Collaborative interaction in turn-taking: a comparative study of European bilingual (CLIL) and mainstream (MS) foreign language learners in early secondary education

Pat Moore

Filología Inglesa, Universidad Pablo de Olavide, Carretera de Utrera km1, Seville, 41013, Spain

Published online: 06 Jan 2011.

To cite this article: Pat Moore (2011) Collaborative interaction in turn-taking: a comparative study of European bilingual (CLIL) and mainstream (MS) foreign language learners in early secondary education, International Journal of Bilingual Education and Bilingualism, 14:5, 531-549

To link to this article: http://dx.doi.org/10.1080/13670050.2010.537741

Taylor & Francis makes every effort to ensure the accuracy of all the information (the “Content”) contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms &
Collaborative interaction in turn-taking: a comparative study of European bilingual (CLIL) and mainstream (MS) foreign language learners in early secondary education

Pat Moore*

Filología Inglesa, Universidad Pablo de Olavide, Carretera de Utrera km1, Seville 41013, Spain

(Received 16 July 2010; final version received 30 October 2010)

This paper explores the emergence of collaborative interaction among early secondary learners in bilingual sections at state schools in Andalusia. These sections are organised in line with a content and language integrated learning (CLIL) approach. By transcribing and then analysing data from oral interviews conducted with randomly selected pairs of CLIL learners and mainstream (MS) peers, the article compares and discusses the quantity and quality of collaboration evidenced in turn-taking patterns. In doing so it also proposes a pragmatic, participant-based approach to the initial classification of turns, prior to more functionally aligned analysis. Four initial turn types are identified in the data but while all four obviously contribute to the overall ongoing talk, only two are deemed inherently collaborative. These are embedded turns, where one speaker contributes to another speaker’s main turn, and cooperative turns, where two or more speakers jointly construct the message. Once identified, each of these turn types was examined for patterns of functional use. The research finds that the CLIL learners are participating both more frequently and more effectively in collaborative turns than their MS counterparts. In closing we briefly discuss some of the implications of this finding.

Keywords: CLIL; collaboration; interaction; turn-taking

1. Introduction

Content and language integrated learning (CLIL) implies the teaching of curricular content through, and thereby in tandem with, second and foreign languages. As such, it represents an increasingly popular means of incorporating the push for the 1+2 principle – the idea that all Europeans need some competence in two languages other than their first – into general education. CLIL is actively promoted by European policy-making bodies such as the European Commission1 and the Language Policy Division of the Council of Europe (Ó Riagáin and Lüdi 2003), and most European nations have at least experimental CLIL programmes up and running.

1.1. Setting

In Andalusia, a largely monolingual region whose eight million inhabitants make it comparable to some of the smaller European nations, experimental bilingual sections

*Email: pfmoox@upo.es
were first set up in 2000. The push for bilingual education was incorporated into the government’s *Plan to Promote Plurilingualism* published in 2005\(^2\) (see Lorenzo and Moore 2009 for discussion). The bilingual sections scheme represents one of the key strategies in the Plan and at the time of writing there were 762 state schools, both primary and secondary (partnered to ensure continuity), with bilingual sections – involving approximately 4000 teachers and 80,000 learners. At these schools part of the curriculum is taught in an L2. The choice of content subjects and L2 (English, French or German) is up to the school and depends on the linguistic profile of the teaching body. We should note that, unlike in many other European CLIL-type programmes, student selection in Andalusia is not governed by academic ability; in the case of over-subscription, selection is by lottery. It is not, therefore, the case that the bilingual sections necessarily contain the more gifted learners.

The Plurilingualism Plan also stipulates that monitoring and evaluation of the project should be conducted and the *Andalusia Bilingual Sections Evaluation and Consultancy* (see Section 4.1 for details) found that CLIL learners were outperforming their mainstream (MS) counterparts. This article reports on part of a subsequent analysis looking more closely at CLIL and MS oracy in order to explore the CLIL differential.

### 1.2. CLIL research

When European CLIL first emerged, research was primarily concerned with the possibility that L2 integration might negatively affect content learning. Results have demonstrated, however, that not only is this not the case (Serra 2007; Stohler 2006; Vollmer 2008), but CLIL appears to offer interesting cognitive advantages (Gassner and Maillat 2006; Jäppinen 2005; van de Craen, Ceuleers, and Mondt 2007); significant L2 gains (Admiraal, Westhoff, and de Bot 2006; DESI-Konsortium 2006; Lorenzo, Casal, and Moore 2010); a beneficial impact on L1 development (Merisuo-Storm 2007; Nikolov and Mihaljević Djigunović 2006); and positive attitudinal corollaries (Lasagabaster and Sierra 2009; Seikkula-Leino 2007).

Having satisfied these basic concerns, CLIL research is now both diversifying and delving deeper. Coyle (2007) and Smit (2008) provide useful overviews of current concerns; they agree on the need for more microlevel studies of CLIL, in its diverse guises, as a route to greater awareness of the learning processes involved and the construction of solid theoretical foundations to underpin the approach (see also Dalton-Puffer and Smit 2007; Dalton-Puffer, Smit, and Nikula 2010; Lorenzo et al. 2007).

The focus of this research is on learner oracy (on oracy in general see Maclure, Phillips, and Wilkinson 1988; on oracy in CLIL see Moore 2010). Few would deny the importance of talk in learning and that means that it is important to explore oral competences in CLIL. Amongst researchers exploring qualitative aspects of CLIL learner talk, there appears to be a fairly wide consensus that there is a need to look at what Gassner and Maillat label ‘higher-organisational structures’, such as turn-taking mechanisms, argument construction and repair (2006). In this article we focus on interaction.

Research into teacher–student interaction in CLIL classrooms has focused on certain key areas, notably codeswitching (Dalton-Puffer 2007; Nikula 2007a; Wannagat 2007), the ubiquitous IRF exchange (Dalton-Puffer 2007; Nikula 2007b)
and repair (Dalton-Puffer 2007; Serra 2007; Smit 2007). Generally speaking there is consensus that CLIL learners demonstrate good interactive skills.

There is also a growing body of research focusing more specifically on the learners. Burmeister and Daniel (2002) highlight aspects of oral competence – particularly cohesion and turn-taking – recorded amongst learners in the Kiel IM Project, set up to investigate the overall linguistic outcomes of late-partial immersion amongst secondary learners aged 12–13 and 15–16. Their study found that even the younger bilingual learners, after only seven months of bilingual instruction, were far less dependent on interviewer prompts and far more likely to link contributions to either their own or peer input. This was further substantiated by investigation of a taxonomy of turns proposed for the study (requests, answers, interrupts, etc.), which found that the immersion learners produced more links and acknowledges and fewer answers than their non-immersion peers. Overall, Burmeister and David concluded that the bilingual learners display greater initiative and more involvement and that their interaction was more effective.

Hüttner and Rieder-Bünnemann (2007) explored the oral narrative competence of a group of 12-year-old Austrian CLIL and MS learners who had been receiving CLIL instruction since the beginning of primary education (seven years). One of their evaluative criteria related to the degree to which learners recreated the three key plot elements of the story and they found that the CLIL learners were more likely to provide a complete onset/unfolding/resolution sequence. In addition, more of the CLIL learners provided a resolution which was commensurate with an ideal ending (in this instance, animals being left free in nature). They suggest that CLIL learners appear to be more competent when it comes to verbalising their messages.

A more global, albeit rather traditionally operationalised, view of CLIL oracy comes from Mewald who looked at L2 gains amongst lower secondary CLIL learners (2007). Mewald purposefully selected a group of learners from different schools with mixed learning backgrounds (i.e. a varying number of CLIL and L2 hours per week, extra-curricular activities, etc.). Mewald considers her test ‘communicative’ (2007, 147), yet this is arguable. To illustrate, task descriptors repeatedly call for formal language and complete sentences and there is a clear conception of target language items, informed by the learners’ L2 syllabus. The evaluation criteria are also more reminiscent of a typical FL assessment than anything allowing for a CLIL differential. In one instance, for example, the fact that a learner substituted German words to avoid communication breakdown is interpreted as an inability to ‘produce “language at ease”’ (Mewald 2007, 155), whereas an alternative view might judge this to be natural bilingual discourse. However, Mewald concludes that CLIL learners were ‘able to speak fluently, with a rich lexical range and a good command of grammar’ and that, in comparison with their MS counterparts, ‘CLIL learners were not just more accurate but also more resourceful’ (2007, 168).

There is, therefore, increasing evidence to support the idea that CLIL aids in the development of oracy. Nonetheless, CLIL learner oral output is often described by employing rather vague terms such as fluent, smooth and comfortable. Aside from being fuzzy, these terms are highly subjective. It is true that the term fluency has theoretical weight in FL discourse but this tends to be ‘fluency’ as a procedural skill and thus ‘a temporal phenomenon’ (Wolf 2008, 280) and cannot, alone, account for oral competence. This gives rise to a need for complementary, theoretically robust descriptions and this article should contribute to this goal.
Interaction and turn-taking

Interaction, as the name implies, focuses on communication between speaker(s) and listener(s) and is therefore co-constructed. Wells provides three characteristics fundamental to interaction (1981, 25–6):

1. the participants alternate, waiting for each other to finish before starting their turn;
2. what is said is coherently related to what was said by the previous speaker so it is reasonable to infer that both participants understand each other’s messages and frame their subsequent messages in light of that understanding; and
3. the talk will be systematically related to the physical situation in which it occurs and to the intentions of the speakers in relation to that situation.

Wells’ characteristics lean towards the idea of interaction as verbal exchange, or dialogue, which is also the focus of this study. Dialogic enquiry – the exchange and thence modification of ideas implied in the construction of ‘common knowledge’ (Edwards and Mercer 1987) is considered key in learning (Alexander 2008; Skidmore 2006; Wells 1999). Interaction has also received significant attention in language-learning theory whether it be first language (Chapman 2000; Wells 1981), second language (Allwright 1984; Ellis 1999) or bilingual education (Lyster 2002; Swain and Lapkin 1998).

Rather than interaction for learning, this article looks at interaction between learners as evidence of learning. We assume that successful interaction depends as much on the way that speakers relate to each other as it does on what they actually say (Wiemann and Knapp 2007, 227). It follows that interaction patterns should display differentials.

Following the norms of Conversation Analysis, the mechanics of interaction can be systematised as a series of turns between speakers. Although turn-taking has been analysed from a stochastic perspective – as a random system based on unpredictable elements (e.g. Jaffe and Feldstein 1970) – the consensus nowadays would appear to be that turns adhere to some form of recognisable pattern, albeit ‘locally managed, party-administered, interactionally controlled, and sensitive to recipient design’ (Sacks, Schegloff, and Jefferson 1974, 696). From this perspective, turns can be understood as comprising constructional and allocational components; in other words conversation can be perceived as constructed units interspersed with speaker transition opportunities.

Research into turn-taking within conversation has often assumed that a ‘one speaker at a time’ approach constitutes the norm (Sacks, Schegloff, and Jefferson 1974, 700). Recently, however, attention has turned to simultaneous turns – involving two or more speakers concurrently. Simultaneous talk can be construed as problematic or not, depending on the context (for a useful review of attitudes to simultaneity see Cheng 2003, 31–4). Problematic simultaneity may be treated as ‘interruption’ (Schegloff 1987) or ‘blatant non-cooperation’ (Brown and Levinson 1987), whereas aspects of non-problematic simultaneity have been discussed as ‘overlap’ (Sacks, Schegloff, and Jefferson 1974; Schegloff 2000), ‘co-production’
(Lerner 2002) and more recently as ‘collaboration’ (Bolden 2003; Iwasaki 2009; Lerner 2004).

Schegloff provides a useful breakdown of types of non-problematic simultaneity (2000):

1. Terminal overlaps: When one speaker, recognising that another speaker is about to reach a turn-allocation point, jumps in slightly ahead of time.
2. Continuers/interpolations: When a listener signals that they recognise that the speaker has not finished yet. Although Schegloff does not employ the term, this notion appears to conflate with the idea of backchannelling.
3. Conditional access: When one speaker invites another to participate without giving up their turn. This category is further divided into ‘Word Search’, when the speaker who holds the floor requests assistance in remembering a word, and ‘Collaborative Construction’, when one speaker initiates and provides for a second speaker to complete.
4. Choral: Certain responses, such as laughter or congratulations, are often contiguous rather than serial.

Schegloff restricts the term to describe a subcategory of Conditional access; yet the final three could easily be construed as interactive collaboration. Some would argue that even the first type, when considered a contribution to conversational efficacy, should be considered collaborative (Bolden 2003). In this article we explore collaboration through non-problematic simultaneous turns.

3. Research questions

The research addresses the following questions:

1. Can turns be classified according to participatory roles? Schegloff applies functional criteria in order to classify simultaneous turns, yet starting with function can complicate matters as it can be extremely difficult to assign single functions to speaker contributions. In this research, we explore the potential of a more pragmatic, bottom-up approach by classifying turns according to the number of speakers involved and the nature of their participation. Regarding the latter we can expect at least three basic types: non-participation, individual participation and collaborative participation – yet it may also be possible to identify sub-sets.

2. Is there a quantitative difference in participatory patterns between control and experimental groups? Once the turns have been classified, it will be possible to compare findings for the two groups. This will show whether one group is collaborating more than the other.

3. Is there a qualitative difference in participatory patterns between control and experimental groups? Research has shown that more effective collaboration between L2 learners has a competence corollary – that elements such as backchannelling (Wolf 2008), latching (Galaczi 2008) and collaborative completions (Bolden 2003) can improve the quality of the talk. We will examine the sub-sets of turn types to discuss functions and patterns of use.
4. Data gathering and methodology

4.1. Umbrella research project

The data employed in this study were gathered during the Andalusian Bilingual Sections Evaluation and Consultancy. One of the largest of its kind in Europe to date, the project involved visiting a total of 61 schools (primary \( N = 32 \); secondary \( N = 29 \)) evenly distributed across the eight provinces of Andalusia, covering both urban and rural zones, with weighting to allow for population distribution. The schools involved were all at the beginning of their second year in the bilingual scheme. Three L2s were represented: English, French and German, and a total of 1768 learners, 398 teachers, 61 project coordinators and 972 parents were involved in the data-gathering process, which comprised: linguistic evaluation; student, teacher and parent questionnaires; and coordinator interviews designed to enable a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis. For more detailed information regarding the project design and implementation see Casal and Moore (2009), and for a discussion of overall results see Lorenzo, Casal, and Moore (2010).

4.2. Gathering spoken data

The linguistic evaluation was organised, in line with Spanish norms, into four components: Reading and Listening Comprehension and Written and Spoken Production. We were interested in general linguistic competence and both the tasks and the evaluation criteria were formulated in line with descriptors from the Common European Framework of Reference (Council of Europe 2001) at A1 for (fourth year) primary and A2 for (second year) secondary learners. In this article, however, we focus exclusively on the oral evaluation of the secondary L2 English learners. This represents a total of 79 10-minute interviews (158 informants), conducted at 15 state secondary schools across the region, providing just over 13 hours of recordings.

It is worth noting that much of the research into CLIL interaction reported in Section 1.2 was classroom-based. Classrooms imply very particular contexts and Dalton-Puffer has suggested that CLIL research should also explore the degree to which learners are able to cope in hors classroom situations (2007, 204). Although the data-gathering here employed took place within schools, it did take the learners out of the classroom (see below).

The informants were interviewed in pairs rather than individually. This decision was initially prompted by two factors: paired interviews have the potential to generate a greater diversity of interaction and discourse patterns (Együd and Glover 2001; Galaczi 2008) and they are thought to be less stressful for the interviewees (Ikeda 1998), quite possibly because they mirror the interaction patterns which learners experience in pair and group work in the classroom (Swain 2001).

The exchange which comprised the oral test was not primarily conceptualised as an interview in the formal, generic sense. The genre interview falls into the category of ‘institutional talk’, and within an institutionalised interview roles are often pre-designated, representing ‘a significant potential for interactional power and control’ (Heritage 1998, 8). Many of the learners in the study would never have been in a formal interview and thus would not necessarily be aware of the norms of the genre. They are all, however, perfectly used to conversation and so the oral data-gathering was designed as a semi-formal conversation.
Obviously, genuine mundane conversation was not feasible but the goal was to set up as relaxed and informal a situation as possible within the confines of the context. In order to do so it was decided that the interlocutor should violate as many conventions as possible: ‘Interview style patterns are fine if interview-language is the desired goal; they are a poor substitute for natural conversation patterns if that is the goal’ (McCarthy 1991, 126). Speculation suggested that the earlier on in the exchange conventions were rejected, the more informal (and more like a conversation) the interview would become. Ways of subverting the conventions include:

- conducting the interviews in a neutral space (in many schools this was the library or the canteen);
- trying to get the learners to open the exchange (initially greeting them with smiles and gestures but not words);
- allowing and nurturing topic drift (Coulthard 1985, 81);
- encouraging learner questions (which might also steer topic choice);
- leaving respondents to self- and/or peer select; and
- fostering peer evaluation/comment.

The interview was loosely structured, not dependent on lists of pre-designated items, structures or functions, allowing the interviewer to ‘go with the flow’ rather than having to concentrate on eliciting specific language.

While incorporating some form of explicit content-element into the tests initially seemed desirable, the range of content subjects involved in Andalusian Bilingual sections precluded such a possibility. On reflection, this may have had positive consequences for the overall quality of the interaction: fact-oriented questions generally produce shorter or even monosyllabic responses, while opinion questions give learners freer rein and tend to result in longer turns (Dalton-Puffer 2008, 11–2).

A single individual – the researcher herself – conducted the oral data-gathering; this has its limitations in that it can be difficult to be both interlocutor and examiner concurrently (Együd and Glover 2001, 74), yet these problems were largely offset with back-up video recording. The data-gathering process for the umbrella project involved whole days at each participating school and by the time they entered the room, learners knew that the interlocutor was bilingual. L1 use was not proscribed and alternation patterns provided interesting insights in the larger study into oracy and play their part in the qualitative analysis (below).

5. Analysis and results

Three pairs (girl+girl, boy+boy and girl+boy) were randomly selected from control (MS) and experimental (CLIL) groups in each school. We should note here that when results were collated there were no significant differences between scores according to gender – which means, of course, that unlike in much mainstream FL learning, the girls were not outperforming the boys – and therefore speaker gender is not a factor in the research here discussed.

In order to conduct the quantitative analysis, two sub-samples (CLIL and MS) were randomly selected. Each comprises one hour of talk (six pairs) and includes a range from the lowest to the highest scoring learners in the category. These
sub-samples were then transcribed employing Conversation Analysis conventions (see Appendix 1 for transcription norms).

5.1. Identifying turn types

Four turn types were identified in the data: individual turns (IndT), cooperative turns (Co-T), embedded turns (EmbT) and empty turns (MT). The transcriptions were adapted to model turn-taking patterns, as in the examples below which serve to illustrate the four types.

(1) IndT: an individual turn implies that one speaker is ‘in charge’ of the discourse, as is clearly the case with S1 in Extract 1.

(2) Co-T: a cooperative turn is co-constructed (with or without overlapping), either between learners as in Extract 2, or between the interlocutor and learner, as in Extract 3, or even between all three. In a cooperative turn, speakers share responsibility.

(3) EmbT: embedded turns represent contributions to another speaker’s ongoing turn. In Extract 1, although both I and S2 make contributions, S1 does not relinquish his turn. EmbTs can be found in both individual and cooperative turns.

(4) MT: an empty turn means that no one has taken up the reins, as in Extract 4.

Extract 1. CLIL.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>S1</td>
<td>mm he /laıv/ mm (.) he lives near to me o sea ((I mean)) hi- his house is near to-</td>
</tr>
<tr>
<td>2</td>
<td>S2</td>
<td>= ‘neighbour</td>
</tr>
<tr>
<td>3</td>
<td>I</td>
<td>uuhh</td>
</tr>
<tr>
<td>4</td>
<td>S1</td>
<td>yes yes we are neighbour hh um...</td>
</tr>
</tbody>
</table>

Extract 2. CLIL.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I</td>
<td>oh (.) ok (.) so (.) at the moment (.) in history (.) wha- what’re you doing?</td>
</tr>
<tr>
<td>2</td>
<td>S2</td>
<td>‘erm</td>
</tr>
<tr>
<td>3</td>
<td>S1</td>
<td>= the aRABiC culture</td>
</tr>
<tr>
<td>4</td>
<td>S2</td>
<td>the muslims a:nd ‘ası ((stuff like that))</td>
</tr>
</tbody>
</table>

Extract 3. MS.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I</td>
<td>josé (.) this morning (.) what &lt;number&gt; were you</td>
</tr>
<tr>
<td>2</td>
<td>S2</td>
<td>(5) ((S2 shaking head)) ( xx ) ((to S1))</td>
</tr>
<tr>
<td>3</td>
<td>I</td>
<td>[this morning]</td>
</tr>
</tbody>
</table>

538    P. Moore

Downloaded by [Northcentral University] at 15:10 12 January 2015
Once the transcriptions had been modified, it was possible to calculate the number of each of the different turn types in the sub-sample. It should be noted here that all turns, whether entirely L1, entirely L2 or L1/L2 combined, are counted. L1 was not proscribed in the interviews – the interlocutor sometimes used it herself – but alternation between L1 and L2 is not a relevant factor in the purely quantitative analysis.

In the original research two sets of data were produced, one for the triads (learner+learner+interlocutor) and one for the dyads (learner+learner). This means that the first extract above produced two embTs in the triad data and one in the dyad data. As the focus here is on learner interaction we restrict the data to occurrences in the learner dyads (Table 1).

Overall, the MS learners take more turns. This is commensurate with the finding, in the larger analysis of overall oracy, that MS contributions were shorter than CLIL contributions (Moore 2009). It is immediately apparent that the MS learners were also taking more individual turns while the CLIL learners were involved in more cooperative turns and were more frequently embedding. There is not a significant difference between the figures for MT turns. Interpreting Co-Ts and embTs as collaboration, we can see that the CLIL learners are, indeed, collaborating more. We now need to assess the nature of that collaboration.

5.2. Exploring collaborative turns

*Individual* and *Empty* turns will not be addressed here. We do not question their role in the success of the unfolding talk but they relate to collaboration above the turn and are not relevant in the current discussion. We will focus on the collaborative turn types: *Embedding* and *Cooperation*.

Table 1. The occurrence of turn-types in the sub-sample data (dyads).

<table>
<thead>
<tr>
<th></th>
<th>IndT</th>
<th>Co-T</th>
<th>embT</th>
<th>MT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLIL</td>
<td>363 (70.8%)</td>
<td>62 (12.1%)</td>
<td>57 (11.1%)</td>
<td>30 (5.8%)</td>
<td>512</td>
</tr>
<tr>
<td>MS</td>
<td>483 (83.7%)</td>
<td>21 (3.6%)</td>
<td>38 (6.5%)</td>
<td>35 (6%)</td>
<td>577</td>
</tr>
</tbody>
</table>
Embedded turns conflate with Schegloff’s ‘continuers’ above, inasmuch as they contribute to the on-going speaker’s turn without trying to steal it, yet they incorporate a range of communicative functions:

(1) **Interactive support:** Embedding frequently serves to demonstrate engagement in the on-going interaction. This may involve the signalling of comprehension (Extract 5) or agreement (Extract 6) but at times, and particularly amongst the CLIL contingent, it goes beyond typical backchanelling. In Extract 7, for example, S2 latches a short reply to an unfolding and still incomplete question, negating the need for its completion. The provision of pre-emptive responses like this evidences a high degree of intersubjectivity.

(2) **Linguistic support:** In line 3 of Extract 1, S2 provides *sotto voce* lexical support to S1 when he begins to cast about for a word. This type of embedding, also featuring grammatical items, was found in both data-sets. Linguistic support might also be provided by way of embedded translation (L2→L1) into the interlocutor’s turn – see Extract 8.

(3) **Affective support:** Learners also embedded affective responses into the talk. In line 4 of Extract 9, S2 laughs in tandem with S1, signalling that he empathises with S1’s hesitation over a potentially awkward question (given that they knew that the research was all about bilingual sections). In Extract 10, S2 comments positively on the fact that S1 knows the word ‘musician’ in English (the interlocutor had asked about ‘music’).

---

**Extract 5. MS.**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I</td>
<td>for example (.) you play tennis-</td>
<td>IndT (I)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>S1</td>
<td><em>si</em></td>
<td>embT (S1)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I</td>
<td>in in physical education-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>S2</td>
<td><em>si</em></td>
<td>embT (S2)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I</td>
<td>ALL year_</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Extract 6. CLIL.**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I</td>
<td>no er biology and lang[ uage (.) ] it’s very different [yeah sure]</td>
<td>IndT (I)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>S1</td>
<td></td>
<td>embT (S1)</td>
<td></td>
</tr>
</tbody>
</table>

**Extract 7. CLIL.**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I</td>
<td>mhm er <em>&lt;computer science&gt; uhuh and um does somebody in your family-</em></td>
<td>IndT (I)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>S2</td>
<td>= my father-</td>
<td>embT (S2)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I</td>
<td>= teach in the- ok (.) but YOUR father’s not a policeman ((to S1))</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The question of L1/L2 choice becomes relevant in the analysis of embedding. Not only is there less embedding in the MS talk, most of it is in the L1 (see Extracts 5, 8 and 10). Overall, the MS data featured more L1 than the CLIL data (Moore 2009) so perhaps this is not surprising. Yet, the rare instances of L2 embedding in the MS data only occur when the learner is embedding into the interlocutor’s output, never when embedding into peer output and we might wonder why this is so.

Moving on to Cooperative turns, it became apparent that they could be more finely tuned into a functionally descriptive sub-set. Five basic types have been identified in the data: Synchronicity, Addition, Support, Expansion and Modulation.

### 5.2.1. Synchronicity

The interlocutor frequently addressed the learners conjointly, hoping that speakers would self-select. Three potential paths then open: learners may be reluctant to respond until obliged by direct nomination – explicit eye contact say – or one speaker may take the turn, or both speakers may reply in unison. It should be noted that synchronicity involves parallel output – learners speaking ‘as one’ – and not displaced echoing. Extract 11 provides an example of an extended set of synchronous cooperative turns.
5.2.2. Addition

When the interlocutor asked the kind of question which required an enumerative response, the dyads often constructed a cooperative response by providing alternate answers. This happened in both CLIL and MS interviews, although it was far more frequent in the former. And yet, in the two extracts below as well as in many other instances, there were considerable differences between the CLIL and MS dyads. In Extract 12, for example, it is doubtful whether the learners are truly answering the question; it seems far more likely that they are simply displaying their knowledge of food-related lexis. In Extract 13 there is more latching. These argue for a distinction between proactive engaged cooperation, as observed in many of the CLIL exchanges, and what might be termed reactive cooperation, where contributions appeared to be spurred by a sense of reluctant duty, as in many of the MS exchanges.

Extract 12. MS.

1 I no, ok (. ) mm what’s your favourite food IndT
2 (5) MT
3 S1 food ((mimes eating)) IndT
4 S1 comer? ((eat)) Co-T (S1 + S2)
5 S2 = m- apple
6 S1 apple (. ) potato-
7 S2 = pizza
8 I uuhuh embT (I)
9 S1 ya esta yo no sé ((that’s it I don’t know anymore))

Extract 13. CLIL.

1 I ok ‘ok (. ) um (. ) here at the school (. ) in IndT
2 the bilingual section (. ) in English (. )
3 (Ss nodding)) you study um history:
4 er Co-T (S1 + S2)
5 S2 = maths-
6 S1 = music-
7 I = music- 2x embT (I)
5.2.3. Support
Cooperation can also be supportive, the second speaker latching onto the first because they feel that the other might be floundering. The distinction between supportive cooperation and embedding is that while in the latter one speaker dominates, in the former both speakers contribute equally to the turn, as in Extract 14.

Extract 14. CLIL.

1 I what kind of activities? IndT
2 S2 here about about this er (. ) Co-T (S2+S1)
3 S1 = do a redaction ((invention)) of-
4 S2 = about these medieval things

5.2.4. Expansion
In Extract 15 the two learners complement each other’s input: S1 clarifies that S2’s page is a paper photocopy, S2 emphasises that the text is in English. In Extract 16, S2 explains that they read the texts and appears to provide a prompt for S1 regarding exercises; I is ready to accept the response and begins to ask a new question (line 11) but the learners have not finished; S2 butts in (suggesting considerable confidence) then expands the list of activity types by insisting on projects. S1 then explains that what they did with recycling was make pictures. The speakers are constantly building on and refining each other’s output.

Extract 15. CLIL.

1 S1 the teacher gi- give us- Co-T (S1+S2)
2 S2 = a page- embT (I)
3 S1 = a paper photocopy
4 I uhu
5 S1 and we read it-
6 S2 >we read it< [in english-
7 S1 [and we do activities-
8 S2 and we do [activities]
9 S1 [activities]

Extract 16. CLIL.

1 I wha- what do you DO in in natural science IndT
2 S1 we ( . ) we english texts Co-T (S1+S2)
3 S2 °read- 2x embT (I)
5.2.5. Modulation

In Extract 17, S2 steps in to soften S1’s message. In line 7 she signals constrastive intent with a long drawn out *but* and in line 11 she rephrases S1’s *don’t know* as *[don’t]* *understand* and again makes a conciliatory move which S1 accepts and expands.

Extract 17. CLIL.

544  P. Moore

---

544 P. Moore

---

[Extract text]

In closing this section we should note that not only were cooperative constructions more frequent in the CLIL data, they also tended to be more extended. Of the five cooperative turn types identified above, the most common in the CLIL interviews overall were synchronic, additive and supportive. The other two types were found more often among the above average CLIL learners than those below average. Although cooperative turns – mainly additive and supportive – were
identified in the MS interviews they tended either to be reluctant or to be entirely in the L1.

6. Summary and conclusions

The aims of this article were threefold: in the first instance we experiment with a pragmatic, participatory approach to the classification of turns. Analysing the number of speakers involved in a turn, and their interactive roles, we identified four turn types: individual turns (involving a sole speaker), cooperative turns (with shared responsibility), embedded turns (one or more secondary speakers contributing to a main speaker’s turn) and empty turns (when nobody takes the proffered turn).

We are looking for attributes which may contribute to an advantage for CLIL learners and we posited that more collaborative interaction might account for such an advantage. Cooperative and embedded turns were interpreted as signals of speaker collaboration and when CLIL and MS sub-samples were compared, it emerged that CLIL learners were involved in almost four times more cooperative turns than their MS counterparts and that they were embedding nearly twice as often.

The next step lay in exploring the nature of the collaboration. Individual and empty turns were not considered relevant to the question in hand; we looked at embedding and cooperation in more detail. Given the difficulties involved in ascribing single functions to speaker contributions, and therefore the impossibility of compiling quantitative lists, qualitative analysis was necessary here. This analysis found that not only were the CLIL learners collaborating more, they were also collaborating more effectively.

CLIL learners provide mutual interactive, linguistic and affective support through embedding and they demonstrated greater engagement through both more and more extended cooperative constructions. Regarding cooperation we were able to posit links between competence levels and types of cooperative turn: Expansion and Modulation were only found amongst the more able CLIL learners. This reinforces the idea that greater competence will result in improved interaction.

In addition, CLIL learners were collaborating more frequently in the L2. While MS L1 collaboration helps to justify the functional classification proposed, it also evidences lower levels of L2 competence. These findings throw up a vital question, and one which surely merits further investigation: how can we account for the fact that MS learners are collaborating less even when L1 use is factored into the equation? It might be because the CLIL learners are actively employing enhanced interactive collaboration as a means to improve L2 talk, in which case we have confirmed the idea that collaborative interaction can account for a CLIL L2 differential. Nonetheless, it might also prove to be the case that CLIL learners are becoming better communicators all-round – even in their L1. In order to explore this hypothesis, research would need to describe CLIL learners interacting, in a similar context, in their L1.

In closing we should acknowledge that CLIL implies multiple possibilities in classroom praxis. There is no CLIL method, only a CLIL approach. In part we can probably ascribe the CLIL advantage here described to the increase in L2 provision that the approach implies. Yet other factors are bound to contribute. Teacher and student questionnaires revealed that there was more team-teaching and more pair and group work in the CLIL classrooms in the Andalusian Bilingual Sections, and this is also likely to play a significant role in the development of
interactive collaboration. This in turn suggests that the potential for improved interaction may not be restricted to the bilingual classroom.

Notes

References


Appendix 1. Transcription symbols

*Palabras en itálicos* L1 output ((translated in double brackets))
(xx) off-record contributions and asides (unintelligible)
[ ] beginning of overlapping talk
[ ] end of overlapping talk (not always relevant)
<word> spoken more slowly than surrounding text
>word< spoken more quickly than surrounding text
= latching
– cut-off point
(.) . micropause (less than 1 second)
. . pauses measured in seconds (1–3 seconds)
(4) . pauses measured in seconds (4 seconds and above)
: . lengthened syllables (number of colons indicates length)
((giggle)) transcriber’s descriptions
BIG sentence stress (only indicated when deemed relevant)
fanTAStic word stress (only indicated when deemed relevant)
° soft
? marked interrogative intonation – rising
¡ an affirmative (checking) question tag: prosodically conveyed
with a gentle rising tone – not as strong as a full interrogative
£ suppressed laughter
® unsuppressed laughter
! emphatic
.hh . inhale (number of h signals length)
hh . exhale