Integrating the learning of language and the learning of content: the UAM-CLIL Project

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OVERVIEW

1. The project: rationale and aims
2. Design
3. Data collection and analysis
4. Selection of results: language of students, language of teachers
5. Conclusions: a principled way to work on the language of the disciplines in CLIL classes
Rationale of the project

We need to know: “how teachers and students use their languages in teaching and learning activities”

We should pay attention to:
- The ways languages are actually used in classroom interaction and activities.
- The demands and affordances of language learning in the context of curriculum subject learning.
  (Leung 2005: 250)
- The role of students’ writing.
Exploratory study at micro level, focusing on process/product (Dalton-Puffer and Smit 2007)
Aim of the project: general

1. To identify the linguistic needs of ESO learners of history (and geography):
   - The language of the discipline.
   - Interpersonal Language.
   - School Macrogenres (Coyle’s “Language for Learning”).

2. Provide support for secondary teachers (specialists in disciplines or in English) setting up CLIL projects.
Aim of the UAM-CLIL project: specific

Analysis of

i) learners’ output: spoken and written production in EFL in a topic a year from the social science syllabus in 2 state secondary schools:

- 2005/2006: 1º ESO students (12/13-year-olds)
- 2006/2007: 2º ESO students (13/14-year-olds)
- 2007/2008: 3º ESO students (14/15-year-olds)
- 2008/2009: 4º ESO students (15/16-year-olds)

ii) class input: the textbook and teacher on the same topic.

Comparison with

i) production of parallel Spanish native groups on the same topics.
ii) production of native speakers of English (same age, similar topics).
Design of tasks and data collection
How do these students represent disciplinary content in the foreign language?

Tasks based on:

i) Syllabus requirements
ii) Need for input for spoken and written production.
iii) Need for production -output- for language learning (Swain 1996)

“Scaffolding Registers”: Class discussion, Written texts, Interviews

EXAMPLE OF A PROMPT FOR SPOKEN AND WRITTEN TASKS (4º ESO)

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. (20 minutes)
The theoretical framework: genre and register in the systemic-functional model


Mainly the analysis of the language of history (Coffin 2000, 2006a, b; Groom 2004, Veel and Coffin 1996)
The theoretical framework: register features analysed

Systemic-functional linguistics (Halliday 2004)
Functions and features analysed

Ideational function
(transitivity: processes
participants, circumstances)

Interpersonal function
(modality)

Textual function
(clause complexes, reference)

Method
All the clauses in the corpus were coded for these features.
Wordsmith, Word, Excel to record and recover features.
Descriptive statistics (exploratory study).
Different disciplines = different types of meanings (ideational). Processes and Circumstances

GEOGRAPHY: MORE ACTIONS
ST: ... floods are when it rains a lot and snow melts, and that cause the river to overflow. (CB-D1)

HISTORY: MORE STATES
The civilizations were so important because the most powerful people stood there and because they were the main sources of work and culture. (CA-T2-21)

CIRCUMSTANCES (expand clause): place, time, manner
ST: a sailor brought it to Europe in the middle of the fourteenth century from Genoa. (CA-D3)
... now we can go from place to place faster with the car (CA-T2-6)
SOME RESULTS (ii): LEARNERS OUTPUT

Modality required for the disciplines
(interpersonal)

Probability, usuality, ability, obligation/permission.
Limited repertoire: multifunctional “can”

(i) The consequences can be that: the houses could float and the people could die. We can cut less trees but that means produce less wood. I can’t do anything ... but, well I could think it and teach my sons and maybe they can say something, but is no probably. (CB-T1-1)
Presentative “there” quite frequent in 2nd and 3rd year, hardly found in 1st year data

(i) TCH: Ok. So, group number.. five should start, now
ST: Eh.. There were peasants or serfs and there were free peasants  (CA-D3)

(ii) ST: there was a price revolution  (CA-D4)
Beginning of compositions:

(i) They start in that places because the population grow.  <CB T2-19>

(ii) Many people lived in rural places. These people worked the lands. They lived in small houses in villages near to forests. These people were called peasants. ...(CA-T3-27)

(Martin and Rose 2003)
In The Modern State Monarchs were the people who ruled countries, so they were very important.

Phillip II was an Spanish king who had ruled many years. When he began to rule…
SOME RESULTS (vi) : LEARNERS’ OUTPUT

Clause complexes (textual). Orality in written register

The black death transpasit because of the rats, *because* they may be go to the food *and* they infected *and* later the humane eat *and* they die *and* may be because of the dogs too *because* the rats go with the dogs *and* they ....  (CB-T3-23)

(8 paratactic, 2 hypotactic clauses)

(Halliday 1989)
(i) ST: The Black Death was caused by *the dirty of the people*. They don’t wash very much and they threw the, the rubbish and the things to the street And that brings rats and other, other diseases. (CB-D3)

(ii) ST: *the filth of the cities* promoted *the expansion of it* (CA-D3)

(iii) ST: and rich people became richer *with the rise of taxes and prices during the Inflation after mercantilism*. (CA-T4-21)
Emergence of evaluation: feature of history genres

(i) This **amazing fact** was **really relevant** to history, and mainly for economy and mercantilism (CA-T4-24)

(ii) **Unfortunately, for him**, his empire **suffered** two bankrupts (CA-T4-29)

(iii) although it was defeated by the english and a storm, because of the **negligence** of the commanders and the **bad strategy** they follow. (CA-T4-28)

(Coffin 2006)
Development of fluency in writing

<table>
<thead>
<tr>
<th>WRITTEN TEXTS- MEAN WORDS PER TEXT</th>
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<tbody>
<tr>
<td>TEXT 1</td>
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<tr>
<td>FEB 06</td>
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<tr>
<td>CA</td>
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<td>CB</td>
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Increasing complexity of noun phrases:

Some important facts are the discovery of America and the changes that brought to the world, the crisis of catholic religion (aparition of new religions; Lutheran and anglican), discovery of new routes … (CA-T4-24)

(Martín-Úriz and Whittaker 2005, Wolfe-Quintero et al 1998)
(i) L1 students use more circumstances (time, place, cause), CLIL students mainly use clause complexes.

(ii) More abstractions in L1 data

TCH: ¿Por qué creéis que se propagó tan rápidamente la Peste Negra? A ver, J. (Why do you think the Black Death spread so rapidly. Let’s see, J.)

ST: Por el hacinamiento (Due to overcrowding) (CB-D3-L1)

(iii) CLIL classes wider variety of modals: there seems to be more space for individual students’ views and interpretations -for more genuine communication

(Dalton-Puffer 2005, 2007)
TCH: ... in first civilizations cities were very big. And why is that?
ST: Because if some small cities join together, they *have*, mm, more power.
TCH: They *had* more power. Yes. It’s one of the reasons. And, what else apart from that? A.?
ST: Eh because they make, they invent *%x x%* and invent cattle raising and agriculture, and the kings conquest, and the kings *conquest* the-
TCH: *Conquered*.
ST: Conquered other cities and make empires and cities. First empires. Then cities.
TCH: So you have *explained* how cities are going to become empires.
SOME RESULTS (xii) TEACHER INPUT

Teacher constructs students as thinkers (mental and verbal processes)

(i) TCH: The importance of the river. Why along rivers? *Think* about that. OK? So, *develop that idea*. ST: Eh, that they placed of the banks of the river, because they were the only fertile lands. CB-D2

(ii) TCH: OK. Something else about the place or the cities? OK. So, can you *name* any, any, a few cities that you can *remember*? (CA-D2)

(iii) ST: Acid rain destroys the forests. TCH: Ah! Very important! OK. *Say* that again. ST: That acid rain destroys forests. TCH: Acid rain destroys forests. And as a *consequence*? ... (CA-D1)
TCH: OK. Good. And what about the **obligations** of the peasants? What did they have to do, A.?

ST1: They have to work the lands of the lords, but they can’t leave. They could go to another, eh, to the land of another, of another lord if they want.

TCH: OK. And P., the same. What about their **rights**? What were the **rights of the peasants**?

ST2: Eh, the, the, the free peasants, eh, they were free. They could do-. They work, attending the lords and things like that. And the serfs were similar to slaves. They, they have few rights. (Gibbons 2004)
Effect of oral activities providing input for writing:

In those times there were less machins that now. Also cities were worst, in those times they didnt have a system of plumbing, in off [= enough] medicines doctors. Nowadays living conditions are better.
SUMMARY

(i) the genres required for a discipline trigger different linguistic features (e.g., different process types, circumstances, modality).

(ii) to create coherent text, students need to control the systems that signal new and given information in English.

(iii) we find development through the three years (in both registers) in the complexity of the NPs students produced.

(iv) students’ written fluency has developed probably due to oral activities (*Register Scaffolding*).