TRAINING TEACHERS FOR ENGLISH MEDIUM INSTRUCTION: LESSONS FROM RESEARCH ON SECOND LANGUAGE LISTENING COMPREHENSION

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Abstract: CLIL (Content and Language Integrated Learning) and EMI (English Medium Instruction) practices have outpaced theory and teacher training. There is a need to provide answers to some of the key issues such as the language requirements. This paper aims to show that knowledge from English for Specific Purposes and English for Academic Purposes, fields which have provided effective teaching practices and materials, could now be used in CLIL/EMI. The paper focuses on two of these. First, the issues related to second language academic listening comprehension and, secondly, the findings from research on it and their implications for student / lecturer training and materials design. These implications and suggestions are summarized. The paper concludes providing some language learning resources originally targeted to students but which could become tools for (self) training of those teachers who need to update their language skills for CLIL.

Keywords: CLIL, EMI, Teacher education, second language listening comprehension, discourse markers, teaching materials.

1. INTRODUCTION

The acronyms CLIL (Content and language integrated learning) and English Medium Instruction (EMI) are perhaps the most common denominations of bilingual education practices. CLIL frequently refers to Primary and Secondary education and the EMI approach is preferred for the tertiary level. They diverge in language focus: CLIL is defined by the dual objectives of language and content learning while EMI is mainly content driven, though some language learning is always expected.

In Spain, Primary and Secondary education have large scale bilingual programs. Regarding University, the areas with the higher number of degrees and postgraduate courses in English are Economy, Business Administration, Engineering, Architecture studies, Primary and Pre-primary Education (Ministerio de Educación, 2013). The most relevant initiatives are compiled and well documented in two monographs: CLIL in Spain (Lasagabaster and Ruiz de Zarobe, 2010) and CLIL across education levels (Dafouz and Guerrini, 2009). Currently, regardless educational level, CLIL is mostly implemented in English (Dalton-Puffer, 2011).

In this novel field of bilingual education conceptualization and nominations are still under construction. Bilingual education practices involve more than linguistic issues. However, the prominence is given to language. This paper attempts to reflect on the use of language in CLIL/EMI to identify some implications for the linguistic education of CLIL/EMI teachers.

The paper begins with the consideration of some relevant issues in CLIL/EMI teacher education. The following section looks at “sister disciplines” of CLIL, such as English for Specific Purposes and English for Academic Purposes (ESP and EAP) in order to find synergies and mutual inspiration. A suggestion is made about the
application of second language (L2) listening comprehension research to CLIL/EMI contexts. With that purpose, some aspects of listening comprehension are commented on, along with some studies and their pedagogical implications (section 4). A reflection on how these could be transferred to CLIL lecturer education in the Spanish speaking context is presented in section 5. The closing section provides some resources for that purpose.

2. TEACHER EDUCATION FOR CLIL AND EMI

   This section runs through some issues related to teacher education: its relevance and urgency, some differences regarding educational levels, the identified training needs and some proposals.

   In CLIL “the key to future capacity building and sustainability is teacher education” (Coyle et al., 2010:161). Teacher training is one of the main concerns of both CLIL theorists and practitioners. Literature has profusely signalled the need for this (Dafouz and Gerrini, 2009; Coyle, 2010; Lasagabaster and Ruiz de Zarobe, 2010, Ball and Lindsay, 2012; Aguilar Pérez and Rodríguez, 2012; Martín del Pozo, 2015, inter alii). European official documentation as well as other less official sources (web sites, expert Forums, special Interest Research Groups) have pointed at this need since the start of this practice (Eurydice Report, 2006, 2012). These two European reports from Primary education found that CLIL had outpaced the provision of tools and resources for teacher training. In Spain, linguistic and methodological training for Primary and Secondary teachers is coordinated and provided by the Education Department (Consejerías de Educación) of each one of the Autonomous Communities.

   The heterogeneous landscape of universities is quite the reverse. The autonomy of each institution along with the independence of teaching staff results in very different attitudes towards receiving training for teaching through English. Halbach and Lázaro (2015) report on how Spanish universities are dealing with the challenge of training and accreditation of their teachers for EMI. Fifty Spanish universities were polled and results showed considerable movement towards homogeneity due to the coordination of two supra-university institutions: the Mesa Lingüística in CRUE (Conferencia de Rectores de Universidades Españolas, Conference of Spanish University Rectors) and ACLES (Asociación de Centros de Lenguas en la Enseñanza Superior, Association of Language Centres in Higher Education). However, Halbach and Lazaro warn that having received some training should not be confused with being qualified, that is having achieved a level of competence.

   Spanish CLIL teachers of all educational levels, active or prospective, have been asked about their professional development needs in several studies. Some of them (synthesized and revised in Martín del Pozo, 2015) reveal that methodological concerns go after language up skilling. On the contrary, there is a shift of interest towards methodological issues in more recent studies in Spain (Durán-Martínez and Beltrán-Llavador, 2016) and in Europe (Pérez Cañado, 2014, 2016) and other previous studies (Fernández and Halbach, 2011).

   Thriving competences lists and frameworks which attempt to identify training domains give importance to linguistic issues. Some European initiatives at transnational levels include the CLIL teacher’s competencies grid (Bertaux et al., 2009), The European Framework for CLIL Teacher education (Marsh et al., 2010), the CLIL across Contexts: A scaffolding framework for CLIL teacher education, a project funded by European Commission (2010). Language issues have a constant and broad presence among these competences which teachers are expected to acquire and to develop. Two special areas needing language enhancement are identified: subject-specific language and classroom management/teaching. As a drawback, the majority of these proposals are too general and as a consequence, they are difficult to translate into specific language objectives and contents. Further precision is needed to assist those who are training teachers in the linguistic dimension. In search of a complement to these proposals and with the purpose of specifying the competences needed, the next section shifts towards already established practices such as ESP and EAP.

3. CLIL / EMI AS LANGUAGE LEARNING ENVIRONMENTS: LESSONS FROM EAP AND ESP

   Though there “still seems to be uncertainty as to where it (CLIL) fits conceptually in the language teaching scene” (Snow, 1998:243), it seems sensible to apply to CLIL and to EMI Snow’s claim (1998:256) that “the Content Based classroom provides an appropriate setting for applying what we currently know about effective language teaching practices”. The teaching of ESP and of EAP precedes CLIL / EMI and provides a tradition of effective teaching practices. Dalton-Puffer (2007:297) considers CLIL, ESP and EAP as sister disciplines and suggests that “the relationship between current work on EPS and CLIL needs to be explored for synergies of mutual inspiration”. The proposal in this paper endeavors to point out sources of potential mutual inspiration and synergies.

   The first one is needs analysis. Ruiz-Garrido and Fortanet (2009) explore the possibilities of transferring this methodology to CLIL. They suggest using instruments and methods which succeeded in ESP such as interviews,
tests, questionnaires, classroom observations, and knowledge of the professional context. A second area of mutual inspirations is genre analysis. Needs analysis establishes situations, skills, level of proficiency among others, and, as a second step, genre analysis provides an approach to the analysis of texts (Dudley-Evans, 1998). The linguistic data derived from it will be used for the preparation of teaching materials. This very commonly applied approach in L2 teaching, especially ESP, is being transferred to CLIL/EMI environments. In Spain, examples of the genre-based approach to CLIL/EMI can be found in official documentation and planning (Junta de Andalucía, 2008), classroom based research and experiences (Morton, 2010; LLinares et al., 2012) and teacher training proposals (Dafouz and Núñez, 2009; Martín del Pozo, 2014). The genre approach is considered a potential strong promoter of synergy among CLIL/EMI and ESP/EAP practice (Dalton-Puffer, 2011; Dafouz, 2011).

This paper proposes another area of ESP/EAP to be forwarded to CLIL/EMI: the research on second language academic listening comprehension and the learning materials derived from these findings. The next section draws together some conclusions from this field which will be turned into education guidelines in the final section of this paper.

4. SECOND LANGUAGE (ACADEMIC) LISTENING COMPREHENSION

The growing practice of specific language courses for students of content in L2 gave birth to research on L2 academic listening performance. From the beginning (Chaudron and Richards, 1986), the findings of this research are potential input for instructional materials, curriculum design and teacher training. This section provides an overview of some aspects revealed by this research which may be beneficial for CLIL/EMI lecturers. First, some general elements of L2 listening comprehension are considered and some conclusions pointed out. Secondly special attention is paid to the skills required to listen to lectures, the academic genre per excellence.

4.1. Issues in L2 listening comprehension

Physiological processes, cognitive processes and contextual information processing converge in listening. Thus, listening is a complex skill even in the L1. The implications of listening in the L2, as students do in CLIL/EMI contexts, could be better understood if the cognitive processes involved are considered. With that purpose, three main approaches to listening comprehension are summarized in this section: sources of knowledge to aid listening comprehension, processes models and microskills models.

a. Anderson and Lynch’s model of listening comprehension (1988:13) identifies three main sources of knowledge: schematic knowledge (background knowledge and schemata) contextual knowledge (situation and context) and systemic knowledge (knowledge of the language system at the phonological, lexico-semantic, morphosyntactic and discursive level).

b. A second group of theoretical models focus on the process involved in listening. Two main types of processes can be identified: top-down processes and bottom-up processes. In the first type, the listener builds a conceptual framework for comprehension using context and prior knowledge in long-term memory (topic, genre, culture, schema knowledge). On the other side, bottom-up processes imply the construction of meaning by building up from small units of meaning (phoneme-level) to increasingly larger ones up to discourse-level elements. These processes do not exclude each other but interact depending on the purpose of the listening and on the listener’s skills (Vandergrift, 2004).

c. The microskills models derive from Richards (1983). This oft-quoted article provides detailed skills needed for conversation and academic lecture speech which others have followed (Mendelssohn, 1998). Richards’s (1983) micro-skills for listening to lectures include the ability to identify purpose, topic and scope of lecture. Also recognizing key lexical items related to subject/topic and deducing meanings of words from context. On a more discursive level, Richards highlights the ability to recognize markers of cohesion while at pragmatic level, the identification of attitude of speaker toward subject matter, intonation, non verbal cues, style and accent are considered among others.

4.1. Academic listening: understanding lectures

In spite of the momentum gained by other teaching methods in the European higher education area (EHEA), the lecture continues to hold sway. Therefore, any contribution to a better understanding of how lectures are comprehended or how to deliver them successfully is currently relevant, even more if dealing with the increasingly popular practice of CLIL/EMI.

In lectures, language is complex. Miller (2002) points out some differences between listening to academic discourse and more general listening events: academic discourse presents a special disciplinary orientation, it is delivered to an audience in particular ways, and the underlying rhetorical structures are different from other
In addition to linguistic complexity, the lecture is a complex situation in which the listener has to integrate information from different channels (auditory, visual and perhaps kinetic). This is one of the main dissimilarities between the lecture comprehension process and the comprehension process of other oral genres. Hence the importance of considering the factors affecting L2 academic listening comprehension (Hyland, 2009:97). These factors have been the focus of numerous research studies among which Academic listening (Flowerdew, 1994) is still said to be the most comprehensive work. The main argument underlying this book is that knowledge about the processes involved in the lecture comprehension in L2 provides information which can be applied to:

(i) Teaching students to understand lectures in a second language
(ii) Assisting lecturers to facilitate comprehension.

The call for greater support in academic listening for non-native speakers comprises two aspects: need to help students to help themselves; need to educate lecturers when they have classes with a significant number of international students.

In CLIL/EMI contexts lecturers are frequently non-native speakers of English (in Spain, for instance). Thus, the implications of this information to support and educate lecturers are different from those in native speakers. The question then is what knowledge about lecture comprehension derived from these studies is useful for CLIL/EMI teacher linguistic education. An answer can be found in the factors which affect lecture comprehension. Considering these factors is essential for good teaching practice, but perhaps they present distinctive connotations in L2 contexts. Some of them are closely related to personal style (such as speed of delivery). Others, though they depend on style, are “trainable”. Some of these factors are formal, others are cultural. Some findings in these two dimensions (form and culture) and pedagogical implications derived from them are summarized in the next sections.

4.2. Formal elements facilitating lecture comprehension: discourse markers

A major feature of the language in lectures is the use of certain rhetorical markers. These are lexical phrases which fulfill signaling functions regarding three main elements: the most important content, the moves in argumentation or the boundaries of non-essential information. These markers achieve a twofold utility as indicators of the structure of the discourse and as potential aids in training listeners to understand better. These discourse markers (DMs henceforth) are one of the most studied formal elements in L2 and L1 lectures.

Linking them to the sources of knowledge which aid listening comprehension and the processes described in 4.1, DMs are elements of the language system; therefore knowing about them can potentially enhance comprehension. Understanding the unit of meaning constituted by DMs favors bottom-up comprehension processes. In addition, DMs signal the different phases in a lecture (Young, 1994). This is related to schematic knowledge. Students have lecture schemata in their L1 and this knowledge could be used to understand lectures in the L2. In this case, top down processes are promoted.

Hence, the knowledge of DMs is likely to foster both comprehension processes. Perhaps this is one of the reasons for their presence among the skills needed for comprehension. For instance in Richards’ taxonomy (1983), he includes “the ability to recognize the role of DMs for signaling the structure of the lecture”. Another indicator of their importance is their permanence as a focus of interest for many researchers. Chaudron and Richards’s pioneering investigation (1986) concluded that macro-markers signaling major transitions and emphasis in a spoken academic lecture helped successful recall. Since then, research has approached the question combining different variables such as the type of markers or kind of evaluation process. The most frequent methodology followed similar steps in all cases. First, an experimental group received a lecture with DMs and a control group received the same lecture without them (Chaudron and Richards, 1986; Flowerdew and Taurroza, 1995; Morell, 2004; Eslami and Eslami- Rasekh, 2007; Reza et al., 2012 inter alii.). The second step was to check students’ comprehension by different means (questions, tests or the notes taken). Other studies, which add an interventional step, revealed that students who received explicit instruction on DMs performed better than those who had not (Smit, 2006). Smit’s intervention program explicitly trained the students to notice when and how DMs are employed to verbally signpost the different movements in the lecture. The consensus about the facilitating presence of DMs seems to be general. A small number of disagreements may be rooted in the type of markers studied, the students’ language proficiency or test employed, variables which are beyond the scope of this paper.

4.3. Cultural factors in listening comprehension

The previous section pointed out certain elements which research in this area states is worth looking at in order to facilitate comprehension. This section comments on aspects which lecturers are advised to avoid. When lecturing for international audiences, some authors recommend awareness of the potential comprehension difficulties that certain elements such as metaphors (Littlemore, 2001) or cultural references and certain types of...
humor (Lynch, 1994) may entail. This advice is given for contexts where the lecturer not only does not share the L1 with students, but may not even share the same cultural background.

Though from different research orientations, these studies (section 4.1, 4.2 and 4.3) and many others shed light on how students take input in L2. Results tent to point to the facilitative role of DMs, mainly macro markers and metadiscourse. All of these studies mention the pedagogical implications of the findings and the consequent recommendations for lecturers to make their “output” more comprehensible. These implications are discussed in section 5.

5. LESSONS FOR CLIL LECTURERS

The application of knowledge and results derived from research on L2 listening comprehension has targeted students much more than lecturers, as the wide range of materials for learning academic listening makes obvious. Clear examples are the instructional materials to train L2 students to identify signposting elements and overall lecture structure. Regarding the training of lecturers, the second target of L2 listening comprehension research, some indications are suggested in the conclusion section of these studies. Two aspects should be noted.

Regarding the first one, these indications or teacher training implications are still formulated under the general label “training lecturers” and need to be specified with reference to language contents. The second aspect is related to the lecturer’s language. Until the spread of CLIL/EMI, content lecturers were very frequently native speakers or had much more proficiency than students. However, with the growing expansion of CLIL/EMI, this is not the case or at least it is not the case in the Spanish University system. Some pedagogical implications for non-native speakers which result from understanding L2 listening comprehension are discussed now.

5.1. Pedagogical implications derived from cultural differences

As already indicated in 4.4, metaphor, cultural references and humour may hinder comprehension. The recommendation is to avoid them. These factors are less likely to occur if lecturer and students share the same L1 and culture. This is, at the moment, the case in many Spanish universities. In time, the presence of international students and the increase in staff mobility will result in more heterogeneous situations. For that reason, if avoiding the production of some elements is proven to have a positive impact on comprehension, it is advisable to make lecturers aware of aspects which may cause misinterpretations when teaching international and intercultural audiences. Disciplinary variation as well as personal lecturing style may constrain the use of these elements. However, awareness of their potential difficulty should be raised.

5.2. Pedagogical implications derived from the importance of DMs

Reasons for the facilitative role of DMs, mainly macro-markers and metadiscourse have been argued. Mendelsohn (1998) offers eight suggestions for lecturers, all resulting from the studies and experiences compiled in Flowerdew (1994). The third of Mendelsohn’s suggestions reads: “train lecturers to insert many more overt DMs that highlight the overall structure of the lecture” (p. 93). The production of more DMs is also advocated in the conclusions of the other studies mentioned in 4.2. Therefore, if DMs are a recommended feature, the first question to be answered is the type of presence of these signposting elements in lecturer discourse. Discourse analysis of some Spanish lecturers reveals that:

(i) a small number of DMs and lecture phases are implicitly signaled (Dafouz and Nuñez, 2010; Martín del Pozo, 2014),

(ii) contrastive analysis shows less stylistic variety and less precision in L2 than in L1 (Dafouz and Nuñez, 2010; Martín del Pozo, 2014). Less precision may be understood as pragmatic inadequacies and simplified grammars.

Given that a lack of explicit signaling may hinder comprehension, and given that CLIL/EMI lecturers do not produce the desirable quantity of DMs in L2, it seems very advisable to make lecturers aware of their importance and to train them in the production of markers which clarify lecture structure (see section 6).

5.1. Pedagogical implications derived from knowledge of the lecture as a genre

A starting point is the reality that

In many university contexts, lecturers are generally not trained in how to lecture, and may only pick up the discursive conventions of lectures incidentally through countless hours of observing and evaluating other lecturers. (Lee, 2009:53)
In the quotation, this lack of explicit instruction on lecture discursive conventions refers to L1 lecturing. However, by learning through observation and practice lecturers develop schemata of the genre lecture. Theory of L2 listening comprehension has identified schematic knowledge as a source of information to aid listening. This could be applied to lecturing in L2. According to the Linguistic Interdependence Hypothesis (Cummins, 1984) every language contains common features which he labels Common Underlying Proficiency (CUP). If the schemata of the lecture are considered part of CUP and lecturers already know and employ linguistic tools in L1, then, their main need is linguistic tools for the genre lecture in L2. The following section orientates the lecturer about where to look for linguistic tools to lecture in L2.

6. LINGUISTIC TOOLS AVAILABLE FOR CLIL LECTURERS

A warning note on the linguistic tools available to lecture in English comes from Lynch (1994) quoting a review by O’Brien (1984) on materials that can be used to teach academic listening comprehension:

As authentic as they sound, however, one has to recognize that special care has been given to the structure of the talks. They have a structure and it is clearly marked. Sadly this is not always the case with the real lecture. Perhaps we should start training the lecturers (O’Brien, 1984, original emphasis).

This complaint about the lack of authenticity in L2 listening comprehension teaching material is at the same time a call for lecturers to follow the generic conventions of the lecture. Materials for teaching listening comprehension in academic contexts could be used to learn lecture conventions. Using the already existing materials is a contribution to “maximize content teachers’ access to the generic tools for more explicit signaling of metadiscursive devices” (Dafouz and Núñez, 2009:109).

A list of resources (books, DVDs and websites) to train students to understand content lectures in L2 is provided. The materials in this list were originally targeted to non-native speakers of English who had to attend content lectures in English. Content lecturers who have to deliver instruction in English could benefit from the linguistic tools available in these resources. They are ordered by publication date, though expanded new editions are available. This list, by no means exhaustive, shows that listening comprehension in academic environments is a topic whose significance endures. CLIL/EMI lecturers may benefit from these materials and use them as self training tools.

a. Books

Contents: lecture organization: strategies for recognizing introductions, conclusions, and digressions; note taking strategies.

Materials: actual excerpts and transcripts from authentic lectures covering a wide range of topics and academic disciplines (on the accompanying DVDs or web sites).


Dissimilarly to the previous ones, this last reference was targeted to academic professionals who speak English as a second language at USA Higher Education.

(ii) Web resources

http://www.englishforacademicstudy.com

This is a portal to other sites related on Academic English. Some of them are of free access. They include clips of lectures and information about the phraseology used in the different lecture phases.
7. SUMMARY AND CONCLUSIONS

It seems, so far, from the findings of this research, that both research on academic listening comprehension and materials development have focused on students’ strategies and competence development. The reason is that, until recently, CLIL and EMI were conducted by native speakers of English in most cases. In the 21st century this is not the situation any longer: non-native speakers of English and content experts (not language experts) are required lecture in English. Language level is one of the main difficulties and reasons for lectures to be reluctant to apply CLIL methodology. Some studies show that teachers do not consider that they need methodological training but only language training. Usually, language training would be more welcome and accepted if it could be used autonomously. The problem is the dearth of CLIL/EMI teacher training materials for autonomous work. However there are numerous materials available, though they were not initially designed for that purpose. This paper has considered some results and knowledge on L2 listening comprehension and suggested applying them to the training of CLIL/EMI lecturers. DMs are among the elements referred to. Their role in signposting lecture structure facilitates comprehension. Pedagogical implications derived from the studies we have reviewed recommend the production of these linguistic resources. In order for content lecturers to have access to them, the paper has suggested some teaching materials originally targeted to train student lecture comprehension. Figure 1 summarizes these reflections and applications.

<table>
<thead>
<tr>
<th>Issues in L2 comprehension</th>
<th>The lecture</th>
<th>Pedagogical implications (lecturer)</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Schematic</strong></td>
<td>Schematic</td>
<td>Signal lecture phases: decrease markers (DMs) (Mendelsohn 1998)</td>
<td>EAP materials originally designed to assist L2 listening comprehension (students)</td>
</tr>
<tr>
<td>Sources of knowledge</td>
<td>Genres: lecture phases (Young, 1994)</td>
<td>Metaphors, humour, cultural conventions</td>
<td>Avoid them (Littlemore 2001, Lynch 1994)</td>
</tr>
<tr>
<td>(Anderson &amp; Lynch 1988)</td>
<td>Contextual</td>
<td>Lecture linguistic conventions</td>
<td>Use lecture conventions</td>
</tr>
<tr>
<td>Systemic</td>
<td>Top-down</td>
<td>From general to specific (schematic knowledge)</td>
<td>Facilitate</td>
</tr>
<tr>
<td>Process (Yavondrith, 2004)</td>
<td>Bottom up</td>
<td>From specific to general (Systemic knowledge)</td>
<td>Facilitate</td>
</tr>
<tr>
<td><strong>Microskills</strong></td>
<td>ability to recognize the role of DMs for signaling the structure of the lecture</td>
<td>Lecture has a structure (Young, 1994)</td>
<td>Signal lecture phases: presence of DMs facilitates recall/comprehension (Claxton and Richards 1996, Floresferda and Tavris 1999, Morell 2004, Enami and Enami 2007, Peris et al. 2006, many others)</td>
</tr>
<tr>
<td>U2 exercise for lecture comprehension (Richards 1983)</td>
<td></td>
<td>Used these EAP materials to acquire lecture linguistic conventions (CLIL lecturers)</td>
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Helping non native speakers to deliver lectures will, at the same time, have an effect on students’ comprehension. This is of great importance as there is a tendency towards emphasizing the instrumental character of listening comprehension: “learning to listen in the L2 and learning the L2 through listening,” (Rost, 2002:91). We should bear in mind that, though the explicit teaching of language is not among the duties of content teachers (nor are they trained to teach language), teachers are linguistic models of the academic and discipline discourses. Any training/education which pays attention to language awareness is a good investment since “All teachers are teachers of language” (Bullock Report, 1975).
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