From "*This is impossible*" to "*I will make the standard higher*": A close look at interaction in the CLIL classroom

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This paper aims to explore the complexities of students' interaction in a collaborative learning task set within a CLIL unit in the EFL classroom. By way of illustration, a sample from a 4th year classroom grade in a secondary school of Catalonia has been collected. The paper examines, through the students' outcome, the impact of cooperative learning in a content-rich information swap task and discusses the role of content and language integrated learning in the classroom. This paper concludes with several implications for research and practice.

Introduction

Interaction in the Content and Language Integrated Learning (CLIL) classroom has been proven to be a key element both as a medium for the achievement of the goal and the goal itself. Specifically, interaction among students involves numerous interesting implications for empirical research. This paper's focus is set on how students process the content in an information swap task in an English as a Foreign Language (EFL) classroom though cooperative work. This study draws on the research conducted by several members of the CLIL-SI collaborative research team. Studies like Corredera (2010), Escobar and Nussbaum (2008) and Horrillo (2009) analyze the complexities of the jigsaw task, ranging from its design to the qualitative and quantitative approaches taken to analyze said task. The research described here has been carried out by examining the students' oral productions from a qualitative perspective through content analysis, supported by conversation analysis., The analysis looks at data obtained from the audio files recorded during two sessions and the detailed transcripts of a set of excerpts taken from these recordings.

Escobar and Nussbaum (2008) explore the learning processes in collaborative tasks during CLIL sessions by analysing the recordings of several student dyads during the task. They focus their research on the strategies used by students which are common in all groups, such as the students' hierarchical vision of the teacher's instructions and

their strategies to construct the conversation together. In further research on collaborative task within the same sequence, Evnitskaya and Aceros (2008) focus on the characteristics of a 'didactical contract between students' and its impact on their foreign language learning and Horrillo (2009) focuses on the amount of time that students spend on-task and off-task during cooperative activities. Using previous research as the foundation for further exploration, this study explores the complexities of students' interaction in a collaborative, information-swapping task

Theoretical framework

The issue of content and language integrated learning (CLIL) has become a significant area of study among linguists and educators. Described by Dalton-Puffer (2007) as a dual-focus educational context where a foreign language (English, in this case) is used as a medium of instruction in content subjects, the label CLIL has been thoroughly studied for its benefits for learners striving towards a specific target language competence. Marsh, Marshland and Stenberg (2001) claim a set of benefits that CLIL entails for students. For instance, CLIL is claimed to be beneficial for students when introduced as a tool for promoting plurilingualism in education and beyond, thus supporting linguistic diversity. It is also considered as a helpful tool for the inclusion of a broad range of learners, beyond specifically privileged minority groups. Furthermore, it is argued that CLIL enhances the development of learning strategies and skills, which are related to broader cognitive applications. Regarding assessment, the fact that students are assessed not only on language but also on content is also claimed to be beneficial for students, by allowing students to show the breadth of their knowledge.

An essential part of CLIL is collaborative learning. Collaborative learning occurs when two or more people attempt to learn something together (Dillenbourg 1999). It encompasses a set of methodologies and environments in which learners share a common task where each individual depends on and is accountable to each other. Collaborative learning is heavily rooted in Dewey's views (1938), which implies that learners do not learn in isolation, but by being part of the surrounding community and the world as a whole, and Vygotsky's (1978) views, which imply that the individual's cognitive system is a result of communication in social groups and cannot be separated from social life, as described in his theory of the *zone of proximal development* (ZPD),

which he posited as being "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86).

In relation to collaborative learning, cooperative learning refers primarily to an array of highly structured goals and techniques for learning (Oxford 1997). It can be defined as a teaching arrangement in which small, heterogeneous groups of students work together to achieve a common goal. Students encourage and support each other, assume responsibility for their own and each other's learning, employ group related social skills and evaluate the group's progress (Dotson 2001). The general consensus is that cooperative learning can and usually does result in positive student outcomes in all domains (Johnson & Johnson 1998).

Kagan and Kagan (1992) describe four basic principles of cooperative learning which were further developed by Brody and Davidson (1998): *Positive interdependence* occurs when gains of individuals and teams correlate positively. *Individual accountability* requires that all students are actively involved and become responsible for their own learning. This implies that each student is in charge of a share of the work and each share is key for the success of the group. *Equal participation* takes place when all students have the opportunity to contribute and participate actively in their teams. Finally, *Simultaneous interaction* refers to the fact that in cooperative learning all the students interact during the period of time that the activity lasts.

According to Kagan (1994), grouping is essential to cooperative learning. The most widely used team formation is that of heterogeneous teams. Furthermore, there is strong evidence that the motivation of students is boosted when group grades and team rewards are introduced in the activity (Slavin 1990). Pica, Lincoln-Porter, Paninos and Linnell (1996) point out that:

> learners working together in groups were found to display greater motivation, more initiative, and less anxiety regarding their learning, they were found to produce more language. It also contained a greater number of features believed to assist message comprehensibility and thereby to serve as input for L2 learning. (p. 60)

All of the above is closely tied to the notion of socio-interactionism, where language and learning processes are understood as social phenomena and learning is

acknowledged to occur in and through interaction. Thus these factors also play a big role in the analysis in order to understand the development of students' interaction. Pekarek Doehler and Ziegler (2007) point out that "language learning is understood as learning to deal with locally organized and sequentially structured discourse activities and hence rooted in the learner's participation structures or sequencing activities" (p. 85).

For educators following Vygotskian ideas, the teacher acts as a facilitator and provider of assistance. Teachers facilitate the students' learning by providing any and all forms of assistance that might help students develop their language and socio-cultural skills. In the second language (L2) classroom, this is interpreted as the teacher providing hints or clues, praising, reminding or reviewing anything that L2 students need at a certain stage of an activity. When the learners need assistance, the teacher provides *scaffolding* to ensure that the learner's constructs grow more complex. The term *scaffolding* is first described in Wood, Bruner and Ross (1976) as a metaphor to describe the type of assistance offered by a teacher or peer to support the student's learning. Inevitably, the type of interaction that takes place in the classroom provides key input for research.

One dimension of interaction which can never be segmented from the notion of learning as a social practice is the conception of the students' face and how it mutates as the task progresses. Under the light of politeness theory, Goffman (1967) introduces the concept of *face*, which Brown and Levinson (1987) further develop, describing it as "the public self-image that every member wants to claim for himself" (p. 61) and positing that interactants cooperate and assume each other's cooperation to maintain each other's face in interaction, even though that is not a norm or maxim. They also discern between *positive face* (an individual's desire to be liked, respected and appreciated by others and to have his actions highly considered) and *negative face* (an individual's basic claim to freedom of action and freedom from imposition).

The choice of conversation analysis as a methodological tool comes from its appropriateness for Second Language Acquisition research, as it can help explain the reflexive relationship between pedagogy and interaction and, therefore, how the learning process takes place through interaction (Seedhouse 2005).

Research context

The audio recordings were collected at Institut Garona[1] in April 2010. Incidentally, this school is currently implementing a PELE (*Projecte Educatiu Llengües Estrangeres*) project, based on the use of a foreign language to work on the curriculum of content-based subjects. The main objective of this project is to improve the students' linguistic competence in EFL, by means of teaching curricular content (in this case Chemistry) in English. This involves working in a Content and Language Integrated Learning (CLIL) program. As extra help, the English Department counts on a Language Assistant who helps at the English and CLIL lessons of the centre.

The students who appear in the audio and video recordings belong to a 4th level of ESO inclusive group, which corresponds to the last year of compulsory education in Spain. They are mostly 15-16 year old students, although some of them are nearly 18 because they are retaking the course. It is relevant to mention that this specific group is fairly heterogeneous. Some of the students attend extracurricular English classes and their level of competence by the majority ranges between an A1/A2 COE level - according to the Common European Framework nomenclature. On the other hand, some students show a fairly lower level of competence.

In order to preserve the students' privacy, all names appearing in this study have been substituted by pseudonyms. Transcriptions appearing in this study follow the CA symbol conventions referenced in Richards and Seedhouse (2007).

Activity implemented

The audio recordings correspond to an information swapping activity based on the principles of cooperative learning. This activity corresponded to a jigsaw activity, where not only the language, but also the content (Chemistry) posed an extra difficulty to students, who needed to work out content-specific tasks encrypted in L2. This option was chosen for pedagogical and also for circumstantial reasons, taking into account the CLIL program that the secondary school was implementing.

Jigsaw teaching was invented and named by Aronson, Bridgeman and Geffner (1978) and was originally designed as an answer from education to the social disarray that the racial mix had produced in Austin, Texas. This technique fostered collaborative work and learning among students from different communities and proved to be a

valuable contribution to socialization among students from different ethnic groups (Aronson *et al*. 1978). Both individual and group accountability are built into the process (Aronson 2008). In ESL classrooms, jigsaws are a four-skills approach, integrating reading, speaking, listening and writing.

The implementation of the activity followed the traditional model to a certain extent however, the conventional method to implement the task was not designed to take into account foreign language speakers. Therefore, an adaptation of that primary method has been chosen in order to exploit cooperative learning in the EFL classroom. Said adaptation draws on the *Rainforests* teaching sequence (CLIL-SI 2006) designed and experimented by the CLIL-SI collaborative research team. Divergences from the original model include: groups being heterogeneous and being formed by three to four students, lack of a leader figure, students dealing with three topics, permission to write down up to five words as reminders of their topic and students being allowed to take notes of their peer's explanation but not of their own topic.

The Rainforests sequence[2] (CLIL-SI 2006) was used as a basis for the proposal of instructions delivery, measures to adapt and structure the language, the presentation of the information in the experts' sheets, the modulation of the communicative and cognitive challenges, support for students, and the creation of the final quiz.

To implement the activity a group of two teachers, two student-teachers and one researcher split the group in two halves. The halves were formed by a group of 10 and 12 students, respectively, who worked in 3 teams which ranged from 3 to 4 members. Both half-groups were recorded. The recordings comprise the two sessions in which the activity took place. Students were asked not to stop the recorder during the whole sessions unless the teacher said so. The group chosen for this study is the one with 10 students. The ten students' groups were subsequently divided into four groups of three to four students. This will be called 'home groups' in the rest of the article.

These recordings became a key part for analysis in the data corpus. In order to cope with the complexities of the construction of the students' exchanges in this oral task, conversation analysis was chosen as an approach which allowed for a thorough analysis. Through conversation analysis, certain communication processes can reveal the mechanisms used by students to master their topic, exchange information and learn from their partners. Conversation analysis proves that conversation in the classroom

context differs greatly from ordinary conversation. Focusing on the sequentiality of code-switching and aspects of the conversation such as repair sequences and turn allocation, this study aims at identifying the possible regularities and patterns that students use to complete each stage of the activity.

After listening to the whole data corpus, data for analysis was selected according to the quality of the sound, the richness of the language exchanges and the students' profiles. Once the relevant data were selected, the focus was set on the response of two specific students who had different learning profiles and responded to different expectations. The table below shows the characterisation of the informants selected and the researchers' expectations on their behaviour when confronted with the activity.

Table 1. Principal informants tracked during the task

Main informants	Characterisation of the informant	Researchers' expectations on the informant
Pau	He is retaking 4th of ESO. Failed the previous English course. Low English level in reference to the rest of the group.	He will probably be off-task most of the time. He will probably not talk in English at all. He will probably give up.
Mar	Her ESL marks are remarkably high in reference to the average of the group.	She is likely to talk in English most of the time. She will probably be capable of succeeding in the activity.

In this task there are other informants as well, whose contributions are not primarily tracked but provide relevant information in the context of excerpts chosen. The following two tables show the characterisation of the rest of the expert and home group members.

Table 2. Other informants

Subsidiary informants	Characterisation of the informant	Researchers' expectations on the informant
Carles (expert and home group)	Retaking 4th of ESO. It appears he will most likely pass the course according to his marks. Low English level in reference to the rest of the group.	As he and Pau are both in the same expert and home groups, and also on good terms with each other, he will try to help Pau. He is not expected to use much English. He will probably give up.
Oscar (expert group)	Retaking 4th of ESO. He will not pass the course if he continues with his low marks. Prone to get distracted.	He might not talk in English at all. He will not try. He will remain silent and off-task most of the time.
Eva (home group)	High English competence level according to her marks. Very social but prone to behave disruptively.	She is considered to be capable of succeeding in the activity but she might not as she will be off-task most of the time. She will talk in English often.
Laia (home group)	Average English level in reference to the rest of the group. Very respectful to teachers and classmates.	She is expected to try hard to succeed in the activity. She will struggle to talk in English. She will help her team mates.

Objectives and Research Questions

Cooperative learning has been traditionally used in the classroom to learn content (Slavin 1990). However, the L2 teacher's approach opens a new perspective, using this approach to attain language goals through content. This approach can be confusing for students, who in the traditional teacher-led lessons have the continuous input of the teacher. This study focuses on the use of cooperative learning in an EFL classroom and its impact on students, observing how they negotiate and cope with the new information through team work. To achieve these goals, this study poses the following research questions:

- Does this activity favour the learning of students with different characterization and learning profiles?

- How does the feeling of success influence students' learning and motivation?

Analysis

Pau shows a low level of English competence according to his marks and shows certain discouragement towards the whole educational system. He has been diagnosed with attention-deficit hyperactivity disorder (ADHD) and is retaking 4th of ESO. Moreover, this is the second time that he re-takes a course, thus reaching the maximum times that a student can re-take a course in the current Spanish obligatory educational system. For classroom management purposes, Pau and Carles, another student with lower English competence level, share the same topic in their home group, thus forming the only home group of four members. This strategy was chosen by the teacher on the spot for classroom management purposes while aiming at fostering their cooperative work and consequently catering for the diversity in the group.

Mar, on the other hand, shows a high level of English competence in comparison with the average level of her 4th of ESO group. She takes extra-curricular English lessons. This student shows a relatively high potential for learning. However, this potential is not developed as the quality of her contributions during the lesson are not reflected in the exams. She seems to be content with just passing the subjects.

In the following excerpts, there is evidence of the stages the students go through during the task development, together with information on how they approach the content and how they negotiate the procedure and face the challenges.

Expert group, day 1

This first excerpt belongs to the expert group recorded on the 15th of April, and roughly starts at 02'50'' and ends at 03'07", lasting for about 18 seconds.

Excerpt 1

Turn	Speaker	Text	Translation
11	Pau:	*jo no m'entero de res*	*I'm not getting anything*
12	Oscar:	**yo no me entero de nada**	**I'm not getting anything**
13	Marc (T):	okey (.) so you will have to help each other\	
14	Pau:	*no no (.) això és impossible*	*no no (.) this is impossible*
15	Marc (T):	if you read it aloud maybe it will help you (.) but it's up to you (.) okey/	
16	Oscar:	**yo si quieres me aprendo una línea**	**If you want to I can memorize one line**
17	Pau:	food additives are substancesss (0.5)	
18		added to food\ (.) **ya está**	added to food\ (.) **done**
19	Oscar:	**yo la primera!**	**I want the first one**
20	Mar:	*pero tio que no t'has d'apendre (.) ho has d'entendre i ja està*	*but dude you don't have to memorize it (.) just understanding is enough*

This excerpt belongs to the initial stage of the task, where students join in expert groups. This expert group is in charge of explaining to the rest of their home group the presence of chemistry in diet. This excerpt is extracted from the very beginning of the recording and it shows the first impression from students towards the activity. In this first excerpt there are signs of anxiety about the resolution of the task, as can be seen in turns 11 or 14. The expert group shows traits of doubt and express verbally their feelings of being overwhelmed and frustrated.

This group is remarkably heterogeneous, composed of a female student with a high English competence level (Mar), another male student with a low level (Carles) and two other male students with a very low level (Pau and Oscar). In this excerpt the first traits of socialization in the group can be observed, which a relevant factor of team work is. Students express their feelings looking for support and approval from the rest of their team mates. Students support each other, as can be seen in turns 11 and 12.

Moreover, at this preliminary stage, students start understanding the procedure and request support from the teacher. Marc (student-teacher) is clarifying the task. Right afterwards, they start negotiating the task procedure, as can be seen from turns 16 to 19.

While Pau and the rest of the group show these signs of anxiety, Mar shows much more restrain and confidence and is able to reformulate the task procedure to her team mates. Pau and Oscar decide being overtly pessimistic and start giving deference as negative politeness strategies, in order to preserve their face in the light of the challenge that the task supposes. Mar decides to hedge the description of the task for their teammates to look like a more attainable task.

The second excerpt belongs to the same stage of the previous excerpt and appears approximately 5 minutes later, roughly lasting from 08'05'' to 08'25''.

Excerpt 2

Turn	Speaker	Text	Translation
26	Mar:	*diu que*:: *que*:: *els* foods additives *es posen al menjar* (.) *per conservar el sabor* (.) *o l'aroma*:: *o que*:: *o sigui* (.) *que es vegin millor* (.) *saps/*	*It says tha::t tha::t* food additives *are added on food (.) to preserve the flavor (.) or the aroma:: or tha::t I mean (.) they look better (.) you know/*
27	Pau:	*per l'olor també* (.) *veritat/*	*for the smell too (.) right/*
28	Mar:	*sí* (.) *per què tinguin millor aparença*	*yes (.) so they look better*
29	Carles:	*ah val*	*ah okey*

In this excerpt students have already finished a preliminary first reading of the text and start getting familiar with the content. There is evidence that students are trying to solve the problem and, after reading the text, are constructing the content in group. To achieve this, they are reasoning the content so it becomes meaningful to them, as can be seen in turns 27 and 28. This is linked to Dewey's and Vygotsky's theories about the social nature of learning.

As students deem the task too complex, they decide to self-scaffold the content of the text by going through it in their L1. This way, the content becomes more transparent and this eventually leads them to understanding it in a more efficient way. Students are relating the content to their previous experience.

Mar acts as the more knowledgeable other and instructs her team mates so that they all reach the same level of competence. Therefore, Mar is interacting with the group zone of proximal development so that all the group members achieve a similar

status of mastery. This fragment also shows how Mar and Pau constantly seek agreement with each other as a positive politeness strategy. Interestingly, this becomes a constant throughout the task.

The third excerpt is taken from the same stage of the activity and is representative of the last part of this first stage. This excerpt lasts approximately from 17'37'' to 17'57''.

Excerpt 3

Turn	Speaker	Text	Translation
52	Pau:	food additivesss *què vol dir*/	food additivesss *what does it mean*/
53	Mar:	*eh*/	
54	Pau:	food additives	
55	Mar:	*són substàncies*\	*these are substances*\
56	Pau:	a:: substances	
57	Mar:	food additives	
58	Pau:	°*són substancies*°	°*these are substances*°
59	Mar:	*com colorants*\	*such as colourants*\
60	Pau:	a::: *d'acord*\ *d'acord*\	a:::h *okey*\ *okey*\

During this excerpt, the time to master the content in the experts' group is finishing and students are consolidating the content they later will have to explain to their home group. At this point, Pau, being aware that he will have to explain this data to his team members, realizes that one of the key concepts he will have to transmit remains unclear to him. He resorts to Mar to clarify his questions.

This fragment reflects how knowledge is constructed collectively at first and later processed individually. Pau shows a moment of reflective inquiry when in turn 52 he asks Mar for clarification. This leads Pau and Mar through a series of exchanges until turn 60 where Pau expresses that the concept asked has been clarified. The key seems to be at turn 59, where, in order to explain the concept, Mar uses an example so Pau can relate the concept to his knowledge. Students resolve local problems, which are focused on specific information. Students seem to realise the importance of comprehending the content when they have the need to produce it afterwards.

Home group, day 1

The fourth excerpt consists of an exchange that takes place during the second stage of the activity approximately from 21'25 to 21'35''.

Excerpt 4

Turn	Speaker	Text	Translation
72	Eva:	the personal products use soaps (.) sunscreen (.) fragancesss	
73	Pau:	=*com la meva*! *Custo Barcelona*!	=*such as mine! Custo Barcelona!*

At this point of the activity, Pau is listening to his home team mate who is explaining her topic, the presence of chemistry in personal care products, to the rest of her team members. In the exchange Pau decides to use a joke as a positive politeness strategy. This spontaneous contribution illustrates how he constructs a link between the target content and his previous knowledge. This implies that he has managed to integrate this new content and give meaning to it by making it instrumentally useful and creating reference points that can be provided in society, aspects directly linked to Dewey's vision of social constructivism.

The fifth excerpt is taken from the last part of the second stage and lasts approximately from 35'00'' to 35'26''.

Excerpt 5

Turn	Speaker	Text	Translation
125	Pau:	*un moment\ (.) un moment\ (.) que això és el que se fer\ (.) deixaré el llistó alt\ (0.5)*	*just a moment\ (.) just a moment\ (.) this is what I know how to do\ (.) I will make the standard higher\ (0.5)*
126	Pau:	the letter e me:ans the: the: Europe\ *saps/*	the letter e me:ans the: the: Europe\ *you know/*
127	Eva:	yes/	
128	Pau:	yes\	
129	Eva:	and the number/	
130	Pau:	the number just the products\	
131	Eva:	<u>very</u> goo:d!	
132	Pau:	ye::ah!	

This excerpt is highly relevant because it provides evidence of how Pau is aware that he can succeed. This emphasizes his motivation to complete the activity by mastering the content and consequentially becoming more confident of his performance, as he feels that he is succeeding. The students are aware that there will be a quiz on the following day and there will be a prize for the team who reaches the highest score. Turn 125

evidences not only how Pau feels confident about his mastery of the content, but also about his production in the target L2.

This has an effect on his self-confidence and he takes the initiative to talk directly to the tape recorder, to prove that he has reached the objectives of the activity. This is linked to the construction of motivation and initiative in cooperative learning and the notion of group reward.

It is relevant to point out the development in the way the task has been managed by the team members and how the fact that they feel that they have attained the goals has a heartening impact on their self-confidence. This excerpt also shows the dramatic change in terms of self-image from the beginning of the task, as he becomes overtly optimistic as a positive politeness strategy and the rest of the group decide to save his team mate's face by exaggerating their agreement reaction and complimenting him as positive politeness strategies. Therefore, Pau's face is ultimately saved and pro-actively reinforced at this stage of the task.

Expert group, day 2

The sixth excerpt is taken from the first stage of the second day of the activity, where students in the expert group briefly reunite for a second time to revise the content. This is recorded on the 19th of April, four days later than the previous recording. This excerpt approximately lasts from 02'15'' to 02'52''.

Excerpt 6

Turn	Speaker	Text	Translation
149	Mar:	what are the e numbers/ **venga**	what are the e numbers/ **come on**
150	Pau:	*un tros cada un diem* (.) *no/ tu dius* the e numbers (.) the e numbers are the:: (.) *aviam* (.) *com t'ho dic* (.) the e numbers i::s (.) e::h an Europe:: (.) *saps el que et vull dir/*	*we will say one bit each* (.) *no/ you say* the e numbers (.) the e numbers are the:: (.) *lets see* (.) *how should I put it* (.) the e numbers i::s (.) e::h an Europe:: (.) *you know what I am saying/*
151	Carles:	*explica-ho <u>tu</u>*	*explain it <u>yourself</u>*
152	Pau:	only Europe (.) OKEY/	
153	Mar:	humm::	
154	Pau:	=and the only number:::	
155	Carles:	**tío** (.) **venga** (.) **que nos van a suspender**	**dude** (.) **come on** (.) **we are going to fail**
156	Mar:	*no*:: *no*:: (.) *va* **explícalo** *que tú lo has* **explicado bien**!	*no*:: *no*:: (.) *come one* **explain it** <u>**yourself**</u> *you did it well*!

This excerpt further evidences the construction of motivation among team mates and the negotiation of the task within the work group. In turns 149 to 152, Mar takes the initiative of managing the situation and starts negotiating the task with her team mates.

It is remarkable how in turn 155 his team mate Carles uses a threat as a means to put pressure on Pau and therefore prompt his response. Just afterwards, in turn 156, Mar re-directs that stimulus by praising him and boosting his confidence. This shows two very different approaches towards the construction of motivation in the same team. While Carles puts pressure on Pau by telling him the possible consequences of a failure, Mar uses positive reinforcement to make Pau feel comfortable and encourage him to do his best for the whole group. Again, Mar uses compliment as a positive politeness strategy so that Pau's face is saved.

It is interesting how Mar takes the role (turns 149 and 156) of the teacher in this group to a certain extent, by managing the task and motivating her team mates. The fact that she is acknowledged as the most knowledgeable other by the rest of her team mates contributes to strengthen the roles that each student complies within the group.

The seventh and last excerpt is taken from the same stage as the previous recording and approximately comprises from 02'53'' to 03'16'', it being taken right after excerpt 6.

Excerpt 7

Turn	Speaker	Text	Translation
157	Pau:	*ja\ (.) però més o menys\ (.) més o menys\ (.)* the e number °are the name of°	*yeah\ (.) but more or less\ more or less* (.) the e number °are the name of°
158	Mar:	=<u>is</u> the name (.) IS or ARE the names/	
159	Pau:	is the name used to the products to identify	
160	Carles:	=**<u>ahora</u>**!	=**<u>now</u>**!
161	Pau:	to identify the products (.) and the E is only used in Europe	
162	Mar:	=*<u>molt bé</u>*!	=*<u>very good</u>*!
163	Pau:	in the rest of the world they don't use any letter\ (.) just numbers\	
164	Mar:	<u>very good</u>!	

This excerpt further develops the figure of Mar as taking the role of the teacher in the expert group. In turn 158, Mar detects a mistake in Pau's utterance from turn 157 and decides to interrupt him. Mar repairs his mistake and poses a question to Pau so he

realizes that he has committed a mistake. In turn 159, Pau produces a repaired utterance and consequently, in turn 160, Carles expresses his approval.

While Pau uses a set of negative politeness strategies to save his face (hedging, avoiding disagreement, etc.), Mar continues using positive politeness strategies (complimenting him, exaggerating her approval) to praise Pau after each utterance he produces correctly, as can be seen in turns 162 and 164. It is relevant that Pau uses the target L2 all the time to talk about the content and that he has mastered his part of the content.

Discussion

After examining the transcripts, some general patterns can be identified in the way the task has been approached by students. The analysis of the set of excerpts supports these findings. In the excerpts there can be found evidence of the following aspects:

The fact of making students work together divided in groups of three does not cause students to give up, even though some students present a very low English competence level. Students show a high degree of involvement while their team mates are producing their explanation and pay a high degree of attention to them. Students are highly cooperative in the construction of the conversation and interact simultaneously.

Students face the task both in group and autonomously. They manage the task, help each other and save their team members' and own face. Student's motivation grows as they master the content and it stems from that fact. Students self-scaffold their way through the task by using L1 to master the content. Once the content is mastered, they switch to the target L2 to refer to it, as the input is presented in that language. Students automatically switch to L1 when they want to socialize or express their feelings.

Students try to reason the content and create reference points to their previous knowledge in order to master the content. These reference points are shared in the group in order to help the rest of their team mates. Student's motivation is influenced by the common group reward and by the common threat of failing the subject as well. The heterogeneous group favours the creation of leader in the group who coincides with the most knowledgeable other. Regarding the expectations set on the students chosen, some of these expectations have been met while some other expectations have proved to be

incorrect. Interestingly, both Mar's and Pau's performance is over the expectations for both the teachers and the student-teachers.

Regarding Pau, taking into account his trajectory, the expectations on his performance were fairly low. He was expected to be off-task most of the time, give up the activity soon and not to use English at all. However, he took the activity seriously and, even if it meant a challenge for him, he had the reinforcement of his team members, which eventually led him to master the content and boost his confidence up to producing a speech levelled to the rest of his team members. He does use English a lot more than expected, using the target vocabulary and explaining his part to his team members in English. He gets really involved and finds his motivation from feeling confident after having mastered the content and being able to explain it in the target L2. He reasons the content and links it to his previous knowledge. He generates doubts while processing the information and asks his team mates for clarifications. He manages to produce a speech intelligible enough for his home team mates to take notes and manages to get the content across.

As for Mar, she was expected to talk in English most of the time and to succeed in the activity. The expectations on her were mostly met. Mar was set in a heterogeneous group with three male students who ranged from a low to a very low English competence level. This automatically set her as the most knowledgeable other of the group. This led Mar to set herself into the role of the teacher and become the group manager and leader to a certain extent. Mar manages the timing, the part that each member has to master, the way the activity is approached and gives instructions to the other three members. Moreover, she monitors her team mates' productions both in terms of content and in terms of language.

Mar also provides positive reinforcement and protects her team mates' face by using a set of positive politeness strategies such as hedging, minimising the degree of imposition, complimenting and exaggerating her approval. It is also remarkable how Mar's discourse coincides with *feminine discourse style*, which is characterised by promoting cooperation and by emphasizing conversational work (Holmes 2006). Mar's leading role and its tacit acceptance by the rest of the team members further supports Evnitskaya and Aceros's (2008) findings regarding the issue of the *contract didactique* (Brousseau 1997).

Conclusion

Several conclusions can be drawn from the analysis of the data under the light of cooperative learning. To begin with, it can be observed that students struggle to create meaning out of the content by relating it to their previous knowledge and by reasoning. It is paramount for students that the content forms part of an acceptable theory, that it is instrumentally useful and that it can be linked to reference points provided in society.

In the data, it can be observed how the principles of cooperative learning described by Kagan (1994) are tracked; they are evidently present in the course of the activity. Students rely on positive interdependence to justify their motivation and support one another in the aspiration of a common goal. Additionally, students develop their individual accountability by being and feeling valuable for the outcome of their group. Students participate equally to a certain extent in the construction of knowledge and interact simultaneously, constructing their knowledge cooperatively. Resolving complex problem-based tasks promotes the reflective inquiry of students, who share their feelings in group and the goal of creating meaning out of the content. In order to succeed in the activity, students resort to self-scaffolding their way through the content by using L1 and reasoning out the new information. Students in group share their findings, further interacting with the zone of proximal development through the presence of a more knowledgeable team mate, in an attempt to level all the group members' knowledge.

There is evidence in the recordings that students with different features and learning profiles show results which are beyond the expectations and adaptation of the task by negotiating and accepting roles. The analysis also supports that knowledge is constructed first in group and later constructed individually. This leads to students' confidence boosting as a result of the mastery of the content. Consequently, they feel more comfortable talking in the target L2 once they have negotiated and processed the input of the content with their team mates.

A key part of the activity is that students manage to level it to their own standard. The feeling of success is essential to creating a link between learning and motivation. As students feel more and more successful, their motivation towards the activity grows and their learning develops. Cooperative work proves to be a pedagogical

device which allows students to self-adapt the task level to their own needs and learning styles. The results found cannot be generalized, but different studies carried out by other CLIL-SI contributors like Escobar and Nussbaum (2008), Horrillo (2009) and Corredera (2010) point in the same direction.

Even though the analysis results provide several insights into the construction of knowledge in cooperative learning, it also generates certain doubts which would need further research in order to reach a more profound understanding of the implications of cooperative learning in the EFL classroom. For instance, the fact that in the research a number of tape recorders were introduced conditioned the response of students to a certain extent. Would the amount of English have decreased if the recorder had not been present? Some studies have previously investigated this issue (see, for example, Escobar and Nussbaum, 2008). Another important factor is what happens to students who fail to cope with the challenge that the activity poses and decide to give up. For instance, among the students observed, one of them, Oscar, seemed to be quite lost during many points of the activity. Are there ways to re-incorporate lost students to the activity once it has begun? Are there ways to prevent such situation? Regarding the role of the teacher in the activity, to which extent should the teacher intervene in order to help students with special needs?

In summary, cooperative learning has proved to be a valuable device for teachers and students, which fosters both their capacity to work in group and autonomously. It enhances their self-confidence and it helps catering for the diversity of the group. This way of learning supposes a more motivational variable in contrast with the traditional teacher-led lessons and contributes to creating future citizens capable of working together, interacting with the community and opening up to the world.

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Notes

1 The name has been changed to maintain anonymity of the participants and the centre.
[2] Didactic material available at: http://grupsderecerca.uab.cat/clilsi/

Appendix: *Transcription conventions*

Adaptation of the transcription conventions proposed by Gail Jefferson (Atkinson and Heritage 1984).

=	indicates latching between turns
(1.0)	an interval between utterances (1 second in this case)
(.)	a very short untimed pause
<u>word</u>	relatively high pitch
word	italics indicate code switch to Catalan
word	bold text indicates code switch to Spanish
CAPITALS	relatively high volume
a::	the colon indicates lengthening of the vowel
?	rising intonation, not necessarily a question
\	falling intonation
/	animated or emphatic tone
°word°	relatively quiet volume
<word>	lengthening of the word
(xxx)	unclear talk

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