Affording Students Opportunities for the Integrated Learning of Content and Language: A Contrastive Study on Classroom Interactional Strategies Deployed by Two CLIL Teachers

Cristina Escobar Urmeneta and Natalia Evnitskaya
Departament de Didàctica de la Llengua i la Literatura, Universitat Autònoma de Barcelona, Barcelona

This paper is concerned with CLIL in English as a foreign language in secondary education in Catalonia. Through the use of tools from Conversation Analysis and Sociocultural Discourse Analysis, the study contrasts the way two different CLIL teachers organise and manage respectively an academic conversation. Its goal is to empirically identify components of Classroom Interactional Competence (Walsh, 2006), present in the particular conditions of CLIL settings, by showing how the teachers’ instructional choices in the form of conversational adjustments afford students more or fewer opportunities for the integrated learning of language and content. The study concludes that the different sets of conversational strategies deployed by each teacher determine the quality of each conversation and its outcomes in terms of affordances for the integrated learning of content and language.

Keywords: Democratic CLIL, teacher-led interaction, conversational strategies, scaffolding, conversation analysis, sociocultural discourse analysis, classroom interactional competence (CIC).

Introduction

Content and Language Integrated Learning (CLIL) has become a successful umbrella term which “covers a wide range of educational practices and settings whose common denominator is that a non-L1 is used in classes other than those labelled as ‘language classes’” (Dalton-Puffer, 2007: 2). The acronym is used for programmes that go from kindergarten to tertiary education. And for programmes in a second language available in everyday interactions in the context where the learner lives (i.e. learning through English in Britain), or in a foreign language of international use (i.e. learning through English in Spain). Needless to say that CLIL programmes vary enormously depending on the specific settings and programme goals (Marsh et al., 2001).

This paper is concerned with CLIL in English as a foreign language in secondary education in Catalonia. It builds on Escobar Urmeneta & Evnitskaya’s (2011) preliminary study and contrasts the way two different CLIL teachers organise and manage respectively an academic conversation. Its goal is to empirically identify components of Classroom Interactional Competence (Walsh, 2006), present in the particular conditions of CLIL settings, by showing how the teachers’ instructional choices in the form of conversational adjustments afford students more or fewer opportunities for the integrated learning of language and content.

The study is part of a larger research project which seeks to gain understanding of how the integrated acquisition of scientific and communicative competences in a foreign language is instantiated in CLIL classrooms, and its ultimate goal is to shed light on how the interactional spaces created by CLIL teachers allow students (or not) to
become full participants in the co-construction of scientific knowledge in inclusive environments.

**Catalonia, a complex sociolinguistic setting**

Catalonia is a bilingual region from a legal and a sociological point of view, where both Catalan and Spanish are co-official languages. The Act on Linguistic Normalization (Generalitat de Catalunya, 1983) and its derivate Decree 75/1992 generalized the use of Catalan, the minority language, as the medium of instruction for content subjects in infant and compulsory education, where it had been banned for forty years (Escobar Urmeneta & Unamuno, 2006). Catalan immersion programmes have received the support of independent national and European evaluations (Armau, 1985, 2004; Council of Europe, 2005; OECD, 2001, 2010, for example) and a majority acceptance from the Catalan society.

In this complex sociolinguistic situation, yet one third language, English, is slowly but steadily gaining grounds as a language of instruction in Catalan schools, ratifying once more the Catalan aspiration of combining “linguistic policies aiming at (apparently) opposing targets (...) promoting a vernacular language and adopting global policies which favour the free circulation of workers and goods across Europe” (Escobar Urmeneta & Unamuno, 2006: 229). Contrary to Catalan, English is a truly foreign language for schoolchildren in Catalonia as, on a general bases, it is only available to learners in institutionalised settings for an average of three EFL lessons per week since the age of six² (Escobar Urmeneta & Nussbaum, 2010).

**CLIL: threats vs. opportunities**

In the last decade the CLIL approach has gained the interest of institutions and researchers in Europe as a privilege strategy to foreign language learning (see, for example, Cenoz, 2009; Cenoz & Genesee, 1998; Escobar Urmeneta, 2009, 2011; Escobar Urmeneta & Nussbaum, 2008; Escobar Urmeneta & Sánchez Sola, 2009; Evnitskaya & Aceros, 2008; Evnitskaya & Morton, 2011; Lasagabaster & Ruiz de Zarobe, 2010; Lorenzo et al., 2011; Moore, submitted; Muñoz, 2007; Pérez-Vidal & Juan-Garau, 2011 for studies centred in the context of Spain; Coyle et al., 2010; Dalton-Puffer, 2007; Dalton-Puffer et al., 2010; Dalton-Puffer & Smit, 2007; Llinares et al., forthcoming; Nikula, 2005; Ruiz de Zarobe & Jiménez Catalán, 2009 for studies in other European countries).

The enthusiasm shown by administrators, teachers, families and researchers is overshadowed by the suspicion that some external factors may undermine the success of such programs. Some of the most commonly alleged are:

- the risk of lowering in the “academic standards” in the content subject due to the students’ low command of the FL (Escobar Urmeneta, 2011);
- the inadequate preparation of teachers to teach CLIL programmes usually attributed to linguistic deficits³;
- the specific difficulties that a number of students may experience under the assumption that only those students who meet certain conditions, such as (above the average) intellectual capacities, (solid) previous academic background or (intermediate or higher levels of) communicative competence in the foreign language, are able to
successfully meet the communicative and cognitive demands imposed by a foreign language curriculum; and

• the threat of interferences caused by the simultaneous acquisition of English and Catalan, or English and Spanish, respectively by students from non-Catalan and/or non-Spanish speaking families.

The third and fourth asserts are, in our opinion, particularly perilous. Not only because available research does not support them. Also, because admitting them would offer a rationale to justify that those students raised in less stimulating milieus, and/or with certain sociolinguistic backgrounds, and/or with fewer opportunities for foreign language practice outside school would be denied of access to multilingual education, triggering in this fashion the undesired Matthew effect. In other words, the risk is that the enduring tension between selective and comprehensive approaches to education always present in the Spanish context may find in CLIL a strong ally to support selection as the most adequate strategy to educational success (Escobar Urmeneta, 2011).

**Democratising CLIL**

The Spanish curriculum is partly aware of the potential problem outlined above and has tried to prevent some of its effects by proscribing any kind of segregation in CLIL programmes due to linguistic reasons. However it would be naive to believe that legal prohibitions suffice when educational practices are at stakes. It is clear that a definition of democratic CLIL is needed as a tool which may help identify those teaching practices that will ensure equal opportunities of access to students with different linguistic, academic or social backgrounds.

In this fashion we advocate that democratic “Content and Language Integrated Learning or CLIL embraces those educational practices in which content subjects – excluding those labelled as ‘language subjects’ – are taught and learned through a language of instruction, second or foreign, in which a learner has a basic or advanced developing communicative competence, and which explicitly:

1. Promote the preservation and development of the learner’s first language(s) and the consideration and mise en valeur of cultural forms attached to that (those) language(s);
2. Promote a truly integrated approach, with a dual focus of pedagogical attention, i.e. language and content;
3. Provide learners with all the assistance needed to comprehend, produce and negotiate academic messages in the target language adopted as the medium of instruction” (Escobar Urmeneta, 2011: 203-204).

The first requirement rejects subtractive approaches to plurilingualism and language substitution policies. In the Catalan context, this implies the coordinated planning of school language policies in order to guarantee adequate exit levels in at least the two co-official languages, and the third language of instruction: English in the vast majority of cases. The second one calls the attention to the often forgotten dual focus of pedagogical attention in compulsory education: unlike other contexts such as tertiary studies, the adequate treatment of content is here as important as the adequate treatment of language. The third requirement departs from the undeniable fact that CLIL students face extra-ordinary challenges, which, in turn, call for specific interactional
competences from teachers in order to assist learners in overcoming those challenges. The constructs of Classroom Interactional Competence (CIC) and competence as situated practice become particularly useful to characterise quality interaction in this type of environments and will be presented in section Classroom interactional competence in CLIL settings.

Theoretical framework

**Sociocultural theory, ZPD and CLIL**

This study is framed within the paradigm of current sociocultural theory, which derives from the work of Vygotsky (1978, 1986). “Sociocultural approaches emphasise the interdependence of social and individual processes in the co-construction of knowledge, overcoming the Cartesian dichotomy between the external and the internal” (John-Steiner & Holbrook, 1996: 191). Under this paradigm, knowledge is not located in the individual mind, nor owned privately by each person in isolation. On the contrary, all learning is viewed as a social process embedded in social interaction between learners and more knowledgeable others.

Although the work of Vygotsky was devoted to analyse first language acquisition processes in informal settings, his statement that the psychological behaviour of human beings is mediated or facilitated by signs, symbols, and languages at individual and collective levels of experience (De Valenzuela et al., 2000) has borne crucial implications for education in general, and for second language education in particular (Lantolf, 2000). Hence, the “sociocultural perspective highlights the possibility that educational success and failure may be explained by the quality of educational dialogue, rather than simply in terms of the capability of individual students or the skill of their teachers” (Mercer, 2000: 139).

Moving sociocultural postulates one step forward so as to apply them to CLIL settings, we suggest that in the CLIL classroom it is the job of the CLIL teacher to interpret and react to the learners’ emerging utterances and project them into more advanced stages of development, whereas providing assistance to sustain the learners’ actions throughout the conversation in an interactional space created and co-built ad hoc in each lesson. Only after a number of experiences of supported participation in interactional experiences in the “Zone of Proximal Development” or ZPD (Vygotsky, 1978), will the CLIL student be able to carry out those actions on their own, independently from the CLIL instructor.

**Situated classroom interactional competence in CLIL settings**

The construct of CIC (Walsh, 2006), initially developed to interpret foreign language classrooms, becomes particularly useful in CLIL settings as it tries to capture the interplay of the various factors that result in high quality interaction which is conducive to learning. According to Walsh, “CIC is concerned to account for learning-oriented interaction by considering the interplay between complex phenomena that include roles of teachers and learners, their expectations and goals; the relationship between language use and teaching methodology; and the interplay between teacher and learner language. Although CIC is not the sole domain of teachers, it is still very much determined by them” (2006: 130).

CIC encompasses those characteristics of classroom interaction which result in high quality interaction and, thus, make the teaching-learning process more efficient. Understanding the nature of those conversational adjustments is paramount as it might become the bases for teacher education programmes specifically addressed at CLIL teachers.
The following adaptation of Walsh’s (2006) categorization includes some of the teaching strategies so far identified by research.

- **The use of learner-convergent language**, which is both appropriate to teaching goals and adjusted in relation to the co-construction of meaning and the unfolding agenda of a lesson.

- **The facilitation of interactional space** so that learners are given the opportunity to contribute to the class conversation and to receive feedback on their contributions. Some teaching strategies that may contribute to afford students interactional space are:
  - effective eliciting strategies in the form of good questions;
  - refining, adjusting and clarifying those questions for learners;
  - allowing for increased wait-time;
  - promoting extended learner turns, i.e. asking “why” questions;
  - creating opportunities for students to ask their own questions; or
  - providing more freedom to self-select or remain silent.

- **The ‘shaping’ of learner contributions** by seeking clarification, modelling, paraphrasing, reiterating or repairing the learners’ productions. Through shaping the discourse, the teacher helps learners to say what they mean by using the most appropriate language to do so.

Mercer’s (1995) classification of teaching strategies (Figure 1), elaborated as a result of research in the domain of teaching different types of subjects in L1 settings, bears a great resemblance with that of Walsh’s. The most outstanding difference among them is the importance attributed by Walsh to learner-convergent language.

**Figure 1** Some techniques that teachers use (Mercer, 1995: 34)

<table>
<thead>
<tr>
<th>To elicit knowledge from learners:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct elicitation</td>
</tr>
<tr>
<td>Cued elicitation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To respond to what learners say:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmations</td>
</tr>
<tr>
<td>Rejections</td>
</tr>
<tr>
<td>Repetitions</td>
</tr>
<tr>
<td>Elaborations</td>
</tr>
<tr>
<td>Reformulations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To describe significant aspects of shared experiences:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“We” statements</td>
</tr>
<tr>
<td>Literal recaps</td>
</tr>
</tbody>
</table>
The teaching strategies identified by both researchers represent different elements of scaffolding (Wood, Bruner & Ross, 1976) which, if successful, can help learners to acquire the target language and the content. In this sense, CLIL settings have proved to be particularly rich in the use of scaffolding procedures and modelling (Escobar Urmeneta & Evnitskaya, in progress) as well as in the use of multimodal resources and material objects to mediate the teaching-learning process (Evnitskaya, in progress; Evnitskaya & Morton, 2011), or a diversity of elicitation techniques (Simon Auerbach, accepted).

However, it would be erroneous to describe CIC as an inventory of potentialities possessed by individual teachers, who deploy a catalogue of teaching strategies independently from macro-, meso- or micro-contexts. On the contrary – borrowing Mondada and Perakek Doehler’s (2004) definition of communicative competence as situated practice – we envisage CIC “as a plurality of capacities embedded and recognized in the context of particular activities” (2004: 503).

To sum up, if CLIL is to become a democratic option made available to students within a wide range of linguistic, academic or social backgrounds, teachers need to be able to enact CIC in a context-sensitive way, in environments in which learners are expected to acquire academic concepts and scholastic skills through the use of a system of signs and symbols – the foreign language – in which they are also apprentices.

Method

Data and participants

The natural occurring data analysed here come from the CLIL-SI university-schools partnership project (Tsui et al., 2009) corpus. More specifically, the study examines two extracts from two teacher-led lessons (one from each lesson) consisting in the checking of true-false exercises designed to review previously covered content. Lesson A revises basic concepts in the domain of biology and lesson B is devoted to renewable energies. The lessons were selected for analysis because of the apparent disparities observed in the way conversations were unfolded in each lesson in spite of the noteworthy number of common traits that both lessons shared, which include: geographical context (Metropolitan Barcelona); sociolinguistic context (bilingual Catalan-Castilian students; English = L3); sociocultural context (middle class), compulsory subject (science); type of interaction (teacher-fronted lessons); type of activity (public correction of true-false revision exercise).

Two excerpts were selected for a detailed analysis basing on their representativeness of the type of conversation carried out throughout the activity. Other relevant contextual information about the lessons, the participants and the excerpts is provided in Figure 2 to help the reader contextualise the conversations.

Figure 2 Relevant contextual information on both lessons

<table>
<thead>
<tr>
<th></th>
<th>Lesson A</th>
<th>Lesson B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson on</td>
<td>Cells</td>
<td>Materials</td>
</tr>
<tr>
<td>Teacher’s experience</td>
<td>Experienced</td>
<td>Novice</td>
</tr>
<tr>
<td>Teacher’s level of English</td>
<td>B2 CEFR</td>
<td>C2 CEFR</td>
</tr>
<tr>
<td>Number of students</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Age</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Class</td>
<td>1st lower secondary education (compulsory)</td>
<td>1st higher secondary education (post-compulsory)</td>
</tr>
<tr>
<td>Students’ average level of</td>
<td>A2.1 CEFR</td>
<td>A2.2 CEFR</td>
</tr>
</tbody>
</table>
**English**

<table>
<thead>
<tr>
<th>Sitting arrangement</th>
<th>Circle. The teacher forms part of it.</th>
<th>Rows and columns. The teacher stands at the front.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excerpt content</td>
<td>Amoebas</td>
<td>Steel</td>
</tr>
</tbody>
</table>

Although some of the circumstances outlined above may have surely influenced the quality of the interaction, the study is not concerned with establishing cause-result relationships among factors and outcomes, and does not provide enough data to do so.

It is essential to point out that every teacher had her own teaching and personal developmental goals when planning, implementing and assessing the lessons under analysis. Those goals were met to a large extent in both cases and, under this perspective, it can be concluded that both lessons were successful. In short, the goal of the paper is not to judge how well the teachers teach (we will not provide enough data to reach this type of conclusion) but to make a small contribution to the understanding of the intricacies of teacher-led academic conversations in CLIL classrooms and the enacting of CIC in those settings.

**Research questions**

The interpretive analysis seeks to:

- determine the way each teacher structures the conversation and makes it progress;
- explore the conversational strategies and adjustments deployed by each teacher in order to afford students interactional space, and the use students make of these affordances;
- identify the conversational moves used by each teacher in order to shape the learners’ contributions and the outcomes of those moves in terms of the creation or consolidation of the learners’ linguistic-discursive repertoire in the target language; and
- identify indicators of gains in the understanding of key aspects of the content addressed in the activity.

**Methodological framework**

The postulates enunciated by Vygotsky have given rise to a number of methodological frameworks that share fundamental tenets but differ in focus and in the specificity of their respective analytical tools and methods. This interpretive study draws from two of these traditions: on the one hand, that of Sociocultural Discourse Analysis or SDA (Mercer, 2004), a branch of Discursive Psychology (Edwards & Potter, 1992), used to study how people use language as a tool for thinking collectively, mainly in L1 settings. On the other hand, Conversation Analysis or CA (Markee, 2000; Seedhouse, 2004) and Multimodal Analysis (Pekarek Doehler, 2010; Moore & Nussbaum, 2011), extensively used in the microanalysis of second language learning sequences, mainly with the purposes of uncovering the fine-grained mechanisms of L2 talk, and documenting language acquisition processes. Whereas SDA allows “to relate the content, quality and temporal nature of dialogue during joint activities to outcomes such as the success or failure in the task, or to specific learning gains” (Mercer, 2004: 139), CA offers a privileged set of tools for the detailed analysis of sequential
organisation, turn-taking, or repair that may reveal how participants use language as a tool to jointly accomplish social actions.

**Data treatment**

Video recordings of the two excerpts were transcribed using Transana software (Woods & Fassnacht, 2007). Detailed transcripts of talk and other semiotic resources were made employing conversation analysis conventions proposed by Gail Jefferson (Atkinson & Heritage, 1984), which are provided in Appendix 1. Non-verbal actions were described using line-to-line narratives while additional contextual information relevant for the analysis is provided with video screenshots.

Once the transcripts were obtained, SDA and a micro-analysis of multimodal data (Moore & Nussbaum, 2011; Pekarek Doehler, 2010) were used to explore multimodal conversational resources used by each teacher, to identify recurrent conversational patterns and to relate them to the differences in results observed in each lesson.

**Analysis**

Despite all these resemblances outlined above, the preliminary analysis of conversational data showed important differences in the way teachers led the conversation, responded to students and extended their demands, and, as a result, both conversational styles seemed to create two very different interactional spaces, which afforded students different types of opportunities for learning.

**Lesson A: “Amoebas”**

After a brief introduction to the activity (lesson A on Cells), the teacher starts a public correction of the homework revision exercise (see a screenshot in Figure 3) by passing to Jaume the interactional floor and the responsibility to read aloud the first statement (Excerpt 1, line 9).

Figure 3 Public correction of a true-false exercise in lesson A (lines 26-27)

Excerpt 1

<table>
<thead>
<tr>
<th></th>
<th>TEA:</th>
<th>Jaume (.) the first one?</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>JAU:</td>
<td>((reads)) amoebas have a nucleus and a cytoplasm. e:::</td>
</tr>
<tr>
<td>10</td>
<td>TEA:</td>
<td>is it true or false?</td>
</tr>
<tr>
<td>11</td>
<td>RIC:</td>
<td>true</td>
</tr>
<tr>
<td>12</td>
<td>JAU:</td>
<td>true</td>
</tr>
<tr>
<td>13</td>
<td>ARN:</td>
<td>no false</td>
</tr>
<tr>
<td>14</td>
<td>QUI:</td>
<td>no false false</td>
</tr>
<tr>
<td>15</td>
<td>JOA:</td>
<td>true</td>
</tr>
<tr>
<td>16</td>
<td>JAU:</td>
<td>a:: true</td>
</tr>
</tbody>
</table>
Jaume reads the statement but doubts in providing an answer (line 10). The teacher explicitly asks for the response (line 11) and it is another student, Ricard, who offers his opinion (line 12, “true”). His contribution is followed by a series of divergent replies among Jaume, Arnau and Quim (lines 13-15), which are discursively marked by an emphasis on the words “no” (line 14) and “false” (line 15). The dispute ends with the mutual acceptance that the statement is true (lines 16-18).

During this brief but intense discussion of seven turns the teacher has stayed out of the discussion and intervenes again only when it seems that the consensus among the students has been implicitly established. It is noteworthy that her intervention in lines 19-20 is not evaluative but, rather, aims at eliciting a more elaborated answer from the students, an answer that would include not only the verdict of whether the statement is true or not, but also a justification for such a verdict. Moreover, at this point she refrains from offering any clues about whether the provided answer is correct or not. On the contrary, she reopens the spectrum of possibilities by suggesting the rejected answer as a feasible one: “why is true or why is false?” (line 19).

The difficulty experienced by the students to meet this new demand is reflected in their inconclusive statements in lines 21-23. Yet, the teacher seems not to be willing to exempt them from the challenge (both in relation to the scientific content under discussion and at the linguistic-discursive level) because she proposes it again while looking at Ricard and Jaume (line 24). From line 25 to 34 we can observe a complex interactive sequence in which students use an extremely limited range of resources (marked by their single word answers, hesitations and monosyllables) which they have at their disposal to meet the teacher’s challenge. In this sequence, two of them, namely Jaume and Joan, suggest their arguments.

Hence, Jaume offers an explanation (“I found it”, line 26) which is pragmatic and valid from his perspective of “student” (additionally supported by his shoulders and hands raised and slight head shaking, line 27, see Figure 3) and grammatically correct (simple past, irregular verb, subject-verb-object). Jaume’s answer is ratified by Ricard (line 29), but not by the teacher. The latter evaluates it negatively through a set of multimodal resources: a double negation (“no, no”) is reinforced by a synchronous head
shaking (line 30). At the same time, the teacher broadly smiles thus using a negative politeness strategy (Kasper, 2009) in order to smooth things over and avoid a potential face-threatening act. The sequence concludes with the teacher’s justification of the unacceptability – from the content/academic point of view – of the argument provided by Jaume: “this is not a reason” (line 32).

In parallel, another student, Joan, makes an effort to construct his own argument despite the difficulties he is faced with, reflected in sound stretching, repetitions and clearly slower speech rhythm along the lines 25, 28, 31 and 33. Apparently, the teacher pays no attention to him as at this moment she is oriented toward Jaume (both verbally and through her gaze, line 32). Nevertheless, Joan manages to construct a complete sentence in the target language: “because they are eukaryotic cells”. The clause is correct from a linguistic point of view and bears a certain level of complexity (correct agreement between subject, copula and attribute, causal subordination; active use of relevant target vocabulary: “eukaryotic cells”).

Joan’s statement also reveals his knowledge about the microorganism in question (amoeba) and its elements, both facts being corroborated by the positive multimodal feedback from the teacher (verbal “very good” and nodding, line 34). In the next line the teacher picks up Joan’s contribution and reformulates it, thus confirming again its validity and utility for a more complex explanation that she constructs in line 35.

The linguistic and discursive adjustments introduced by the teacher in her more elaborated version of the student’s answer include the replacement of the indefinite pronoun “they” with the microorganism’s name and “are” with “have got”.

In line 36 Arnau tries to contribute to this process of joint construction and suggests the continuation of the unfinished utterance initiated by the teacher in line 35. Considering that what Arnau produces is the interactional pattern already used several times in the discussion (“it’s”), we could interpret his intervention as an attempt to propose the verdict (“it’s true”) as the closing of the argument. However, the teacher ignores his attempt and moves the conversation forward by establishing a cause-effect link between Joan’s contribution and the initial statement from the exercise (“so they have got a nucleus and a cytoplasm”, lines 36 and 38). With the utterance in line 39 (“it’s true”) the teacher finally and explicitly acknowledges the students’ previous interventions in which they claimed the veracity of the statement and closes the argumentative circle.

The result is an argument constructed by several voices: “It’s true because they are eukaryotic cells. Amoebas are or have got eukaryotic cells. So they have got a nucleus and a cytoplasm” (lines 21-23, 25, 28, 31, 33, 35, 36 and 38, in bold the students’ contribution). After this the sequence closes with the final (implicitly positive) evaluation of the teacher, “it’s true” (line 39), followed by a more explicit positive evaluation of one of the students (“molt bé”, line 40). It should be noted that though the teacher carries out the most of the explanation, she is able to share the interactional floor with the students and obtain, as a result, their multiple and discursively rich interventions.

**Lesson B: “Steel”**

After a brief introduction into the topic of the lesson (Materials), the teacher asked students to do a true-false exercise which reviewed previously covered content. The screenshot (Figure 4) and Excerpt 2 below correspond to the public correction of one of the statements.

**Figure 4** Public correction of a true-false exercise in lesson B (line 46)
Excerpt 2
38 TEA: ((reads)) steel has become the most used (. ) metal
39 SS: true
40 SS: false
41 SS: true false
42 TEA: (nods)
43 ([0.7] ((TEA looks at students, smiles))
44 SS: true false false
45 TEA: ((turns to screen, coughs feakely)) what?
46 ((points to column 'True' on screen)) what?
47 SS: ((keep repeating 'true' and 'false'))
48 TEA: e::: ((smiles, moves her body rhythmically))
49 SS: ((smile, keep repeating 'true' and 'false'))
50 TEA: e::m
51 SS: (it's true or false?)
52 TEA: ((smiles)) okey
53 ORI: ((to another student))
54 por eso te preguntaba qué era (.) steel (.)
Translation: ORI: that's why I was asking you what was (. ) steel (.)
55 no sé (. ) creo que-
Translation: ORI: I don’t know (. ) I think that-
56 SS: xxxxxxxxx
57 TEA: ((smiles, looks over class))
58 SS: xxxxx false
59 TEA: (1.9) ((looks at her notes))
60 ORI: es false
61 TEA: ((looks at ORI))
62 ((to students)) it’s TRUE
63 ((nods))
64 SS: UU::: ((shouts of happiness))
65 TEA: it's true, ok?
66 ((looks at handout)) it’s true
67 (3.8) ((students speak simultaneously))
68 TEA: ((continues the activity reading the next item))

Excerpt 2 starts with the teacher reading aloud the statement: “steel has become the most used metal” (line 38). This is followed by the numerous contributions of the students (lines 39-41) whose authorship is difficult to recognize since many of them are produced almost simultaneously. There is no consensus among the students on whether the statement is true or false and, although the teacher nods confirming the correct answer (line 42), it is still unclear which one is this answer. Therefore, for the next 0.7
second the students continue trying to guess it like in a guessing game (line 44) while the teacher looks at them smiling (line 43).

It seems that finally the teacher decides to give a more explicit clue about which answer is correct and which one is wrong. To do this, she uses a variety of multimodal resources: first to gain the students’ attention, she slightly turns to the blackboard with the screen over it on which an empty activity sheet is projected (see Figure 4) and pretends to cough several times, after which she produces an overtly faked clarification request (“what?”) (line 45). With a minimal pause in between, she finally provides the clue to the students by pointing to the column “True” on the screen and repeating the request (line 46). However, the teacher’s attempt seems to have brought no results as the class continues repeating alternatively both options without reaching any agreement (line 47).

The teacher’s actions in lines 48 and 50 suggest that she wants the class finally state their verdict. However, the way she does it – by employing paralinguistic and non-linguistic resources such as stretching the sounds, smiling and moving her body rhythmically – shows that she tries to keep a friendly and positive atmosphere that seems to have been established between her and the students. This is confirmed by the fact that the students also smile while they keep saying the two answers (line 49). Finally, some (unidentified) students ask again for a final verdict (line 51).

At this moment, one of the students, Oriol, addresses his peer in a private turn (line 53) in order to express his doubt about the term “steel” (“that’s why I was asking you what was (. ) steel (. ) I don’t know (. ) I think that-”, lines 54-55), the key term in the statement in question. Being clearly audible, it is however ignored by the teacher who continues her agenda. Meanwhile, in the official conversation, among the general noise created by the simultaneously speaking students (line 56), we can distinguish some of them saying that (probably) the statement is false (line 58). The teacher who, smiling, was looking around the class, takes some time to check her notes (line 59). At this moment, Oriol, who has not been attended by the teacher in his private turn, publicly states that the answer is “false”, highlighting it emphatically (line 60). This time his intervention is heard by the teacher (perhaps because he produced it aloud or because she was standing nearby when checking her notes), who reacts by looking at him (line 61). Then she addresses the whole class with the correct answer “it’s true” which she repeats three times (lines 62, 65 and 66) and accompanies with a set of multimodal resources: an emphasis on and an increased volume of the word “true” and several nods in lines 62-63 and a comprehension check “ok?” in line 65. This officially closes the sequence even though the students continue speaking for approx. 4 seconds until the same teacher reads aloud the following item, thus continuing the same teaching and conversational pattern.

**Discussion**

The analysis carried out in the previous section shows that both in lesson A and B the teachers’ use of learner-convergent language in conducting the public correction of a true-false exercise made possible that all participants – teachers as well as students – used English exclusively or almost exclusively as the language of instruction.

In both classrooms the atmosphere was inviting and the teachers’ proposals were well received by the students. The predominance of self-selection also contributed to the building up of a low-stress milieu in both settings which made possible a large number of voluntary contributions on the part of different students. This was a particularly important outcome in the case of lesson B, as previous ethnographic data portrayed the group as a low responsive one. Additionally, both teachers showed a tight control of the
pedagogic conversation and managed it quite successfully to enforce their respective instructional agendas through the use of IRF sequences (Sinclair & Coulthard, 1975), typical of pedagogic discourse in general (Mercer, 1995) and particularly ubiquitous in CLIL classrooms (Dalton-Puffer, 2007). However, the analysis also reveals that these agendas were interactively constructed in very different ways and, as a result, the degree of complexity in the interactional organization achieved in both lessons differs to a great extent.

Hence, in lesson B students’ participation was achieved thanks to the enthusiastic and friendly attitude of the teacher, observable in her smile (lines 43, 48, 52 and 57), her dynamism (rhythmic movements, line 48) and her complicity with the students (fake cough, line 45). Her contagious liveliness was evidenced in the way she elicited the students’ answers using a range of multimodal resources. She also employed a wide variety of strategies to guide the students towards the correct answer, opting for those which simultaneously functioned as a reward for the mere fact that the students had made a contribution. The effects of this strategic approach are clear: the students felt comfortable enough to follow the lesson path set by the teacher and respond chorally and enthusiastically to her demands. Figure 5 summarises the guiding strategies observed in lesson B:

<table>
<thead>
<tr>
<th>When the students’ contribution is correct:</th>
<th>When the students’ contribution is wrong:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A nod (lines 42, 63).</td>
<td>• A faked cough (line 45).</td>
</tr>
<tr>
<td></td>
<td>• An overtly faked clarification request</td>
</tr>
<tr>
<td></td>
<td>(“what?”) (line 45) repeated almost</td>
</tr>
<tr>
<td></td>
<td>immediately (line 46).</td>
</tr>
<tr>
<td></td>
<td>• A gesture pointing to the column “True”</td>
</tr>
<tr>
<td></td>
<td>on the screen (line 46).</td>
</tr>
</tbody>
</table>

On the other hand, we do not observe instances in which the students were required to clarify, develop or justify the declared veracity or falsehood of the statement under discussion, since the teacher exclusively oriented the students’ attention towards the guessing of the answer. In the same vein, she opted for not elaborating on the answers provided.

The result was, on the one hand, a way of managing classroom conversation which was highly successful in capturing and maintaining the students’ attention, which, additionally, produced a great sense of achievement among all the participants, the students and the teacher. On the other hand, the conversation afforded students few opportunities to develop their linguistic and discursive repertoire beyond the mere comprehension of the messages produced by the teacher. It also provided little interactional space for students to state their questions and doubts, to make more elaborated contributions or to receive more adjusted and appropriate feedback on them.

Additionally, the teacher overlooked the clarification request that emerged in Oriol’s private turn (line 54), even though it was quite audible and closely related to the target content. This inattention may be interpreted as a result of a combination of factors, such as a certain degree of her unawareness of the difficulties experienced by the students; and/or difficulties to cope with all the simultaneous demands that doing teaching posed on her; and/or an attachment to her lesson plan which prioritised plan
completion over any other instructional facets, all phenomena being commonly observed in the teaching practice of novice teachers (Escobar Urmeneta, in progress).

Conversely, the conversation in lesson A evolved in very dissimilar ways. In relation to the facilitation of interactional space the following moves have been identified:

- To start with, the teacher offered the students the opportunity to read out the statements, an option which announces that students may later occupy a relevant role in the unfolding conversation.
- The students in turns took the floor in an orderly way with few overlappings or choral answers. The fact that this is achieved without using the hand-raising procedure suggests that the class has developed so far a common culture on how to run academic discussions based on the contributions of self-designated individuals. The teacher’s gaze and body orientation to individuals, as well as to the group, seemed to favour the efficiency of this procedure in this context.
- The teacher remained silent for seven turns (lines 12-19) thus allowing students to discuss independently until they reached a verdict. Only then did she demand a more elaborate answer in the form of a “why” question.
- She refrained from providing hints toward the “guessing” of the true/false answer. On the contrary, she reintroduced uncertainty as a strategy to push students to supply an acceptable justification of their verdict.
- As a result she obtained from one of the students a valid token of science knowledge that she used as a starting point to build up her explanation.

The teacher also shaped the learners’ discourse in efficient ways:

- She rejected the information provided by Jaume (line 32), which might be true but was certainly unacceptable from an academic point of view, to insist on the type of argument needed at this point.
- By collecting Joan’s contribution (line 35) and returning it to the rest of the class in a more accurate, elaborated and acceptable way – from the point of view of the subject-matter – the teacher incorporated it into the collective argument that was being interactively co-constructed in the classroom. In such a way she was helping her students to express their ideas and opinions in a more appropriate L2 academic language (Mercer, 1995; Walsh, 2006).

In lesson A the limited set of linguistic resources that the students exhibited when they had to construct the required justification was not considered an obstacle by the
teacher. She managed to help the students succeed enacting a complex scaffolding process which was the result of the multifaceted articulation of all the moves identified within the reach of the students’ ZPD. And, in doing so, she managed to bring to fruition her agenda for the lesson in adaptive ways (Duffy, 1998).

From a linguistic point of view, one of the observable consequences of such teaching approach is that the teacher obtained from the students a diverse set of discursive forms (“true”, “false”, “it’s true”; “because”; “I found it”; “they are”; “yes”; “eukaryotic cells”), which reveal an enormous effort of attention and cooperation in the joint construction of academic discourse that students carried out under her guidance.

Figure 6 summarises the main differences indentified in the study:

**Figure 6 Main conversational features and outcomes indentified in lessons A and B**

<table>
<thead>
<tr>
<th>Teacher’s orientation:</th>
<th>Lesson A</th>
<th>Lesson B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Toward individuals through direct nomination, gaze and body (allocating turns and providing feedback), as well as toward the group.</td>
<td>Toward the group.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students’ contributions:</th>
<th>Lesson A</th>
<th>Lesson B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual contributions predominate and are taken into account.</td>
<td>Choral contributions predominate.</td>
<td></td>
</tr>
<tr>
<td>Individual students are given the floor to read statements aloud.</td>
<td>Teacher reads sentences aloud.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students’ private turns:</th>
<th>Lesson A</th>
<th>Lesson B</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available in the excerpt.</td>
<td>Relevant private turns do not have public implications.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wait-time:</th>
<th>Lesson A</th>
<th>Lesson B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wait time which allows for discussion among students.</td>
<td>No wait-time.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teacher’s feedback:</th>
<th>Lesson A</th>
<th>Lesson B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback is withheld and uncertainty is exploited to favour discussion among students.</td>
<td>Immediate (verbal and non-verbal) feedback on right or wrong answer.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clues provision:</th>
<th>Lesson A</th>
<th>Lesson B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provided clues lead to students’ argumentation of the correct answer.</td>
<td>Provided clues lead to students guessing the correct answer.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students’ speech:</th>
<th>Lesson A</th>
<th>Lesson B</th>
</tr>
</thead>
<tbody>
<tr>
<td>A variety of discourse forms is elicited.</td>
<td>Two monosyllabic utterances (“true” and “false”) are elicited.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(School) science discourse produced by students:</th>
<th>Lesson A</th>
<th>Lesson B</th>
</tr>
</thead>
<tbody>
<tr>
<td>One token of science argumentation, plus two tokens signalling comprehension and approval.</td>
<td>Not observable.</td>
<td></td>
</tr>
</tbody>
</table>

**To conclude**

Foreign language CLIL is currently seen as an advantaged educational strategy for the democratization of active plurilingualism, in line with the European language policy. Simultaneously, CLIL runs the risk of becoming one more pretext for the segregation of the least favoured students on the basis of their lack of ability to participate successfully in the development of the lessons. To preserve CLIL’s foundational democratic character, it is crucial to organise classwork in such a way that all students are offered access to active participation in the academic conversations. To achieve that goal, CLIL teachers need provide learners with tailor-made assistance which will help them comprehend, produce and negotiate academic messages in the target language adopted as the medium of instruction. Success in this undertaking depends to a great extent on the quality of the conversations generated and, therefore on the teacher’s classroom interactional competence.

By contrasting two different lessons, this study has contributed to the ongoing research in the field by empirically identifying the set of classroom conversational strategies deployed by each teacher. Or, in other words, the teachers’ CIC profile enacted by them. Secondly, it has shown how those strategies relate to the students’ participation and turn-taking patterns, on the one hand, and to the variety of discourse
forms displayed by learners, on the other. Thirdly, although the students’ production of (school) science discourse is small in lesson A and inexistent in lesson B, the degree of conceptual problematisation achieved in the former is very high if compared to that observed in the latter. For all these reasons, it can be concluded that lesson A provides students with more interactional space situated in their ZPD, and therefore affords them more opportunities for the integrated learning of content and language than lesson B, fulfilling in this way requirements 2 and 3 in the definition of democratic CLIL proposed in section Democratising CLIL.

The analysis also hints toward the importance of the use of gaze and body language as semiotic resources to control learners’ behaviour and signal turn allocation. Clearly, more work needs to be done in this area.

Content teachers’ linguistic deficits are often presented as an obstacle for the implementation of CLIL programmes in some Catalan schools. Undoubtedly, a certain level of communicative competence in the target language on the part of the teachers is a pre-requisite for any CLIL programme to come into existence. However, the data analysed show that CIC is somewhat more complex than general communicative competence and, to some extent, independent from it, as it is the teacher with a lower certification the one who achieves higher levels of complexity in the conversation. The development of a sophisticated set of interactional skills that compose CIC – some of which have been identified in the study – requires something more than just offering teachers ESP courses. Or unspecific pedagogical training, one may add. CLIL quality teaching requires specific teacher-education programmes addressed at the development of CIC in CLIL settings in particular contexts.

Finally, it is hoped that the study may contribute to help policy makers and course developers to make informed decisions in relation to the design of pre-service or in-service teacher-development programmes.

Acknowledgements

This study has been carried out thanks to the R+D+i EDU2010-15783 project ‘Academic Discourse in a Foreign Language: Learning and Assessment of Science Content in the Multilingual CLIL Classroom’ (DALE-APECS), funded by the MICINN.

Special thanks go to Dr. Espinet for her feedback on an earlier version of this paper and her trained eye on all aspects referring to the teaching-learning of science. And to M. Jiménez for her useful comments on the readability of the paper.

Correspondence

Any correspondence should be directed to C. Escobar Urmeneta, Departament de Didàctica de la Llengua i la Literatura, Universitat Autònoma de Barcelona, Campus UAB, Bellaterra (Barcelona), 08193, Spain (cristina.escobar@uab.cat).

Notes
1. C. Escobar Urmeneta and N. Evnitskaya are members of the GREIP (http://greip.uab.cat) research group and the CLIL-SI collaborative team (http://grupsderecerca.uab.cat/clisi).
2. Although a significant number of middle class families invest considerable amounts of money in providing their children with extra tuition or language stays in English-speaking countries.
3. In response to such needs, the Catalan Education Act (LEC) requires a CEFR B2 level in a foreign language from all teachers in whatever speciality in order to access the teaching profession LLEI

5. Screenshots have been manipulated and pseudonyms have been used throughout the paper so as to protect participants’ identities.

6. Escobar Urmeneta & Evnitskaya (in progress) argue that students’ private turns can help them become ready to publicly state their questions, clarification or repetition requests, demands for help, etc., which eventually leads to their increased participation in classroom interaction.

7. Still, it is not to be understood that we imply that true-false exercises are, per se, exemplary in the teaching of science. On the contrary, Dr. Espinet, expert on the field, let us know that this is not the case.

8. At least for teachers with a CEFR B2 level or higher.

9. To falsify a given hypothesis, a single case will suffice (Popper, 1963).

Appendix 1: transcription conventions

JAU: Initials followed by a colon correspond to the speaker’s pseudonym.

() A dot in parentheses indicates an unmeasured (micro-)pause of less than two-tenths of a second.

(1.5) Numbers in parentheses indicate measured pauses in tenths of seconds.

= An equal sign indicates ‘latching’ (no gap) between utterances produced by the same speaker or different speakers.

[overlap] Square brackets indicate start of concurrent speech.

word Underlining indicates speaker’s emphasis.

CAPITALS Talk is louder than that surrounding it.

. Falling intonation.

, Low-rising intonation, suggesting continuation.

? Rising intonation, not necessarily a question.

cu- A single dash indicates a sharp cut-off.

: Colon indicates that the speaker stretched the preceding sound, more colons more stretching.

>fast< ‘Greater than’ and ‘less than’ signs indicate that the talk was produced noticeably quicker or slower than the surrounding talk.

xxx ‘xxx’ indicate an unintelligible fragment with one ‘x’ equal to one syllable.

word Bold italics indicate utterances produced in any other language that is not English.

((laughs)) Description of speaker’s non-verbal actions.

References


Evnitskaya, N. (in progress) Interweaving objects, gestures, and talk in the co-construction and negotiation of dialogic explanations in the CLIL science classroom.


Moore, E. (submitted) Content and language learning in teamwork tasks in academic lingua franca.


INTERLINGUISTIC REFLECTION ON TEACHING AND LEARNING LANGUAGES

Oriol Guasch Boyé
GREAL Group
Departament de Didàctica de la Llengua i Literatura.
Universitat Autònoma de Barcelona

This paper presents a project, shared by the areas of the Catalan and English languages, for teaching and learning grammatical reflection in secondary education. Certain aspects on student interaction are analysed together with the interaction between students and their teachers, focussing on the metalinguistic interlinguistic activity that is created in its implementation, with conclusions being established about the potentialities of the experience itself.

Key words: teaching and learning languages, interlinguistic metalinguistic reflection, verbal aspect, narrative textures, integrated teaching of languages

Introduction

The education system in Catalonia stipulates the simultaneous teaching of three languages throughout compulsory schooling for all students: Catalan, Spanish and a foreign language, which is usually English. One of the peculiarities of the classrooms where this project is carried out is the fact that there are students with a diverse range of first languages. In most cases the language is Catalan or Spanish, but there is also a small but significant percentage of Arabic, Berber, Chinese, Urdu... and a long list of more than 300 languages. Achieving minimum efficiency in this linguistic training programme requires an educational plan working in two directions: the coordination of the linguistic areas (Catalan, Spanish and a foreign language) with the other curricular areas and the coordination between the linguistic areas.

This paper focuses on the second part of planning and presents the analysis and subsequent discussion of some relevant aspects related to interaction among students and interaction between students and their teachers in the development of a collaborative project between the Catalan and English languages areas. The experience takes place in a second-year classroom of compulsory secondary education (14 year old students) and discusses the accomplishment of linguistic learning objectives through the development of metalinguistic reflection and also includes comparisons between languages in the curriculum (Catalan, the co-official and vehicular teaching language and English, a foreign language). The planning of this intervention proposal and its implementation in the classroom was developed as part of a research project with the objective of deepening our knowledge of how students construct grammatical concepts

We will begin with a synthetic presentation of three of the aspects that the theoretical basis of the research is centred on which are particularly relevant to our research. We
will then continue with the description of the characteristics of the project that the students carried out. Thirdly, we will specify the objectives of the analysis that forms the main part of this paper and analyse in detail the process of its explanation and ultimately formulate conclusions.

**Theoretical frames of reference**

We will focus on three study areas chosen from the theoretical frames of reference we base the teaching proposal on, and in accordance with the issues that will be the subject of our attention in analysing the development of the project. The first area refers to linking linguistic and metalinguistic knowledge of different languages in the mind of the learners; the second is the construction of grammatical concepts by the students; and the third is the acquisition of the concept of temporality.

*The connections between linguistic knowledge of and about different languages*

Many authors, both in the English-speaking world (Hawkins, 1974; Sharwood Smith 1993; James, 1996) and in the French-speaking world (Roulet 1980; Dabène 1992; De Pietro, 2003) have considered the importance of building a common space of reflection on languages as a tool to improve the teaching and learning of first languages and of other additional ones (those learned after the first). We consider the proposals from Bill Van Patten, Anne Trévise and Irit Kupferberg to be symbolic in this area.

Van Patten & Cadierno (1993) and Van Patten (2002) proposed the teacher’s intervention in processing linguistic input that the learners receive as a way of teaching and learning to read in an additional language based on an instruction process that: (a) focuses on a certain linguistic structure, (b) provides information on a reading strategy that may lead to misinterpretation and, (c) to avoid this misinterpretation, provides the learner with the tools to self-regulate their reading processes and arrive to a correct construction of the meaning of this input. What Van Patten & Cadierno ultimately proposed is an implicitly reflexive activity on the language which depends on the construction of the meaning of the formal characteristics of certain structures. What is more significant for us, however, is that the formal structures that these authors refer to are the more common reading errors, and a part of these errors they consider to be extremely relevant result from the interference of languages previously learned with the new language. This means that the comparison of differentiated structures of the learners’ first language and an additional language constitutes the basis of points (b) and (c) of the recommended instruction process.

Trévise (1994, 1996) takes linguistic knowledge into consideration and understands it as an intuitive knowledge of linguistic uses that language users construct from a combination of several factors. She sees metalinguistic knowledge as a more or less conscious understanding that can be verbalised, largely thanks to schooling. She considers the balance and the distinct relationships between these two knowledge types in the first languages and in additional languages and she joins in the beliefs regarding interlinguistic linking of linguistic knowledge by multilingual people. However, unlike what was considered normal in the mid-90s and still remains usual in current day educational approaches, she also postulates the interlinguistic linking of metalinguistic knowledge, namely, the conscious knowledge of languages. Trévise carefully examines the students’ grammatical knowledge of their first language and found it often consists of a mixture of wide-ranging knowledge, which can be projected on the second language with positive learning effects in some cases and negative in others.