Collaborating for Content and Language Integrated Learning

Critical Components of Integrating Content and Language in Spanish Higher Education

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Abstract: After the harmonization process carried out in Spanish higher education following the Bologna Declaration, many universities have decided to introduce English as the language of instruction for some studies. From 2010, the new study programmes have been implemented, and there is an urgency to define what is meant by "teaching in English". Some researchers have investigated the constraints and difficulties of introducing a second or third language of instruction and have shown the difficulties content teachers have in recognising and describing their disciplinary discourse (Jacobs, 2007), which would make it very difficult for them to teach it in a foreign language. There seems to be a need for dialogue between language and content teachers, in which they can express their experiences, opinions and fears. An innovative education project proposed by ESP teachers at Universitat Jaume I investigated how teachers intend to implement the directive to introduce English as a third language of instruction and the relationship they think should be established between language and content teachers. This paper summarizes the discussions developed in the meetings held in the framework of this project.

Introduction

The Bologna Declaration is a document signed in 1999 by 29 European Ministers regarding the future developments towards a common European Higher Education Area. In 2001, the Ministers met again to review the progress of the joint system and established 2010 as the deadline for the completion of the national adaptations. Spain has been one of the last countries to modify study plans in order to implement the necessary adaptations following the Bologna Declaration. The processes of modification and the implementation of these study plans have not been an easy task: endless meetings, tensions and conflicts generated by unfriendly attitudes marked by personal interests, and a great deal of paperwork have left most academic staff exhausted and unwilling to introduce any more changes in their teaching practices. However, changes pose an invaluable opportunity to introduce new policies such as those related with new languages of instruction.
In Spain there has traditionally been a problem with the command of foreign languages, maybe due to a perceived lack of necessity, since so many people in the world speak Spanish, to the isolation of Spain from the rest of Europe for many years during the Franco dictatorship, or maybe due to the bilingualism with local languages in almost a third part of the country. However, there is now a declared willingness by all politicians, regardless of the political party they represent, to improve students' level of foreign languages, especially of English[1]. In higher education this interest in foreign languages has led to the introduction of bilingual programmes, where students can choose between Spanish or English as the language of instruction, or programmes exclusively taught in English. Now, the questions many teachers are asking are "How are we going to teach in English?; Should we just change the language of instruction?". Some of these teachers are turning to their colleagues teaching the English language, asking for help and collaboration, and learning about pedagogies already recommended some years ago by the European authorities such as Content and Language Integrated Learning (Commission of the European Communities, 2003).

However, the integration of content and language in higher education requires understanding of concepts such as interdisciplinarity and teacher collaboration. The last two centuries have seen a continuous and accelerating process of fragmentation of disciplines (Donald, 1995), in contrast with today's interpretation of knowledge, which is not seen in separate chunks, but "within the framework of real life application where solutions are required for complex problems" (Kreber, 2009, p. 25). A reaction to the fragmentation of subjects has been the collaboration between teachers of different disciplines. An example of this collaboration is that developed between content subjects and ESP teachers. Some authors have reported these collaborations in the past, when relationships were not easy, and ESP teachers took the initiative and gathered information by means of needs analyses techniques from students, content teachers and future employers and applied it to their courses (Dudley-Evans and St John, 1998; Wilkinson, 2003). Today in Europe, there is a reported tendency (Räisänen & Fortanet-Gómez, 2008) to introduce English as a second or third language of instruction in European universities, with an effort to try and integrate content and language (ICL). In order to manage this integration it is necessary to consider the kinds of communication tasks and skills that form the core competence profile as well as the intercultural communication conventions in each discipline, the skills that may be transferable between languages, and the academic genres that should be covered from the language point of view in order to use them in the content
subject (Räsänen, 2008; Jones, 2009). The problem with communication skills is that they are often considered additional and secondary to the main curriculum, as they are thought of as generic skills. As a consequence, little time and attention is devoted to explaining disciplinary discourse, (Airey and Linder, 2009) or the genres required in the discipline. Moreover, cross-disciplinary dialogue about communication skills is very rarely found. In this new situation, however, both content and language teachers need to collaborate with each other.

One of the first steps for the success of content and language integrated learning is to create discursive spaces "for sustained collaboration of language and content lecturers" (Jacobs, 2007, p. 44), which is difficult, since there is no tradition in the Spanish university for interdisciplinarity, especially between content and language teachers. The aim of this paper is to present the reflections of a group of content and English language teachers in the year previous to the introduction of English as a third language of instruction in a Spanish university, as an attempt to create a discursive space against the backdrop of the ambiguities and tensions generated by the Bologna Declaration and its implementation in Spain.

The Setting

Spain has an idiosyncratic sociolinguistic circumstance: five of its 17 autonomous regions are bilingual, with Spanish and one of the three local languages: Catalan, Basque and Galician. During the last 20 years, local languages have been used as languages of instruction, in addition to Spanish, in all levels of education following immersion programmes. However, foreign languages have remained secondary, despite being taught from the first years of the education system[2].

The beginning of the academic year 2010-2011 was the deadline to introduce the new study programmes, after the Bologna Agreement to harmonize higher education in Europe. The new programmes have meant a substantial change regarding structure, as well as pedagogy. The 4[3] courses of the graduate degree have been accommodated to an 8-semester system of 30 credits per semester, totaling 60 credits per academic year (up to now it was estimated that we taught an equivalent of 75 credits per year).

One of the peculiarities of Universitat Jaume I’s study plans is the requirement to incorporate 12 credits taught in English, besides the English language course. However, the lack of precise guidelines has led to a
variety of interpretations about how to implement the new policy. This uncertainty has been the main motivation to gather a group of content teachers and English language teachers in order to create a discursive space to share experiences and points of view at a time when it was still possible to reflect on how to introduce a new language of instruction. One topic for discussion in this interdisciplinary forum has been the definition of a number of competencies for each subject, which students should acquire and teachers should adequately assess.

**Opinions and Expectations on Future ICL Teaching and Learning**

The reflections I will introduce in this section stem from the innovation project at Universitat Jaume I. The team in this project was formed by 7 ESP teachers and 5 content teachers. The reason for selecting the members of the team was the good professional relationship between these teachers, as well as their common concern about the introduction of English as a third language of instruction. The content teachers were also representatives of the committees that have to supervise the implementation of 6 study plans: Criminology and Safety, Business Administration and Marketing, Finances and Accountancy, Economy, Electrical Engineering, and Computer Engineering. The project took place in the year previous to the implementation of the new study plans, so all discussions are based on prospective ideas on how the collaboration between content and language could be organized. There were three meetings of the whole group. In addition, in order to complete the information, a questionnaire was passed to a random sample of 50 teachers who might be teaching in the graduate degrees involved in the next years and 100 current students in related bachelor degrees. A total of 38 teachers and 83 students answered the questionnaires.

The questionnaire included questions about the following five aspects of ICL:

1. Distribution of subjects with credits in English.
2. Students’ needs for courses delivered in English.
4. Opinions about English as a language of instruction.

**Distribution of Subjects with Credits in English**
The inclusion of a foreign language as a language of instruction in higher education is something new in many universities. In the case of programmes with two or more languages of instruction, the criteria to select the subjects to be taught in the foreign language do not seem to be very clear from the list of subjects offered, since they do not correspond to contents related to international institutions or wider fields of knowledge. Implementing the credits taught in English has very often been done by offering laboratory groups in English and in Spanish\(^4\). This convenient solution, however, is not feasible when there are no lab groups or when subjects have a reduced number of students. Furthermore, ESP courses are rarely found in the degree programmes in Spanish institutions, except in some universities like Universitat Jaume I. English language learning is most often assumed to be the responsibility of the individual student.

At Universitat Jaume I, a search on the university web site provided information about English courses and subjects that had been labeled as "taught in English" in the 5 degrees involved in the project. It was found that, as recommended in the guidelines to design the new study plans, an ESP course is present in the curricula in the first year, though in the degrees in Business Administration and Marketing, Finances and Accountancy and Economy, the ESP course is in the first semester of the third year. Including an ESP course in the study programmes seemed to be something unquestionable for the project team members. It is a good way to introduce students in the disciplinary discourse, as well as to prepare them for the activities they will be required to carry out in the content subjects delivered in English. Moreover, in the business and economics degrees it was decided that the ESP course should be in the third year as a guarantee that students would have a good preparation, not only for courses delivered in English, but also to write and present their final project in that language.

As for the credits to be taught in English, Table I shows their distribution in the graduate degrees involved in the project.

<table>
<thead>
<tr>
<th>Table 1 - Distribution of Credits Developed in English in the Degrees</th>
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<tbody>
<tr>
<td><strong>Business Administration and Marketing, Finances and Accountancy and Economy</strong></td>
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<tr>
<td>Criminology and</td>
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As shown in Table 1, there is great variety in the way committees have interpreted the guidelines about the credits that should be delivered in English, which should amount to 12 in each study plan. This variety surprised the project team and led to some discussion about the convenience of having courses taught only partially in English or on the contrary to teach complete courses in that language. Only the degrees in Business Administration and Marketing, Finances and Accountancy and Economy selected one course with 6 credits in which the language of instruction is English, and the final project (also 6 credits) to be written and presented in English. The members of the project team reported that the discussions in this respect in the committees for the new study plans had been quite different. While some members thought it was better to have the courses involving teaching in English in the last years, others preferred to distribute these credits along the graduate degree years. With the exception of the business and economy degrees, all the others included in the syllabus of the courses to be taught in English one competency regarding the improvement in the knowledge of the English language. However, only the committee for the degree of Computer Science Engineering considered the participation of teachers from the English department relevant and suggested team-teaching the course. Further discussion on this topic revealed that partial teaching in English seemed less demanding for content teachers than complete courses, their intention being to use some materials in English, to invite some foreign teachers for a few sessions and to require assignments and presentations in English.
How to evaluate these assignments and presentations had not been discussed yet in the committees, except for Computer Science Engineering. In this degree, the idea is to incorporate a new skill along each academic year. So, in the first and second year, reading in English will be required from students; in the third year writing will be incorporated; and in the fourth year listening and speaking will be the requirement. The collaboration of teachers from the English department will involve the supervision of the assignments and the language assessment. This explanation generated a reaction by the English teachers who did not like the idea of having their teaching duties divided in so many courses. Moreover, collaboration in teaching seemed to be uncomfortable for both language and content teachers who have not experienced it before and only see the disadvantages such as losing the freedom to teach the way they prefer, or the time that has to be devoted to coordination meetings and elaboration of joint materials.

No conclusion about the best option to distribute the credits to be taught in English was reached, but the information shared made the participants see other points of view and start thinking in practical terms about the implementation of these courses. The collaboration between content and language teachers will not be easy, but a certain compromise seemed to have been achieved at least by the project team members.

**Students' Needs for Courses Delivered in English**

Discussions on the students' needs in English brought to the fore some shortcomings: the information provided to new students about the introduction of English in the courses is almost non-existent, and content teachers do not have a clear idea about the level of English their students have. Therefore, teachers who try to integrate content and language may find reluctant students, due to this lack of information, in addition to not being sure about the possibilities they have of being understood if they use English in the class. A questionnaire distributed to students revealed the fears students have in the face of this new situation (Table 2).

**Table 2. Students' opinions about the introduction of English as a LoI (83 respondents)**

<table>
<thead>
<tr>
<th>Which problems may you find in a subject where you are expected to learn both the corresponding content and English?</th>
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<tbody>
<tr>
<td>When writing and speaking, lack of specific vocabulary</td>
<td>71.3%</td>
</tr>
<tr>
<td>Difficulty in writing reports in English</td>
<td>36.3%</td>
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</tbody>
</table>
The lack of specific vocabulary and not being able to understand lectures and specialized texts seem to be students' main concerns, followed by the difficulty to write reports. This reveals their uncertainty about the command of English they have. Most students answering the questionnaire were in their first year at the university; this could also explain their concern for specific vocabulary. An additional problem for some students appear to be teaching/learning the contents of a subject and the English language at the same time since they have never experienced that before.

As for content teachers, as shown in Table 3, they suggested introducing English partially in their subjects, by introducing glossaries with specific terminology in English, bibliography in English, online materials to work with them in class or individually, video materials and visuals in English (slide presentations) in their lectures. However, only 40% would support teaching exclusively in English.

**Table 3. Ways to introduce English in content subjects (38 respondents)**

<table>
<thead>
<tr>
<th>How would your classes vary in case of teaching them in English?</th>
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</thead>
<tbody>
<tr>
<td>I would introduce specific terminology in English</td>
<td>80%</td>
</tr>
<tr>
<td>I would ask students to read and understand texts in English</td>
<td>76%</td>
</tr>
<tr>
<td>I would use online materials in English</td>
<td>85.7%</td>
</tr>
<tr>
<td>I would use visuals in English when lecturing</td>
<td>68%</td>
</tr>
<tr>
<td>I would invite teachers from other universities who could teach part of my subjects in English</td>
<td>52.8%</td>
</tr>
<tr>
<td>I would show video materials in English</td>
<td>61.9%</td>
</tr>
<tr>
<td>I can teach complete courses in English</td>
<td>40%</td>
</tr>
</tbody>
</table>

Moreover, on hearing the content teachers in the team recognize that most teachers only have a low command of the English language, language teachers expressed concerns and declared their doubts about the quality of the language that will eventually be used in the classes. These fears and concerns revealed by students and teachers could be the main hindrance for the integration of content and English language
teaching. A good communication campaign, as well as a complete teacher training programme and complementary courses for students will be needed in order to guarantee success.

**Disciplinary Differences in Modes of Teaching and Pedagogical Strategies**

In the discussions held in the meetings of the team of the project, it was perceived that there might be differences in the modes of teaching and pedagogical strategies used by content and language teachers which could be a problem, or an opportunity, for future collaboration. This was explored by asking teachers and students. Teachers reported the monological lecture as the main mode of teaching, though they also ask students to do tasks with precise instructions, either individually or in group; class discussion and oral presentations do not seem to be very common in content subjects.

Regarding students' answers to similar questions, about half of the students agreed all the pedagogical strategies could be found in both English and content subjects except the correction of spoken discourse and listening comprehension activities, more associated with language courses. About the rest of students, the main differences were in the two strategies related to the application of new knowledge to a practical situation and solving problems, especially in group work, which were generally linked to content courses (Table 4).

**Table 4. Relation between modes of teaching and language and content subjects (83 respondents)**

<table>
<thead>
<tr>
<th><strong>How would your classes vary in case of teaching them in English?</strong></th>
<th>English</th>
<th>Content Subject</th>
<th>Both English and Content Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explanation by the teacher</td>
<td>14.8%</td>
<td>34.5%</td>
<td>50.7%</td>
</tr>
<tr>
<td>Class discussion about a topic</td>
<td>23.7%</td>
<td>32.8%</td>
<td>43.5%</td>
</tr>
<tr>
<td>Student presentations</td>
<td>27.3%</td>
<td>29.2%</td>
<td>43.5%</td>
</tr>
<tr>
<td>Summary writing</td>
<td>25.7%</td>
<td>30.2%</td>
<td>44.1%</td>
</tr>
<tr>
<td>Correction of students' spoken specific discourse</td>
<td>38.4%</td>
<td>24.6%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Listening comprehension activities</td>
<td>46.1%</td>
<td>17.7%</td>
<td>36.2%</td>
</tr>
</tbody>
</table>
These results do not seem to shed light on the differences between content and language pedagogies, which are perceived by students rather similarly, something unpredictable for the language teachers, who would have expected greater association of more language-based activities (summary writing) with language courses. Fortunately, the similarity in student perception of pedagogies might facilitate future integration.

In contrast, in the interviews and focus group meetings of language and content teachers, we observed some differences. Many teachers choose written assignments (trabajos) as a mode of evaluation. The word used in Spanish is generic and, after some dialogue, we realized that it can be interpreted in several ways, depending on disciplines and subjects. For a lecturer teaching finances to first year business administration students, it meant a comment on financial news of about two pages or a business plan of about ten or twelve pages. For computer science lecturers, a written assignment could be twelve to fourteen pages long, but had mostly formulae and demonstrations and only a few written paragraphs. The same could be said about students' oral presentations, which could range from a mini-lecture to a demonstration of a lab experiment. This finding reinforced that it is essential to coordinate to learn what the specific needs of the students are, so that both content and language teachers can help them in the introduction of another language of instruction. A good way to do so could be to use the Literacy Discussion Matrix proposed by Airey (2011), where content lecturers can be invited to check the boxes for the four skills as needed in the academy and workplace by their students in order to achieve disciplinary literacy. The discussion may lead to a focus on 'text' types and the importance of skills transfer between disciplines.

**Opinions about English as a Language of Instruction**

In general, there is not much agreement in the opinions by lecturers and students about aspects related to the introduction of English in content subjects. About half of the students agree with the incorporation of English as the third language of instruction with the same percentage of teaching hours as the other two languages, and 25% do not have a clear opinion about this. When asked who should teach and evaluate a subject taught in
English, 28% said the content teacher, 12% the language teacher and a majority (60%) said it should be both. These are interesting data, which encouraged the members of the project team to go on collaborating and promoting joint work.

As seen in Table 5, teachers agree to introducing English as a third language of instruction and see the need for specific training for it. Despite the lack of tradition in the collaboration between English language and content teachers, especially regarding the content courses, there also seems to be an agreement that collaboration is important (84%), which also reinforced the idea of continuous teamwork in the project group.

Table 5. Teachers' Opinions about Critical Aspects of Integrating Content and English Language (38 respondents)

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the introduction of English as third language of instruction positive for the university?</td>
<td>97.3%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Should lecturers teaching in English receive specific training?</td>
<td>95.9%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Should new teaching staff be recruited to teach in English?</td>
<td>51.6%</td>
<td>48.4%</td>
</tr>
<tr>
<td>Can a teacher with an intermediate level of English teach in that language?</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Can the use of a new language of instruction create problems in content acquisition?</td>
<td>62%</td>
<td>38%</td>
</tr>
<tr>
<td>Is coordination of language and content teachers convenient in order to collaborate in teaching content subjects in English?</td>
<td>83.8%</td>
<td>16.2%</td>
</tr>
<tr>
<td>Does teaching in English require a specific methodology?</td>
<td>48.6%</td>
<td>51.4%</td>
</tr>
</tbody>
</table>

In other questions there appears to be far less consensus such as whether a lecturer with an intermediate level of English can teach in that language, or whether teaching in English requires a special pedagogy. Some teachers also presume that using English as the language of instruction will lead to problems in the acquisition of the contents. The discussions on these topics between the members of the project team did not show much agreement either. The general idea is that more directives by the academic authorities may help to organize the new policy, and that a transitional period of time will be needed to implement it with some guarantee of success.

Conclusion
The reflections presented in this paper indicate that there are several interpretations of policies or directives when there are no clear criteria by which to apply them. In this case, the teachers in several majors had different interpretations on how English should be introduced as a medium of instruction in terms of how to distribute the 12 credits to be taught in English, as well as the activities to be carried out in the classes in order to reach this objective. These differences surprised the participants in the project team, who learned about them through the discussions within the project. This led to an exchange of experiences trying to explain the diversity, since many of the project participants had been involved in the design of the new study plans. Though no conclusion was reached on which could be the best option, the discussions opened the participants' minds to other possibilities.

On the other hand, the project provided an interesting discussion about the activities that could be carried out for the introduction of a third language in the classroom, as well as about the different interpretations certain strategies could have depending on the discipline, or the teacher, since this was new information for them. The discussion about the results brought to the fore the need for teacher and student involvement in decision making processes, as well as for more discursive spaces that enable dialogue and experience sharing by means of teacher training with mixed groups of teachers, or innovative projects like this. There was also general agreement on the importance of having a communication plan in order to reach students, present and future, teachers, administrative staff, as well as future employers and society, in general. These measures should help reinforce the already positive opinion most students and teachers have on the introduction of English as a language of instruction.

In sum, the challenging situation conveyed by structural changes may provide an opportunity for initiatives such as the diversification of the languages of instruction. However, it is still difficult to speak about the integration of content and language as an additional value of second and third language instruction. The incorporation of English in content subjects in degree courses where ESP was already present leads to a new scene in which both language and content teachers need each other in order to guarantee the success of their teaching. Even so, the implementation of programmes for integrating content and language requires the agreement, commitment and involvement of the whole institution, something not easy to achieve. It is the main task of leaders to know and make clearly explicit what the objectives are and how to achieve these objectives by means of top down policies in order to avoid diversity of interpretations and
misunderstandings. However, the involvement and enthusiasm of the university community is also essential for the success of the programme. Making discursive spaces available for interdisciplinary collaboration of teachers is a good measure to motivate and involve them in integrating content and language, but new creative spaces where students and administrative staff can also participate, such as workshops or seminars, will help to create a corporate image about multilingualism at the university. Furthermore, other accompanying activities can help to successfully develop a multilingual higher education policy, such as a good communication plan for students, teachers and administrative staff, as well as for the society in which the institution is embedded, which includes future students and their family, and future employers.

References


Notes

[1] See for example Álvarez in El País in October 2010, which summarizes the measures taken by the government to improve the English level of primary and secondary students (http://www.elpais.com/articulo/sociedad/Clases/extraescolares/gratis/ingles/elpepisoc/20101002elpepisoc_9/Tes).

[2] Though the reflections in this paper are in general valid for the Spanish higher education system, the perspective taken hereby is that of Universitat Jaume I, which is based in the Valencian Community, a bilingual region with Spanish and Catalan.

[3] Regarding the graduate and master levels, the Ministry of Education decided that Spain, instead of going to a $3 + 2$ years (as most universities in Europe), would have a $4 + 1$ years higher education system. This in fact means an important hindrance for harmonization with the rest of Europe.

[4] See for example the list offered by the Universidad Politécnica de Valencia (http://www.opii.upv.es/enlaces_internos/docencia_ingles.asp)

[5] In the case of optional subjects, I have estimated the number of credits in English the student has to choose.

[6] A full time lecturer in Spain is required to teach 24 credits per academic year. If one teacher has to choose these credits distributed in up to 24 courses, this means dispersion, a huge number of students and focusing almost exclusively on assessment and evaluation.

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