THE FOREIGN LANGUAGE IN THE CLIL LESSON: PROBLEMS AND IMPLICATIONS

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Abstract

CLIL constitutes a new learning environment as well as a new teaching environment. As such therefore it represents a new research 'space' that can be investigated from a variety of perspectives. In this paper the focus of the research is that of language – the foreign language in the CLIL lesson. The reason for focus lies in the promise that CLIL makes - namely that the foreign language competence of the CLIL students will grow through the learning of the content. Research by Swain and colleagues (1985) has shown however that this is not an automatic process, especially as far as concerns oral productive competence.

The present paper focuses precisely on this aspect through the quantitative and qualitative analysis of oral data collected in CLIL lessons from five lessons in four Italian high schools. Results show that greater care needs to be made in organizing tasks in the CLIL lesson that are more conducive to richer oral production on the part of the pupils.

Parole chiave: *CLIL lesson, foreign languages,*

The use of a foreign language as a medium of instruction (henceforth FLM) is rapidly gaining ground in Europe both at the school level as well as at the university level[1] – this in response to European Commission and Council of Europe indications[2] and to the call by some national governments for internationalisation. Numerous European projects have been conducted in the field from the early 1990s which have seen Italy involved as a member: TNP, ALPME, TIECLIL[3]. It is against this background, and in response to the moves now underway in Italy to promote FLM (today a grassroots movement favoured by the law on school autonomy (1999) and the so-called 'Riforma Moratti' (DL. 17 October 2005 and law 28 March 2003, n. 53) as opposed to the ministerial-led projects of the 1990s, cf. Liceo Europeo; Liceo Internazionale; Liceo Linguistico Europeo), that the PRIN research project reported in the volume proposal sets itself.

Given the spread of these programmes now underway, we feel there is an urgent need to explore some of the diverse variables that contribute to the success (or failure) of FLM programmes. Taking CLIL (Content and Language Integrated Learning) as the guiding planning and methodological principle underlying FLM programmes, we look at FLM from the perspective of language, considering this to be a fundamental underpinning of all these types of programmes. Many questions come to mind: to what extent is language competence promoted in FLM programmes? To what extent is learning a non-language subject hindered through language difficulty? How can the dual integrated learning focus be guaranteed? These (and more) are

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[1] Cf. for example the ICL (Integrating Language and Content) Conference (2003) held at the University of Maastricht and entitled Integrating Content and Language: Meeting the Challenge of a Multilingual Higher Education: cf. Wilkins (ed.) (2004).

[2] Cf. European Commission (1995); Council for Cultural Cooperation (1996); Council for Cultural Cooperation (2001); Helfrich, Thurmann (1994), Čok, (1995).

[3] TNP Language Teacher Training and Bilingual Education: (1996-1999) of the Sub project n° 6: Language Teacher Training and Bilingual Education of the Thematic Network Project on Languages run by the European Language Council (Berlin): partner Università Ca' Foscari Venezia; ALPME (Advanced Level Programme in Multilingual Education) Erasmus-Socrates project (2000-2003) coordinated by Pompeu Fabra University of Barcellona: partner Università Ca' Foscari Venezia; TIE-CLIL (Translanguage in Europe - Content and Language Integrated Learning) (1998-2002) Socrates project Lingua Azione A: partner USR Lombardy; CCN: CLIL Cascade Network, 2007: partner Università Ca' Foscari, Venezia; EUCLID-APPC: European CLIL in Development: a primary phase consortium, 2008, partner: Università Ca' Foscari Venezia.

the several questions that those involved in FLM must pose and which today have not received the necessary scientific attention.

CLIL is seen as a new learning and teaching environment and as such is susceptible to research from a multiplicity of angles. The decision to focus on the language dimension in the PRIN project (cf. below and Introduction) as opposed to the other important dimension highlighted by of the acronym, namely Content, is the result of the realisation, through contact with schools and teachers in various parts of the country as well as with experts abroad, that language is a considerable problem, and the situation in Italy is no exception. The issue of language springs to the forefront as soon as the acronym CLIL is used as a label to define the foreign language medium programmes that more and more schools in Italy – legitimated through school autonomy – are setting up with, however, insufficient awareness of the conditions that need to be in place for success in learning to be possible. The use of the acronym in fact binds the school to a promise – that content be learnt through the language ad that language be learnt through the content, contemporaneously. This aspect is highlighted by the expression in the acronym 'integrated learning' and which we consider pivotal to the whole concept. That language be learnt (acquired) by the students in FLM situations is by no means automatic, as research in immersion situations has shown.

Thus we feel that the language dimension of CLIL requires attention both from a research point of view (and the articles in this volume present results of research) as well as from an educational policy view point. This last aspect is particularly pressing. There are at the moment in Italy – unlike in other countries in Europe (cf. articles in this volume) – no ministerial (national or local) indications that define standards and set up benchmarks for the CLIL programmes. Thus, there is no official indication of the necessary level of competence in the foreign language used as a medium of instruction that a CLIL teacher needs to possess in order to work in CLIL programmes; CLIL programmes are not submitted to a local board of experts for approval, thus the schools that propose them are essentially self referential. On account of this situation, any teacher can decide to set up CLIL – indeed the school acquires lustre in the public eye – , get the necessary approval from the school organs and begin. In our view instead, CLIL programmes are just too important, on account of

the many issues they bring with them, to be left out of some kind of quality assurance control. The university can contribute to this dimension of quality by offering training courses[4], by working with the local educational agencies[5] and by researching and disseminating their results through publications[6], organizing, as well as attending, seminars and conferences. This volume, alongside the many other publications so far produced by the research group in Venice (cf. Appendix), is an example of this action.

1. The language issue in CLIL

The language issue is all pervasive and can be looked at from many angles:

- foreign language competence of teacher;

- language alternation (L1/LS);

- focus on language as code in the CLIL lesson;

- the 'weight' and role of the foreign language teacher in the CLIL lesson in team teaching situations (Coonan, 2007);

- content and language;

- cognition and language;

- methodology for promotion of language development in CLIL lesson;

- opportunities for LS use in CLIL lesson.

In this paper the last two items constitute the focus of our attention.

1.1 *The research project*

The research reported in this paper represents only one part of the two-year project (2006/2008) conducted by the Venice research unit on the issue of language – oral language – and the promotion of

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[4] The Dipartimento di Scienze del Linguaggio (LADiLS) of the University of Venice has been running an on-line year-long post-graduate course on CLIL for several years.

[5] LADiLS collaborates for research and for training with the regional education authorities and other agencies. The PRIN project itself is an example of such collaboration (with IRRE Veneto).

[6] Cf. Appendix for a list of the of publication in Italian.

oral productive language competence in CLIL situations (cf. Introduction this volume). This aspect of language promotion is obviously a key feature for gauging the inherent quality of a CLIL programme and it is therefore of great importance to understand those variables that contribute to it. In our view, for foreign language growth to come about, methodological innovation is required, for it is through this that the conditions will be established for foreign language learning/acquisition. Thus methodological issues have represented a major focus in the overall research, as is testified by the diverse articles in this volume.

As far as concerns the research reported in this paper the focus is on the oral language production of high school pupils – in terms of quantity and quality.

2. Theoretical framework

The difficulty met in trying to get students to speak the foreign/second language in formal foreign/second language teaching situations is well-known (Brown, Yule, 1983). This is due to a series of factors such as the organisation of the students in the classroom (in rows as opposed to being organised in groups or pairs), the reluctance on the part of the teacher to allow interaction unless of the 'question and answer' type (cf. Menegale, this volume) or to the absence of the types of activities that allow for and effectively stimulate oral communication and interaction.

In consideration of the motivations behind the choice to carry out a CLIL programme (primarily (but not only) concerned with the promotion of the foreign language), and in consideration also of the importance attached to oral production for the acquisition of the foreign language (cf. Bygate, 1987; Levelt, 1978; Skehan,1998; Robinson, 2001, Swain, 1985) as also of the evidence it provides as to the state of development of the language competence of the speaker (cf. the concept of a continuum of styles proposed by Tarone reported in Ellis, 1985), the promotion of the students' ability to use the foreign language orally in a CLIL situation becomes important. However, a methodology needs to be elaborated that responds to the particular conditions of the CLIL context, to what is, in effect, a new learning environment. Two fields of research in applied linguistics and language teaching methodology are relevant to our focus as they are

capable of providing insight into some of the problematical issues related to the development of language competence and to the achievement of the school subject objectives. These fields are:

a.   research carried out on 'task' as a construct with its own structure and internal articulation (convergent/divergent; open/closed; one-way/two-way; shared/unshared information: cf. Crookes,1986; Crookes, Gass, 1993a; Crookes, Gass, 1993b; Long, 1989, Skehan, 1996) and the relationship of these with i) language production mode (interaction/non-interaction; (non) negotiation of meaning; short/long turns) and ii) the acquisition of the language being learned (Skehan,1998; Robinson, 2001);

b.   research on task in Languag teaching methodology and the elaboration of a task-based methodology and the task based syllabus (Willis,1996; Nunan, 1989; Candlin, Murphy, 1987, Prabhu, 1987).

With reference to the first field, two concepts are particularly important: the structure of the task and the concept of difficulty.

2.1 *Task structure*

'Task' has been defined in several different ways in the language teaching pedagogy literature (cf. Ellis, 2003:4-5; Skehan, 1998:95-96 for a synthesis of these) calling our attention to important inherent features like 'meaning focus', 'relationship to the real-world', 'attainment of an objective', 'use of language' (as opposed to mere language practice), 'interaction with other participants', activation of 'thought processes'. In addition, tasks offer opportunities for holistic language use rather than focussing on single language skills or discrete forms.

Furthermore, tasks have been variously classified and the implications of their internal structure and their methodological exploitation have been explored in order to understand their contribution to learning in general and (foreign/second) language learning and acquisition in particular. As the main pedagogical focus of CLIL programmes is the subject matter, types of tasks that promote content learning and the cognitive operations associated with it are of considerable interest and importance.

Tasks classified in a psycholinguistic frame highlight the importance for second language acquisition of variables like interactional structure (one-way or two-way), convergent or divergent orientation, or open or closed outcomes. One-way tasks are those in which the imbalance in the distribution of the information in the dyad or group is such that the task can be accomplished with a minimum of interaction and negotiation (A has all the information B has none A tells B.). In two-way tasks, on the other hand, the information is equally divided (but not totally shared) such that all the members of the dyad or group are obliged to interact and negotiate to get the information they need from the others. A perfect example of a two-way task is 'jigsaw' but other types of tasks can be two-way depending on the manner in which the input is distributed among the participants. In two-way tasks there is more interaction and negotiation and therefore potentially greater possibility of acquisition.

In tasks where the learners work together to find a common solution (converge) or to identify a right solution out of several provided, there is also more interaction and negotiation as opposed to those tasks where the direction the learner can take is completely open (diverge). Convergent tasks are usually closed, meaning that the learners know that they have to find a single outcome, e.g., make a final decision. An open task, on the other hand, allows for several possible outcomes (e.g., expressing a personal opinion in a group will lead to many diverse opinions overall).

2.2 *Task difficulty*

In an information-processing view of foreign language learning, difficulty is an important concept as the presence of difficulty will absorb, according to its degree, the attention that the speaker has available to dedicate to other matters. The importance of this concept is immediately clear if we consider that the CLIL context is inherently difficult as it requires the student to carry out higher order thinking processes in the L2 on new, unfamiliar content and in an unfamiliar way (through the foreign language). Theoretically the consequences might be: i. the speaker is unable to carry out the higher order cognitive processes because his attention needs to be focussed on the language; ii. the speaker focuses on the content and the cognitive skills but is unable to pay attention to the formal properties of the foreign language. In a CLIL situation, where attention

automatically goes to meaning rather than to form, ways need to be found that help the students to notice form (cf. Doughty, Williams, 1988) as this is a premise for the foreign language to evolve – and this needs to be done without transforming the CLIL lesson into a language lesson. Solutions for reducing 'difficulty' might consist in the manipulation of various features such as text length, syntactic complexity of the input; density of information; presence/absence of context or of redundancy, time, etc., and play on the increasing familiarity of the content as learning progresses. Table 1, a synthesis based on Ellis (2003), places features of input (code used, code complexity, cognitive complexity), 'working' conditions (interaction, dialogue), cognitive processes called into play, and outcomes (code used, dimension and mode) on a continuum from easier to more difficult.

Table 1.

		+ easy + difficult	
Input	1.Code used:	image ⇢	written ⇢ oral.
	2. Code complexity:	high frequency words; short simple sentences.	low frequency words; complex sentences.
	3.Cognitive complexity -: - type of information: - quantity information: - structure: - context:	- static ⇢ dynamic; - few elements; - well-defined structure; - *here and now.*	- abstract; - many elements; - little structure; - *there and then.*

	4. Familiarity inform.:	- familiar.	- unfamiliar.
Conditions	1. Interaction:	- two-way.	- one-way.
	2. Discourse mode:	- dialogic.	- mono-logic.
	3. Time	- time to plan; - extended time to carry out task.	- no time to plan; - reduced time to carry out task.
Processes	Cognitive operations - - type - need for reasoning	- exchange information; - few moves.	- exchange opinions; - many moves.
Outcomes	1. Code	- image.	- written ⟶ oral.
	2. Dimension	- closed.	- open.
	3. Discourse mode	- list; - description; - narrative; - classification.	- instruction: - argumentation.

2.3 *The task and foreign language pedagogy*

The importance of the second field can be captured though Doyle's words:

Students will learn what a task leads them to do […] In other words, accomplishing a task has two consequences […] First , a person will acquire information – facts, concepts, principles, solutions – involved in the particular task that is accomplished. Second, a person will practice operations – memorizing, classifying, inferring, analysing – used to obtain or produce the information demanded by the task. (1983:162)

Thus it is the tasks that students are set that lead to learning rather than the sole input itself. In the case of CLIL this must be a dual learning – language and content.

'Task' as a pedagogical construct currently occupies an important position in language teaching pedagogy together with associated movements of 'discovery learning', 'cooperative learning' and developments in syllabus design – in procedural and process syllabuses where 'task' represents the organising criteria for the language course rather than, for example, structures, functions, lexis, or topics.

The value of 'task' is often highlighted by comparing it with the other pedagogical construct: 'exercise'. In language teaching pedagogy, an exercise is an activity that focuses on form, is elaborated for purely linguistic considerations with the primary intention of getting the learner to 'learn' the forms. Learning of language forms therefore is intentional. Unlike tasks, exercises are not meaning-focused and do not require the learner to 'use' the language in a meaningful and communicative manner. Furthermore, exercises are normally associated with individual work as opposed to the collaborative group/pair work normally associated with task. The distinctions referred to above have been made with reference to the situation of language teaching where the contrast between form-focussing and meaning-focussing is quite strong. However, all activities in CLIL lessons can be called 'meaning-focussed'[7] in as

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[7] Meaning-focussed activities are those: "in which learners are occupied with understanding, extending (e.g., through reasoning), or conveying meaning, and cope with language forms as demanded by that process. Attention to language forms is thus not intentional but incidental to perceiving, expressing, and organizing meaning". (Prabhu, 1987:27).

much as the learner always needs to carry them out by using his knowledge of the content being learnt. In other words, the reason for his activities is never purely linguistic. Indeed, Doyle defines all instructional activities in content matter as tasks.

3. The research

Aware of the problems the foreign language teachers face when teaching their students and the difficulties that these latter have in producing the language (especially at an oral level) and aware also that the CLIL lesson has additional intrinsic difficulties (counterbalanced, it is true, by other positive factors, cf. Wolff, 1997), we felt it legitimate to have some doubts as to the effective active participation of the students – doubts related not only to the foreign language competence of the students and the cognitive and conceptual difficulty of the school subject being learnt but also to the teaching style normally associated with non-language subject teaching at high school level (the transmission mode[8]). We were thus curious to know what opportunities are actually offered for speaking in the CLIL lesson, whether the students exploit these opportunities or not and how exactly they speak.

3.1 Research questions

Our research questions were thus:

1.   Is it true that the students speak during the CLIL lessons?

2.   If so, is the quantity such that in the long run language competence will increase?

3.   What is the quality of their oral production?

4.   Is there a connection between the activities and oral production?

3.2 Subjects involved

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[8] We point out however that this comment is made with reference to the Italian situation.

To this end data recorded in five lessons in four different schools: four *scuole tecniche* and one *liceo* were analysed The classes involved were two second year classes[9] and two fifth year classes. The transcriptions were carried out on a sample of lessons chosen casually from the many recordings that had been made within the overall project[10]. Altogether eleven students' oral production during the lessons have been transcribed.

Table 2.

School type	class	code n° of lesson	length lesson	n° of student transcriptions	organisation of lesson
Tecnico	2^	1	44'	1	transmission-participated lesson[11]; no group activity
Tecnico	2^	2	40'	1	entirely group activity
Tecnico	5^	3	59'	3	transmission-participated; group activity
Liceo	5^	4	38'	3	entirely group activity
Tecnico	2^	5	44'	3	transmission-participated lesson, no

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[9] Two lessons of one second year class have been transcribed and analyzed.

[10] Forty seven audio and audio-video recordings.

[11] By the expression 'transmission-participated' we refer to a style of teaching where all or part of a lesson consists in giving information and then asking single students questions.

					group activity

3.3 *Method of data collection*

For the overall project (cf. Introduction), data were gathered from lessons through audio and audio video recordings over a period of 18 months during which time the teachers participating in the project also received training in task-based methodology and cooperative learning. All audio recordings were conducted in the following manner: three students were chosen casually to be recorded. For the whole lesson a small clip-on digital recorder was worn which allowed everything the pupils said to be recorded. Transcriptions were made of these recordings. Brief details concerning the foreign language competence of the students was also provided by the teacher.[12] The audio recordings and/or video recordings have been used according to each single researcher's different research focus (as can be seen from the different articles in this volume). In our case, as the focus is on the pupil oral language production, the principle source of data were the audio recordings.

3.4 *Method of analysis*

For the analysis of the oral language production of the pupils the AS Unit (analysis of speech unit) was adopted. This unit of analysis was elaborated by Foster *et al*., (2000) to overcome the problems associated with the characteristics of speech (especially speech in interactive mode) and which other units of analysis (e.g., turn, utterance, T-unit, C-unit) are not suited to capture. Oral language is not as 'tidy' as written language (just think of false starts, unfinished utterances, overlapping speech, incidence of ellipsis, etc.) and therefore a unit of analysis especially adapted for these characteristics rather than the characteristics of the written language, was needed. The choice to use the AS unit – defined as "… a single speaker's utterance consisting *either of* an independent clause, or sub-clausal unit, together with any subordinate clause(s) associated with

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[12] The data collected for the whole research project concerned English, French, German. In this particular part of the research only English is dealt with.

either"**,** allows for the identification of units that reflect more faithfully the characteristics of spoken language.

For the analysis of the transcriptions, the AS units identified (following Foster *et al*.) were grouped according to the following categories:

A.   independent clause: an AS unit with a finite verb and other element e.g., subject, object, adverbial;

B.   independent sub-clausal unit divided into two categories:

Bi: an AS unit made up of *more than one word* in which: a. there is no finite verb (but which is recoverable from the preceding discourse or from the context) or b. which is a sort of irregular sentence or non-sentence (cf. Quirk *et   al*., 1985:838-53 (cited in Foster *et al*., 2000);

Bii: an AS unit made up of only *one* word that can be reconstructed through ellipsis; or which is a one-word non-sentence (cf. *Quirk et al*., above);

C: subordinate units containing minimally a finite or nonfinite verb and at least one other phrasal element (e.g., subject, object, adverbial);

D: coordinate units.

Whereas false starts, repetitions and self corrections were not included in the analysis, echoic responses were.

Table 3. Examples of the AS units (cf. above) taken from the transcriptions (T= teacher; P= pupil)

A. Independent clause
T: They are important in which sense … neurotransmitters?
P: They ferry messages in the brain
B. Independent subclausal unit

Bi: Più di una parola

T: Who can explain synapsis?

P: … er a gap between the nerve endings and the receptor
sense

Bii. Una sola parola

T: You can find unit by this formula

P: Joule

C. Subordination

P: … And dopamine stay in the synapse so you feel good
(subord.)

D. Coordination

P: … you don't feel good and you want to … to take another
… er … more,

  more of it

4. Analysis and results

As far as ascertaining the fact whether the pupils actually speak during the CLIL lessons, the following procedure was adopted:

- an estimate of the number of AS units produced by each pupil recorded in each lesson was made;

- the number of words per AS unit calculated per pupil;

- the average number of words per AS unit per pupil calculated.

Table 4.

Lesson code	N° pupil transcription per lesson	N° words produced per lesson by	N° AS units	Average n° words per AS

		each pupil		Unit
1	1	30	13	**2,3**
2	1	329	95	**3,4**
3	1	40	12	**3,3**
	2	436	101	**4,3**
	3	70	16	**4,3**
4	1	156	24	**6,5**
	2	155	27	**5,7**
	3	66	13	**5**
5	1	0	0	**0**
	2	38	6	**4,7**
	3	33	19	**1,7**
	Totale	**1353**	**326**	**4,1**

From table 4 we can see that, apart from one pupil (lesson 5) who is silent the whole time, all the others speak. However a look at the details reveals that not much is produced. The average number of words per AS unit is 4.1 words. If we look at the single pupils' production only three go over 5 and only one over 6. Some are as low as 1 and 2. No-one produces an average AS unit length of 7 words or over.

The number of words and the number of AS units is a potential indication of competence because it shows the number of words the pupil manages to pack into the AS unit. Thus a pupil who, within the same activity, produces less AS units than his companions but puts more words in each would be considered more competent. A look at

the table below (data taken from table 4) for example shows us that pupil 1 in lesson 4 would[13] appear to be more competent than his companion (pupil 2) who, in the same lesson, produces one word less but strings them out over more AS units.

Table 5.

Less on/pupil	N° words	N° AS unit	Aver age n° word s AS unit
4/1	156	24	6,5
4/2	155	27	5,7

We can also notice that some pupils are more talkative: 4/1 and 4/2 far more than their companion 4/3, as well as 3/2 if compared to his/her companion 3/1 and 3/3. Notice also 2/1.

What is clear from table 4 is the diversity that can be found in the quantity of language production. This difference may not necessarily only be linked to competence but also to didactic organisation.

In the lessons analysed two (lesson 1 and 5) were entirely teacher led of the 'transmission-participation' ('T') type and two were entirely group work ('G' type). Data concerning these two types of organisation are compared in table 6.

Table 6.

Didactic organisation.	Lesson/pupil	N° words	Average n° words per AS unit

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[13] We use the conditional as there are many variables (like opportunities to speak , difficulty of the task, etc) that can condition the language output.

'T' type	1/1	30	2,3
	5/1	0	0
	5/2	38	4,7
	5/3	33	1,7
		101	**2,1**
'G' type	2/1	329	3,4
	4/1	156	6,5
	4/2	155	5,7
	4/3	66	5,0
		706	**5,1**

The figures show that group work leads to more oral language production than the teacher-led mode. This is important for two reasons – it offers the opportunity for the pupil to use the language, try it out and thus potentially stretch his/her current language competence and it provides additional opportunities to learn the content (the pupils talk to learn thereby consolidating their grip on the content).

However, quantity is not always synonymous with quality. Apart from the already mentioned quality aspect concerning the capacity to produce long turns (more words packed into AS units) and which, as we have seen above, does not seem apparent in the pupil sample (the average number of words is generally low even allowing for the difference between transmission mode and group work mode), the transcriptions of three lessons (lessons1, 2 and 3[14]) have been analysed using the distinctions devised by Foster *et al.*, (cf. above) in order to ascertain the quality of their language production.

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[14] Lesson 3 lasted 59 minutes. The first 37 minutes were conducted in the transmission-participation mode. The remaining time was dedicated to two group activities.

Table 7.

Mode	Total words	AS units	A units	Bi units (2+ words)	Bii units (1 word)	C units Subord.
'T'	101	27	05 (18,5%)	09 (33,3%)	12 (44,4%)	01 (3,7%)
'G'	804	210	77 (36,6%)	49 (23,3%)	65 (30,9%)	09 (4,2%)

Apart from confirming that group activity allows for a much greater production than the teacher led type activity, table 7 also highlights certain quality features. For example, a feature of quality in an individual's language competence could be considered the ability to produce propositions containing a finite verb and other phrasal elements and that these are to be preferred over the one-word and two-word units (for reasons of language development), even though these last strongly characterize interactive discourse. Categories A, C and D are of particular relevance in this regard. With reference therefore to the two diverse didactic organizations identified ('T' and 'G') we can gauge the ratio (vis à vis the number of AS units overall for each mode) of production of independent clauses, subordinate units and coordinate units:

- A. independent clauses: in the transmission mode the ratio is 18,5% whereas in the group work mode the ratio is nearly 36,6% ;

- C. subordinate units: in the transmission mode the ratio is 3,7% whereas in group work mode the ratio is slightly higher (4,2%)

- D. coordinate units: the ratio for transmission mode is higher at 3,7% compared to the group work at 1,9%.

Thus the picture would seem, overall, to favour group activity. Furthermore, if we group categories A,C and D together and category B (i and ii) together we can find out the ratio of the two groups vis à vis each other and vis à vis the two teaching modes

Table 8.

Mode	N° AS units	Total group: A,C,D	Ratio group: A,C,D	Total group: B	Ratio group: B
'T'	27	7	25,9	21	**77,7**
'G'	210	90	42.8	114	52,8

When comparing the two groups we find that, in both teaching modes, group B (i and ii) has a higher *ratio* than the other group (A,C,D) and that it is highest in T mode. The highest *ratio* for the group (A,C,D) is in Group mode although it is still less than that for group B. Thus, despite the fact that group work favours the production of units containing a finite verb together with other phrasal elements, overall the type of units the pupils tend to produce are one word or more than one word, without a finite verb, that are either non-sentences or elliptical ones.

4. Discussion

A first consideration to make is that the sample is limited in number and as such the analysis and results cannot be generalized to all CLIL situations – although the sample lessons considered do have certain typical characteristics.

The data reveals the fact that the pupils do produce language but that this is very limited in quantity (7 out of 11 produce less than 70 words during the lessons). To be noted also that the overall quantity of words is in fact increased through the loquacity of a few.

Given that the important goal of a CLIL programme is to promote the foreign language competence of the pupils and in consideration of the fact that using the language is considered one of the means for achieving this, it is necessary to ask oneself if the situation so described, from the point of view of the quantity of language produced, can lead to an increase in language competence of the pupils, in the long run. We believe that the potential is insufficiently exploited and that CLIL done in this manner may not deliver what is expected. Group/pair work needs to be a more frequent learning mode and questions in the Transmission mode should be posed in such a way as to oblige the pupils to elaborate their responses more richly (cf. Menegale this volume). In this way, the production of units of the B type could be reduced (cf. table 7 and 8 where units of the B category, especially those of one word, are seen to dominate).

There is an obvious connection between the didactic mode and language production – the data confirms this. In lesson 3 for example the first 37 minutes are conducted in 'T' mode. In that space of time pupil 2 produces 42 words in 5 AS units. In the second part of the lesson ('G' mode, 22 minutes long) he utters 394 words in 96 AS units. That pupil would not have been able to unleash his communicative competence if there had not been the opportunity to work in a group/pair.

However, even though group/pair work comes out favourably, there are difficulties that lurk behind this solution which concern the question of quality of language production and the question whether foreign language competence can be expected to grow in terms of accuracy, fluency and complexity.

Group/pair work calls for interaction and, depending on whether the task is one-way or two-way, it will be more or less balanced between the participants (cf. above). It also means that the pupils work on their own with the teacher (not a language teacher in the case of CLIL, unless there is team teaching) acting as facilitator. The transcriptions of the pupils' foreign language production reveals the presence of junky input data that not only goes uncorrected but is re-circulated by the members of the group as the interaction continues. The problems concern pronunciation (especially of new terms), but also morphosyntax. In the case of pronunciation, the impression given is that the terms the pupils are using are either being used (seen in

written form) for the first time or that they have been insufficiently previously exposed to them. Table 9 provides examples of this junky input data.

Table 9.

Pronuncia:

- mistaken stress   *molecoles*   [molèculs]
- incorrect pronunciation   *gasoline*   [gazolain]
                                              closet   [clouset]
-    blurred'pronunciation   *shelter/shoulder?*
                                              shedding/sharing?

Grammar:

            What happens the water …
                What does means …
                    The molecules of water give electrons at
straw.

The problems that render the pupils' interactions difficult to decipher to the transcriber (a native speaker of the language) did not seem to exist for the pupils in the interaction. The 'register' used seems to be 'shared' such that the above expression "The molecules of water give electrons at straw" appeared totally intelligible notwithstanding its unacceptability.

The presence of these problems (found in every transcription) represent cause for concern for the development of the pupils'

language competence from the point of view of fluency, accuracy and complexity essentially because the pupils' attention is not drawn to the inaccuracies which continue to circulate, are taken to be 'correct' or, anyway, 'acceptable' (cf. extract 1 below for another example of an interaction that gets carried along by the two participants regardless of its overall low intelligibility (to the outside listener).

Table 4 indicates that not all the pupils take advantage of the opportunities to speak when these are available (e.g., lesson 3 and lesson 4 – all the pupils are on the same task in each lesson and yet the amount produced varies considerably). The matter may concern the types of tasks proposed as well as the competence of the pupil – the higher the competence the greater the ability in 'holding the floor'. In the transcriptions there are examples of tasks that could be called one-way (see extract 3 below where the task – doing a crossword – requires that one pupil, given a term, has to elaborate a definition or in some way describe the concept behind the term and his interlocutor has to identify the term and put it in the crossword) and problem solving tasks (that are neither one-way nor two-way as the information is not differentially split) where the pupils together must find a solution to a problem. In the one-way task the pupil with the information (the term he has to 'describe') dominates the interaction with the other participant's role being limited to asking for clarification or confirmation (see extract 3 for evidence of this). In the problem-solving tasks (cf. extract 1 where the pupils have carried out an experiment and have to explain in writing the phenomena they have observed) the interaction is however more balanced but the turns are shorter.

Extract 1. Problem solving task[15]

S2:	The water molecule gave…
S3:	The molecules of water gave the electrons at the
S1:	electrons

---

[15] Although the audio-recorder was worn by S1 it was possible to capture and transcribe the contributions of the other pupils (S2 and S3) participating in the group activity.

S2:   at the

S3:   at, at … the straw molecules

S1:   and it changed negative

S2:   negatively

S3:   negatively

S1:   negatively (*he is writing*)

S3:   electron o electrons?

S1:   electrons. Electrons.

S1:   quindi …

S3:   molecules of water gave the electrons at the straw molecole and it charged negatively

S1:   Yes! (triumphant)

So, the possibility of language competence development may be hampered through limited participation in the tasks. Furthermore, in those cases where participation is high (cf. table 4, pupil 1 (lesson 1), pupil 2 (lesson 3), pupils 1 and 2 [lesson 4]), it is not possible to say that more participation means quality language production as there is a high incidence of units of the category B type as well as the errors indicated in table 9. Having said that, the analysis shows that only the more competent are able to produce units of category A type. To be noted also the lack of units from categories C and D (table 8).

Alongside the negative considerations above we find also positive features, essentially related to the group work. These concern the 'focus on form' strategies adopted by the pupils as well as the 'negotiation of meaning' carried out through a variety of strategies. Focus on form has been pointed out as an important premise for language acquisition (cf, par. 1. above). In a foreign language classroom there are generally what is called 'focus on formS' procedures where the teacher isolates the structures and sets in place

instructional techniques that allow the pupils to notice and to practice them. In a CLIL lesson however there is a different type of focussing called 'focus on form' (Lyster, 1998) required for the necessary noticing (and re-noticing) to be carried out. 'Focus on form' comes about during the natural process of communication. It can be carried out by the teacher or also by the pupils. As far as regards the CLIL situation, two considerations can be made concerning the teacher in this regard: the lessons transcribed for this research were examples of team teaching – the content teacher and the foreign language teacher teaching together. In the lessons analysed:

i. *only* the foreign language teacher intervenes to focus the pupils' attention on forms required/used to communicate. Can we presume that this is due to the content teachers' limited capacity in terms of language competence and knowledge or to the actual presence of the foreign language teacher him/herself such that, if the latter were not present, the focus on form role would be taken over by the content teacher?;

ii. intervention of this sort was insufficient to block the circulation of incorrect forms.

Extract 2. Focus on form (pupil-pupil)

Extract a

S2:   Allora … don't move (*he is referring to petrol*)

S1:   Doesn't move … doesn't move … e lui che muove … è doesn't, non è do … è doesn't

S3:   o has move

Extract b

> S2:   The water molecule … has give, give, give the electron to …
>
> S1:   It gave … can have il verbo 'give' … ti metti gave … si scrive gave (*he pronounces it 'g-a-v-e' according to Italian rules of pronunciation*)
>
>
> Extract c
>
>
> S3:   How do you say 'cedere'?
> S1:   'Cedere'? … nel senso di 'give'?

In the above extracts we see examples of pupils collaborating in an effort to correctly write down the observations of their experiment. It a 'convergent' activity that catalyses their attention onto the forms required to express their meanings. We notice how S1 seems to 'manage' the activity from the language point of view pointing out to his companions where corrections need to be made. So, even though CLIL automatically captures attention to meaning, activities such as the above, if done in group mode, can lead to focus on form through discussion. This is the part that Prabhu (1987:51-52) singled out as the most relevant for language acquisition – the part where the 'outcome' is actually being prepared through reasoning. He considers the actual presentation of the outcome as secondary.

The pupils' attention to meaning is evident through the reasoning strategies they adopt to understand something or to get it across to a companion – strategies like reformulation, asking and giving confirmation, explanations, examples, suggestions, cues and hints. In extract 3 below S1 is trying to get S2 to find out the correct terms to put in the crossword game they are playing. The extract concerns the part dealing with 'number 1 across', the correct term for which is 'cross connector'.

In S1.1, after having attempted to formulate his meaning, he calls the other's attention "Listen to me" and begins again from a different angle and giving suggestions. At S1.5, he gives his companion an indication as to how to find the word trying an alternative suggestion in S1.7 when the first does not work and finally losing his patience in S1.11. S1[16] – indicated as a competent foreign language student – shows ability in negotiating skills (which is fortunate as he holds all the information). He does not merely limit his attention to providing 'linguistic' information (when he does it is because he is asked to; cf. lines 2-3) but elaborates cues concerning the content that has been learnt and that can be a help for his companion. S2's involvement however is more superficial, fact related to his role in the game, the unequal distribution of the information (this is a one-way task) and, possibly, to his lower competence in the language vis à vis his companion.

Extract 3.

---

1. S1:   Number 1 across … a room … door, yes … a room or un a closet where … where   you wire, er … Listen to me – when you attach a cable in the horizontal camping

with the cable are a cable scrambling, … is a general term.

2. S2:   Is one or two word?

3. S1:   is composed by the two word.

4. S2:   ??? facility?

5. S1:   No. Are … is er think about a system where you attach horizontal cabling for   example or a building cabling.

6. S2:   the ??? closet?

7. S1:   No, remember about um campus distributor. Your remember better campus   distributor.

8. S2:   ?

---

[16] The student had 'PET with Merit' certification.

> 9. S1:   er … there are two terms to the ??? campus distribution.
>
> 10. S2:   . May I use the ??? … cross connection?
>
> 11. S1:   What's a campus distributor? Distributor stand for? Cross connector!! (???) Put   cross connector.
>
> 12. S1:   Now number 2. A point where arrive ISP connection …

The transcripts of the tasks highlight an important feature: the pupils' engagement, whatever their linguistic competence. This engagement is a necessary premise for without it (foreign language) learning will be faultering. As Prabhu (1987: 53) says:

Sustained engagement is a condition favourable to the development of grammatical competence.

Furthermore it must also be noticed that the pupils do not have recourse to communication strategies like foreignisation or language switch. With regard to the use of the L1 however, there are occasional 'falls' but this is rarely strategic in the sense that the L1 is consciously used to mediate the content of the task. The L1 'slips in' the flow of conversation so to speak or, more importantly, it is used as a metalanguage to explain facts about the foreign language being used in the task to communicate meaning (cf. extract 2 above).

5. Conclusions

The small scale research undertaken allows us, in synthesis, to indicate that the situation, as would appear from the data collected, is not conducive to the promotion of the (oral) language competence of the pupils *in the long run, unless* certain features of teaching style in the CLIL lesson are changed. We suggest that these include:

- greater provision for pair/group work particularly for the opportunities they provide not only for language production *per se* but also for the opportunities of student focus on form and negotiation of meaning;

- greater focus on form by the teacher (content or foreign language teacher);

- greater attention to pronunciation of specialist vocabulary. This will require creating synergies with the foreign language syllabus and/or, in the case of team teaching, greater care in presenting new terms before asking the pupils to use them autonomously;

- provide structures (blackboard, handout) or get pupils to identify them themselves, prior to the group/pair task for potential use during the task. Although this is particularly urgent for the weaker pupil, it will help all students to use new or unfamiliar structures that they tend to avoid.

Recalling therefore the research questions (par. 3.1), the tentative answers for questions 1-3 tend towards the negative.

As far as regards question 4, we confirm that there is a connection between oral language production and the activities proposed – at least concerning the distinction teacher-led activities and pupil-led activities – even though, in the case of pair/group activities, they may only mainly lead to an increase in the quantity of language production by the more able. Furthermore, not always is there a parallel increase in quality.

Bibliographic references

Brown G, 1983, Yule G, *Teaching the Spoken Language*, Cambridge, Cambridge University Press.

Bygate M, 1987, *Speaking*, Oxford, Oxford University Press.

Candlin C, Murphy D, 1987, (eds.), *Language Learning Tasks*, Englewood Cliffs, Prentice Hall.

Čok L, 1995, *Learning and Teaching in Pre-school and Primary Bilingual Contexts: age 3/4-12/13. Report on Workshop 5B*, Strasbourg, Council for Cultural Cooperation, Council of Europe.

Coonan C M, 2007, "Contatto, confronto, condivisione. Cosa succede quando due mondi disciplinari si incontrano?", in USR per l'Umbria, *Progetto CLIL Umbria: uso veicolare della lingua straniera*, Perugia, Guerra Edizioni.

Council for Cultural Cooperation, 1996, *Bilingual Education in Secondary Schools: Learning and Teaching non-Language Subjects through a Foreign Language. Report on Workshop 12B*, Strasbourg, Council of Europe.

Council for Cultural Cooperation, 2001, *Common European Framework of Reference for Languages. Learning, Teaching, Assessment*, Cambridge University Press, Cambridge.

Crookes G, Gass S, 1993a, (eds.), *Tasks in a Pedagogical Context: Integrating Theory and Practice*, Clevedon, Multilingual Matters.

Crookes G, Gass S, 1993b, (eds.), *Tasks and Language Learning: Integrating Theory and Practice*, Clevedon, Multilingual Matters.

Crookes G, 1986, "Task classification: A cross-disciplinary review", in *Technical Report*, Centre of Second Language Classroom Research, Social Science Institute, University of Hawaii at Manoa, 4.

Doughty C, Williams J, 1988, (eds.), *Focus on Form in Classroom Second Language Acquisition*, Cambridge, Cambridge University Press.

Doyle W, 1983, "Academic work", in *Review of Educational Research*, 53, 1.

Ellis R, 1985, *Understanding Second Language Acquisition*, Oxford, Oxford University Press.

Ellis R, 2003, *Task-based Language Learning and Teaching*, Oxford, Oxford University Press.

Foster P, Tonkyn A, Wigglesworth G, 2000, "Measuring spoken language: A unit for all reasons", in *Applied Linguistics*, 22, 3.

Helfrich H, Thurmann E, 1994, (eds.), *Bilingual Education in Secondary Schools: Learning and Teaching non-Language Subjects*

through a Foreign Language. Report on Workshop 12A, Strasbourg, Council of Europe.

Lyster R, 1998, "Immersion pedagogy and implications for language teaching", in Cenoz J, Genesee F, (eds.), *Beyond Bilingualism. Multilingualism and Multilingual Education,* Clevedon, Multilingual Matters.

Levelt W, 1978, "Skill theory and language teaching", in *Studies in Second Language Acquisition*, 1.

Long M, 1989, "Tasks, groups, and task-group interactions", in *University of Hawaii Working Papers in ESL,* 8, 2.

Nunan D, 1989, *Designing Tasks for the Communicative Language Classroom*, Cambridge, Cambridge University Press.

Prabhu N, 1987, *Second Language Pedagogy,* Oxford, Oxford University Press.

Robinson P, 2001, *Cognition and Second Language Instruction*, Cambridge, Cambridge University Press.

Skehan P, 1996, "A framework for the implementation of task-based instruction", in *Applied Linguistics*, 17.

Skehan P, 1998, *A Cognitive Approach to Language Learning*, Oxford, Oxford University Press.

Swain M, 1985, "Communicative competence: some roles of comprehensible input and comprehensible output in its development", in Gass S, Madden C, (eds.), *Input in Second Language Acquisition*, Rowley, Newbury House.

Willis J, 1996, *A Framework for Task-Based Learning*, London, Longman.

Wilkins R, 2004, (ed.), *Integrating Content and Language: Meeting the Challenge of a Multilingual Higher Education*, Netherlands, Universitaire Pers Maastricht.

Wolff D, 1997, "Content-based bilingual education or using foreign languages as working languages in the classroom", in Marsh D, *et al*, *Aspects of Implementing Plurilingual Education: Seminars and Field Notes*, Jyväskylä, University of Jyväskylä, Continuing Education Centre.