

ROSALÍA CRESPO JIMÉNEZ  
M.<sup>a</sup> ÁNGELES GARCÍA DE SOLA  
(EDITORAS)

ESP TEACHING  
AND METHODOLOGY  
ENGLISH STUDIES  
IN HONOUR OF  
ÁNGELES LINDE LÓPEZ

GRANADA  
2011

*Cualquier forma de reproducción, distribución, comunicación pública o transformación de esta obra sólo puede ser realizada con la autorización de sus titulares, salvo excepción prevista por la ley.  
Diríjase a CEDRO (Centro Español de Derechos Reprográficos, [www.cedro.org](http://www.cedro.org)) si necesita fotocopiar o escanear algún fragmento de esta obra.*

*Esta editorial es miembro de la UNE, lo que garantiza la difusión y comercialización de sus publicaciones a nivel nacional e internacional.*



© LOS AUTORES

© UNIVERSIDAD DE GRANADA.

ESP TEACHING AND METHODOLOGY ENGLISH  
STUDIES IN HONOUR OF ÁNGELES LINDE LÓPEZ.

ISBN: 978-84-338-5234-2.

Depósito legal: Gr./ 2.064-2011.

Edita: Editorial Universidad de Granada.

Campus Universitario de Cartuja. Granada.

Fotocomposición: García Sanchis, M. J., Granada.

Diseño de cubierta: José María Medina Alvea.

Imprime: Imprenta Santa Rita. Monachil. Granada.

# LANGUAGE AND CONTENT-SUBJECT TEACHER ISSUES ACROSS CLIL IN THE MARITIME STUDIES FIELD: A PROJECT EXPERIENCE WITHIN THE NEW EUROPEAN FRAMEWORK

MARÍA ARACELI LOSEY LEÓN  
*Universidad de Cádiz*

The common European language policy under Bologna requirements has prompted university teachers' concern with developing students' language competences. Many content-subject teachers are encouraged to exploit new opportunities in teaching and learning methods by integrating English language as the medium of instruction. Within this framework, CLIL methodology was found to offer a wide range of opportunities for those content-subject teachers interested in merging content and language in their classrooms. This paper presents the main theoretical and practical issues raised in the implementation process of a CLIL project with undergraduate students at the Faculty of Nautical Sciences of the University of Cádiz (Spain) by a teachers' interdisciplinary innovation research team. The underlying hypotheses of this study are, firstly, that the content greatly determined which communicative competence would be more interesting and beneficial to gain rather than vice versa in a CLIL programme. Secondly, this analysis aims at exploring how certain underlying assumptions in the planning of CLIL methodology cannot be taken for granted. Finally, results also highlight that content-language integrated programmes are a sharing information platform for converging the needs of the language teacher and the content-subject teacher in the European Higher Education Area.

## INTRODUCTION

Content Language Integrated Learning (CLIL) is an innovative methodology that has emerged to cater for a new form of educational delivery where integrated learning is viewed as an effective means of getting learners through the demanding language skills demanded by the European Higher Education policies<sup>1</sup> (Coyle, Hood and Marsh,

1. On tackling CLIL, it is hardly impossible to move aside from the reference and use of a burden of European terms and abbreviations whenever a discussion on EHI new methodologies arise. It is generally acknowledged that a timeline of crucial European educational events start with the Sorbonne Joint Declaration in 1998, which would be the first step towards the so-called Bologna process that definitively

2010; Coyle, 1999, 2007; Coleman, 2006; Dalton-Puffer, 2006, 2007; Marsh, 2008; Wannagat, 2007). In 2006, Eurydice<sup>2</sup> defines CLIL as:

‘Acronym of ‘Content and Language Integrated Learning’. This survey covers the use of at least two languages to teach various subjects in the curriculum, one of which is the language used in mainstream education (generally the official state language), and the other a target language (which may be a foreign language, a regional or minority language, or another official state language), independently of language lessons in their own right (the aim of which is not content and language integrated learning’ (2006: 61).

The closest European project to CLIL objectives is the ENLU Project (European Network for the Promotion of Language Learning Among all Graduates)<sup>3</sup>, which considers an outstanding instrument and method for promotion of language learning “the use of foreign languages as mediums of education (content and language integrated learning-CLIL)” etc. The European Convergence has paved the way for the rise and implementation of CLIL from the primary and secondary levels<sup>4</sup> to tertiary

---

started the way towards the establishment of a European Higher Education Area by 2010. In June 1999, 29 European Ministers signed the Bologna Declaration stating as their main objectives the adoption of a system of ‘easily readable and comparable degrees’ helped by the establishment of the Diploma Supplement; the adoption of a system based on two main cycles, undergraduate and graduate; and the adoption of a system of credits, the ECTS system as a proper means of promoting the most widespread student mobility; other objectives were the promotion of mobility, of European co-operation in quality assurance and promotion of the necessary European dimensions in higher education, as regards “the curricular development, interinstitutional co-operation, mobility schemes and integrated programmes of study, training and research” (4) cf. Confederation of EU Rectors’ Conferences and the Association of European Universities (CRE), 1999: *The Bologna Declaration on the European Space for Higher Education: An explanation*. [<http://ec.europa.eu/education/policies/educ/bologna/bologna.pdf>]. (Acc. 30/09/09).

In 2001, the Prague Communiqué emphasized lifelong learning concept (2) cf. *Towards the European Higher Education Area*, Communiqué of the meeting of European Ministers in charge of Higher Education in Prague on May 19<sup>th</sup> 2001. The Berlin Communiqué, in 2003, added further actions such as European Higher Education Area and European Research Area as two pillars of the knowledge-based society, as well as including the third phase (Ph.D.). cf. [[http://www.bologna-berlin2003.de/pdf/Prague\\_communiqueTheta.pdf](http://www.bologna-berlin2003.de/pdf/Prague_communiqueTheta.pdf)]. (Acc. 01/10/09). In 2005, a Conference of European Ministers of Higher Education was held in Bergen and the objectives were ratified under the document title *The European Higher Education Area-Achieving the Goals*. Communiqué of the Conference of European Ministers Responsible for Higher Education, Bergen, 19-20 May 2005.

But the real initiative focused on language competencies started as early as 1989 in the *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*, [<http://culture2.coe.int/portfolio/documents/0521803136txt.pdf>]. (Acc. 15/11/09).

2. Cf. URL: <http://www.eurydice.org>.

3. ENLU Project (European Network for the Promotion of Language Learning among all Undergraduates) also created a network for the development and implementation of university policies, HELP (Higher Education Language Policy). cf. URL: <http://www.elccl.org/enlu-consultation>, acc. 09/05/10.

4. A number of 13 communities in Spain are involved in CLIL projects. In the Andalusian community, the bilingual programme considerations for primary and secondary educational levels can be consulted at Consejería de Educación. Dirección General de Ordenación y Evaluación Educativa. Junta de Andalucía. Do-

level due to the significant primacy of second language learning in the curricula to such an extent that completion of a university degree is intimately joined to achieving an intermediate level in a second language communication skills. As stated in the European Commission working title document *Promoting Language Learning and Linguistic Diversity: An Action Plan 2004-2006*, 'all students should gain an accepted language qualification as part of their degree course'<sup>5</sup>.

Diversity of language and the need for communication are good grounds for supporting the development and implementation of university-wide language policies<sup>6</sup> but this situation also poses a number of immediate issues in the planning, organizing and structuring of a CLIL course for undergraduate students at the university level such as revisiting methodologies, modes of teaching, competences, learning outcomes, assessment and evaluation, materials and task design, language teacher role, content-subject teacher training, partial/full language of instruction, etc. All these issues have been more or less central in the discussion section of most literature on CLIL in the Spanish context (Jiménez y Ruiz, 2009; Navés, 1999, 2009; Fortanet-Gómez & Räisänen, 2008; Dafouz and Llinares, 2008; Ruiz-Garrido and Palmer-Silveira, 2008) and in other European contexts (Coyle, 1999, 2007, 2010; Dalton-Puffer, 2007; Lightbown and Spada, 2006; Lyster, 2007; Marsh, 1998, 1999, 2000; Mehisto, Marsh and Frigols, 2008; Nikula and Marsh, 1998; Wilkinson, 2004).

Within this framework, the present paper offers a theoretical and practical discussion on these core issues in the process of implementation of a CLIL programme in Maritime Studies from the LT and the C-ST perspective since teachers' concerns around CLIL have not been discussed and surveyed so far in the Maritime Studies field. This study also attempts to offer answers to questions to steer in the CLIL implementation process such as: (a) how to define the role and status of the language teacher; (b) how to widen the scope of courses in English so that students can benefit from mobility programmes language projects; (c) how to implement content-subject

---

cumento titulado "Recomendaciones metodológicas al profesorado de educación primaria" [<http://www.juntadeandalucia.es/averroes/bilingüe/upload/orientacionesprimaria.pdf>] (Acc. 20/06/10). Consejería de Educación. Dirección General de Ordenación y Evaluación Educativa. Junta de Andalucía. Documento titulado "Orientaciones metodológicas al profesorado de áreas no lingüísticas de educación secundaria" [<http://www.juntadeandalucia.es/averroes/bilingüe/upload/orientacionessecundariolingüísticas.pdf>] (Acc.19/09/09).

5. The European Commission adopted the Action Plan on 27 July 2003.

6. The current trend in ELT and ESP education is the existence of projects applying CLIL in several European educational organisations such as EuroCLIC, [<http://www.euroclil.net>]; CERNET (Central European Regional Network for Education Transfer. European Studies material, the teaching of content matter through the target language [<http://www.cernet.at>]; TIE-CLIL [<http://www.tieclil.org>]; and CLIP, the latter hosted by CILT (The National Centre for Languages), [<http://www.cilt.org.uk>], in the UK. Other websites promoting CLIL are CLIL Compendium [<http://www.clilcompendium.com/clilexpertise.htm>]; Content and Language Integrated Learning: A teacher training [<http://lernen.bildung.hessen.de/bilingual/aktuelles/news/1058200637>] and VocTalk: Integrating competencies for working life [<http://www.cec.jyu.fi/voc-talk>]. In-service Education for Teachers Using Content and Language Integrated Learning (2000-2002). [[http://www.iff.ac.at/iu/EAA\\_2\\_report2.pdf](http://www.iff.ac.at/iu/EAA_2_report2.pdf)].



learning merging students language competences and ME model course competences in the European Higher Education Area (EHEA); (d) how to deal with content-subject teachers' training; (e) how to deal with accreditation of language competencies in the Diploma Supplement (DS)<sup>7</sup>, that is to say, which actions the university will exercise so that learners can achieve an expected "threshold" level in communicative needs (Littlewood, 1981).

This analysis stems from the results of a CLIL project carried out with undergraduate students at the Faculty of Nautical Sciences of the University of Cádiz (Spain) by a teachers' interdisciplinary innovation research team from the Sea Navigation and Transport degree, the Marine Engineering degree and the Marine Radioelectronics degree programmes. The development of students' competence enriches the new educational scenario by putting into action new methodologies, organizing learning outcomes, designing materials and tasks, and recasting the teacher's role and evaluation criteria; a wide range of models and suggestions thought to move teachers' and learners' positions closer to each other in the EHEA.

Besides centralised educational competences, Maritime Education and Training enlarges the world of abilities through worldwide regulations and standards such as the *Standards of Training, Certification and Watchkeeping Convention 78/95*, directed towards future masters, officers and watch personnel on sea-going merchant ships. On the other hand, ESP courses on Maritime English also have to comply with international standards and skills as regulated by the International Maritime Organization through the *Model Course 3.17 in Maritime English*<sup>8</sup>. Thus, the combination of legacy goals from different sources in the programming of both content subjects and language subjects has prompted teachers' awareness for exploring new ways, and CLIL methodology was found to offer a wide range of opportunities for teachers interested in merging content and language in their classrooms.

The underlying hypotheses are, firstly, that the content greatly determined which communicative competence would be more interesting and beneficial to gain, which foreign language skills are most likely to profit from CLIL instruction and which seem to do so less. In second place, this analysis aims at exploring how certain underlying assumptions in the planning of CLIL methodology cannot be taken for granted according to the data obtained in CLIL classroom surveys.

7. Its purpose is "to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates, etc.), as adopted by the Lisbon Recognition Convention committee, June 2007, Bucharest. [[http://ec.europa.eu/education/lifelong-learning-policy/doc/ds/ds\\_en.pdf](http://ec.europa.eu/education/lifelong-learning-policy/doc/ds/ds_en.pdf)] (Acc. 15/11/09), and it should accompany the authentic credential that certifies the award. According to a Royal Decree (1044/2003), Spain is in the process of implementing the DS. Moreover, ENIC-NARIC (European Network of Information Centres in the European Region-National Academic Recognition Information Centre) network provides information concerning the recognition of diplomas and periods of study undertaken in other European countries as well as advice on foreign academic diplomas in the country where the NARIC is established.

8. The model course includes a course framework, a course outline (timetable), a detailed teaching syllabus, including the learning objectives that should have been achieved when the course has been completed by the student, teacher's guidance and notes on how students should be evaluated.

## CONTENT-BASED LANGUAGE LEARNING (CBL) AND CONTENT LANGUAGE INTEGRATED LEARNING (CLIL)

Communicative language teaching is the port for many different approaches to ELT and the learner-centred approach is one of the methodologies more profusely related to it. European convergence discovered for most content-subject teachers the existence of an approach where the learner is at the centre of the teaching process. However, this is not new in the second language teaching field; there are many ESP teachers who have trusted in the learner-centred approach for decades (Nunan, 1998; Littlewood, 1981; Tudor, 1996) and designed tasks and materials accordingly. As early as 1998, Nunan described the learner-centred approach as the learners' involvement in bringing to the learning situation "different beliefs and attitudes about the nature of language and language learning and that these beliefs and attitudes need to be taken into consideration in the selection of content and learning experiences." (178). Nunan already pointed out that "language programs should have twin goals, one set relating to the development of language skills and the other set relating to the development of learning skills and skills in learning how to learn" (187), which exactly refers us to the claimed teaching practices in official education actions and policies nowadays.

A similar situation is occurring with CBL and CLIL methodologies across educational settings at different levels. The existence of some overlaps among their features have led to the thought that they work under the same principles since the terms are used interchangeably; nevertheless, the primary identity of CBL is related to the language classroom (Brinton, 1989, 2003; Brinton and Snow, 1997); whereas CLIL is located in the content-subject classroom. Jiménez and Ruiz (2009) offer a detailed list of many assumptions shared by both approaches:

greater motivation towards the language, decrease of learners' anxiety, encouragement of language learning by means of comprehensible input, resemblance to language acquisition in natural contexts, integration of language skills, focus on meaning, fostering of learning and communicative strategies, development of academic skills and use of the target language as a vehicle for learning curricular subjects different from the language itself' (82).

However, a detailed review of some of the assumptions which come into play in a CLIL course may highlight some differences between CBL and CLIL programmes. In the proposed table below, there has been included a set of twenty assumptions and only four of them show a close resemblance whereas sixteen of the assumptions are differential.



Table 1. Similarities and differences between CBL and CLIL<sup>9</sup>

Content-based language learning	Similarities	Content Language Integrated Learning
a. Language learning is acquired through dealing with content-subject.	≠	a. Language learning is reinforced through dealing with content-subject.
b. Functional perspectives of language may be included in the learning process.	≠	b. Functional perspectives of language are not normally included in the learning process.
c. Focus on content.	≠	c. Focus on content.
d. Focus may rely upon reading, writing, listening and speaking.	≠	d. Focus may rely eminently upon reading skills.
e. Vocabulary, grammar and pronunciation have an important role.	≠	e. Main concern is vocabulary.
f. Learning outcomes are more immediate to be gained.	≠	f. Learning outcomes are long-term envisaged.
g. Evaluation is based on the whole language subject.	≠	g. Evaluation within the whole content-subject is not strictly balanced.
h. Its syllabus corresponds to the language syllabus as a whole.	≠	h. Its syllabus may be partially or fully devoted to integrating content and language learning.
i. The teaching role is developed by the language teacher.	≠	i. The teaching role is developed by the content-subject teacher.
j. The language teacher may not be a specialist in the content proper.	≠	j. The content-subject teacher is a specialist in the content proper.
k. Student's perception is that he/she is attending a language course.	≠	k. Student's perception is that he/she is attending a content-subject course.
l. Language accuracy is as important as fluency.	≠	l. Fluency is more important than language accuracy.
m. Language error correction is taken into account.	≠	m. Language error correction may not be made.
n. Materials and tasks design may already be devised.	≠	n. Materials and tasks design have to be specifically devised.
o. LT and C-ST's collaboration is preferable.	≠	o. LT and C-ST's collaboration is necessary.
p. Motivation is presumably gained easily due to content-oriented goals.	≠	p. Motivation is presumably gained due to content-oriented goals.
q. Medium of instruction is a foreign language.	≠	q. Medium of instruction is a foreign language.
r. Organizes learning through cross-curricular themes.	≠	r. Organizes learning through cross-curricular themes.
s. All the subject is taught in L2.	≠	s. Not all the subject is necessarily taught in L2.
t. Cultural competences are not strictly taken into account.	≠	t. Cultural competences are at the core of CLIL.

THE CLIL PROJECT IN CONTENT-SUBJECTS OF MARITIME STUDIES<sup>10</sup>

The project analysis described in the following pages has a twofold objective. In the first place, to compare the general assumptions in CLIL with the content-subject teachers' views. In the second place, to show the results obtained at a CLIL experience in the subject 'Electronic Technology', where twenty-five students of the 4<sup>th</sup> and 5<sup>th</sup> year of the Bachelor degree in Sea Navigation and Transport of the Faculty of Nautical Sciences of the University of Cádiz participated. A description of the CLIL process in the subject 'Electrotechnics and Electronics' of the 2<sup>nd</sup> year of the 1<sup>st</sup> cycle degree in Marine Engineering.

9. Another concept intimately related to CLIL is TBLT (task-based learning and teaching), formerly TBL, which is now seen as a continuum to CLIL (Nunan, 2004; Littlewood, 2004).

10. The Project title is 'Planning, design and integration of tasks in content-subjects of the Facultad de Ciencias Náuticas' PIE96 financed by the University of Cádiz.

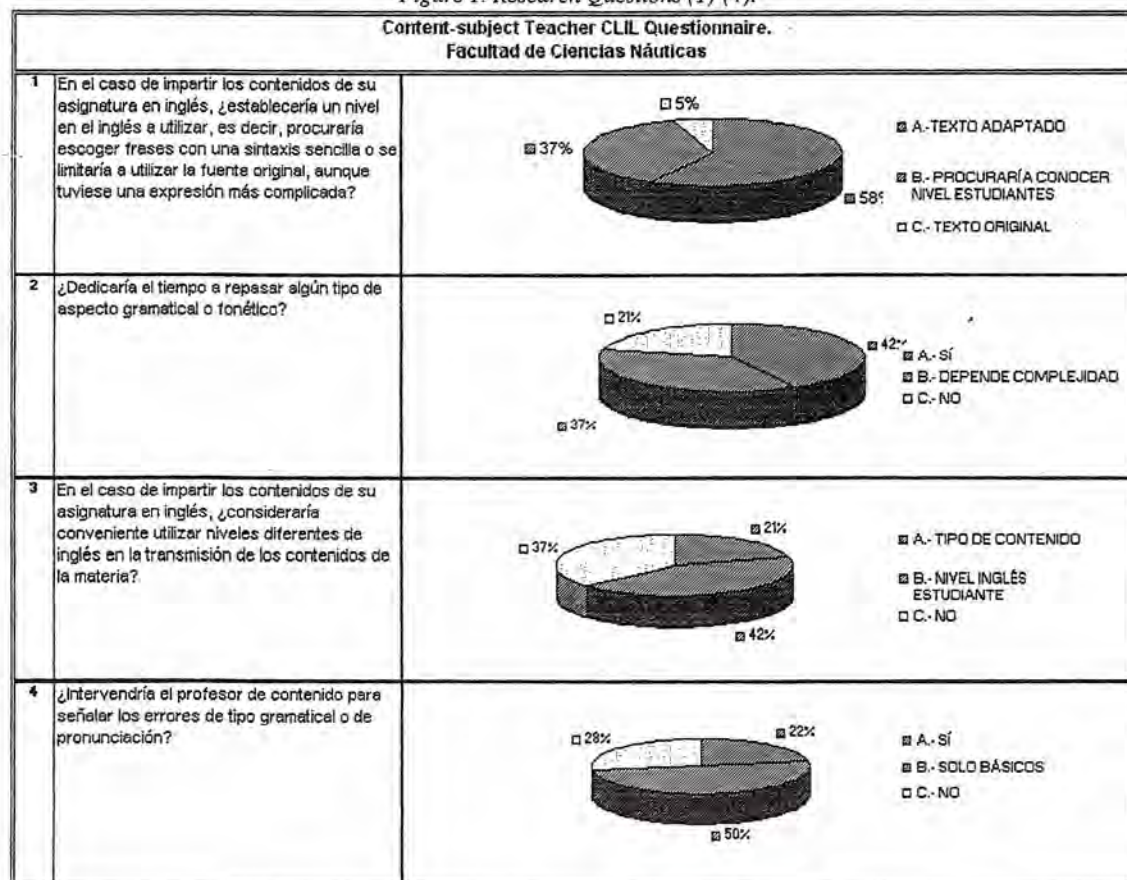


## (a) FIRST PART: CLIL CONTENT-SUBJECT TEACHERS' QUESTIONNAIRE

Participants in the survey were an interdisciplinary group of 19 teachers belonging to six departments: Navigation Science and Marine Technology, Marine Engineering, Physics, Electronic Engineering, Ship Building and Shipping Law. None of them had had previous CLIL experience, though some of them admitted having taught in English occasionally, and their English language level goes from lower intermediate level to intermediate level.

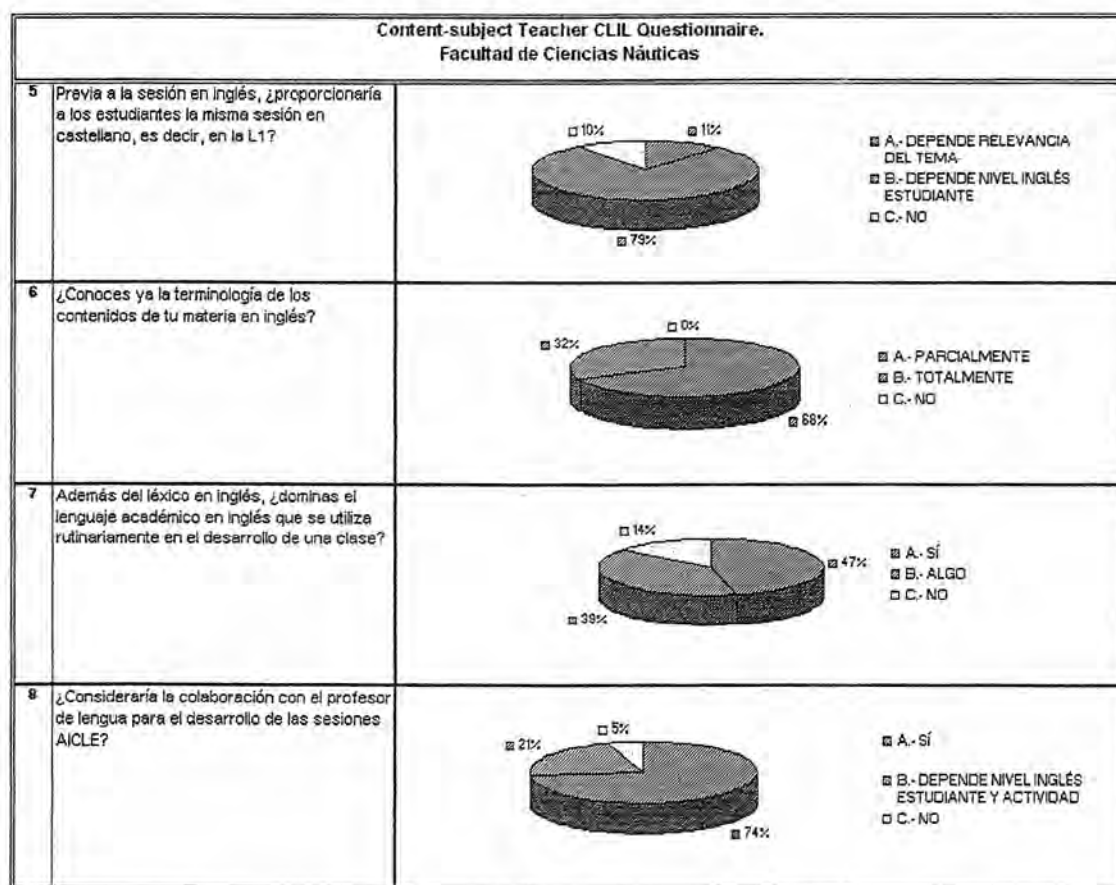
This analysis was carried out in order to verify the consistency of some of the assumptions around CLIL from the C-S T's perspective, with an overall number of 22 research questions (RQ onwards). Let us examine now the results illustrated in figure 1 (RQ 1-4), figure 2 (RQ 5-8), figure 3 (RQ 9-12), figure 4 (RQ 13-16), figure 5 (RQ 17-20), and figure 6 (RQ 21-22). The source language of the questionnaire was Spanish and the text has been transcribed just as it was. In what follows, the corresponding comments are provided in English. The data were analysed individually on the basis of each question result.

Figure 1. Research Questions (1)-(4).



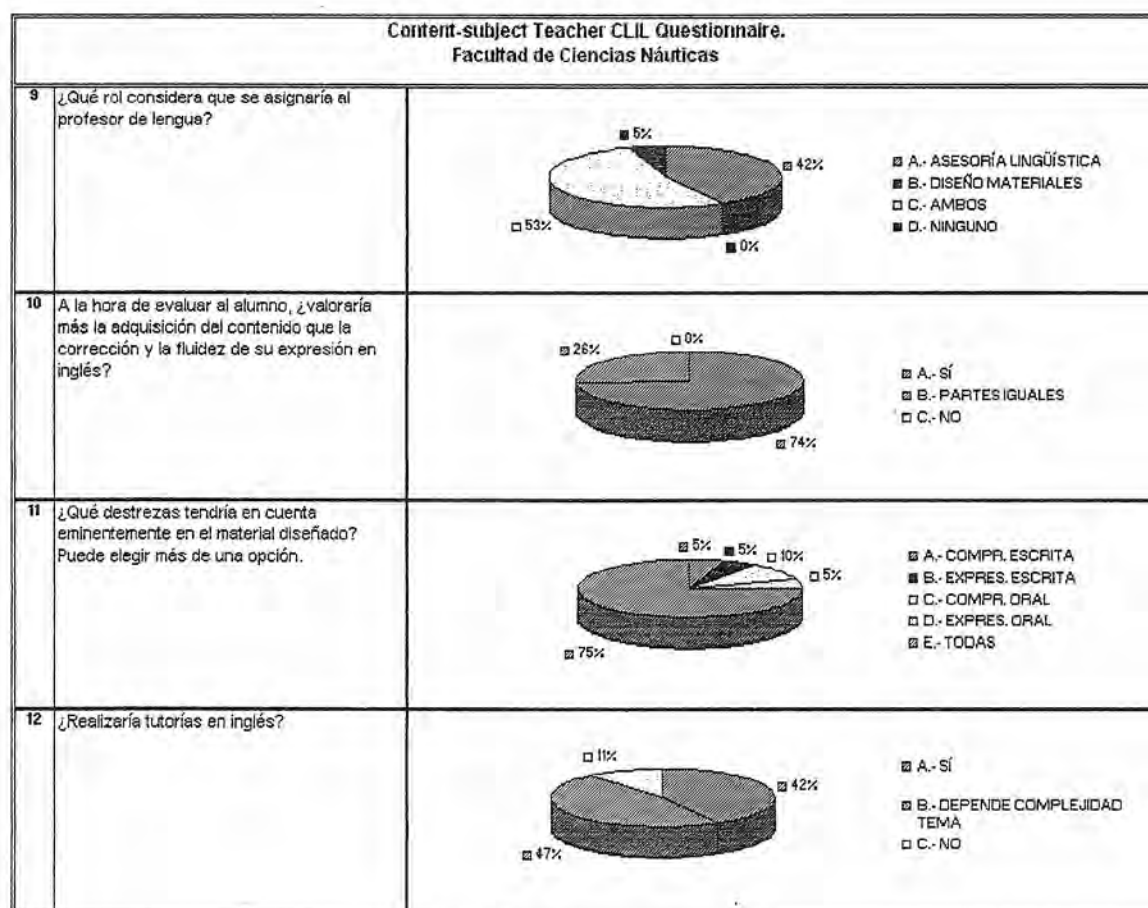
Taking a closer look at the data, we can observe that in question (1) 58% agreed on adapting the grammar of the source text into more simple grammar structures; 37% previously surveyed the students' English level and only 5% would not take any action. Thus, the adaptation of a source text in terms of English level difficulty is the preferable choice. In question (2), we can see that the majority of the content-subject teachers (42%) would devote time to explain grammar/phonetics aspects but it is closely followed by 37% who would review these aspects only if the level of difficulty is low. Both percentages are closely followed by 21% who refused to do it. Teachers were asked in question (3) whether they would use different English levels in their classes and the highest result goes to the second choice (42%), that is, it depends on the student's level of English. Then, 37% would not establish different levels and 21% answered that it would depend on the content type. Another item in the questionnaire, question (4), aimed at finding out the opinion about an old assumption in CLIL, whether the content-subject teacher would correct grammar/phonetics errors or not. The results show that 47% are in favour of pointing out the basic errors, whereas 26% would not intervene at all and 21% would definitely intervene.

Figure 2. Research Questions (5)-(8)



With regard to question (5), figure 2 indicates there is a high percentage (79%) for providing the students with the same lesson in L1, 11% would refuse to do this whereas 11% would do it only if the topic is quite relevant. The data show that the teacher's concern for the student's adequate learning of the content is above the language acquisition process. As far as question (6) is concerned, results reveal that the technical vocabulary size of the content-subject teacher is upper-intermediate as all of them know the specific terminology in English, either completely (32%) or partially (68%). On the other hand, question (7) explores whether the teacher is familiarized with academic language in English. A percentage of 68% responds affirmatively; 58% think that it would be necessary to improve it and 21% admit not having used it before. Consequently, it can be concluded that a teacher training course on English for academic purposes should be taken previous to CLIL. The following research question (8) is focused on the collaboration of the LT in the development of the CLIL working sessions. A significant rise in the percentage can be found in the affirmative option (74%) whereas 21% think that it would depend on the students' English level and on the task type. Only 5% would not consider collaboration with the LT.

Figure 3. Research questions (9)-(12)

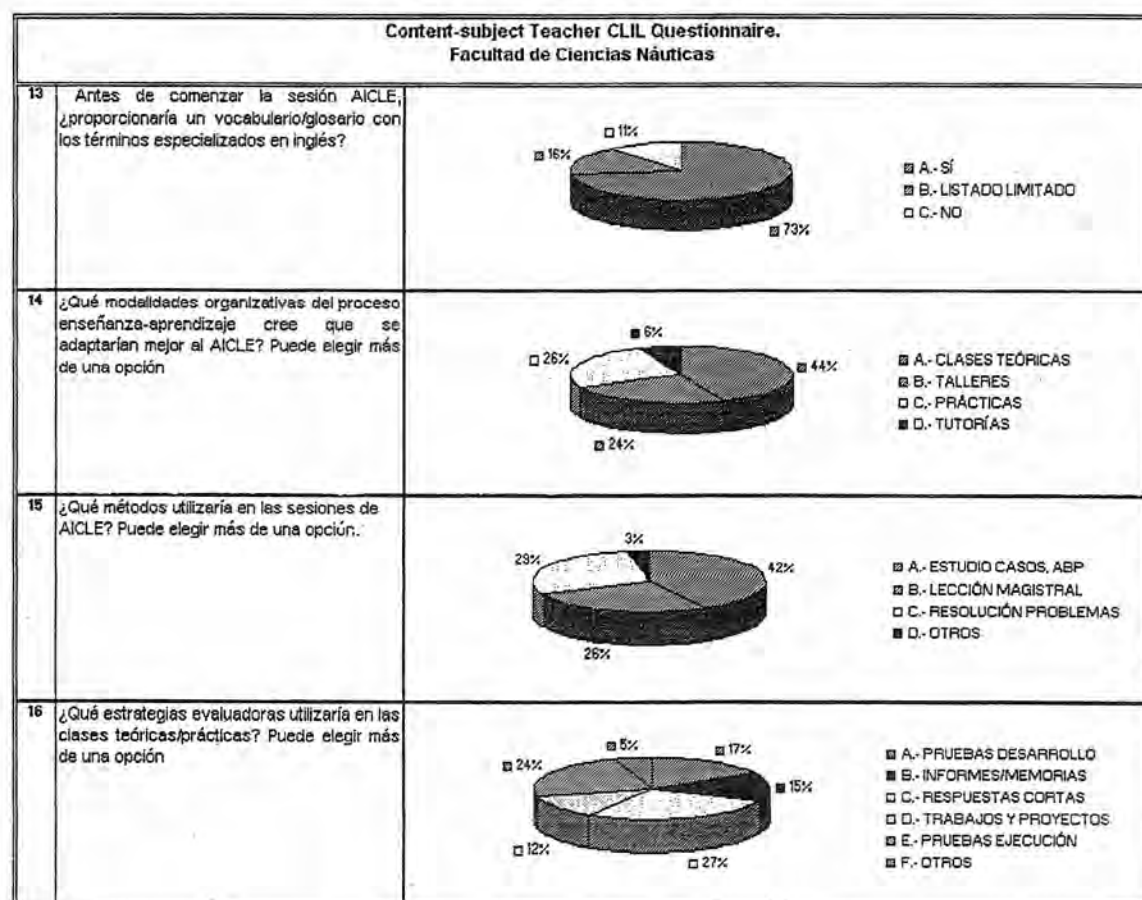




As can be observed in question (9), 53% would accept the LT collaboration in terms of language monitor and materials' designer, 42% think that the LT would only perform the role of language monitor and just 5% would not accept LT's collaboration on any terms. As regards question (10) it poses a generally accepted CLIL assumption, whether the C-ST would value content accuracy rather than language accuracy and fluency. The results reveal that there is still general agreement on this traditional assumption -74%-, whereas 26% admit an average balance between them and none of them would value language accuracy over content accuracy. As far as question (11) is concerned, results show evidence of the inconsistency of one of the most generally held CLIL assumptions, the pre-eminence of the reading skills over the rest of the skills. The question focused on which skills would the C-ST consider when devising material and a significantly striking 76% is in favour of including all the skills whereas a meaningful 10% is in favour of listening skills; 5% would prefer writing skills and another 5% have chosen reading skills and speaking skills.

A new issue is raised in question (12) as to whether the C-S T would be ready or not to do tutorials in English. The results show that 47% would consider the content level of complexity before accepting, 42% agreed with it and 10% would refuse to do it.

Figure 4. Research Questions (13)-(16)



Results displayed in question (13) reveal that 74% out of the C-S T surveyed would provide the students with a glossary on specific terms in English; 16% would provide a limited list whereas 10% admit they would not provide the students with any previous list. With regard to question (14), the preferred teaching-learning organizational modes and techniques in CLIL are lectures (44%), not very closely followed by practical training classes (26%) and seminars (24%); only 6% would also include tutorials. With reference to the typology of activities, results from question (15) reveal that case studies and problem-based learning have obtained the highest score (42%) whereas lectures reach 26%, and, very closely, we can find problem-solving activities (29%) and others not specified (3%). As far as question (16) is concerned, evaluating styles are asked and the highest score was obtained by the short answers test (27%), very closely followed by real/simulated task test (24%), developmental test (17%), reports (15%), written assignments (12%) and the option 'others' amounts to 5%.

Question (17) displays the results for an issue on evaluation: whether the C-S T would evaluate under the same parameters content taught in L1 as content taught in L2. The output shows that the majority would value it under the same parameters (74%) whereas a small percentage (16%) admits evaluating in a higher degree L1 content than L2 content and a close percentage (11%) would evaluate L1 content less. Also noteworthy are the results obtained in question (18) demonstrating the C-S T's concern for the students' content learning as 63% would be in favour of supporting the learner by means of individual tutorials in order to ensure that concepts were clearly assimilated by the student. A percentage of 21% would carry out collective tutorials and 16% would develop any other strategy to get appropriate feedback of the students' content learning process. As regards question (19), another central traditional CLIL issue is raised; whether the C-S T would teach the whole subject in L2 or a part of it. Results indicate that 63% would teach all the subject in English, whereas 37% would consist of just inserting a complementary task in L2 at the end of each L1 content unit. As far as question (20) is concerned, the C-S T was asked whether he/she would provide the student with English for academic purposes before the session (53%), or during the session (47%). Results indicate that all of them were interested in getting the students familiar with academic language.

Figure 5. Research Questions (17)-(20)

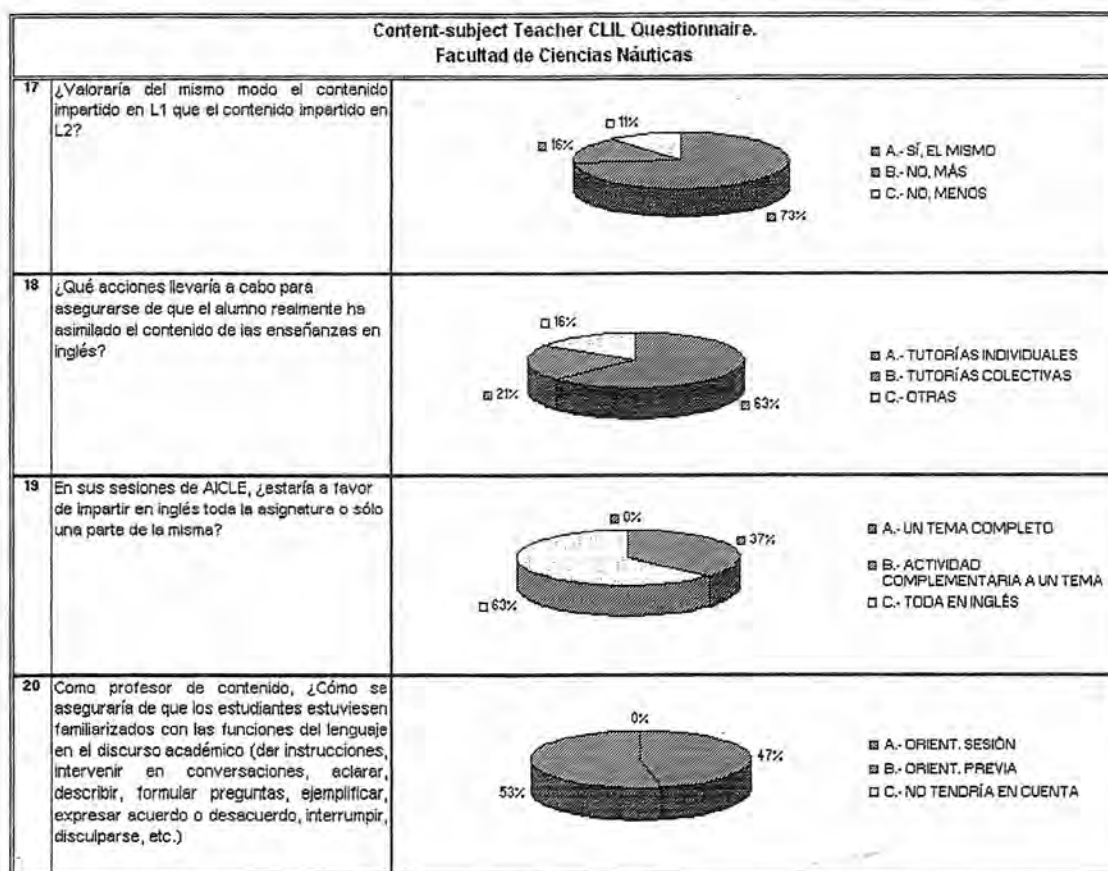
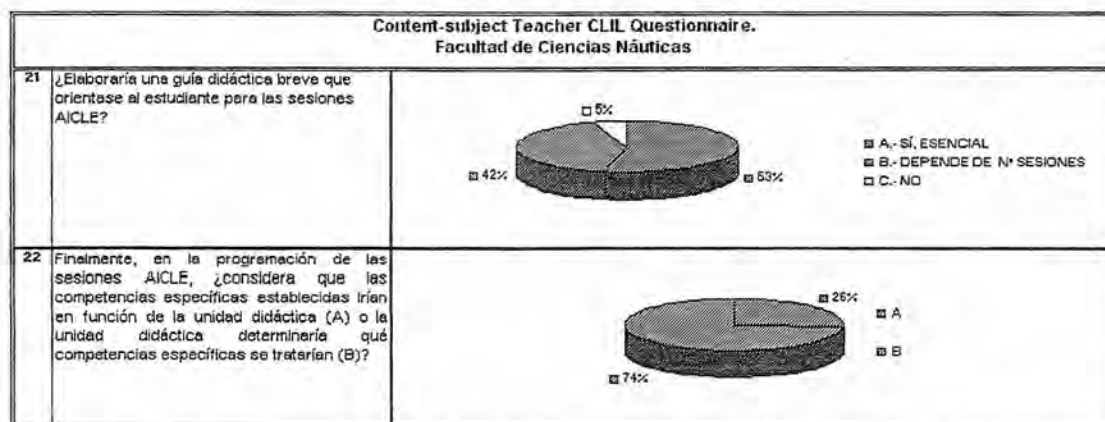


Figure 6. Research questions (21)-(22)



With regard to question (21), 53% of the C-ST agreed on providing the students with an orientating guide previous to CLIL, 42% declared that it would depend on the number of topics devised for CLIL experience and just 5% showed their refusal.



Finally, it is worth mentioning that despite the fact that competences play a decisive and central role in a course design within the EHEA framework, in a CLIL programme there is a shift in the mode of performance of competences. Results indicate that there are statistically significant differences between the choices proposed. Choice A focused on whether the goal competences would decide on the materials and tasks design whereas choice B asked whether topic content and tasks' typology would have prominence over the goal competences. Choice A was selected by 26% whereas choice B was selected by 74% of the surveyed C-S T.

Results revealed that our first underlying hypothesis was proved, that is to say, that the content type would determine which communicative competence to foster rather than vice versa. CLIL also accomplishes an immediate influence upon decisions on the task typology which best fits the contents. Let us consider an example from a CLIL lesson on "Electrotechnics and Electronics". If the C-S T has to deal with teaching the types of diodes, the teacher would probably select as teaching technique a lecture, whereas if the teacher wants to explain how to assemble the elements of an electronic circuit, then a seminar or a workshop in a practical training session seem to be the preferred means and only then the competences will function.

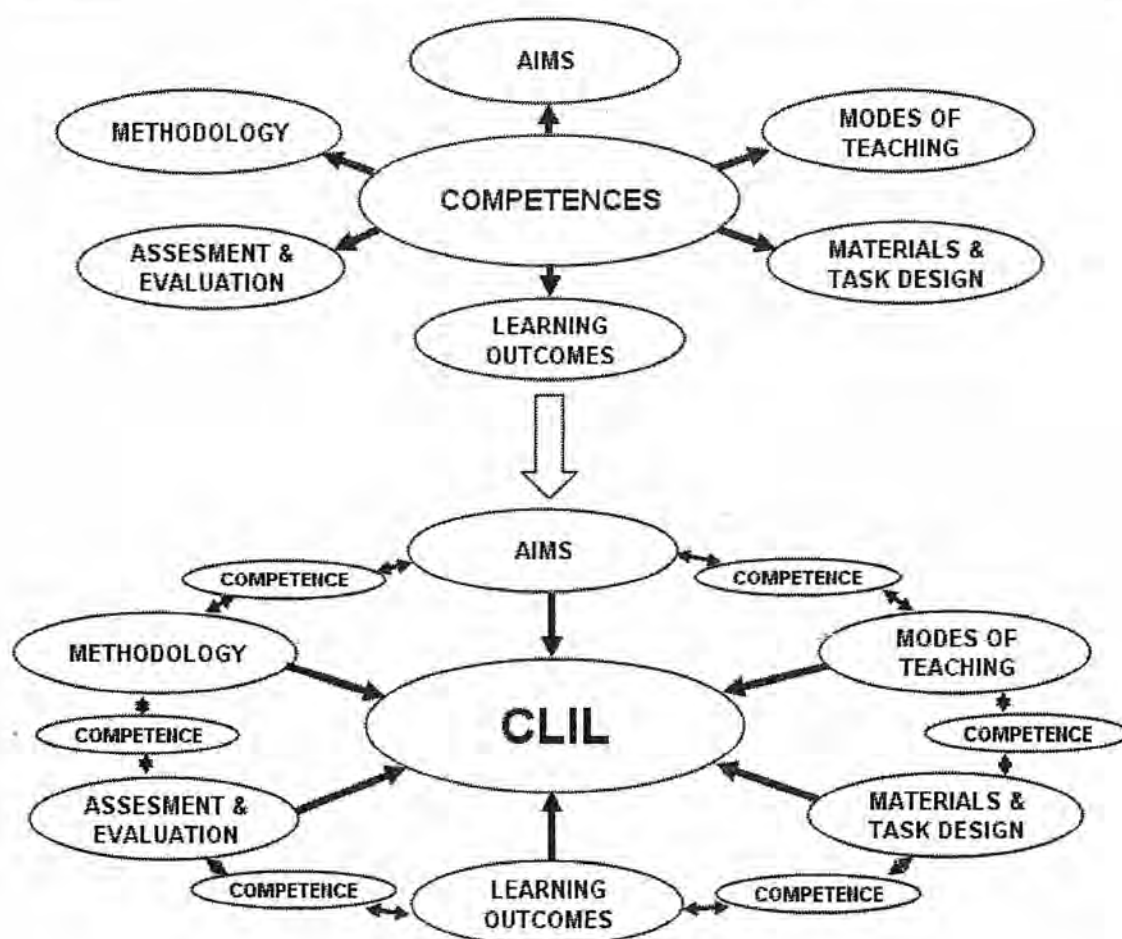
Competences, as defined by *EQF*, and by the *Tuning* project (González, 2003) mean 'the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development'<sup>11</sup>. This definition implies that their presence is necessary more than ever in order to feed all the learning cycle but in the case of CLIL, competences steer the course to follow from the surrounding margins. In a very simplified way, a new scenario for competences in CLIL is proposed and is illustrated in the figure below.

Besides, the results found in some of the research questions illustrate that our second hypothesis also relies on contradiction. With the intention of paying due attention to CLIL traditional assumptions, research questions were carefully examined so that they could provide us with the exact feedback. Thus, on revisiting the CLIL traditional assumptions, it was found that in the degree of involvement of the LT in CLIL session planning, the highest score (74%) would agree with this collaboration as language monitor and materials designer (53%). A new issue such as tutorials in English in CLIL planning resulted in 47% conditioned by the level of difficulty of the content. The prominence of the teacher's concern with the right content learning process over the language accuracy proved that the traditional assumption based on the fact that content accuracy is more important than language accuracy was confirmed from the data obtained. On the other hand, the C-S T would be ready to organize individual tutorials just to check the right content acquisition. It is also worth mentioning that the highest score (76%) indicates that C-S T would be in favour of teaching the content-subject wholly in English so that this also reinforces a traditional

11. *The European Qualification Framework for Lifelong Learning*. [[http://e.europa.eu/education/policies/educ/eqf/reco8\\_en.pdf](http://e.europa.eu/education/policies/educ/eqf/reco8_en.pdf)]. (Acc. 21/04/2010).

CLIL assumption. Another important remark is the kind of collaboration of the LT, whose tasks were confirmed as both monitoring and materials designers. However, the inconsistency of two CLIL traditional assumptions can be shown.

Figure 7. CLIL COMPETENCES ROLE



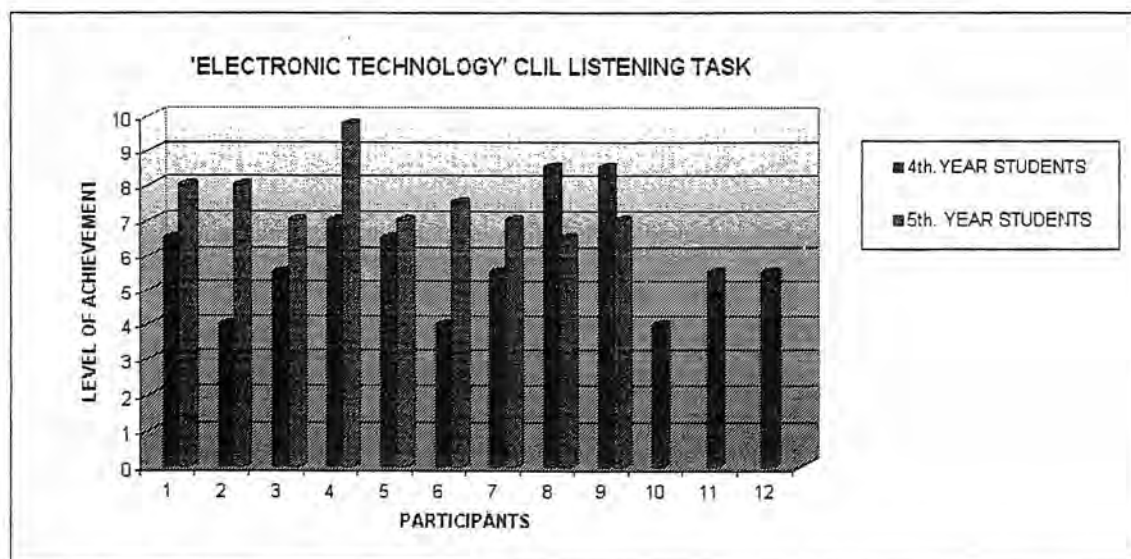
- The degree of involvement of the C-S T in language matters: the highest score agreed on devoting time to review the certain aspects. On the other hand, teachers would also be ready to point out basic language errors. The C-S T's positive attitude shows the inconsistency of traditional assumptions.
- The focus on skills: The traditional focus on reading skills is eminently in clear contrast with the data gathered. The highest score, 76%, would select the integration of the four skills.

## (b) SECOND PART: OUTCOMES FROM A CLIL EXPERIENCE IN MARITIME STUDIES

In this section we will summarize our findings on student achievement from the CLIL experience in the content-subjects “Electronic technology” and “Electrotechnics and Electronics”. In the case of “Electronic Technology” participants were 21 students from the Bachelor degree in Sea Navigation and Transport, from the 4<sup>th</sup> and 5<sup>th</sup> year. The C-S T only introduced one English language task at the end of one of the units of the subject. It consisted of a listening task about a lecture given by the teacher on the automatic identification system, one of the electronic systems located in the bridge of a vessel. The students already know about it from L1 lectures and practical seminars but the English task would bring about new applications of the system. It is also worth mentioning that most of the terminology on these systems is taught in English within the L1 content-subject so that specific vocabulary is not new. On the other hand, the students also attend Maritime English courses where terminology and topics are consistently paired with the content subjects. The session lasted 90 minutes. 30 minutes were devoted to presentation and 10 minutes for a discussion period in which the students actively participated. The time allotted for answering the listening task was 50 minutes. The C-S teacher requested the collaboration of the LT in this experimental session.

On the completion of the task-sheet, the listening and the writing skills of every student were taken into account and a final analysis of the students’ level of achievement can be seen in the figure below.

Figure 8. ‘Electronic Technology’ CLIL listening task





In figure 8, the vertical axis displays the results obtained by the students whereas the horizontal axis displays the number of participants. As can be observed, the left bar indicates there were 12 participating students from the 4<sup>th</sup> year whereas the right bar indicates there were 9 students from the 5<sup>th</sup> year. The level of achievement was higher in the 5<sup>th</sup> year students than in the 4<sup>th</sup> year students except in the cases of two students who achieved a better result. The results were successful, only three out of 21 students failed the test. It is important to notice that students have received previous input in the Maritime English subjects.

The second CLIL subject is "Electrotechnics and Electronics" and the processes and outcomes are quite different. Participants were 5 students of the 2<sup>nd</sup> year of the 1<sup>st</sup> cycle of The Marine Engineering degree. The CLIL planning was focused on a whole unit, the diodes, and it was intended to deal with all the four skills. The students did not receive any previous L1 input on the content but they received supplement teaching contents such as guidelines and a glossary of specific technical terms. The students were also provided with a table of contents indicating the content learning outcomes and the language learning outcomes which was prepared in collaboration with the LT. The C-S T also had teacher's guidelines consisting of objectives, timing, content, learning outcomes, task description and assessment details. Each part of the unit was devoted to practising on a specific skill and at the end of each part the student had to complete a progress test. The materials were specially-designed tasks focused on reading, writing, listening and oral skills. At the end of the unit the student had to develop an oral presentation. The full number of hours devoted were eight sessions of 50 minutes each.

#### FINAL REMARKS

The results of our research in which teachers' perceptions have been examined and analysed support the view that CLIL courses have to be carefully planned and tailored according to the particular needs of the curricula contents since not all traditional assumptions can be taken for granted. On the other hand, the present study also intended to show the shift paradigms in the role of competences in the CLIL programmes as well as the distinctive features between this methodology and others claimed to be interchangeable as CBL.

A major conclusion is the fact that a language for specific purposes is most successfully acquired when conditions are similar to those of the content-subject (Lightbown and Spada, 2006). Future directions would be the implementation of CLIL in the curricula so that students can get immersed in the English language in a motivating, refreshing and innovative way. Nowadays, there is expanding evidence-based research on CLIL issues that would ensure an enrichment of experience from different educational communities.

As regards the C-S T, CLIL can also offer opportunities to shape their discipline through adaptation to a second language (Mehisto, 2009: 161), by diversifying methods and forms of classroom teaching and learning. Concerning the LT, their roles as

language analysts would bridge the still existing gap in some languages for specific purposes which are demanding shape contents to situations the learner might encounter, or to language functions that are likely to be most frequent in the specific field, to what topics are likely to be important and what language forms the students should acquire in order to satisfy the communicative needs in their future professional development. Students may also learn consciously and unconsciously from each other in this CLIL stream.

Concerning the teachers' collaboration, sharing ideas in core CLIL issues resulted in constructing and encouraging discussions with colleagues in other departments of the same professional community. Apart from the great workload for teachers, our meetings also brought in new ideas to implement in a range of varied settings.

It is hoped that this paper has successfully contributed to the emerging range of CLIL courses by describing a project close to EHEA and by examining issues that in its future implementation could enhance the convergence of students' communicative language competences and their future working life.

#### ACKNOWLEDGEMENTS

The author wishes to express her thanks to the financial support provided for this research by the University of Cádiz's "Teachers' innovative actions and plans" to the project "PIE 96" she coordinated during the academic year 2009-2010. Special heartfelt thanks to all the content-subject colleagues of the Facultad de Ciencias Náuticas for their helpful comments and collaboration throughout the CLIL experimental stage and to all the students who have freely participated in the tasks of the CLIL pre-implementation stage.

#### REFERENCES

- BRINTON, D. M., SNOW, M.A. and WESCHE, M. B., 1989, *Content-Based Second-Language Instruction*. New York, NY: Newbury House.
- BRINTON, D. M. and SNOW, M. A. (ed.), 1997, *The Content-based Classroom: Perspectives on Integrating Language and Content*. NY: Longman 5-21.
- BRINTON, D., 2003, Content-based Instruction. In D. Nunan (ed.) *Practical English Language Teaching*. New York: McGraw Hill. 199-224.
- Coleman, J. A., 2006, 'English-medium teaching in European higher education'. *Language Teaching* 39: 1-14.
- COMMISSION OF THE EUROPEAN COMMUNITIES, 2003, *Promoting Language Learning and Linguistic Diversity: An Action Plan 2004-2006*. (Acc.13/10/2010). [[http://ec.europa.eu/education/doc/official/keydoc/actlang/act\\_lang\\_en.pdf](http://ec.europa.eu/education/doc/official/keydoc/actlang/act_lang_en.pdf)].
- COUNCIL OF EUROPE, 2001, *Common European Framework for Reference for Languages*. Cambridge: Cambridge University Press.
- COYLE, Do, 1999, "The next stage? Is there a future for the Present? The Legacy of the "communicative approach". *Francofonie*, March, 1999, no. 19: pp. 13-16.
- COYLE, Do, 2007, "Content and Language Integrated Learning: Towards a Con-

- connected Research Agenda for CLIL Pedagogies". *International Journal of Bilingual Education and Bilingualism*. Volume 10, Issue 5: 543-562.
- COYLE, D.; Hood, P. and Marsh, D. 2010, *CLIL Content and Language Integrated Learning*. Cambridge: Cambridge University Press.
- DALTON-PUFFER, C., "Outcomes and Processes in Content and Language Integrated Learning (CLIL): current research from Europe" [URL: <http://www.univie.ac.at>; accessed 18 february 2010].
- DALTON-PUFFER, C., 2007, *Discourse in Content and Language Integrated Learning (CLIL) Classrooms*. Amsterdam: John Benjamins Publishing Company.
- DAFOUZ MILNE, E. and LLINARES GARCÍA, A. 2008, "The Role of Repetition in CLIL Teacher Discourse: A comparative study at Secondary and Tertiary Levels". *International CLIL Research Journal*, vol. 1 (1). [<http://www.icrj.eu/index.php?vol=11&page=743>]. (Acc. 7/12/09).
- ENLU Project (European Network for the Promotion of Language Learning among all Undergraduates). [<http://www.elccel.org/enlu-consultation>]. (Acc. 09/05/10).
- EURYDICE. The information network on Education in Europe, 2006, *Content and Language Integrated Learning (CLIL) at School in Europe*. Brussels: Eurydice, Directorate-General for Education and Culture.
- FORTANET-GÓMEZ, I. and RAISANEN, C. (eds.), 2008, *ESP in European Higher Education: Integrating Language and Content*. Amsterdam: John Benjamins.
- GONZÁLEZ, J. and WAGENAAR, R. (eds.), 2003, *Tuning Educational Structures in Europe. Final Report, Phase One*. Bilbao: Universidad de Deusto.
- GRABE, W. and STOLLER, F. L., 1997, "Content-based instruction: Research foundations". In M.A. Snow & D. M. Brinton (eds.), *The Content-based classrooms: Perspectives on integrating language and content*. New York: Longman.
- HUIDAN, Wu; BADGER, Richard G. 2009, "In a Strange and Uncharted Land: ESP teachers' strategies for dealing with unpredicted problems in subject knowledge during class". *English for Specific Purposes*, volume 28, Issue 1: 19-32.
- JIMÉNEZ CATALÁN, R. M. and RUIZ DE ZAROBÉ, Y., 2009, *Content and Language Integrated Learning. Evidence from Research in Europe*. Bristol: Multilingual Matters.
- JIMÉNEZ CATALÁN, R. M. and RUIZ DE ZAROBÉ, Y., 2009, 'The Receptive Vocabulary of EFL Learners in Two Instructional Contexts: CLIL versus non-CLIL Instruction'. In *Content and Language Integrated Learning. Evidence from Research in Europe*. R. M. Jiménez Catalán; Y. Ruiz de Zarobe (eds.). Bristol: Multilingual Matters. 81-92.
- LIGHTBOWN, P.M. and SPADA, N. 2006, *How Languages are Learned*. Oxford: Oxford University Press.
- LYSTER, Roy, 2007: *Learning and Teaching Languages through Content: A Counter-balanced Approach*. Amsterdam: John Benjamins.
- LITTLEWOOD, W., 1981, *Communicative Language Teaching*. Cambridge: Cambridge University Press.
- Littlewood, W., 2004, "The Task-based Approach: Some Questions and Suggestions". *ELT Journal* 58 (4): 319-326.
- MARSH D. y LANGÉ G. (eds.), 1999, *Implementing Content and Language Integrated Learning*. Jyväskylä: Universidad de Jyväskylä.
- MARSH, D. et al., 1999, *Language Teacher Training and Bilingual Education in Finland*. (Acc. 15/05/06). [<http://web.fu-berlin.de/elc/tnp1/SP-6NatRepFI.doc>].
- MARSH D. y LANGÉ G. (eds.), 2000, *Using Languages to Learn and Learning to Use Languages*. Jyväskylä: University of Jyväskylä.



- MEHISTO, P.; MARSH, D. and FRIGOLS, M. J., 2008, *Uncovering CLIL: Content and Language Integrated Learning in Bilingual and Multilingual Education*. Oxford: Macmillan Publishers Limited.
- NAVÉS, T. and MUÑOZ, C., 1999, "Implementation of CLIL in Spain". In D. Marsh and G. Langé (eds.) *Implementing Content and Language Integrated Learning. A Research-Driven TIE-CLIL Foundation Course Reader*. Jyväskylä, Finland: University of Jyväskylä. 145-158.
- NAVÉS, T. 2009, 'Effective Content and Language Integrated Learning (CLIL) Programmes'. In R. M. Jiménez Catalán and Y. Ruiz de Zarobe (eds.). *Content and Language Integrated Learning. Evidence from Research in Europe*. Bristol: Multilingual Matters. 22-40.
- NIKULA, T., MARSH, D., 1998, *Terminological Considerations Regarding Content and Language Integrated Learning*. En: *Bulletin Suisse de Linguistique Appliquée*, núm. 67: 13-18.
- NUNAN, D., 1998, *Language Teaching Methodology*. London: Longman.
- NUNAN, D., 2004, *Task-based Language Teaching*. Cambridge: Cambridge University Press.
- RUHAUF, G. et al., (eds). 1996, *Teaching Content in a Foreign Language*. Alkmaar: Stitching Europees Platform voor het Nederlandse Onderwijs.
- RUIZ-GARRIDO, M. F. and PALMER-SILVEIRA, J. C., 2008, "Content Learning in Business Communication". In Fortanet-Gómez, I. and Rasanen, C. (eds.) *ESP in European Higher Education: Integrating Language and Content*. Amsterdam: John Benjamins. 147-164.
- TUDOR, I. 1996, *Learner-Centredness as Language Education*. Cambridge: Cambridge University Press.
- WANNAGAT, U., 2007, 'Learning through L2-content and Language Integrated Learning (CLIL) and English as Medium of Instruction (EMI)'. *International Journal of Bilingual Education and Bilingualism*. Volume 10, Issue 5: 663-682.
- WILKINSON, R., 2004, 'Integrating Language in Content and Content in Language: Conclusions from two experiences'. In R. Wilkinson, (ed). *Integrating Content and Language: Meeting*