Teacher-student-interaction in subject-specific writing: research meets practice

Writing in secondary school CLIL contexts: genre and development in texts, scaffolding and interaction in classrooms
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Outline
1. Context:
   a. CLIL in Spain
   b. The UAM-CLIL Project: speaking and writing (subcorpus Secondary History classes)
2. Theoretical Background: genre and register
3. Student writing: analyses of language+content
   a. Coherence and register
   b. Interpersonal resources
4. Teacher-student interaction in CLIL writing: Reading to Learn pedagogy
5. Conclusions

Context: geography, history and language learning

CLIL in Spain, CLIL in the Madrid Region
Decentralised education system:
   • 17 Autonomous Communities (between 1981-2000)
   • All have developed their own CLIL programs
   • Madrid Autonomous Community: 1st program in 1996: 10 primary (later + 10 secondary) state schools (Ministry Education + British Council)
   • Present program from 2004
     • 318 junior + 90 secondary schools
   • Schools agree and bid to participate

The UAM-CLIL Project
• UAM-CLIL Project since 2005
• Aim: to find the needs of language for CLIL classes = reveal features of subject language
• Corpus = over 1,000,000 words from CLIL classroom spoken discourse + some written
• Spain, Austria, Finland, Holland
• Pre-school, primary, secondary

The UAM-CLIL Research Team
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**Secondary school**: grades 7-10 (12-16 yrs)
- two schools (diff socio-economic areas)
- one class in each over four years
- Once a year, end-of-topic prompt:
  whole-class summary session + independent written text same topic + individual interviews (6 sts each class)
- Also some L1 data same subject

**CLIL and writing**
- Focus of most research on language in CLIL = spoken discourse
- UAM-CLIL projects: both spoken + written
- Role of writing in the creation of knowledge and learning (Bazerman 1988, Halliday 1996...)
- Role of writing in FL learning (Bynes 2009, Heine 2011, Manchón 2011...)
- Role of writing in CLIL: apprenticing students into disciplinary knowledge (Llinares, Morton, Whittaker 2012 cf. Sydney School projects... Schleppegrell 2004, ...)

**CLIL writing seen through a linguistic theory: genre + register model**
- Research into the texts of schooling
- Different subjects have different aims, questions, methods, activities...

**Different purposes**
- Inform reader
- Evaluate (to persuade reader)

**The genres of school history**

<table>
<thead>
<tr>
<th>Genres</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-chronological organization</td>
<td>Period Study: To describe the character of a historical period</td>
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<tr>
<td></td>
<td>Historical Recount: To retell events in a sequence</td>
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<tr>
<td>Chronological organization</td>
<td>Historical Account: To account for why things happened in a particular sequence; to explain the past</td>
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<td></td>
<td>Historical Explanation: To explain past events via causes and consequences</td>
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<tr>
<td>Logical organization</td>
<td>Historical Argument: To argue for an interpretation of the past; evaluating various proposals</td>
</tr>
</tbody>
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**Prompts for data collection secondary**
- In collaboration with teachers
- Based on syllabus outcomes
- Explain reasons for events and their significance
- Make connections between changes in different periods
- Discuss ideas and information
- Create written texts: organise sentences / paragraphs
- Language: specialised lexis, some ref to registers, genres
- Support for production
Sample prompts for data collection

1st year, Grade 7

We have been studying the origins of ancient civilizations. Explain why they started in the places where they did, and how they developed. Include information on the characteristics of ancient civilizations, why they were so important at that time and compare them with present day society.

Data secondary writing

- Total 27,000 words
- 171 texts
- Length: from 125-200
- Steady increase in fluency

Historical Account and Period Study

Research Questions

Coherence:
• How do the students introduce participants (people and entities) into the discourse when writing about History in English?
• How do they keep track of participants once introduced?
• Do we see development in their ability to introduce and track participants over the four years?

Register
• Do we see development in their use of the resources of the nominal group?

Integrating content and language in writing: coherence and register ...

(Intelligaia, Bever & McCabe 2003)

Identification/Tracking System

1. (how listener/reader is told the participant is new or recoverable, by the linguistic form)

1. Present participant introduced as new
   by, to, one, some, someone, anyone, plural and mass nouns - no determiner

2. Presume ways of mentioning already introduced participants
   Pronominal 1st, 2nd and 3rd person pronouns
   Nominal - named Philip II, Europe, his wife, Mary Tudor, - determined
     - definite (the soldiers, the empire)
     - demonstrative (this title, these countries)

Based on Martin & Rose 2003

Coherence ...

...
Identification/Tracking System
2. (how the participant is “known” or “recoverable” for the reader)

1. Situation: We have pencil and pen.
2. Shared knowledge: They started to move to the North
3. Inference: During the war it was a terrible situation. The soldiers...
4. Topic knowledge: In ancient Egypt, the king called Pharaoh
5. Reference in previous text: ...and its Queen said “no” to his proposition of marriage

Simplified version of Martin & Rose 2003

Successful Identification + Tracking

Beginning a composition:

Feudalism in Europe was a very important historic moment.
Europe grew and new countries were found.
Many people lived in rural places; these people worked the lands; they lived in small houses in villages near to forests.

Beginning of composition:

They start in that places because the population grow.

The first world war ... Some important causes were that.... There are facts that made this war different. Firstly, the alliances make so many countries to be involved...

Less successful identification + tracking

Nominal group structure (1)

Nominal group types (Based on Haan, 1994: 86)
1. PRO Pronoun
   1. you, he, she, it
   2. we, they, them
2. (DET) PREMOD (+) HEAD
   3. cities; all the people; the war; their wage
   4. women’s wage; a good monarch
3. (DET) HEAD POSTMOD (+)
   4. lands near the river; an event such as the assassination of the Austro-Hungarian Archduke by a Serbian
   5. a passenger ship with 100 American passengers on board; new technology that could kill a lot of people

Written vs. Spoken Language

‘The written language is organised around the nominal group’

(Halliday 1996: 352).
**Nominal group structure (2)**

- **COMP** Compound nominal group

- *more different classrooms and more subjects than in those times;*
- *a great power centered on a king, a very big hierarchical society, and a great artistic development*

France; Germany; Philip II; the Treaty of Versailles

- *what it was; how the countries bought or sold profits*

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**RESULTS: Coherence ...**

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**Total Identifying & Tracking Functions**

![Graph showing data comparison](Graph1.png)

**Total Tracking Functions**

![Graph showing data comparison](Graph2.png)

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**SUMMARY of Identification/Tracking (coherence)**

**Development (from 1st to 4th year)**

- Fewer MISSES in presenting/presuming functions
- Greater use of nominal groups (+ lexis) instead of pronouns for presuming
- Increase in textual cohesion (via direct reference to previous mention)
- Decrease in use of reference to situational context (1st and 2nd person pronouns)
- Noticeable increase of reference inside nominal group (eshora)
- Less reliance on shared knowledge of topic
RESEARCH MEETS PRACTICE ...

Teacher-student interaction for register
Academic register: nominalisations

World War One started because of the assassination of archduke Franz Ferdinan mainly, also appear other reasons like: Germany took Alsace-Lorraine and also started to build a large navy, that make France angry and declared war to Germany...

Teacher-student interaction for register
Clauses to nominal groups
Clause-internal cause

- Germany took Alsace-Lorraine
- and also started to build a large navy
- that make France angry and declared war to Germany.

The annexing of Alsace-Lorraine by Germany, the construction of a large navy, France’s reaction led to France’s declaration of war on Germany.

SUMMARY of Nominal Group Type (academic register)

Development from 1st to 4th year
- Decrease in Type 1 NGs (no modification)
- Decrease in pronoun use (grammar words)
- Increase in Type 3 NGs (post modification)
- Slight increase in Type 4 (pre + post modification)

Teacher-student interaction for coherence in writing
Reference and audience-awareness

They were polyteistics, they live near rivers to had arid lands. Mesopotamia mean “between two rivers” they called Tigris, Euphrates. Egypt along the river Nilo. They were so important because if they died the human disappear.
Summary: coherence and register
CLIL = rich input + meaningful use of language for:

• acquisition of resources for coherent text
• beginning to learn academic register

• Oral sessions before the writing tasks seem to provide the stable knowledge base (Bereiter & Scardamalia 1980) for writing

Why study interpersonal language in CLIL?

• Evaluation is intrinsic to language (Halliday and Matthiessen 2004, Sarangi, 2003), but CLIL classrooms mainly focus on facts (Dalton-Puffer, 2007)

• CLIL students need interpersonal resources to (a) manage social relations in the classroom (b) evaluate subject-related information when writing and speaking on content

What is interpersonal language?

What is Appraisal?

linguistic resources by which speakers or writers express evaluation, attitude, emotion, point of view...

= Halliday’s Interpersonal Metafunction (Halliday & Matthiessen, 2004), developed by Martin and White in Appraisal Theory (eg. Martin 2000, Martin & White 2005).

APPRAISAL and Genre in History

APPRAISAL resources will be called on differently depending on the generic demands ...

(Coffin, 2006)
**APPRAISAL and Genre in School History**

Early adolescence [12-13]
- Biographical recounts + Social valuation of events or phenomena; Judgment of historical figures.

Mid-adolescence [13-15]
- Texts attitudinally "rather dispassionate" especially e.g. period studies

Late adolescence [16-18]
- Historical explanations and arguments + Social valuation of events and movements; Judgment of behaviour; Engagement for diverse perspectives; modality; Graduation to emphasise key points

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**Research questions**

Aim: To discover whether students' texts show development in the use of APPRAISAL resources over the four years of secondary schooling

Questions:
1. Are the uses appropriate for the genre of the texts?
2. Do the linguistic features show differences in
   a) later work by the students
   b) texts which are rated higher or lower?

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**Data and Methodology**

Data: Texts by same 16 students
- 16 x 4 years = 64 texts = 11,000 words

Coding: Appraisal System using UAM Corpustool, analysis + negotiation in pairs

Evaluation of texts: holistic by expert rater

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**RESULTS: DEVELOPMENT AND QUALITY ...**
Prompts for writing tasks: (sub-)genres

Year 3 (age 14-15): Biographical Recount + Period Study + Argument

3. Write a composition about The Modern State: strong and weak Monarchs; Economy and Society. Make sure you include the following ideas: Describe the evolution of Philip II and whether you think he was a good or a bad monarch and why. Focus on how mercantilism influenced economic activity and compare the way rich and poor people lived at that time and how they live today. Evaluate the impact of European nations on indigenous civilizations.

Year 4 (age 15-16): Historical Account + Argument

4. Write a composition about The First World War. Try to include the following ideas: Explain why WWI broke out and in what ways it was different from previous wars. Explain what happened during the war and why it came to an end. Refer to the consequences of the Treaty of Versailles and justify whether you agree with its terms or not.
**ENGAGEMENT in higher & lower rated texts**

**LOWER**

- I think
  - my personal view

**HIGHER**

- Greater variety of lexical verbs
  - eg: I agree
  - emphatic do
- other voices:
  - Europeans thought...
  - some say...others (say)
- Nouns as sources:
  - the fact that
  - this treaty said

++ backing with justification + evidence

**GRADUATION:INTENSIFICATION**

**LOWER rated texts:**

- little variety
  - very (= almost 50%)
  - more /most (= 20%)
  - superlative: worst, most

- Comparative of high frequency adjectives:
  - bigger, higher, richer

- Mainly in predicate:
  - Philip II was very religious

**HIGHER rated texts:**

- greater variety
  - very (= 30%) + really, so, pretty, totally, quite
  - more / most (= 10%)
  - A few superlatives: worst, best, greatest

- Many comparatives of high freq adj:
  - better, worse, bigger, higher, richer, poorer, stronger

- In different structures:
  - thanks to the very bad health and hygiene conditions
  - lived in poorer conditions than now

**SUMMARY of Appraisal**

All students:

- use the types of appraisal needed for the genre
- lower students: less variety in meanings, less justification, less developed language (high-frequency lexis, less variety in structures)

**RESEARCH MEETS PRACTICE ...**

**Teacher-student interaction for APPRAISAL**

We can draw attention to:

- different types of JUDGMENT: morality vs. capacity; targets: person, event, movement
- justification for evaluations
- ENGAGEMENT: overuse, other voices, modal verbs for hypothesising
- GRADUATION: overuse and linguistic encodings

**CAPACITY: light blue, PROPRIETY: purple, APPRECIATION: pink, ENGAGEMENT: green, GRADUATION: red**

- TCH: ... Ok. Right. So, so, maybe then we can say a bit more about question number two ok? So we could talk about him and about what you think about Philip the Second. Come on. David?
- David: he was a bad king because he prohibited the Spanish people to study in foreign universities and I think he was not very tolerant
- Pablo: he was a good king but with bad luck because he suffered a lot of bankruptcies and the Armada was defeated by a storm and there was <<...>>
- TCH: Great. Excellent appreciation. Good. Ok
SUMMARY of analyses of CLIL student writing

With well-prepared and pushed output, all students:
• complete the tasks
• show development in genre and register

BUT lower students still + very limited range of linguistic resources

AND ALL COULD IMPROVE

USING GENRE PEDAGOGY AND READING TO LEARN ...

Teacher-student interaction in CLIL writing: a proactive focus on language

Theoretical foundations of reading to learn

Educational linguistics - Halliday & Martin

Pedagogic discourse: - Bernstein
Social learning theory - Vygotsky

Reading to Learn

Designing pedagogy: three levels of support

Preparing for Reading
Detailed Reading
Sentence Making
Spelling
Reading
Joining
Joining
Construction

Modelling/Scaffolding Learning

Teacher regulated
Joint Practice
Student regulated

Teacher led/modelled

I do, you watch

Joint practice/teacher
together with students

I do, you help/You do, I help

You do, I watch

Adapted from: Strategic Reading: Guiding Students to Lifelong Literacy by Jeffrey Wilhelm, Tanya Baker, and Julie Dube. Copyright © 2001
Preparing for Reading
T. Explains content + structure of text in everyday language

Detailed Reading
T guides Ss to identify information they will use later in writing on same topic. Ss highlight key words

Note Making
Ss take turns to write notes on board as others give key words. Org by stages of genre. T guides.

Joint Rewriting/Construction
Class jointly builds text from notes. T may model. Ss take over writing.

Comenius Multilateral Project
2011 - 2013

Teacher Learning for European Literacy Education (TeL4ELE)

EUROPEAN LITERACY PROJECT RESULTS
Little time (yet) but effect on:
• Students: participation, texts, behaviour
• Teachers: awareness, preparation, evaluation

They don’t drop their pencils all the time!! And their eyes are glued to the text!
NOTHING WILL BE THE SAME AGAIN IN THE CLASSES! [re. reading and writing]

Now we can’t just take any text and go into the classroom with it!

SUMMARY AND CONCLUSIONS ...

WRITING IN CLIL

• Writing is working on subject content and on language in an integrated way

• Writing is complex, cognitively and linguistically (working at many levels), SO needs support

THEORY MEETS PRACTICE

Seeing subject texts and language through theory of genre + register  

direct transfer to practice

TEACHER-SPORTENT INTERACTION

POSSIBILITIES

• Re-active: unplanned, theory-based interaction

• Pro-active: theory-based interaction planned into class-work on subject texts (R2L)

WHEN THEORY MEETS PRACTICE, WE SEE THE PATTERNS AND THEIR EXPLANATIONS ...
It’s like getting above the clouds which stopped the view ....

We can see meaningful patterns

We hope you will too !!!

Assumptions and principles of R2L

» Learning through doing tasks successfully
  > failure reduces capacity for learning
  > task success opens up learners’ capacity for higher level of understanding

» For a successful task, preparation necessary
  > of task by teacher: key information, focus questions
  > of students by teacher: clues

» For successful tasks on texts, preparation needs knowledge of content, genre and register

Thank you very much for your attention !!!
**Data for the study**

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<tbody>
<tr>
<td></td>
<td>School A</td>
<td>School B</td>
<td>School A</td>
<td>School B</td>
</tr>
<tr>
<td>Number of texts</td>
<td>26</td>
<td>25</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>Total number of words</td>
<td>3,951</td>
<td>2,639</td>
<td>2,980</td>
<td>3,338</td>
</tr>
<tr>
<td>Average length (words)</td>
<td>151</td>
<td>105</td>
<td>124</td>
<td>145</td>
</tr>
</tbody>
</table>

*a The class in School B changed teacher in its 4th year, which seems to have affected fluency.*