ma; 7Me; 5V; 14R
Themes	1 simple; 1 multiple (t)	16 simple; 4 multiple (t)	6 simple; 3 multiple (1 t & 2 i)	2 simple; 2 multiple (t)
# parataxis	2	5	7	7
# hypotaxis	4	7	4	6

EG-9-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	86	170	110	232
# sentences	7	16	7	21
P. Pron	15: 7S; 8-O	25: 21S; 4-O	13: 7S; 6-O	27: 23S; 4-O
Processes	15: 6Ma; 7Me; 2R	31: 18Ma; 4Me; 3V; 6R	14: 6Ma; 4Me; 4R	47: 32Ma; 1Me; 4V; 10R
Themes	5 simple; 2 multiple (1 t & 1 i)	12 simple; 4 multiple (t)	3 simple; 4 multiple (3 t & 1 i)	14 simple; 7 multiple (t)
# parataxis	2	5	1	10
# hypotaxis	1	4	5	5

EG-10-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	155	152	151	141
# sentences	6	9	9	10
P. Pron	20: 16S; 4-O	26: 21S; 5-O	30: 21S; 9-O	17: 9S; 8-O
Processes	28: 9Ma; 6Me; 2V; 11R	26: 18Ma; 1Me; 5V; 2R	29: 7Ma; 13Me; 6V; 3R	25: 14Ma; 5Me; 1V; 5R
Themes	4 simple; 2 multiple (t)	8 simple; 1 multiple (t)	9 multiple (t)	8 simple; 2 multiple (t)
# parataxis	7	4	5	5
# hypotaxis	5	4	6	0

EG-11-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	28	76	160	138
# sentences	3	6	12	11
P. Pron	3: 3S	6: 6S	18: 16S; 2-O	19: 16S; 3-O
Processes	5: 2Ma; 2Me; 1R	13: 9Ma; 4R	41: 24Ma; 4Me; 4V; 9R	30: 23Ma; 2Me; 1V; 4R
Themes	1 simple; 2 multiple (t)	4 simple; 2 multiple (t)	6 simple; 5 multiple (4 t & 1 i)	9 simple; 2 multiple (t)
# parataxis	0	4	6	8
# hypotaxis	1	1	2	3

EG-12-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	11	91	193	87
# sentences	1	3	5	3
P. Pron	1: 1S	8: 5S; 3-O	28: 23S; 5-O	12: 9S; 3-O
Processes	2: 1Me; 1R	17: 9Ma; 2Me; 3V; 3R	34: 6 Ma; 5Me; 3V; 20R	18: 10Ma; 2Me; 2V; 4R
Themes	1 simple	2 simple; 1 multiple (t)	5 simple	2 simple; 1 multiple (t)
# parataxis	1	5	13	5
# hypotaxis	0	3	2	2

EG-13-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	34	107	92	106
# sentences	1	4	5	4
P. Pron	4: 3S; 1-O	10: 10S	10: 7S; 3-O	17: 15S; 2-O
Processes	6: 2Ma; 2Me; 1V; 1R	19: 16Ma; 1Me; 2R	20: 5Ma; 6Me; 3V; 6R	25: 19Ma; 2Me; 4R
Themes	1 multiple (t)	2 simple; 2 multiple (t)	4 simple; 1 multiple (t)	2 simple; 2 multiple (t)
# parataxis	2	8	4	4
# hypotaxis	0	2	0	1

EG-14-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	43	58	92	78
# sentences	2	1	4	3
P. Pron	3: 2S; 1-O	5: 5S	15: 7S; 8-O	7: 7S
Processes	8: 3Ma; 3Me; 2R	12: 10Ma; 2R	18: 9Ma; 1Me; 2V; 6R	22: 16Ma; 2Me; 1V; 3R
Themes	1 simple; 1 multiple (t)	1 simple	2 simple; 2 multiple (1 t & 1i)	1 simple; 2 multiple (t)
# parataxis	6	5	8	5
# hypotaxis	0	0	2	0

EG-15-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	34	100	189	111
# sentences	2	1	7	2
P. Pron	3: 2S; 1-O	12: 9S; 3-O	17: 17S	15: 12S; 3-O
Processes	5: 1Ma; 4R	17: 15Ma; 2R	25: 14Ma; 5Me; 6R	25: 12Ma; 4Me; 4V; 5R
Themes	1 simple; 1 multiple (t)	1 simple	6 simple; 1 multiple (t)	1 simple; 1 multiple (t)
# parataxis	1	6	4	11
# hypotaxis	2	0	0	0

EG-16-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	22	130	149	165
# sentences	1	1	6	6
P. Pron	2: 1S; 1-O	5: 5S	5: 4S; 1-O	19: 18S; 1-O
Processes	1: 1Me	15: 3Ma; 1Me; 1V; 10R	23: 4Ma; 1Me; 1V; 17R	30: 3Ma; 7Me; 1V; 19R
Themes	1 multiple (t)	1 multiple (t)	3 simple; 3 multiple (t)	4 simple; 2 multiple (t)
# parataxis	1	2	5	8
# hypotaxis	0	0	0	4

EG-17-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	84	87	222	122
# sentences	2	1	3	1
P. Pron	10: 8S; 2-O	10: 10S	42: 28S; 14-O	17: 13S; 4-O
Processes	18: 1Ma; 6Me; 3V; 8R	14: 9Ma; 5R	39: 22Ma; 4Me; 6V; 7R	23: 16Ma; 1Me; 2V; 4R
Themes	2 multiple (t)	1 simple	3 simple	1 multiple (t)
# parataxis	6	3	9	11
# hypotaxis	3	0	4	3

EG-18-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	21	18	102	46
# sentences	2	2	7	2
P. Pron	2: 2S	1S	2: 1S; 1-O	3: 3S
Processes	4: 1Ma; 1Me; 2R	3: 2Ma; 1Me	16: 10Ma; 1V; 5R	9: 4Ma; 2Me; 1V; 2R
Themes	1 simple; 1 multiple (t)	1 simple; 1 multiple (t)	5 simple; 2 multiple (t)	2 simple
# parataxis	1	0	1	0
# hypotaxis	0	0	2	2

EG-19-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	20	57	94	151
# sentences	1	2	3	5
P. Pron	3: 2S; 1-O	5: 5S	7: 5S; 2-O	14: 14S
Processes	3: 1Ma; 1Me; 1R	9: 8Ma; 1R	19: 10Ma; 4Me; 3V; 2R	27: 12Ma; 3Me; 5V; 7R
Themes	1 simple	2 simple	3 simple	3 simple; 2 multiple (t)
# parataxis	1	5	2	6
# hypotaxis	0	0	1	3

EG-20-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	39	81	154	168
# sentences	5	11	14	24
P. Pron	3: 3S	8: 8S	13: 12S; 1-O	29: 19S 10-O
Processes	8: 2Ma; 3Me; 1V; 3R	17: 13Ma; 2Me; 2R	25: 8Ma; 5Me; 12R	37: 21Ma; 4Me; 7V; 5R
Themes	5 simple	10 simple; 1 multiple (t)	9 simple; 5 multiple (4 t & 1 i)	23 simple; 1 multiple (t)
# parataxis	0	1	2	3
# hypotaxis	0	1	1	2

EG-21-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	21	80	163	198
# sentences	2	4	7	9
P. Pron	2: 2S	9: 9S	19: 17S; 2-O	25: 23S; 2-O
Processes	4: 1Ma; 1Me; 2R	13: 6Ma; 3Me; 1V; 3R	28: 9Ma; 7Me; 1V; 11R	40: 20Ma; 6Me; 1V; 13R
Themes	1 simple; 1 multiple (t)	4 simple	4 simple; 3 multiple (2 t & 1 i)	9 simple
# parataxis	0	1	2	6
# hypotaxis	1	1	5	4

Control Group 1

CG1-1-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	12	50	161	111
# sentences	1	4	7	5
P. Pron	2: 2S	6: 6S	36: 24S; 12-O	20: 12S; 8-O
Processes	3: 3R	7: 5Ma; 1Me; 1R	33: 11Ma; 8Me; 9V; 5R	22: 10Ma; 6Me; 6R
Themes	1 multiple (i)	4 simple	1 simple; 6 multiple (5 t & 1 i)	3 simple; 2 multiple (t)
# parataxis	0	2	11	5
# hypotaxis	0	0	2	0

CG1-2-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	14	54	114	98
# sentences	1	6	5	9
P. Pron	2: 1S; 1-O	6: 6S	17: 13S; 4-O	8: 8S
Processes	3: 1Me; 1V; 1R	9: 7Ma; 2R	18: 11Ma; 1Me; 2V; 4R	19: 12Ma; 2Me; 5R
Themes	1 simple	4 simple; 2 multiple (t)	1 simple; 4 multiple (t)	5 simple; 4 multiple (t)
# parataxis	1	1	6	4
# hypotaxis	0	0	2	0

CG1-3-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	101	116	106	205
# sentences	4	2	4	5
P. Pron	10: 10S	5: 4S; 1-O	11: 9S; 2-O	18: 18S
Processes	20: 10Ma; 4Me; 6R	18: 16Ma; 1V; 1R	16: 5Ma; 2Me; 4V; 5R	38: 20Ma; 5Me; 1V; 12R
Themes	3 simple; 1 multiple (t)	1 simple; 1 multiple (i)	3 simple; 1 multiple (t)	3 simple; 2 multiple (t)
# parataxis	7	8	4	18
# hypotaxis	3	0	3	2

CG1-4-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	43	82	145	158
# sentences	2	4	7	14
P. Pron	6: 4S; 2-O	9: 9S	16: 15S; 1-O	20: 17S; 3-O
Processes	10: 3Ma; 5Me; 2R	11: 6Ma; 1V; 4R	23: 21Ma; 1Me; 1R	33: 18Ma; 2Me; 2V; 11R
Themes	2 simple	3 simple; 1 multiple (t)	5 simple; 2 multiple (t)	12 simple; 2 multiple (t)
# parataxis	2	2	8	6
# hypotaxis	1	3	6	6

CG1-5-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	31	143	132	175
# sentences	2	12	9	3
P. Pron	5: 2S; 3-O	15: 12S; 3-O	13: 12S; 1-O	31: 23S; 8-O
Processes	5: 1Ma; 2Me; 2R	24: 15Ma; 3Me; 6R	31: 5Ma; 16Me; 1V; 9R	36: 20Ma; 4Me; 3V; 9R
Themes	2 simple	8 simple; 4 multiple (t)	8 simple; 1 multiple (t)	3 multiple (t)
# parataxis	0	5	4	14
# hypotaxis	1	1	1	1

CG1-6-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	24	58	143	160
# sentences	3	5	3	2
P. Pron	4: 3S; 1-O	4: 3S; 1-O	10: 9S; 1-O	20: 18S; 2-O
Processes	3: 2Me; 1R	7: 3Ma; 4R	22: 11Ma; 1Me; 1V; 9R	28: 15Ma; 4Me; 3V; 6R
Themes	3 simple	4 simple; 1 multiple (t)	1 simple; 2 multiple (t)	1 simple; 1 multiple (i)
# parataxis	0	1	6	6
# hypotaxis	0	0	3	6

CG1-7-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	31	19	50	139
# sentences	2	2	2	12
P. Pron	3: 2S; 1-O	1S	2: 2S	8: 4S; 4-O
Processes	4: 1Ma; 1V; 2R	3: 3R	10: 4Ma; 4V; 2R	24: 14Ma; 6Me; 4R
Themes	1 simple; 1 multiple (t)	2 simple	2 multiple (t)	3 simple; 9 multiple (8 t & 1 i)
# parataxis	0	0	2	11
# hypotaxis	1	0	0	0

CG1-8-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	47	29	77	151
# sentences	2	2	1	1
P. Pron	3: 3S	1: 1S	1: 1S	12: 11S; 1-O
Processes	8: 6Ma; 2Me	3: 3Ma	7: 5Ma; 3Me; 1V	20: 5Ma; 2Me; 1V; 12R
Themes	2 simple	1 simple; 1 multiple (i)	1 simple	1 multiple (t)
# parataxis	2	1	2	8
# hypotaxis	2	0	1	1

CG1-9-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	56	138	108	206
# sentences	2	4	2	3
P. Pron	6: 5S; 1-O	13: 12S; 1-O	9: 8S; 1-O	34: 20S; 14-O
Processes	11: 3Ma; 3Me; 1V; 4R	19: 10Ma; 1V; 8R	17: 8Ma; 2Me; 2V; 5R	34: 14Ma; 7Me; 13R
Themes	1 simple; 1 multiple (t)	3 simple; 1 multiple (t)	2 simple	2 simple; 1 multiple (t)
# parataxis	3	6	7	9
# hypotaxis	1	1	0	3

CG1-10-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	144	61	210	99
# sentences	1	1	1	1
P. Pron	17: 16S; 1-O	8: 8S	17: 13S; 4-O	13: 10S; 3-O
Processes	25: 8Ma; 6Me; 1V; 10R	10: 5Ma; 1V; 4R	38: 12Ma; 8Me; 10V; 8R	21: 15Ma; 2Me; 4R
Themes	1 simple	1 multiple (t)	1 simple	1 simple
# parataxis	9	6	11	10
# hypotaxis	5	1	4	2

CG1-11-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	72	126	105	104
# sentences	2	7	4	2
P. Pron	13: 11S; 2-O	14: 13S; 1-O	9: 6S; 3-O	12: 11S; 1-O
Processes	15: 4Ma; 4Me; 7R	26: 13Ma; 5Me; 1V; 7R	18: 4Ma; 3Me; 2V; 9R	22: 14Ma; 2Me; 6R
Themes	2 multiple (t)	4 simple; 3 multiple (t)	4 multiple (t)	1 simple; 1 multiple (t)
# parataxis	4	5	7	11
# hypotaxis	2	2	1	0

Control Group 2

CG2-1-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	98	69	84	155
# sentences	8	4	5	15
P. Pron	14: 12S; 2-O	7: 7S	10: 6S; 4-O	22: 22S
Processes	19: 9Ma; 1Me; 1V; 8R	16: 8Ma; 3Me; 5R	18: 7Ma; 5Me; 4V; 2R	44: 28Ma; 2Me; 3V; 11R
Themes	3 simple; 5 multiple (t)	4 simple	2 simple; 3 multiple (2 t & 1 i)	8 simple; 7 multiple (t)
# parataxis	4	1	4	7
# hypotaxis	3	2	0	4

CG2-2-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	135	76	235	240
# sentences	6	4	9	12
P. Pron	24: 16S; 8-O	9: 8S; 1-O	30: 23S; 7-O	21: 16S; 5-O
Processes	27: 4Ma; 11Me; 2V; 10R	12: 6Ma; 4Me; 2R	50: 21Ma; 5Me; 2V; 12R	45: 27Ma; 6Me; 1V; 11R
Themes	6 simple	4 simple	4 simple; 5 multiple (t)	8 simple; 4 multiple (t)
# parataxis	6	2	8	14
# hypotaxis	5	1	10	6

CG2-3-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	111	67	135	181
# sentences	7	3	3	2
P. Pron	10: 7S; 3-O	7: 7S	8: 7S; 1-O	32: 29S; 3-O
Processes	17: 3Ma; 6Me; 1V; 7R	10: 8Ma; 2R	20: 9Ma; 2Me; 1V; 8R	39: 21Ma; 4Me; 3V; 11R
Themes	6 simple; 1 multiple (t)	2 simple; 1 multiple (t)	2 simple; 1 multiple (t)	2 simple
# parataxis	1	1	4	10
# hypotaxis	3	1	2	1

CG2-4-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	76	122	166	193
# sentences	6	14	11	13
P. Pron	9: 7S; 2-O	12: 12S	16: 11S; 5-O	23: 16S; 7-O
Processes	14: 7Ma; 1Me; 1V; 5R	20: 14Ma; 6R	27: 12Ma; 3Me; 12R	44: 28Ma; 3Me; 6V; 7R
Themes	4 simple; 2 multiple (t)	14 simple	6 simple; 5 multiple (3 t & 2 i)	10 simple; 3 multiple (t)
# parataxis	3	1	5	13
# hypotaxis	1	0	4	4

CG2-5-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	201	113	152	101
# sentences	4	8	2	1
P. Pron	22: 18S; 4-O	19: 13S; 6-O	12: 12S	12: 12S
Processes	34: 21Ma; 4Me; 1V; 8R	20: 9Ma; 1Me; 3V; 7R	25: 15Ma; 4Me; 1V; 5R	20: 10Ma; 2Me; 3V; 5R
Themes	3 simple; 1 multiple (i)	6 simple; 2 multiple (t)	2 simple	1 simple
# parataxis	19	1	12	5
# hypotaxis	1	0	0	4

CG2-6-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	120	76	126	155
# sentences	10	6	14	12
P. Pron	12: 8S; 4-O	10: 7S; 3-O	10: 9S; 1-O	21: 20S; 1-O
Processes	25: 8Ma; 10Me; 7R	16: 7Ma; 6Me; 3R	30: 4Ma; 9Me; 2V; 15R	31: 13Ma; 6Me; 4V; 8R
Themes	10 simple	6 simple	13 simple; 1 multiple (t)	7 simple; 5 multiple (t)
# parataxis	1	4	6	4
# hypotaxis	0	0	2	6

CG2-7-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	109	55	76	107
# sentences	5	4	3	9
P. Pron	16: 11S; 5-O	6: 6S	7: 4S; 3-O	9: 8S; 1-O
Processes	23: 9Ma; 7Me; 1V; 6R	11: 7Ma; 1Me; 1V; 2R	16: 9Ma; 5Me; 2R	20: 10Ma; 3Me; 2V; 5R
Themes	3 simple; 2 multiple (1 t & 1 i)	3 simple; 1 multiple (t)	2 simple; 1 multiple (t)	6 simple; 3 multiple (2 t & 1 i)
# parataxis	6	1	3	4
# hypotaxis	4	2	1	1

CG2-8-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	84	71	167	85
# sentences	5	1	9	4
P. Pron	17: 12S; 5-O	6: 6S	29: 20S; 9-O	17: 12S; 5-O
Processes	15: 4Ma; 3Me; 2V; 6R	12: 8Ma; 2Me; 2R	40: 25Ma; 4Me; 4V; 7R	20: 16Ma; 4R
Themes	1 simple; 4 multiple (t)	1 simple	8 simple; 1 multiple (t)	4 simple
# parataxis	4	6	12	9
# hypotaxis	5	0	1	0

CG2-9-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	101	100	175	117
# sentences	8	13	20	14
P. Pron	10: 10S	12: 11S; 1-O	21: 18S; 3-O	11: 11S
Processes	15: 6Ma; 4Me; 5R	18: 11Ma; 3Me; 4R	34: 18Ma; 8Me; 1V; 7R	29: 17Ma; 5Me; 7R
Themes	5 simple; 3 multiple (t)	10 simple; 3 multiple (2 t & 1 i)	20 simple	9 simple; 5 multiple (5 t)
# parataxis	1	4	1	4
# hypotaxis	2	1	1	3

CG2-10-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	57	134	99	108
# sentences	5	12	8	7
P. Pron	4: 3S; 1-O	26: 22S; 4-O	12: 11S; 1-O	16: 13S; 3-O
Processes	12: 7Ma; 2Me; 3R	26: 18Ma; 2Me; 2V; 4R	19: 9Ma; 3Me; 1V; 6R	19: 16Ma; 3R
Themes	1 simple; 4 multiple (t)	8 simple; 4 multiple (t)	7 simple; 1 multiple (t)	3 simple; 4 multiple (t)
# parataxis	6	6	2	7
# hypotaxis	0	2	1	2

CG2-11-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	85	71	67	98
# sentences	5	6	3	9
P. Pron	12: 8S; 4-O	11: 11S	11: 7S; 4-O	5: 4S; 1-O
Processes	15: 4Ma; 1Me; 1V; 9R	16: 11Ma; 1Me; 4R	13: 4Ma; 5Me; 2V; 2R	15: 3Ma; 12R
Themes	2 simple; 3 multiple (t)	4 simple; 2 multiple (t)	2 simple; 1 multiple (t)	7 simple; 2 multiple (t)
# parataxis	4	3	3	5
# hypotaxis	5	0	2	0

CG2-12-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	122	156	108	142
# sentences	9	7	8	10
P. Pron	17: 13S; 4-O	20: 17S; 3-O	9: 6S; 3-O	19: 18S; 1-O
Processes	20: 6Ma; 4Me; 1V; 9R	28: 22Ma; 3Me; 1V; 2R	28: 16Ma; 5Me; 1V; 6R	30: 21Ma; 1Me; 2V; 6R
Themes	3 simple; 6 multiple (t)	4 simple; 3 multiple (t)	4 simple; 4 multiple (2 t & 2 i)	5 simple; 5 multiple (t)
# parataxis	4	7	4	9
# hypotaxis	6	6	2	3

CG2-13-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	135	148	114	146
# sentences	12	10	9	14
P. Pron	14: 11S; 3-O	18: 17S; 1-O	16: 11S; 5-O	25: 24S; 1-O
Processes	26: 11Ma; 9Me; 6R	27: 17Ma; 2Me; 1V; 7R	18: 7Ma; 4Me; 4V; 3R	39: 12Ma; 7Me; 3V; 17R
Themes	10 simple; 2 multiple (t)	9 simple; 1 multiple (t)	7 simple; 2 multiple (t)	12 simple; 2 multiple (t)
# parataxis	1	8	3	3
# hypotaxis	4	2	4	6

CG2-14-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	57	120	101	102
# sentences	6	7	6	5
P. Pron	5: 5S	15: 11S; 4-O	13: 11S; 2-O	14: 11S; 3-O
Processes	11: 6Ma; 2Me; 3R	22: 16Ma; 1Me; 5R	25: 9Ma; 13Me; 2V; 1R	21: 10Ma; 4Me; 7R
Themes	4 simple; 2 multiple (t)	7 simple	4 simple; 2 multiple (t)	5 multiple (t)
# parataxis	3	4	5	4
# hypotaxis	1	3	2	5

CG2-15-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	111	110	55	60
# sentences	7	6	3	1
P. Pron	13: 7S; 6-O	12: 12S	6: 5S; 1-O	8: 8S
Processes	22: 5Ma; 5Me; 1V; 11R	16: 13Ma; 3R	7: 3Ma; 2Me; 2R	9: 2Ma; 7R
Themes	1 simple; 6 multiple (t)	1 simple; 5 multiple (4 t & 1 i)	2 simple; 1 multiple (t)	1 multiple (t)
# parataxis	9	7	3	5
# hypotaxis	5	0	0	2

CG2-16-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	54	65	51	79
# sentences	3	8	2	6
P. Pron	6: 5S; 1-O	8: 8S	6: 6S	5: 4S; 1-O
Processes	10: 1Ma; 4Me; 5R	11: 8Ma; 3R	10: 2Ma; 4Me; 2V; 2R	14: 7Ma; 2Me; 1V; 4R
Themes	3 simple	7 simple; 1 multiple (t)	1 simple; 1 multiple (t)	4 simple; 2 multiple (1 t & 1 i)
# parataxis	0	1	0	2
# hypotaxis	1	1	2	1

CG2-17-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	150	156	147	248
# sentences	12	11	11	19
P. Pron	33: 20S; 13-O	18: 17S; 1-O	23: 17S; 6-O	44: 33S; 11-O
Processes	32: 7Ma; 6Me; 12V; 7R	30: 17Ma; 4Me; 1V; 8R	27: 11Ma; 7Me; 6V; 3R	54: 34Ma; 7Me; 6V; 7R
Themes	8 simple; 4 multiple (t)	7 simple; 4 multiple (t)	1 simple; 10 multiple (9 t & 1 i)	5 simple; 14 multiple (t)
# parataxis	1	5	10	25
# hypotaxis	6	6	5	6

CG2-18-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	87	76	86	68
# sentences	2	4	2	3
P. Pron	9: 6S; 3-O	8: 8S	9: 6S; 3-O	5: 4S; 1-O
Processes	16: 7Ma; 6Me; 2V; 1R	11: 4Ma; 2Me; 5R	32: 8Ma; 3Me; 3V; 3R	15: 9Ma; 3Me; 3R
Themes	2 simple	4 multiple (3 t & 1 i)	1 simple; 1 multiple (t)	1 simple; 2 multiple (t)
#parataxis	4	0	2	5
# hypotaxis	0	5	4	0

CG2-19-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	24	153	155	72
# sentences	1	4	7	5
P. Pron	7: 4S; 3-O	23: 16S; 7-O	18: 14S; 4-O	14: 11S; 3-O
Processes	5: 1Ma; 1Me; 3R	30: 17Ma; 7Me; 3V; 3R	26: 18Ma; 2Me; 3V; 3R	17: 11Ma; 4Me; 2R
Themes	1 simple	1 simple; 3 multiple (t)	4 simple; 3 multiple (t)	2 simple; 3 multiple (t)
# parataxis	0	8	7	2
# hypotaxis	2	1	6	4

CG2-20-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	70	114	111	129
# sentences	3	7	3	3
P. Pron	11: 8S; 3-O	13: 13S	12: 9S; 3-O	16: 12S; 4-O
Processes	13: 5Ma; 6Me; 2R	25: 14Ma; 6Me; 5R	21: 7Ma; 8Me; 2V; 4R	26: 10Ma; 9Me; 3V; 4R
Themes	2 simple; 1 multiple (t)	7 simple	2 simple; 1 multiple (t)	2 simple; 1 multiple (t)
# parataxis	2	4	5	8
# hypotaxis	1	1	2	2

CG2-21-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	165	214	154	120
# sentences	16	16	9	6
P. Pron	21: 17S; 4-O	21: 19S; 2-O	20: 16S; 4-O	19: 14S; 5-O
Processes	24: 3Ma; 4Me; 17R	36: 26Ma; 2Me; 3V; 5R	31: 18Ma; 9Me; 3V; 1R	24: 15Ma; 3Me; 2V; 4R
Themes	13 simple; 3 multiple (t)	11 simple; 5 multiple (4 t & 1 i)	3 simple; 6 multiple (5 t & 1 i)	4 simple; 2 multiple (1 t & 1 i)
# parataxis	0	9	1	4
# hypotaxis	4	2	9	3

CG2-22-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	69	94	95	169
# sentences	4	5	4	9
P. Pron	8: 6S; 2-O	5: 5S	15: 13S; 2-O	29: 27S; 2-O
Processes	13: 4Ma; 2Me; 1V; 6R	16: 10Ma; 1Me; 5R	18: 10Ma; 3Me; 3V; 2R	41: 29Ma; 1Me; 2V; 9R
Themes	4 simple	5 simple	3 simple; 1 multiple (t)	4 simple; 5 multiple (t)
# parataxis	3	5	1	9
# hypotaxis	1	2	5	4

CG2-23-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	126	99	91	134
# sentences	9	7	4	7
P. Pron	15: 11S; 4-O	10: 10S	10: 10S	16: 12S; 4-O
Processes	16: 5Ma; 2Me; 2V; 7R	17: 13Ma; 4R	15: 10Ma; 3Me; 2R	30: 21Ma; 1Me; 2V; 6R
Themes	7 simple; 2 multiple (t)	6 simple; 1 multiple (t)	3 simple; 1 multiple (t)	5 simple; 2 multiple (t)
# parataxis	2	2	1	5
# hypotaxis	2	1	3	1

CG2-24-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	148	95	136	122
# sentences	9	7	12	9
P. Pron	18: 11S; 7-O	9: 8S; 1-O	17: 12S; 5-O	20: 14S; 6-O
Processes	29: 4Ma; 10Me; 15R	19: 11Ma; 4Me; 1V; 3R	22: 7Ma; 2Me; 4V; 9R	24: 13Ma; 1Me; 5V; 5R
Themes	5 simple; 4 multiple (3 t & 1 i)	5 simple; 2 multiple (1 t & 1 i)	10 simple; 2 multiple (1 t & 1 i)	2 simple; 6 multiple (t)
# parataxis	3	4	3	12
# hypotaxis	5	2	6	2

CG2-25-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	125	153	72	98
# sentences	8	6	2	5
P. Pron	17: 13S; 4-O	10: 9S; 1-O	8: 6S; 2-O	12: 11S; 1-O
Processes	28: 6Ma; 8Me; 4V; 10R	25: 13Ma; 6Me; 6R	13: 7Ma; 2V; 4R	20: 8Ma; 5Me; 7R
Themes	3 simple; 5 multiple (t)	5 simple; 1 multiple (t)	2 multiple (t)	4 simple; 1 multiple (t)
# parataxis	6	5	2	5
# hypotaxis	7	3	4	3

CG2-26-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	90	64	93	165
# sentences	9	5	8	17
P. Pron	16: 8S; 8-O	4: 4S	9: 5S; 4-O	17: 15S; 2-O
Processes	15: 8Ma; 4Me; 3R	7: 2Ma; 2V; 3R	19: 7Ma; 5Me; 2V; 5R	27: 12Ma; 4Me; 1V; 10R
Themes	7 simple; 2 multiple (t)	5 simple	7 simple; 1 multiple (t)	13 simple; 4 multiple (t)
# parataxis	3	1	3	2
# hypotaxis	1	0	0	3

Natives 6

N-6-1	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	10	61	149	209
# sentences	1	3	14	14
P. Pron	2: 1S; 1-O	6: 4S; 2-O	14: 12S; 2-O	29: 26S; 3-O
Processes	2: 1Me; 1R	9: 4Ma; 1Me; 4R	21: 3Ma; 3Me; 2V; 13R	38: 19Ma; 2Me; 9V; 8R
Themes	1 simple	3 simple	11 simple; 3 multiple (t)	11 simple; 3 multiple (t)
# parataxis	0	1	3	10
# hypotaxis	0	0	0	3

N-6-2	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	19	83	140	75
# sentences	2	7	9	10
P. Pron	2: 2S	9: 7S; 2-O	9: 9S	12: 10S; 2-O
Processes	4: 2Me; 2R	13: 12Ma; 1Me	18: 11Ma; 2Me; 5R	11: 4Ma; 2Me; 2V; 3R
Themes	2 simple	6 simple; 1 multiple (t)	7 simple; 2 multiple (t)	10 simple
# parataxis	0	4	0	1
# hypotaxis	0	1	2	0

N-6-3	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	13	75	152	261
# sentences	1	8	11	29
P. Pron	1: 1S	11: 9S; 2-O	9: 8S; 1-O	36: 26S; 10-O
Processes	2: 1Me; 1R	11: 8Ma; 1Me; 2R	26: 16Ma; 1Me; 9R	59: 34Ma; 8Me; 9V; 8R
Themes	1 simple	8 simple	7 simple; 4 multiple (2 t & 2 i)	23 simple; 6 multiple (5 t & 1 i)
# parataxis	0	2	6	8
# hypotaxis	0	1	1	2

N-6-4	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	20	188	229	158
# sentences	2	13	5	10
P. Pron	3: 2S; 1-O	20: 14S; 5-O	31: 25S; 6-O	13: 11S; 2-O
Processes	3: 1Me; 2R	38: 20Ma; 5Me; 4V; 9R	41: 19Ma; 4Me; 7V; 11R	41: 30Ma; 3Me; 2V; 6R
Themes	2 simple	8 simple; 5 multiple (2 t & 3 i)	5 multiple (t)	7 simple; 3 multiple (t)
# parataxis	1	4	12	5
# hypotaxis	0	4	5	2

N-6-5	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	21	143	231	209
# sentences	2	12	10	22
P. Pron	2: 2S	24: 21S; 3-O	21: 17S; 4-O	43: 31S; 12-O
Processes	3: 1Me; 2R	34: 23Ma; 4Me; 4V; 3R	34: 13Ma; 3Me; 3V; 15R	48: 24Ma; 9Me; 9V; 6R
Themes	1 simple; 1 multiple (t)	12 simple	7 simple; 3 multiple (t)	20 simple; 2 multiple (1 t & 1 i)
# parataxis	0	3	4	6
# hypotaxis	0	1	4	1

N-6-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	19	135	167	199
# sentences	1	9	10	7
P. Pron	3: 2S; 1-O	15: 14S; 1-O	23: 17S; 6-O	21: 19S; 2-O
Processes	4: 1Ma; 2Me; 1R	21: 16Ma; 5R	35: 14Ma; 5Me; 3V; 13R	44: 34Ma; 4Me; 5R
Themes	1 simple	6 simple; 3 multiple (t)	7 simple; 3 multiple (t)	4 simple; 3 multiple (t)
# parataxis	1	8	5	18
# hypotaxis	0	1	2	4

N-6-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	58	137	186	225
# sentences	4	13	7	17
P. Pron	4: 3S; 1-O	14: 13S; 1-O	30: 22S; 8-O	19: 17S; 2-O
Processes	10: 1Ma; 3Me; 6R	34: 14Ma; 4Me; 10V; 6R	30: 17Ma; 3Me; 6V; 4R	42: 22Ma; 4Me; 9V; 7R
Themes	3 simple; 1 multiple (t)	7 simple; 6 multiple (3 t & 3 i)	4 simple; 3 multiple (t)	8 simple; 9 multiple (t)
# parataxis	1	6	8	13
# hypotaxis	1	1	5	3

N-6-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	17	97	169	223
# sentences	2	10	14	20
P. Pron	1: 1S	12: 12S	22: 12S; 10-O	31: 27S; 4-O
Processes	3: 1Me; 2R	17: 10Ma; 3Me; 4R	34: 8Ma; 3Me; 12V; 11R	48: 31Ma; 1Me; 8V; 8R
Themes	1 simple; 1 multiple (t)	6 simple; 4 multiple (t)	7 simple; 7 multiple (5 t & 2 i)	9 simple; 11 multiple (t)
# parataxis	0	1	4	15
# hypotaxis	0	1	1	6

N-6-9	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	54	139	207	187
# sentences	6	13	22	20
P. Pron	9: 6S; 3-O	18: 18S	24: 24S	21: 20S; 1-O
Processes	13: 1Ma; 4Me; 8R	25: 18Ma; 3Me; 1V; 3R	32: 24Ma; 2Me; 6R	37: 14Ma; 2Me; 11V; 10R
Themes	5 simple; 1 multiple (t)	7 simple; 6 multiple (t)	13 simple; 7 multiple (t)	9 simple; 11 multiple (t)
# parataxis	0	7	1	6
# hypotaxis	1	3	8	4

N-6-10	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	51	75	227	69
# sentences	4	5	10	6
P. Pron	8: 5S; 3-O	9: 7S; 2-O	13: 12S; 1-O	8: 6S; 2-O
Processes	10: 4Ma; 3Me;3R	10: 9Ma; 1R	40: 35Ma; 2V; 3R	10: 4Ma; 1Me; 5R
Themes	3 simple; 1 multiple (t)	3 simple; 2 multiple (t)	3 simple; 7 multiple (t)	5 simple; 1 multiple (t)
# parataxis	4	4	13	0
# hypotaxis	1	0	6	0

N-6-11	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	62	59	154	201
# sentences	3	3	7	12
P. Pron	7: 6S; 1-O	5: 5S	23: 16S; 7-O	25: 17S; 6-O
Processes	11: 2Ma; 3Me; 1V; 5R	10: 7Ma; 1Me; 1V; 1R	28: 2Ma; 10Me; 6V; 10R	34: 17Ma; 2Me; 7V; 8R
Themes	2 simple; 1 multiple (t)	1 simple; 2 multiple (t)	3 simple; 4 multiple (t)	10 simple; 2 multiple (t)
# parataxis	3	3	6	7
# hypotaxis	2	4	5	5

N-6-12	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	34	119	159	120
# sentences	1	9	14	7
P. Pron	2: 1S; 1-O	12: 12S	14: 12S; 2-O	9: 8S; 1-O
Processes	5: 3Ma; 1Me; 1R	19: 12Ma; 1Me; 6R	24: 6Ma; 1Me; 17R	24: 16Ma; 3V; 5R
Themes	1 simple	6 simple; 3 multiple (t)	11 simple; 3 multiple (t)	6 simple; 1 multiple (t)
# parataxis	2	4	8	6
# hypotaxis	0	3	4	3

N-6-13	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	18	41	150	101
# sentences	1	4	15	9
P. Pron	1S	4: 4S	20: 16S; 4-O	7: 3S; 4-O
Processes	2: 1Ma; 1R	5: 3Ma; 1Me; 1R	34: 7Ma; 3Me; 13V; 11R	25: 20Ma, 1Me; 4R
Themes	1 multiple (t)	4 simple	11 simple; 4 multiple (2 t & 2 i)	3 simple; 6 multiple (5 t & 1 i)
# parataxis	0	0	5	4
# hypotaxis	1	0	0	0

N-6-14	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	102	135	91	84
# sentences	3	4	5	5
P. Pron	16: 14S; 2-O	15: 14S; 1-O	15: 12S; 3-O	13: 10S; 3-O
Processes	17: 11Ma; 2Me; 2V; 2R	18: 11Ma; 1V; 7R	20: 8Ma; 2Me; 4V; 6R	15: 9Ma; 3Me; 3R
Themes	1 simple; 2 multiple (t)	2 simple; 2 multiple (t)	2 simple; 3 multiple (t)	5 simple
# parataxis	12	6	10	7
# hypotaxis	1	2	1	1

N-6-15	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	53	35	167	94
# sentences	3	2	17	8
P. Pron	7: 4S; 3-O	4: 4S	21: 17S; 4-O	12: 11S; 1-O
Processes	7: 4Me; 3R	6: 4Ma; 1Me; 1R	29: 11Ma; 4Me; 1V; 13R	19: 11Ma; 4Me; 4R
Themes	1 simple; 2 multiple (t)	2 simple	11 simple; 6 multiple (4 t & 2 i)	7 simple; 1 multiple (t)
# parataxis	2	1	1	5
# hypotaxis	1	1	1	1

N-6-16	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	25	116	81	105
# sentences	1	2	12	10
P. Pron	5: 3S; 2-O	5: 4S; 1-O	10: 10S	15: 15S
Processes	5: 2Ma; 1Me; 2R	18: 16Ma; 1V; 1R	13: 9Ma; 1Me; 3R	18: 10Ma; 3V; 5R
Themes	1 simple	1 simple; 1 multiple (t)	6 simple; 6 multiple (t)	5 simple; 5 multiple (t)
# parataxis	0	8	3	0
# hypotaxis	2	1	1	6

N-6-17	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	43	54	69	63
# sentences	2	3	5	6
P. Pron	6: 4S; 2-O	7: 5S; 2-O	14: 13S; 1-O	9: 6S; 3-O
Processes	10: 3Ma; 5Me; 2R	6: 5Ma; 1R	26: 16Ma; 4Me; 1V; 5R	10: 5Ma; 1Me; 4R
Themes	2 simple	3 simple	2 simple; 3 multiple (2 t & 1 i)	5 simple; 1 multiple (i)
# parataxis	2	1	4	1
# hypotaxis	0	0	6	1

N-6-18	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	40	37	93	112
# sentences	3	4	5	4
P. Pron	2: 2S	4: 4S	11: 6S; 5-O	9: 8S; 1-O
Processes	9: 3Ma; 4Me; 2R	6: 3Ma; 3R	20: 11Ma; 1Me; 4V; 4R	15: 7Ma; 1Me; 1V; 6R
Themes	1 simple; 2 multiple (t)	4 simple	1 simple; 4 multiple (t)	3 simple; 1 multiple (t)
# parataxis	4	0	2	6
# hypotaxis	0	0	2	0

N-6-19	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	21	41	71	101
# sentences	4	5	6	6
P. Pron	6: 5S; 1-O	5: 5S	9: 8S; 1-O	11: 10S; 1-O
Processes	6: 1Ma; 3Me; 2R	6: 4Ma; 2R	12: 5Ma; 2Me; 1V; 4R	23: 13Ma; 2Me; 5V; 3R
Themes	4 simple	5 simple	4 simple	1 simple; 5 multiple (4 t & 1 i)
# parataxis	0	1	0	2
# hypotaxis	0	0	1	5

N-6-20	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	67	130	186	222
# sentences	4	11	10	17
P. Pron	6: 6S	11: 10S; 1-O	20: 17S; 3-O	23: 20S; 3-O
Processes	12: 5Ma; 3Me; 4R	18: 9Ma; 1Me; 8R	32: 13Ma; 1Me; 7V; 11R	47: 31Ma; 6Me; 2V; 8R
Themes	4 simple	8 simple; 3 multiple (t)	8 simple; 2 multiple (t)	15 simple; 2 multiple (t)
# parataxis	2	6	3	11
# hypotaxis	2	3	4	3

Natives 7

N-7-1	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	69	28	130	167
# sentences	4	2	3	9
P. Pron	6: 4S; 2-O	4: 3S; 1-O	16: 10S; 6-O	18: 13S; 5-O
Processes	14: 3Ma; 6Me; 5R	5: 5Ma	24: 16Ma; 1Me; 3V; 4R	28: 18Ma; 2Me; 6V; 2R
Themes	2 simple; 2 multiple (t)	2 simple	2 simple; 1 multiple (t)	5 simple; 4 multiple (t)
# parataxis	3	2	1	7
# hypotaxis	2	0	6	6

N-7-2	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	78	64	141	89
# sentences	5	6	6	7
P. Pron	8: 7S; 1-O	8: 7S; 1-O	16: 12S; 4-O	1: 1S
Processes	17: 6Ma; 8Me; 3R	13: 11Ma; 2R	27: 16Ma; 5Me; 4V; 2R	9: 1Ma; 3Me; 2V; 3R
Themes	5 simple	4 simple; 2 multiple (t)	2 simple; 4 multiple (t)	7 simple
# parataxis	2	2	2	2
# hypotaxis	0	2	5	1

N-7-3	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	71	53	150	138
# sentences	4	3	7	10
P. Pron	8: 6S; 2-O	5: 5S	13: 9S; 4-O	12: 9S; 3-O
Processes	14: 2Ma; 5Me; 7R	10: 8Ma; 1Me; 1R	24: 13Ma; 5Me; 6R	27: 18Ma; 3Me; 6R
Themes	4 simple	3 simple	2 simple; 5 multiple (t)	1 simple; 9 multiple (t)
# parataxis	6	4	9	10
# hypotaxis	0	0	4	5

N-7-4	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	169	106	174	71
# sentences	8	7	8	3
P. Pron	24: 15S; 9-O	12: 10S; 2-O	16: 11S; 5-O	11: 7S; 4-O
Processes	35: 8Ma; 12Me; 4V; 11R	20: 12Ma; 4Me; 1V; 3R	36: 17Ma; 2Me; 4V; 13R	16: 8Ma; 4Me; 1V; 3R
Themes	3 simple; 5 multiple (t)	5 simple; 2 multiple (t)	5 simple; 3 multiple (t)	3 simple
# parataxis	7	4	6	4
# hypotaxis	4	1	5	1

N-7-5	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	85	48	112	62
# sentences	6	2	6	7
P. Pron	12: 9S; 3-O	6: 6S	14: 12S; 2-O	4: 4S
Processes	18: 5Ma; 7Me; 6R	9: 6Ma; 3R	22: 12Ma; 3Me; 2V; 5R	12: 3Ma; 1Me; 8R
Themes	5 simple; 1 multiple (t)	2 simple	2 simple; 4 multiple (t)	4 simple; 3 multiple (1 t & 2 i)
# parataxis	3	2	10	1
# hypotaxis	2	1	6	1

N-7-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	70	126	132	79
# sentences	5	7	12	3
P. Pron	5: 5S	14: 13S; 1-O	7: 6S; 1-O	14: 11S; 3-O
Processes	11: 4Ma; 4Me; 1V; 2R	28: 12Ma; 5Me; 1V; 10R	21: 11Ma; 2Me; 3V; 5R	20: 16Ma; 2V; 2R
Themes	2 simple; 3 multiple (t)	4 simple; 3 multiple (t)	8 simple; 4 multiple (t)	1 simple; 2 multiple (t)
# parataxis	4	4	5	10
# hypotaxis	2	3	0	1

N-7-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	49	41	72	37
# sentences	1	1	3	2
P. Pron	6: 6S	6: 4S; 2-O	9: 6S; 3-O	0
Processes	14: 5Ma; 7Me; 2R	9: 7Ma; 2R	13: 5Ma; 2Me; 4V; 2R	7: 4Ma; 1V; 2R
Themes	1 multiple (t)	1 simple	2 simple; 1 multiple (t)	1 simple; 1 multiple (t)
# parataxis	3	5	3	2
# hypotaxis	2	0	0	0

N-7-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	83	76	157	44
# sentences	6	7	5	1
P. Pron	6: 6S	8: 7S; 1-O	13: 13S	4: 3S; 1-O
Processes	20: 10Ma; 2Me; 8R	13: 7Ma; 2Me; 4R	27: 17Ma; 2Me; 8R	8: 7Ma; 1R
Themes	6 simple	5 simple; 2 multiple (t)	4 simple; 1 multiple (t)	1 simple
# parataxis	3	1	11	3
# hypotaxis	1	3	0	0

N-7-9	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	102	99	116	90
# sentences	6	7	5	5
P. Pron	12: 7S; 5-O	11: 11S	16: 10S; 6-O	14: 14S
Processes	20: 5Ma; 7Me; 8R	17: 11Ma; 2Me; 4R	21: 12Ma; 1Me; 7V; 1R	23: 20Ma; 2V; 1R
Themes	2 simple; 4 multiple (t)	4 simple; 3 multiple (t)	3 simple; 2 multiple (t)	1 simple; 4 multiple (t)
# parataxis	4	3	6	10
# hypotaxis	1	3	1	4

N-7-10	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	77	64	70	86
# sentences	3	5	4	6
P. Pron	6: 6S	8: 8S	14: 7S; 7-O	7: 5S; 2-O
Processes	15: 7Ma; 2Me; 6R	14: 9Ma; 2Me; 3R	15: 5Ma; 3Me; 6V; 1R	19: 13Ma; 3Me; 3R
Themes	3 simple	5 simple	4 multiple (t)	6 simple
# parataxis	3	4	6	3
# hypotaxis	1	1	0	0

N-7-11	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	146	129	150	84
# sentences	9	9	10	6
P. Pron	15: 12S; 3-O	18: 16S; 2-O	18: 15S; 3-O	10: 10S
Processes	29: 7Ma; 3Me; 3V; 16R	26: 19Ma; 1Me; 6R	25: 8Ma; 3Me; 14R	16: 9Ma; 1Me; 2V; 4R
Themes	7 simple; 2 multiple (t)	6 simple; 3 multiple (t)	7 simple; 3 multiple (t)	4 simple; 2 multiple (t)
# parataxis	5	8	5	4
# hypotaxis	3	2	2	4

N-7-12	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	68	43	161	156
# sentences	7	4	9	9
P. Pron	10: 5S; 5-O	5: 5S	15: 13S; 2-O	24: 19S; 5-O
Processes	13: 6Ma; 4Me; 3R	5: 3Ma; 2R	27: 13Ma; 2Me; 2V; 10R	34: 21Ma; 4Me; 5V; 4R
Themes	3 simple; 4 multiple (t)	4 simple	9 simple	5 simple; 4 multiple (t)
# parataxis	2	0	4	7
# hypotaxis	2	1	4	2

N-7-13	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	72	56	115	176
# sentences	4	5	10	6
P. Pron	9: 6S; 3-O	6: 6S	12: 12S	26: 20S; 6-O
Processes	11: 1V; 6Me; 4R	12: 10Ma; 2R	21: 13Ma; 4Me; 1V; 3R	34: 15Ma; 4Me; 1V; 14R
Themes	4 simple	5 simple	6 simple; 4 multiple (3 t & 1 i)	5 simple; 1 multiple (t)
# parataxis	2	1	0	8
# hypotaxis	2	1	4	6

N-7-14	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	82	87	123	69
# sentences	7	6	9	7
P. Pron	6: 6S	11: 8S; 3-O	12: 11S; 1-O	7: 5S; 2-O
Processes	18: 5Ma; 5Me; 8R	12: 9Ma; 2V; 1R	28: 9Ma; 12Me; 2V; 5R	14: 9Ma; 1V; 4R
Themes	6 simple; 1 multiple (t)	5 simple; 1 multiple (t)	7 simple; 2 multiple (t)	6 simple; 1 multiple (t)
# parataxis	1	2	2	2
# hypotaxis	3	1	3	0

N-7-15	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	108	59	150	206
# sentences	4	1	8	3
P. Pron	16: 13S; 3-O	9: 9S	10: 7S; 3-O	34: 20S; 14-O
Processes	20: 5Ma; 5Me; 10R	10: 5Ma; 5R	25: 20Ma; 1Me; 4R	34: 12Ma; 8Me; 14R
Themes	3 simple; 1 multiple (t)	1 multiple (t)	4 simple; 4 multiple (t)	2 simple; 1 multiple (t)
# parataxis	3	3	4	7
# hypotaxis	3	0	2	4

N-7-16	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	105	81	135	119
# sentences	5	6	9	7
P. Pron	10: 8S; 2-O	11: 11S	10: 9S; 1-O	10: 9S; 1-O
Processes	19: 5Ma; 6Me; 8R	18: 14Ma; 2Me; 2R	28: 19Ma; 3Me; 2V; 4R	31: 21Ma; 1Me; 4V; 5R
Themes	1 simple; 4 multiple (t)	3 simple; 3 multiple (t)	2 simple; 6 multiple (t)	1 simple; 6 multiple (t)
# parataxis	4	3	6	6
# hypotaxis	4	3	2	3

N-7-17	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	128	54	123	113
# sentences	8	4	7	5
P. Pron	17: 12S; 5-O	2: 2S	11: 8S; 3-O	12: 10S; 2-O
Processes	23: 8Ma; 4Me; 1V; 10R	12: 11Ma; 1Me	20: 11Ma; 3Me; 1V; 5R	18: 12Ma; 4Me; 2V
Themes	2 simple; 6 multiple (t)	1 simple; 3 multiple (t)	7 multiple (t)	2 simple; 3 multiple (t)
# parataxis	4	5	7	6
# hypotaxis	7	0	2	3

N-7-18	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	75	80	154	129
# sentences	4	7	12	8
P. Pron	10: 7S; 3-O	8: 7S; 1-O	19: 9S; 10-O	8: 8S
Processes	18: 7Ma; 2Me; 9R	14: 12Ma; 1Me; 1R	32: 14Ma; 3Me; 8V; 7R	30: 14Ma; 3Me; 13R
Themes	2 simple; 2 multiple (t)	5 simple; 2 multiple (t)	4 simple; 8 multiple (t)	5 simple; 3 multiple (t)
# parataxis	0	1	14	7
# hypotaxis	4	1	1	0

Natives 8

N-8-1	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	249	68	107	77
# sentences	2	5	3	7
P. Pron	37: 29S; 8-O	7: 7S	11: 9S; 2-O	8: 8S
Processes	51: 24Ma; 5Me; 3V; 19R	13: 9Ma; 4R	21: 11Ma; 5Me; 3V; 2R	13: 11Ma; 2R
Themes	1 simple; 1 multiple (t)	5 simple	1 simple; 2 multiple (t)	4 simple; 3 multiple (3)
# parataxis	18	4	5	7
# hypotaxis	9	0	2	0

N-8-2	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	62	95	35	97
# sentences	1	8	1	2
P. Pron	13: 10S; 3-O	11: 11S	1S	10: 9S; 1-O
Processes	15: 5Ma; 3Me; 1V; 6R	19: 16Ma; 1V; 2R	7: 6Ma; 1V	18: 13Ma; 2Me; 3R
Themes	1 simple	4 simple; 4 multiple (t)	1 multiple (i)	2 multiple (t)
# parataxis	5	6	3	13
# hypotaxis	4	2	1	4

N-8-3	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	139	46	141	90
# sentences	5	2	9	1
P. Pron	21: 14S; 7-O	5: 4S; 1-O	15: 10S; 5-O	8: 7S; 1-O
Processes	27: 4Ma; 10Me; 5V; 8R	5: 5Ma	26: 8Ma; 5Me; 2V; 11R	14: 10Ma; 1Me; 3R
Themes	3 simple; 2 multiple (t)	2 simple	2 simple; 7 multiple (6 t & 1 i)	1 multiple (t)
# parataxis	3	2	2	9
# hypotaxis	2	1	3	1

N-8-4	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	36	69	139	143
# sentences	1	3	9	13
P. Pron	3: 3S	11: 11S	28: 17S; 11-O	11: 11S
Processes	8: 3Ma; 3Me; 2R	16: 10Ma; 6R	26: 6Ma; 3Me; 11V; 6R	27: 8Ma; 2Me; 17R
Themes	1 simple	3 multiple (t)	4 simple; 5 multiple (4 t & 1 i)	4 simple; 9 multiple (t)
# parataxis	1	7	10	0
# hypotaxis	0	2	1	1

N-8-5	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	103	24	22	114
# sentences	2	3	1	10
P. Pron	14: 13S; 1-O	1S	1S	12: 11S; 1-O
Processes	19: 4Ma; 6Me; 3V; 6R	4: 2Ma; 2Me	6: 3Ma; 1Me; 1V; 1R	21: 9Ma; 3Me; 3V; 6R
Themes	1 simple; 1 multiple (t)	1 simple; 2 multiple (t)	1 simple	7 simple; 3 multiple (t)
# parataxis	6	1	2	2
# hypotaxis	2	0	0	0

N-8-6	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	174	102	161	72
# sentences	8	5	15	5
P. Pron	15: 12S; 3-O	8: 8S	5: 4S; 1-O	2: 2S
Processes	26: 18Ma; 4V; 4R	18: 13Ma; 1Me; 4R	14: 6Ma; 4Me; 2V; 2R	11: 5Ma; 2Me; 4R
Themes	2 simple; 6 multiple (5 t & 1 i)	3 simple; 2 multiple (t)	10 simple; 5 multiple (3 t & 2 i)	5 simple
# parataxis	5	4	2	0
# hypotaxis	6	3	2	1

N-8-7	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	67	126	137	90
# sentences	3	7	7	1
P. Pron	8: 7S; 1-O	14: 13S; 1-O	5: 5S	7: 7S
Processes	11: 3Ma; 3Me; 5R	29: 12Ma; 5Me; 1V; 11R	21: 9Ma; 5Me; 1V; 6R	15: 11Ma; 2V; 2R
Themes	2 simple; 1 multiple (t)	4 simple; 3 multiple (t)	4 simple; 3 multiple (t)	1 multiple (t)
# parataxis	4	4	5	6
# hypotaxis	3	3	3	2

N-8-8	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	26	61	113	79
# sentences	1	1	8	1
P. Pron	2: 1S; 1-O	8: 8S	9: 7S; 2-O	4: 2S; 2-O
Processes	4: 1Ma; 2Me; 1R	12: 6Ma; 1V; 5R	20: 15Ma; 1Me; 2V; 2R	12: 5Ma; 7R
Themes	1 multiple (t)	1 multiple (t)	1 simple; 7 multiple (5 t & 2 i)	1 simple
# parataxis	1	6	4	2
# hypotaxis	1	1	4	0

N-8-9	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	32	67	167	176
# sentences	2	7	8	11
P. Pron	2: 1S; 1-O	7: 7S	14: 14S	21: 14S; 7-O
Processes	5: 1Ma; 2Me; 2R	11: 9Ma; 1V; 1R	31: 10Ma; 8Me; 1V; 12R	33: 19Ma; 4Me; 1V; 9R
Themes	1 simple; 1 multiple (t)	3 simple; 4 multiple (t)	3 simple; 5 multiple (t)	7 simple; 4 multiple (1 t & 3 i)
# parataxis	0	5	6	9
# hypotaxis	1	0	3	1

N-8-10	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	28	54	146	93
# sentences	1	5	7	8
P. Pron	1S	6: 6S	11: 6S; 5-O	5: 5S
Processes	5: 3Ma; 1Me; 1R	8: 6Ma; 2R	20: 9Ma; 2Me; 3V; 6R	21: 12Ma; 9R
Themes	1 simple	5 simple	2 simple; 6 multiple (5 t & 1 i)	4 simple; 4 multiple (t)
# parataxis	3	1	3	3
# hypotaxis	0	1	3	4

N-8-11	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	75	61	41	58
# sentences	2	1	2	4
P. Pron	10: 8S; 2-O	8: 8S	1S	7: 7S
Processes	19: 5Ma; 8Me; 6R	12: 6Ma; 1V; 5R	11: 5Ma; 3Me; 1V; 2R	12: 10Ma; 2R
Themes	1 simple; 1 multiple (t)	1 multiple (t)	1 simple; 1 multiple (i)	3 simple; 1 multiple (t)
# parataxis	5	6	3	2
# hypotaxis	1	1	0	1

N-8-12	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	17	59	191	188
# sentences	1	5	11	13
P. Pron	2: 1S; 1-O	5: 4S; 1-O	19: 13S; 6-O	25: 23S; 2-O
Processes	3: 1Ma; 1Me; 1R	8: 3Ma; 1Me; 4R	37: 15Ma; 8Me; 3V; 11R	38: 20Ma; 5Me; 4V; 9R
Themes	1 multiple (t)	4 simple; 1 multiple (t)	3 simple; 8 multiple (4 t & 4 i)	10 simple; 3 multiple (2 t & 1 i)
# parataxis	0	1	7	7
# hypotaxis	1	0	2	5

N-8-13	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	7	38	148	84
# sentences	1	4	11	6
P. Pron	2: 1S; 1-O	4: 4S	25: 15S; 10-O	7: 6S; 1-O
Processes	2: 1Me; 1R	5: 4Ma; 1R	25: 15Ma; 7V; 3R	16: 6Ma; 2Me; 1V; 7R
Themes	1 simple	4 simple	7 simple; 4 multiple (3 t & 1 i)	6 simple
# parataxis	0	0	4	3
# hypotaxis	0	0	2	2

N-8-14	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	45	146	138	89
# sentences	2	12	6	5
P. Pron	3: 3S	17: 14S; 3-O	6: 6S	6: 6S
Processes	6: 2Ma; 2Me; 2R	23: 16Ma; 2Me; 5R	18: 10Ma; 8R	14: 5Ma; 3V; 6R
Themes	2 simple	6 simple; 6 multiple (5 t & 1 i)	6 simple	4 simple; 1 multiple (t)
# parataxis	3	7	7	6
# hypotaxis	0	1	0	1

N-8-15	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	24	70	150	104
# sentences	2	2	11	13
P. Pron	5: 3S; 2-O	4: 4S	5: 4S; 1-O	11: 9S; 2-O
Processes	5: 1Ma; 3Me; 1R	15: 14Ma; 1R	24: 15Ma; 2Me; 7R	20: 14Ma; 3Me; 3R
Themes	2 simple	1 simple; 1 multiple (i)	3 simple; 8 multiple (2 t & 6 i)	8 simple; 5 multiple (4 t & 1 i)
# parataxis	1	3	4	1
# hypotaxis	0	1	1	2

N-8-16	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	50	54	158	107
# sentences	3	6	10	13
P. Pron	4: 3S; 1-O	6: 6S	11: 5S; 6-O	14: 12S; 2-O
Processes	10: 4Ma; 2Me; 4R	10: 8Ma; 2R	31: 14Ma; 13Me; 4R	22: 14Ma; 2Me; 1V; 5R
Themes	2 simple; 1 multiple (t)	4 simple; 2 multiple (1 t & 1 i)	8 simple; 2 multiple (1 t & 1 i)	9 simple; 4 multiple (t)
# parataxis	1	0	2	1
# hypotaxis	1	0	2	2

N-8-17	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	22	63	174	112
# sentences	1	6	11	7
P. Pron	2: 2S	5: 5S	18: 11S; 7-O	10: 7S; 3-O
Processes	4: 1Ma; 1Me; 2R	10: 9Ma; 1Me	34: 18Ma; 2Me; 7V; 7R	19: 12Ma; 1Me; 2V; 4R
Themes	1 multiple (t)	5 simple; 1 multiple (t)	4 simple; 7 multiple (t)	3 simple; 4 multiple (t)
# parataxis	0	2	6	7
# hypotaxis	1	0	2	0

N-8-18	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	184	50	198	107
# sentences	1	4	5	6
P. Pron	17: 12S; 5-O	6: 6S	21: 18S; 3-O	14: 10S; 4-O
Processes	35: 11Ma; 8Me; 2V; 14R	7: 5Ma; 1Me; 1R	35: 18Ma; 7Me; 4V; 6R	23: 10Ma; 6Me; 4V; 3R
Themes	1 simple	4 simple	3 simple; 2 multiple (t)	2 simple; 4 multiple (t)
# parataxis	13	2	8	7
# hypotaxis	4	0	8	3

N-8-19	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	47	28	170	102
# sentences	3	2	8	5
P. Pron	6: 3S; 3-O	4: 3S; 1-O	16: 15S; 1-O	11: 9S; 2-O
Processes	11: 4Ma; 4Me; 1V; 2R	5: 5Ma	28: 9Ma; 4Me; 2V; 13R	21: 15Ma; 1Me; 1V; 4R
Themes	3 simple	2 simple	2 simple; 6 multiple (t)	5 multiple (t)
# parataxis	2	3	8	4
# hypotaxis	0	0	1	5

N-8-20	Pre-tasks	Post-tasks	Follow-up1	Follow-up2
# words	43	64	59	114
# sentences	2	6	4	3
P. Pron	6: 4S; 2-O	8: 7S; 1-O	6: 5S; 1-O	14: 14S
Processes	8: 2Ma; 2Me; 4R	13: 11Ma; 2R	13: 7Ma; 3Me; 3R	22: 15Ma; 1Me; 6R
Themes	2 multiple (t)	4 simple; 2 multiple (t)	4 multiple (t)	3 multiple (t)
# parataxis	2	3	2	10
# hypotaxis	1	2	0	1

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