1. Introduction: Characterizing CLIL

Content and Language Integrated Learning, generally known as CLIL, is a European educational approach by means of which a content or non-language subject is taught through a language other than the students’ mother tongue. Even though CLIL instruction can be undertaken in any language, English is the most popular target language in the European context. It is precisely because of this that Dalton-Puffer, Nikula and Smit (2010) wonder whether it would be more appropriate to use the acronym CEIL (Content and English Integrated Learning) rather than CLIL (Content and Language Integrated Learning). As Graddol (2001) and Juan-Garau (2008) point out, the English language serves an increasingly important role as a European—and international—lingua franca. The empowering preponderance of English in our global world is due to the fact that this language dominates many prestigious domains and functions (Baker 2006), which reflects the symbolic value attached to English as a major global language (Nikula 2007).

CLIL is usually characterized as a dual-focused educational approach since its ultimate goal is the balanced learning of both the content subject and the language used as a means of instruction. Thus, CLIL is in line with “the targets formulated by the European Commission with regard to fostering foreign language
competence in European citizens” (Hüttner and Rieder-Bünemann 2010: 66), since it is considered a useful means to promote and enhance multilingualism in the European Union.

2. Linguistic outcomes of CLIL instruction

As for the linguistic outcomes fostered through CLIL instruction, the empirical research carried out to date seems to reveal that “there is a positive relationship [or correlation] between the amount of exposure to English and the linguistic outcomes [achieved by CLIL students]” (Ruiz de Zarobe 2010: 206). However, research results also indicate that some areas of language competence are more developed than others under CLIL conditions (Dalton-Puffer 2008).

As emphasized in many studies dealing with CLIL outcomes, “one of the linguistic aspects that shows significant gains [under CLIL conditions] is the lexicon” (Ruiz de Zarobe 2010: 201), which is usually the only linguistic aspect that is explicitly treated in CLIL lessons. Thus, CLIL students show greater lexical richness than non-CLIL students.

Similarly, some studies have shown that CLIL students present significantly better results in the receptive skills (i.e. listening and reading) than in the productive skills (i.e. speaking and writing). With regard to speaking, “CLIL students show lower inhibition levels when actually speaking the foreign language […] [and, as a result, they] seem to be more fluent and risk-taking […] than non-CLIL students” (Ruiz de Zarobe 2010: 193). While oral fluency and risk-taking seem to be favourably affected by CLIL instruction, pronunciation is considered to be “the dimension least affected” (Dalton-Puffer, Nikula and Smit 2010: 280) under CLIL conditions as “the pronunciation of CLIL pupils does not seem different from that of their [mainstream] peers” (Dalton-Puffer 2008: 144). Rallo-Fabra and Juan-Garau’s (2011) results in relation to CLIL learners’ perceived oral intelligibility and foreign accent point in the same direction.

As for writing, it is one of the aspects of foreign language competence where the effects of CLIL instruction are not clearly defined. While some studies (e.g. Ackerl 2007; Juan-Garau, Salazar-Noguera and Gené-Gil in press) highlight the positive impact of CLIL instruction on this productive skill, “others suggest [that] there are deficiencies both in CLIL and non-CLIL classrooms in relation to writing” (Ruiz de Zarobe 2010: 193). As regards morphology and syntactic complexity, students seem to benefit from CLIL instruction. However, there are areas that seem to remain unaffected under CLIL conditions, such as “the dimensions that reach beyond the sentence level, i.e. cohesion and coherence, discourse structuring, paragraphing, register awareness, genre and style” (Dalton-Puffer, Nikula and Smit 2010: 281).
Finally, CLIL instruction is also claimed to have the potential for developing not only CALP (Cognitive Academic Language Proficiency) but also BICS (Basic Interpersonal Communicative Skills) (Llinares, Morton and Whittaker 2012). While BICS “concern everyday, straightforward communication skills that are helped by contextual supports, [...] CALP is the [abstract or decontextualized] language required to understand academically demanding subject matter in a classroom” (Baker 2006: 185).

3. Negotiation and interaction in CLIL

Negotiation plays an essential role in interaction as a guarantee of mutual understanding among the interlocutors. Such is the importance of negotiation while interacting that speakers tend to make use of different strategies in order to overcome the communicative obstacles or difficulties they encounter and avoid any possible communication breakdown or misunderstanding (Mariotti 2006, 2007). These negotiation strategies can be understood as those conversational tactics or processes that inevitably emerge when a communication failure, impasse or breakdown is encountered (Foster and Ohta 2005). Speakers can resort to clarification requests, confirmation and comprehension checks (Foster and Ohta 2005; Mariotti 2006; Lyster 2007) as well as to recasts, explicit corrections, repetitions of error(s), elicitations, and metalinguistic clues (Lyster 2007; Llinares, Morton and Whittaker 2012). Other negotiation strategies are self-repairs, collaborative turns (Foster and Ohta 2005) and reformulations.

Conversational interaction is considered to be a key element in CLIL lessons (Fuentes and Hernández 2011), not only because a communicative teaching methodology is adopted, but also because classroom talk is used as a tool for learning through which content knowledge is built (Llinares, Morton and Whittaker 2012). Consequently, negotiation work can also be expected to play a crucial role in CLIL contexts as it needs to be taken into account that “studying subject matter in L2 [or a foreign language] requires handling of both horizontal (everyday) and vertical (scientific, technical —and we would add abstract—) types of concepts” (Llinares, Morton and Whittaker 2012: 64), an endeavour which can obviously be facilitated by resorting to some of the aforementioned negotiation strategies. Overall, it can be hypothesized that CLIL students will enhance their use of some of the aforementioned negotiation strategies so as to negotiate for meaning, guarantee mutual understanding in the classroom, and allow content learning to take place (Guazzieri 2008).

While classroom discourse in CLIL contexts (i.e. teacher-student interaction) has been investigated by some researchers (i.e. Dalton-Puffer 2007; Mariotti 2007;
Llinares, Morton and Whittaker 2012), the perspective of learner-learner interaction was adopted in the present study. Our main aim is to see whether the development of negotiation strategies, also referred to throughout the paper as negotiation moves or negotiation sequences, can be considered an outcome of CLIL instruction along with the other linguistic outcomes acknowledged in section 2. However, unlike most of the previous researchers on CLIL classroom discourse, rather than examine spoken interactions that took place between teachers and learners, we focused our attention on the negotiation moves employed by students while working in dyads.

4. Methodology

4.1. Participants

Two groups of students (N=42), aged between 12 and 14, were involved in the present study: a group of CLIL participants (N=21) and a comparable non-CLIL control group (N=21). They attended five different state-run secondary schools distributed across the island of Majorca. These schools participated in the European Sections Programme, the name given to the CLIL scheme in the Balearic Islands. While non-CLIL students were exposed to the English language in their regular EFL lessons for three hours a week, CLIL students received higher exposure to the foreign language. In addition to having three hours per week of formal English instruction, they were taught a content subject through the medium of English, either natural or social sciences, which implied that they were exposed to the target language for three extra hours. None of the participants received private tuition or additional English classes in order to complement formal instruction and none of them had been to an English-speaking country or had an English-speaking parent.

4.2. Nature of the task and data collection procedures

All participants involved in the study were asked to perform a role-play in pairs. It is generally claimed that this kind of dyadic interaction task “facilitate[s] the production of more —and more elaborate— output from the pupils” (Gassner and Maillat 2006: 19) than the so-called Initiation-Response-Feedback/Evaluation sequence (IRF or IRE), which is typical of teacher-centred classrooms (Lyster 2007). Even though there is still a predominance of the IRF sequence in classroom discourse (Dalton-Puffer 2007; Mariotti 2007), as it proves to be quite effective when verifying students’ comprehension of the subject matter, this interaction pattern has also been criticized because it often generates minimal responses from students (Lyster 2007). By contrast, role-plays are considered to allow “much
more opportunity for the subjects to display their conversational competence” (Maillat 2010: 49) as they usually imply less structured, more open and extended linguistic exchanges than those resulting from the IRF sequence.

All participants, CLIL or mainstream alike, were recorded performing the same role-play at three different data collection times: they were first recorded (T1) at the start of their second year of Compulsory Secondary Education (CSE), coinciding with the onset of the CLIL programme in their school; then, they were recorded (T2) towards the end of the same academic year; and, finally, they were recorded (T3) at the very end of their third year of CSE. Thus, the present study follows a longitudinal design encompassing a two-year span.

Hence, the present study analyses a corpus of audio-recorded and transcribed role-plays performed in dyads. The nature of these role-plays allowed us to analyse the development of negotiating strategies over time because they involved interaction between two students (student A and student B). Each pair of students was given around two minutes to prepare the role-play in a test situation and then they were asked to perform it for about five minutes. They had to imagine that they were going on holiday to the United Kingdom together. However, student A and student B were given different plans about the kind of activities they could do there and, as a result, they had to discuss the possible advantages and disadvantages of the different options suggested in order to reach an agreement. For instance, while student A (STA) wanted to buy maps in order to orient him/herself in the English-speaking country, student B (STB) had to give reasons to justify that s/he preferred a guidebook instead.

4.3. Negotiation strategies

Students can make use of different negotiation strategies while interacting in order to prevent communicative breakdowns and reach mutual understanding. In the present study we considered the following 11 measures identified by Lyster (2007):

- **Self-repairs** or **self-initiated repairs** refer to those instances of self-correction of a given item in an utterance. While self-repairs may be induced, i.e. they may appear as a response to a previous signal (e.g. a repetition) by another interlocutor, self-initiated repairs do not emerge as a result of a previous prompt but rather from the speaker’s personal initiative.

- **Reformulations** or **false starts** are alternative utterances that immediately follow an initial non-target-like utterance within the same turn.

- **Clarification requests** are phrases such as *Pardon?*, *Sorry?* or *What?* that are used in order to show that the previous utterance was misunderstood or that it
is incorrect in some way. They signal that a repetition or a reformulation of a given message is required.

*Comprehension checks* are aimed at checking comprehension and are normally conveyed by phrases such as *Do you understand?*

*Confirmation checks* are “intended to confirm or disconfirm the veracity of [...] a given message” (Lyster 2007: 96).

*Recasts* imply a reformulation of all or part of a learner’s utterance minus the error(s). Thus, they have an implicit and unobtrusive corrective function.

*Explicit corrections* imply the provision of the correct form as well as a clear indication that what the learner had said was incorrect. E.g. *You should say...*

*Repetition of error(s)* involves the repetition of the erroneous utterance by the interlocutor, who adjusts the intonation so as to highlight the non-target form.

*Elicitation* refers to the techniques used by teachers in order to directly elicit correct forms from students. E.g. *How do we say X (word) in Y (language)?* *Metalinguistic clues* contain comments, information, or questions related to the correctness of the learner’s utterance but without explicitly providing him/her with the correct form. E.g. *Do we say X (word) in Y (language)?, We don’t say X (word) in Y (language),* or simply *No.*

*Collaborative turns/talk* imply that a student helps another learner by providing him/her with the word(s) or information s/he needs in order to successfully complete a given utterance.

4.4. Data analysis

All of the digitized speech was transcribed and converted into text following CLAN conventions. Then, a process of identification and codification of negotiation strategies followed in order to assign the examples of the different negotiation moves employed by participants while performing their role-plays at T1, T2 and T3 to one of the aforementioned categories (see section 4.3.). Mean scores were first calculated for the sum of all the different strategies considered (i.e. repair strategies and other negotiation moves) and then separately for repair strategies and for the remaining negotiation strategies at the three data collection times. These mean scores were first submitted to a repeated-measures ANOVA (Analysis of Variance) with time as the independent variable and subsequently post-hoc comparisons were carried out using the Tukey technique.
5. Results

The findings of the present study are presented next. In section 5.1, the results obtained for the use of repair strategies, which include self-repairs, on the one hand (5.1.1), and reformulations or false starts, on the other (5.1.2), are shown. Then, the use of the remaining negotiation strategies under consideration (i.e. recasts, explicit corrections, clarification requests, collaborative turns, confirmation and comprehension checks, repetitions of error(s), metalinguistic clues, and elicitations) is presented in section 5.2.

Overall, the results of the present study point towards a tendency for CLIL students to make use of a higher number of instances and of a wider repertoire of negotiation strategies than their non-CLIL counterparts at all three data collection times. None of the ANOVA and post-hoc comparisons carried out produced statistically significant differences between data collection times or groups (CLIL and non-CLIL), although two of them, the mean scores obtained at T1 for the sum of all measures considered (p=0.052) and for the remaining negotiation strategies (p=0.077), were quite close to significance.

5.1. Repair strategies

Most students made use of repair strategies without having previously received any prompt by the interviewer or the other interlocutor involved in the role-play. In other words, “the producer of the talk containing the trouble source [was] also the person who [indicated] that trouble [was] being experienced” (Buckwalter 2001: 385) and who tried to solve it by making use of a repair sequence. Thus, self-initiated repairs and reformulations were the most frequent negotiation strategies found in the data analysed. However, self-initiated repairs were even more common than reformulations at all three data collection times.

5.1.1. Self-repair

This strategy was employed both by CLIL and non-CLIL participants. As illustrated in Table 1, both groups self-corrected on different levels (i.e. grammar, vocabulary and phonology) in order to make themselves understood. The total average number of self-repair sequences uttered by CLIL students was slightly higher than that produced by their non-CLIL counterparts at each data collection time. Nevertheless, if we consider these results longitudinally, it can be seen that while non-CLIL students showed a little increase in the number of self-repairs used at T3 with respect to T1, CLIL students did not show such a clear development as they uttered exactly the same number of instances of self-repairs at these two data collection times.
As shown in Table 1 above, more than half of CLIL and non-CLIL students’ self-repairs at T1, T2 and T3 involved the lexicon, both content and function words. It was found that both CLIL and mainstream English learners made use of self-repair sequences when they realized that they had used either the wrong content or function word. Even though content words are the ones that carry the central meaning in a sentence or utterance, self-repair of function words (specifically, numbers and pronouns) was even more common than self-repair of content words for students in both groups and at all three data collection times except for CLIL students at T3.

It was found that CLIL and non-CLIL students resorted to self-initiated repairs when using numerals to talk of the price of transport they wanted to take or the cost of accommodation. In particular, they had difficulties when using numbers that sound similar but not identical. This is clearly illustrated in examples 1 and 2 below in the pairs *eighteen/eighty* and *eight/eighteen*, respectively:

**Example 1.** MARU (STA): By bus; I want to go by train because is more speed and I think is better although we pay eighteen, *eighty* euros. (CLIL, T3)

**Example 2.** AISE (STB): *Eh* although is better the train because is quickly and his price is eight, *eighteen* euros. (CLIL, T3)

Apart from numbers, self-repairs of function words also involved personal pronouns. As illustrated in example 3 below, STA self-repaired her utterance in order to replace the erroneous personal pronoun, *it*, with the appropriate one, *we*:

**Example 3.** SANI (STA): I think we can sleep in a hotel because it, *we* can sleep better [...]. (CLIL, T2)

As for self-repairs involving content words, they were employed both by CLIL and non-CLIL students. However, as illustrated in Table 1 above, they were more

<table>
<thead>
<tr>
<th></th>
<th>Pronunciation</th>
<th>Content words</th>
<th>Function words</th>
<th>Grammar</th>
<th>Total average</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>CLIL</td>
<td>0.238</td>
<td>0.190</td>
<td>0.380</td>
<td>0.238</td>
</tr>
<tr>
<td></td>
<td>NON-CLIL</td>
<td>0.142</td>
<td>0.095</td>
<td>0.571</td>
<td>0.000</td>
</tr>
<tr>
<td>T2</td>
<td>CLIL</td>
<td>0.190</td>
<td>0.238</td>
<td>0.380</td>
<td>0.285</td>
</tr>
<tr>
<td></td>
<td>NON-CLIL</td>
<td>0.095</td>
<td>0.238</td>
<td>0.523</td>
<td>0.142</td>
</tr>
<tr>
<td>T3</td>
<td>CLIL</td>
<td>0.000</td>
<td>0.428</td>
<td>0.380</td>
<td>0.238</td>
</tr>
<tr>
<td></td>
<td>NON-CLIL</td>
<td>0.142</td>
<td>0.142</td>
<td>0.571</td>
<td>0.047</td>
</tr>
</tbody>
</table>

**TABLE 1:** Total average of self-repair sequences employed both by CLIL and non-CLIL students at each data collection time and linguistic categories on which self-repair operated.
frequent in the CLIL data than in the non-CLIL data at T1 and T3. In example 4 below, for instance, the CLIL student resorted to self-repair in order to replace the incorrect noun, *hours*, with the correct one, *euros*. By doing this she was able to convey the right information:

Example 4. AIRO (STA): Well, we can go to the hotel that cost fifteen *euros*. (CLIL, T3)

In examples 5 and 6 below, however, both the non-CLIL and the CLIL student had difficulties with word formation processes that they could not quite overcome. More specifically, they used the self-repair strategy to reformulate their utterances unsuccessfully, which evidenced their problems with comparative forms. In example 5, the non-CLIL student dropped the derivational morpheme *-ly* from the adverb *slowly*, which was not appropriate in this context, and was thus left with the adjective *slow* instead of the comparative form *slower* that was required. In example 6, the CLIL participant added the same derivational morpheme (i.e. *-ly*) to the adjective *quiet* and hence turned it into the adverb *quietly*, again failing to provide the comparative form needed, *quieter*. The fact that both students hesitated about the word category (i.e. adverb vs. adjective) to be used in each specific context was reflected in their use of repair sequences.

Example 5. TODU (STA): [...] but bus is more slowly, *slow* than train. (non-CLIL, T3)
Example 6. AIRO (STA): Yeah, but in the bus is more quiet, *quietly*. (CLIL, T2)

Even though more than half of the self-repair sequences identified concerned the lexical choices made by both CLIL and non-CLIL students, self-repair of grammar and pronunciation was also found in the data set. As shown in Table 1 above, CLIL students self-repaired grammar slightly more frequently than their non-CLIL counterparts. Students were found to resort to self-initiated repair when they realized that they had used the wrong verbal form or tense. Thus, while in example 7 below the non-CLIL student, TODU, self-corrected his utterance after noticing that he should have used the affirmative form *could* rather than the negative form *couldn’t*, in example 8 the CLIL student, MAVA, resorted to self-initiated repair so as to correct the verbal tense of his utterance:

Example 7. TODU (STB): Eh@i, no because we couldn’t, *could* buy guidebooks. (non-CLIL, T2)
Example 8. MAVA (STA): Eh@i, I go, *will go* to the Tower of London and the London Eyc. (CLIL, T2)

Students in both groups were also found to self-correct pronunciation mistakes. While at T1 and T2 the average number of self-repairs of pronunciation was higher for CLIL students than for mainstream English learners, at T3 non-CLIL students
were the only ones who made use of this type of self-repair sequence (see Table 1). The pronunciation of the word *guidebook*, which appeared in the task they were given, was found to pose difficulties for non-CLIL students not only at T1 but also at T3. Although non-CLIL students did not always manage to self-correct their pronunciation mistakes successfully, in the instance provided below it can be seen that STB satisfactorily self-repaired the pronunciation mistake uttered previously:

Example 9. ARRI (STB): Ok, we need a guide /gɪd/, guidebook /ˈgaɪdbʊk/ for think about the eh@i most popular cities and. (non-CLIL, T3)

Similarly, the pronunciation of the words *expensive*, *buy* and *souvenirs* was also found to be problematic or confusing for CLIL students at T1 and T2. However, they were able to self-correct in all the examples found in the data:

Example 10. JOCA (STB): Eh@i, I prefer eh@i go shopping souvenirs /ˈsauvənɪrz/, souvenirs /ˈsʊvənɪrz/. (CLIL, T1)
Example 11. ANCA (STA): Eh@i we’re going to go to England, I think we could buy /bʊɪ/, buy /bɑɪ/ a map. (CLIL, T2)

Even though in all previous instances both CLIL and non-CLIL students attempted to self-correct their utterances in the target language, sometimes students from both groups (CLIL and non-CLIL) made use of their mother tongue when self-correcting. Thus, in example 12 below, TODU code-switched to Spanish/Catalan as he did not know how to say *barato* in English. By so doing, he was able to express what he wanted to, but only in the mother tongue:

Example 12. TODU (STB): Eh@i, we we go eh@i bed and breakfast because is more expensive, is more *barato* /ˈbɑːrətəʊ/ (non-CLIL, T2)

5.1.2. Reformulations or false starts

As in the case of self-initiated repair sequences, reformulations were employed by students in both groups at T1, T2 and T3. The average number of reformulations uttered by CLIL students at all three data collection times was found to be higher than that produced by their non-CLIL counterparts. However, if we look at these results longitudinally, it can be seen that students in both groups decreased their use of reformulations at T3 with respect to T1 (see Table 2).

<table>
<thead>
<tr>
<th>REFORMULATIONS</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLIL</td>
<td>0.619</td>
<td>0.476</td>
<td>0.476</td>
</tr>
<tr>
<td>NON-CLIL</td>
<td>0.190</td>
<td>0.190</td>
<td>0.142</td>
</tr>
</tbody>
</table>

TABLE 2: Average number of reformulations uttered by CLIL and non-CLIL students at T1, T2 and T3.
There was a tendency for students in both groups to reformulate their sentences by using the target language rather than resorting to their mother tongue. In example 13, MABO anticipated the use of a repair sequence, in this case a reformulation, through the use of the word no, indicating that she was not content with her previous utterance, before the reformulation took place. By contrast, in example 14, it was the repetition of I’m not and in that anticipated the use of SANI’s reformulation, as it clearly indicated that this learner was unable to successfully complete the utterance without starting it again:

Example 13. MABO (STB): Bueno@fp [well] eh@i because um@i go bé@fp [well] um@i a hotel very, no@fp [no], because why go hotel twenty-five dollars? (CLIL, T1)
Example 14. SANI (STA): I’m not I’m not eh@i in in, I don’t think the same [...]. (CLIL, T3)

5.2. Other negotiation strategies

Apart from self-initiated repairs and reformulations, which are two different repair strategies, CLIL and non-CLIL students employed other negotiation moves only very occasionally: recasts, explicit corrections, clarification requests, confirmation checks and collaborative turns (see Table 3). We were not able to find many instances of them in our data because these negotiation strategies tend to be used by teachers rather than learners in second language classrooms (Lyster 2007; Llinares, Morton and Whittaker 2012). Interviewers did not generally intervene while participants were performing their respective role-plays. On those occasions when they did intervene, they resorted to some of these negotiation moves. However, these examples have not been taken into consideration since our study focuses on learner-learner interaction rather than on teacher-student discourse. No instances of comprehension checks, repetitions of error(s), metalinguistic clues and elicitations were found in the data analysed.

In spite of their low occurrence in our data, it is important to note that, whenever these strategies were employed, CLIL students resorted to them more frequently than their non-CLIL counterparts. As illustrated in Table 3 above, and unlike self-repair sequences and reformulations, which were produced at T1, T2 and T3, these other negotiation moves were not distributed over the three data collection times. Most of the instances were produced at T1 and others at T3.
5.2.1. Recasts and explicit corrections

The following linguistic exchange between ISGR and MARU (example 15) includes an example of recast as STB implicitly and unobtrusively provides STA with the preposition that must precede the noun bus. In other words, MARU is the one who noticed STA’s trouble source and also the one who carried out the repair. Thus, we have here an other-initiated other-completed repair trajectory as MARU both initiated and provided or completed the repair (Mariotti 2007: 50). As the recast was immediately followed by a topic continuation move, we were not able to check whether ISGR incorporated the recast (by bus) in her uptake:

Example 15. ISGR (STA): I go a@fp to Edinburgh eh@i bus.
MARU (STB): By bus; I want to go by train because is more speed and I think is better eh@i aunque@fp although we pay eighteen, eighty euros.

(CLIL, T3)

Example 16 below may be considered a kind of explicit correction in spite of the fact that STB’s intervention did not include any clear indication that what STA had uttered was incorrect. Instead, STB only provided STA with the correct noun

<table>
<thead>
<tr>
<th>OTHER NEGOTIATION MOVES</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECASTS</td>
<td>CLIL 0.000</td>
<td>NON-CLIL 0.000</td>
<td>0.047</td>
</tr>
<tr>
<td></td>
<td>CLIL 0.000</td>
<td>NON-CLIL 0.000</td>
<td>0.047</td>
</tr>
<tr>
<td>EXPLICIT S CORRECTION</td>
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<td>NON-CLIL 0.000</td>
<td>0.047</td>
</tr>
<tr>
<td></td>
<td>CLIL 0.000</td>
<td>NON-CLIL 0.000</td>
<td>0.047</td>
</tr>
<tr>
<td>CLARIFICATION REQUESTS</td>
<td>CLIL 0.190</td>
<td>NON-CLIL 0.047</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>CLIL 0.047</td>
<td>NON-CLIL 0.000</td>
<td>0.047</td>
</tr>
<tr>
<td>COLLABORATIVE TURNS</td>
<td>CLIL 0.047</td>
<td>NON-CLIL 0.000</td>
<td>0.095</td>
</tr>
<tr>
<td></td>
<td>CLIL 0.000</td>
<td>NON-CLIL 0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>CONFIRMATION CHECKS</td>
<td>CLIL 0.047</td>
<td>NON-CLIL 0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>CLIL 0.000</td>
<td>NON-CLIL 0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>COMPREHENSION CHECKS</td>
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<td>NON-CLIL 0.000</td>
<td>0.000</td>
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<tr>
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<td>NON-CLIL 0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>REPETITION OF ERROR(S)</td>
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<td>NON-CLIL 0.000</td>
<td>0.000</td>
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<tr>
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<td>CLIL 0.000</td>
<td>NON-CLIL 0.000</td>
<td>0.000</td>
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<td>METALINGUISTIC CLUES</td>
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<td>NON-CLIL 0.000</td>
<td>0.000</td>
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<td></td>
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<td>NON-CLIL 0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>ELICITATIONS</td>
<td>CLIL 0.000</td>
<td>NON-CLIL 0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>CLIL 0.000</td>
<td>NON-CLIL 0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>TOTAL AVERAGE</td>
<td>CLIL 0.285</td>
<td>NON-CLIL 0.047</td>
<td>0.190</td>
</tr>
<tr>
<td></td>
<td>CLIL 0.047</td>
<td>NON-CLIL 0.000</td>
<td>0.047</td>
</tr>
</tbody>
</table>

TABLE 3: Average number of other negotiation moves considered and the total average at T1, T2, T3.
phrase (*The bus*) by repeating it twice. Thus, apparently it was STB’s repetition that led to STA’s induced repair:

**Example 16.** MARA (STA): No, ch@i the train is.
ERME (STB): **The bus, the bus.**
MARA (STA): The bus is més@fp {more} barato@fp {cheap}.

(CLIL, T3)

5.2.2. Clarification requests

CLIL and non-CLIL students also resorted to clarification requests when they needed their partner to repeat a previous utterance which was not fully understood. As illustrated in example 17 below, the clarification request uttered by STA led to STB’s reformulation of her previous utterance. Thus, we are in front of an other-initiated self-repair sequence (Buckwalter 2001) as “repair [was] carried out by the speaker who produce[d] the trouble source [(AICU)] but it [was] initiated by the recipient [(ANCA)]” (Mariotti 2007: 48) by means of a clarification request:

**Example 17.** AICU (STB): Eh@i, we go to a souvenir?
ANCA (STA): **What?**
AICU (STB): We go to buy souvenirs?

(CLIL, T1)

5.2.3. Collaborative talk

The linguistic exchange reproduced below (example 18) includes an example of collaborative talk. Following Mariotti’s (2007) and Buckwalter’s (2001) terminology, this would be an example of a self-initiated other-repair sequence as the speaker who provided the repair proper (STA) was not the one who signalled the problem (STB). In other words, STA assisted STB by providing her with the irregular comparative form *better* and, as a result, STB was able to complete the utterance successfully:

**Example 18.** AIRO (STA): Ok and we have to buy maps.
MABO (STB): Maps, but ch@i but guidebook is is com@fp es@fp diu@fp? {how do you say?}.
AIRO (STA): **Better.**
MABO (STB): Is better.

(CLIL, T3)

5.2.4. Confirmation check

The only instance of confirmation check found in the data is reported in example 19. The CLIL student asked a yes-no question (*To bus?*) with the aim of eliciting confirmation that he had understood STA’s utterance correctly:
Example 19. JOTO (STA): Eighty, eh@i, yes, yes eh@i but I think we are going to bus too.
JOBL (STB): To bus?
JOTO (STA): Yes.

(CLIL, T1)

6. Discussion

Going back to our initial research question, which aimed to investigate whether CLIL instruction had positive effects on the development of negotiation strategies, the results of the present study seem to indicate that, when compared to formal or conventional language instruction, this educational approach has the potential to affect the development of negotiation moves favourably. In spite of the fact that no statistically significant differences were reported, when the CLIL students’ performance was compared to that of non-CLIL students, it was found that they made use of a higher number of instances and of a wider variety of negotiation moves than their non-CLIL counterparts at each data collection time. This seems to suggest that, even though negotiation strategies are developed in formal language teaching as they may attenuate the linguistic obstacles students may encounter (Stohler 2006), they seem to be more satisfactorily developed in CLIL scenarios, where they play an essential role.

As Buckwalter (2001: 382) emphasizes, “[w]hen SLA [Second Language Acquisition] researchers have examined dialogic discourse in an L2 context, it has often been discourse produced between a learner and an expert [or teacher]” (e.g. Dalton-Puffer 2007; Mariotti 2007; Llinares, Morton and Whittaker 2012). However, in the present study a different perspective was adopted as we examined the negotiation moves that were employed in spoken interactions that took place between learners rather than between teachers and learners. Moreover, it can be claimed that the dialogic discourse analysed in our study is more similar to ordinary or natural conversation than to classroom or institutional talk in the sense that the power relationship between the conversational participants involved in the task was symmetrical. As highlighted by Mariotti (2007: 41), while one of the features of classroom speech is asymmetry between participants as teachers are in a higher position since they have “the right to evaluate the students’ spoken production”, ordinary conversation differs from classroom discourse because in this type of interaction “all participants have the equal right to engage in a wide range of discourse acts” (Mariotti 2007: 42). As we will see, it is important to take these aspects into consideration while reflecting on our results, but especially when dealing with those negotiation strategies that are aimed at promoting attention to form.
Eleven negotiation strategies were considered in the present study: self-repairs, reformulations, explicit corrections, clarification requests, confirmation and comprehension checks, collaborative turns, repetition of error(s), metalinguistic clues and elicitations (Lyster 2007). According to Buckwalter (2001) and Mariotti (2007), self-repairs, reformulations and collaborative turns would be examples of self-initiated negotiation moves as they are repair sequences in which the speaker who produces the trouble is also the one who acknowledges that a communication problem is being experienced. By contrast, the remaining eight negotiation moves considered would be instances of other-initiated negotiation moves as the listener or the recipient is the one who identifies the trouble source and also the person who initiates the repair trajectory (Buckwalter 2001; Mariotti 2007).

Thus, while most of the other-initiated negotiation moves analysed have a pedagogic or evaluative function (Llinares, Morton and Whittaker 2012) and are almost exclusive of educational contexts (Mariotti 2007), self-initiated negotiation strategies are considered to have an interactional or conversational function as they reflect “the type of repair that happens in everyday conversation” (Llinares, Morton and Whittaker 2012: 90). Once again, it is important to bear this in mind when reflecting on our findings because, as previously mentioned, the task students were asked to perform led to a kind of dialogic discourse that was more similar to ordinary conversation than to classroom talk.

The results of the present study have shown that at all three data collection times students in both groups resorted to repair strategies (i.e. self-repairs and reformulations) more frequently than to the other remaining negotiation moves in order to negotiate for meaning and solve comprehension problems. These findings are in line with the ones reported by Buckwalter (2001) and Foster and Ohta (2005) since in the present study there was also a preference for self-initiated repair sequences over other-initiated repair sequences and for self-correction over other-correction. This interactional behaviour is quite predictable if we take into account Llinares, Morton and Whittaker’s (2012) assertion that self-initiated repair trajectories are the ones that predominate in natural conversation.

As reported in section 5, even though students in both groups self-repaired on different levels (i.e. grammar, vocabulary and phonology), more often than not those self-corrections involved the lexicon, which comprised both content and function words. Although mainstream English learners might be expected to self-correct problems that have to do with accuracy and formal precision due to the fact that conventional language teaching focuses on form or on language itself (Lasagabaster and Sierra 2009), the interactional behaviour reported here is not surprising given that the role-play was a meaning-oriented activity. As Foster and Ohta (2005: 48) emphasize, “communication breakdowns are more likely to be
due to problems with lexis than with morphosyntax [...] [In fact, m]issing, incorrect or unrecognized morphemes marking tense, case, or gender do not necessarily lead to communication failure in the way that missing, incorrect, or unknown words do”. However, the fact that CLIL students were found to self-repair grammar more frequently than their non-CLIL counterparts seems to support the assumption that “negotiation of meaning can promote focus on form [...] during a generally meaning-oriented activity” (Mariotti 2007: 62).

Although students in both groups resorted to repair strategies (i.e. self-repairs and reformulations) at all three data collection times, CLIL students were reported to outperform non-CLIL students with respect to the total number of instances of repair strategies produced at each data collection time. One reason for this phenomenon is that CLIL students’ turns were often longer than the ones by non-CLIL students. While CLIL students normally justified their respective choices by means of subordinate clauses introduced by because, non-CLIL students sometimes simply uttered statements without providing any justification for their alternatives. Moreover, on some occasions non-CLIL students’ turns were simply formed by approval markers, such as Ok or Yes, or by a single content word, such as Go or Bus. Students are unlikely to have to repair a given utterance when it simply involves a single word or an approval marker (Mariotti 2007), but they are more likely to resort to self-initiated repair moves when uttering longer and more complex utterances syntactically speaking.

Regarding the remaining negotiation moves considered (i.e. recasts, explicit corrections, clarification requests, confirmation and comprehension checks, collaborative turns, repetition of errors(s), metalinguistic clues and elicitations), we were not able to find many instances of them in the data analysed. In fact, no instances of comprehension checks, repetition of error(s), metalinguistic clues and elicitations were found. Two reasons may explain this. To start with, all of these negotiation sequences except for collaborative turns are examples of other-initiated repair moves and two of them (i.e. recasts and explicit corrections) not only involve other-initiated repair but also other-completed repair. Thus, these findings are quite predictable if we take into account the already mentioned fact that natural talk is more commonly characterized by self-initiated repair than by other-initiated repair (Llinares, Morton and Whittaker 2012). Moreover, as emphasized by Mariotti (2007: 50), other-initiated other-completed repair, as in the case of recasts and explicit corrections, “is a dispreferred activity in natural conversation because it is considered a face threatening act and, in general, can be embarrassing for both participants”. In fact, Lyster (2007) and Llinares, Morton and Whittaker (2012) claim that recasts, explicit corrections, clarification requests, confirmation and comprehension checks, repetition of error(s), metalinguistic clues and
elicitations tend to be used by teachers rather than learners in second language classrooms as they have a pedagogic, didactic or corrective function.

Thus, taking into account the evaluative function, probably implying asymmetry of power between participants, of other-initiated and other-completed negotiation moves, it can be inferred that both CLIL and non-CLIL students tended to avoid using these moves because, when employing them, one of the students was ‘forced’ to take the role of the teacher as s/he had to evaluate the spoken production of his or her partner in the role-play. We assume that this interactional behaviour is not very frequent in interactions where there is symmetry of power between its conversational participants, as was the case in the task they were asked to carry out.

The other main reason for the scarce occurrence of these negotiation moves (i.e. recasts, explicit corrections, clarification requests, repetition of error(s), metalinguistic clues and elicitations) in the data analysed is that, while the role-play was basically a meaning-oriented activity, almost all of these strategies are defined as negotiation moves aimed at negotiating form (i.e. accuracy and formal precision) rather than meaning or message comprehensibility (Lyster 2007; Mariotti 2007; Llinares, Morton and Whittaker 2012). Moreover, the absence of instances of repetition of error(s), metalinguistic clues and elicitations in the CLIL data may also be strengthened by the fact that CLIL students are not usually exposed to these types of corrective feedback as they are reported to be not very frequent in CLIL classroom discourse (Llinares, Morton and Whittaker 2012).

CLIL students were found to produce more instances of these other negotiation moves than their non-CLIL counterparts at T1 and T3. This suggests that they were actively involved in the role-play. It needs to be pointed out that, while the use of self-repairs and reformulations does not necessarily imply interaction as a student may self-correct him/herself while uttering a given utterance without acknowledging his/her partner, the other negotiation strategies observed in the data can only emerge as a result of interaction between two or more students as all of them are either other-initiated or other-completed repair trajectories. However, it is important to notice that when CLIL students resorted to some of these other negotiation strategies they tended to opt for those that allowed them to negotiate for meaning rather than form. Thus, the ones that were most frequently used were collaborative turns and clarification requests.

To conclude, even though CLIL students were reported to employ fewer negotiation strategies at T3 with respect to T1, which might have been conditioned by the fact that at T3 they had increased their L2 competence and were quite familiarized with the task, the overall findings showed a clear tendency, albeit non-significant, for them to produce a higher number of instances and to use a wider variety of negotiation moves than their non-CLIL counterparts. Although these
results might be partially due to the claims that CLIL students are reported to be more motivated (Lasagabaster 2011) and to hold “significantly more positive attitudes towards English as a FL than those in EFL classes” (Lasagabaster and Sierra 2009: 13), they might be more directly related to the fact that, while mainstream English students are language learners, CLIL students are mainly language users (Nikula 2007). Compared to mainstream learners, CLIL students generally adopt a more active role as questioners and commentators, possibly reflecting the fact that CLIL teachers opt for a more dialogic style when teaching in the foreign language, hence providing students with more opportunities to participate verbally in the construction of classroom discourse (Mariotti 2007; Nikula 2010). Thus, by resorting to these different negotiation strategies, CLIL students are able to understand and make sense of the content of the non-language subject matter they are taught through a language other than their mother tongue.

7. Conclusion

The results of the present study appear to indicate that the development of negotiation strategies can be considered another positive outcome of CLIL instruction together with the ones that were mentioned in section 2. Although differences between groups did not reach statistical significance, students involved in the CLIL programme were not only found to make use of a higher number of instances of negotiation strategies but also to display a wider range of negotiation sequences than their non-CLIL counterparts. Thus, CLIL instruction appears to complement formal language teaching as far as the development of negotiation strategies is concerned.

Notes

1. Our gratitude goes to the Spanish Ministry of Economy and Competitiveness for its funding (FFI-2010-21483-CO2-01/02) and to the competitive research group ALLENCAM (SGR 2005-01086/2009-140). Thanks are also due to all the learners and teachers who so kindly participated in data collection sessions.

2. Transcription conventions: all examples are introduced by a code consisting of four capital letters which allow researchers to identify students while preserving their anonymity; @i has been used to indicate that the speaker resorts to a non-lexical filler such as eh or um, while @fp has been employed when students make use of either a Catalan or Spanish word.
Works cited


Received: 14 June 2013
Accepted: 30 September 2013