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## Intelligibility within a Modified CLIL Framework

**ABSTRACT.** The paper provides a brief summary of what CLIL is and why it is regarded as a mainstream pedagogical approach today. The paper's aim is to state the significance of language within Zydatiŝ' modified version of 4Cs framework of CLIL and to recommend the re-modified 4Cs framework of CLIL. The paper further stresses the importance of pronunciation for communication focusing on intelligibility as a necessary linguistic category arguing that intelligibility should become an essential part of communication within CLIL. The paper also lists the important implications for the further proceedings in this direction.

**KEYWORDS:** CLIL; intelligibility; communication.

### 1. INTRODUCTION

Throughout the history of language learning there have been many officially and unofficially recognized methods for teaching languages (Richards, Rodgers 2001, Dakowska 2005, Larsen-Freeman 2000). In the late nineteenth and the beginning of the twentieth century, conventional approaches that concentrated on memorization of the grammatical rules, mimicry of the teacher's speech, accuracy and translation were favored. The language teaching and learning paradigm changed with the findings and discoveries within psychology and linguistics which have established cognitive-based approaches as the leading ones. The focus of these methods has been to emulate the first language acquisition processes as much as possible, with the primary concern of using language to communicate. "Students are encouraged to speak before learning formal grammar, and the use of the maternal variety is often kept to a minimum; the idea is to have second-language acquisition resemble as far as possible first-language learning" (Edwards 2013: 18). To that

end, methods based on a communicative principle have established their dominance in the second half of the twentieth century (Richards, Rodgers 2001). Even though CLT is still an approach that has its rightful claim in foreign and second language classrooms, the shortcomings of the approach led to the generation of the novel approaches. Nevertheless, these contemporary methods still adhere to the basic communicative language teaching principles. According to Edwards (2013: 18), "immersion classrooms provide the most recent and most important embodiment of this principle". Immersion programs first appeared in 1965, influenced by the "major bilingual initiatives such as in Canada" (Marsh 2012: foreword). What ensued was an idea to integrate subject and language teaching which evolved into what is today called CLIL – Content and Language Integrated Learning. Coyle et al. (2010: 1) define CLIL as a "dual-focused educational approach in which an additional language is used for the learning and teaching of both the content and language". It is their claim that "CLIL is not a new form of language education. It is not a new form of subject education. It is an innovative fusion of both" (Coyle et al. 2010: 1). The approach is often referred to as an umbrella term for immersion, bilingual and multilingual policy. CLIL is also said to have similarities with minority education, English medium education, content-based instruction and task-based approach (Ball et al. 2015), but CLIL is a novel approach in that it is "content-driven, and this is where it both extends the experience of learning a language, and where it becomes different to existing language-teaching approaches" (Coyle et al. 2010: 1). Moreover, CLIL "synthesizes and provides a flexible way of applying the knowledge learnt from these various approaches" (Mehisto et al. 2008). For this reason, ECML (European Center for Modern Languages), and the Council of Europe, inter alia, have embraced this approach wholeheartedly, drafting and developing programs for a wide-range implementation of CLIL across the continent<sup>1</sup>. The European Commission has supported the agenda underpinning the significance of creating organizations and projects that would endorse CLIL; which is how CLILiG (Content and Language Integrated Learning in German) was established. The goal of the project "was to observe and analyse all the data coming from schools where CLIL existed in German language and also to work out on some teaching methods and innovative practical solutions which could be implemented into other schools" (Papaja 2014: 14). Papaja gives a fine summary by stating that "the European Institutions have been supporting Content and Language Integrated Learning (CLIL) for more than 20 years now" (ibid.). In addition, it is argued that

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<sup>1</sup> "European framework for CLIL teacher education" by ECML and the "CLIL Guidebook" by the European Lifelong Learning Program present just a few illustrative examples.

CLIL is not predominantly European: "It is also widespread in the Middle East, South America and Asia; for example, Colombia, Brazil and Korea have all hosted CLIL conferences or workshops within the last 5 years" (Henderson 2004: 76). In their claims how relevant CLIL is today, Breidbach, Viebrock (2013: 11) go the far to assume that the CLIL programs "are on the verge to becoming a mainstream phenomenon in education".

The political, technological, economic and social realities of the modern world have led and continue to lead to more contact between more people of different linguistic and cultural backgrounds than ever before, creating the need for new policies on different levels and in different fields (Dalton-Puffer and Smit 2007: 7).

Viewing education from the perspectives indicated in the above-mentioned quote, CLIL has rightfully gained its privileged status. CLIL is both educational and practical: "CLIL is to help the education sector to prepare today's students for the world of work of today, and of tomorrow as well" (Montalto et al. 2016: 8). Political and economic structures adopt positive attitudes towards CLIL's principles and benefits. During one of European symposiums, experts voiced the socio-economic need for CLIL "firstly, the more languages employees know, the more chances they have to be employed; secondly, the knowledge of foreign languages has a positive influence on the development of business cooperation" (Papaja 2014: 14). Sociologists regard CLIL as the binder of a variety of communities and individuals, striving to support team work and group projects. In addition, the widely-adopted concept of multilingualism goes hand in hand with the role of CLIL and its implementation in a multicultural society where intercultural competence is an indispensable quality. Psychopedagogy views CLIL as a cognitively stimulating method which enhances motivation and confidence at students, develops higher order as well as lower order thinking, and requires fewer extra teaching and learning hours (Montalto et al. 2016). Coyle et al. (2010: 9) claim that CLIL is "embedded in the socio-economic, political and cultural traditions of different nations".

## 2. PRINCIPLES UNDERLYING CLIL

CLIL is primarily an integration of the two: subject and language. Ball et al. (2015: 25) try to redefine this 'dual focus' by claiming that "both language and content are actually vehicles for the development of subject competences (geography, history, science, mathematics, etc.) and that language and content are never as it were, aims in themselves", directing CLIL

towards a single focus. Regardless of its definition, certain classifications of CLIL are required for the analysis to take place. Ball et al. (2015) address CLIL through language and subject considerations, but they emphasize that these two are by no means mutually exclusive. The borderline between the two is confusingly fuzzy, though. They also point out that CLIL practitioners tend to differentiate between the 'soft' and the 'hard' CLIL. The former is used to describe the broad linguistic aims that a language teacher brings to the classroom, whereas the latter "refers exclusively to subject-based aims and objectives" (Ball et al. 2015: 27). Coyle et al. (2015: 6) ascertain that there are two main underlying reasons behind the implementation of CLIL: "these involve reactive (responding to situations) and proactive (creating situations) responses to challenges or problems". Both considerations are applicable only if the programs adhere to the basic CLIL principles. Coyle et al. (2010) list the four basic principles of CLIL: content, communication, cognition and culture. These are unsurprisingly united and mapped under the 4Cs Framework. Communication, cognition and content form an equilateral triangle indicating that each part is given the equal role within a culture which subsumes the whole entity (Coyle et al. 2010). Nevertheless, some specialists have found this framework to be inadequate to cover all the considerations of CLIL. Zydatiŝ (2007), for example, focused on the position of the four elements within a framework, modifying the 4Cs framework (Dalton-Puffer 2008) and adhering to the same four elements but with a rather different distribution of the 'ingredients', where the centrality is assumed by communication. "It is a significant advance in CLIL modelling that despite the interdependence which holds between all areas (symbolized by the double-arrows), communication, and hence language, does hold centre-place in this model" (Dalton-Puffer 2008: 142) (Figure 1).

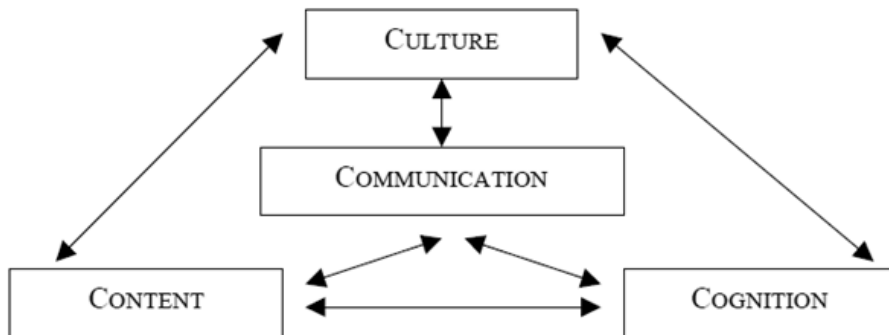


Figure 1. Zydatiŝ's circular 4Cs framework

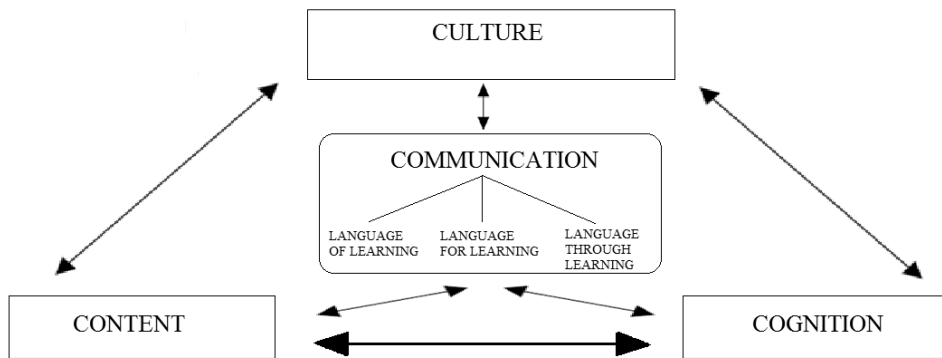
### 3. LANGUAGE IN CLIL

There are contrasting views when it comes to language or communication in CLIL. Coyle et al. (2010: 36) explain the language progression within the Language Triptych which “supports learners in language using through the analysis of the CLIL vehicular language from three interrelated perspectives: language of learning, language for learning and language through learning”. This tripartite division stresses, *inter alia*, that the focus of CLIL ought not to be only on form but also on function and meaning with the objective of developing effective linguistic communicative skills. Alonso et al. (2008: 36) identify three principles of CLIL with the obvious focus on language: “first, language is used for learning and at the same time for communicating; second, the subject being studied is what is used to determine the type of language required for learning; and finally, in language use relevance is given to fluency over accuracy”. Even though the accounts abide in quantity, there are still largely prevalent issues when it comes to which linguistic units and how language ought to be addressed in CLIL.

### 4. THE MODIFIED FRAMEWORK

While the present paper considers Zydatiŝ’ (2007) version to be more justified for CLIL than that proposed by Coyle et al. (2010), due to the higher involvement of language within it, the author adheres to Coyle et al.’s concept of the language triptych as a part of the language dimension itself. Hence, the present paper proposes that the novel model of CLIL be designed based on the combination of Zydatiŝ’ and Coyle et al.’s frameworks, which provides a much more detailed rationale for placing communication in the center of the framework. Namely, Zydatiŝ puts an emphasis on communication as the binder of the other three mechanisms of CLIL, but his 4Cs framework does not explicate precisely what kind of communication is necessary for the framework to be functional in CLIL classrooms. Therefore, this study proposes Coyle et al.’s Language triptych as the leading model of linguistic progress within Zydatiŝ’ version. The triptych plays a vital role, for the guiding principle behind the triptych is the language which is not merely used as a vehicle towards the mastery and acquisition of the content, but it is “constructed to take account of the need to integrate cognitively demanding content with language learning and using” (Coyle et al 2010: 36). *Language of learning* is the linguistic knowledge necessary for talking about the specific content. This knowledge can pertain to any subject matter sub-

sumed by CLIL. Additionally, the linguistic repertoire is not limited to the lexical or grammatical knowledge, but also to syntactical, semantic and pragmatic knowledge, the knowledge of discourse, and so on. Language *for* learning is the development of the necessary linguistic skills for a variety of cognitively challenging or practical tasks needed for the mastery of skills such as “pair work, cooperative group work, asking questions, debating, chatting, enquiring, thinking, memorizing and so on” (Coyle et al. 2010: 37). Lastly, language *through* learning requires from the learners to be active participators in that they might be asked to engage themselves in complicated thinking processes, which entails the high language involvement. ‘New’ language is likely to occur in CLIL classrooms, which implies that language learners “need language to support and advance their thinking processes whilst acquiring new knowledge, as well as to progress their language learning” (Coyle et al. 2010: 38). As it has been mentioned, the communication dimension is allocated the central place within the Zydatiš CLIL model. In order for the framework to be complete and to have solid foundations, it is recommended that the framework follow the tenets of the linguistic dimension set by Coyle et al., who broke down the linguistic progression into three equally important parts. The recommended modified framework can be seen in the figure 2.



**Figure 2.** The modified 4Cs framework of CLIL with Communication in the Centre

## 5. PRONUNCIATION

However rich and comprehensive the theoretical framework for developing linguistic competence in CLIL is, there are still issues related to which linguistic components should be incorporated into CLIL and how. Dalton-

Puffer and Smit's (2007) findings reveal that there are parts of language which are less affected by CLIL. Figure 3 clearly shows which language competences are favorably affected by CLIL and which remain either unaffected or indefinite (Dalton-Puffer and Smit 2007). Syntax, writing, informal/non-technical language, pronunciation and pragmatics tend to be the 'neglected' language areas in CLIL.

Favourably affected	Unaffected or Indefinite
Receptive skills	Syntax
Vocabulary	Writing
Morphology	Informal/non-technical language
Creativity, risk-taking, fluency, quantity	Pronunciation
Emotive/affective outcomes	Pragmatics

**Figure 3.** Affected and unaffected areas of language in CLIL

Pronunciation has often been depicted as an 'orphan' in language teacher training programs and in the classroom (Gilbert 2010), which is why it is not surprising that it is being left out in CLIL, too. Much as there is a wide range of research covering the role of pronunciation in the process of language learning and teaching, some of the problems and questions remain. Firstly, there are pedagogical issues of how and when to incorporate pronunciation in the classrooms. Secondly, there are aspects of pronunciation such as accentedness, comprehensibility and intelligibility which are considered the stumbling blocks by the majority of the researchers due to their interrelatedness and complexity. Numerous studies have tried to "operationalize these three concepts [accentedness, comprehensibility, intelligibility], in order to help instructors better define their learners' needs within such settings" (Henderson 2004: 63). With the view of analyzing them, Derwing and Munro (2009) endeavored to define the three separately. Therefore, they understood "accentedness as how different a pattern of speech sounds compared to the local variety. And, like other researchers, we assess it by having listeners' rate speech on a Likert scale" (Derwing, Munro 2009: 478). Comprehensibility refers to a listener's perception of a speech sample. Intelligibility is different from the two in that it is broadly defined as "the extent to which a speaker's message is actually understood by a listener" (Munro, Derwing 1999: 289).

## 6. INTELLIGIBILITY

According to John M. Levis (2007), intelligibility is pertinent for at least three reasons. It is generally held that the speakers' intelligibility influences the development of both listening and speaking. "It is the most important goal for ESL settings and for non-ESL settings (both where NNSs will interact with NSs and where they interact primarily with other NNSs)" (ibid.). Finally, it depends on the context, which is why certain context-related principles need to be formulated in order for the intelligibility to be defined as precisely as possible (ibid.). Although "there is no universally accepted way of assessing it" (Munro, Derwing 1999: 285) or even incorporating it into the classroom, it is widely agreed that it is significant to address the questions of intelligibility for the purposes of exploring which pronunciation deviations are more likely to affect the communication and which teaching topics should be emphasized. In addition, the research has to scrutinize deeply into intelligibility, too, because there has not been enough conclusive research on intelligibility so that one may strongly argue for one proposal or another. Intelligibility is essential in the bilingual and multilingual context of the globalization, which is not the context of exception any more. This is the context of CLIL, too. Therefore, Henderson (2004: 68) maintains that "if communicative competence is the objective of CLIL, the relationship between accent and intelligibility must be explicitly addressed". Based on the role of intelligibility in language learning, the present paper asserts that intelligibility should become one of the chief considerations within the communication dimension in 4Cs re-modified framework of CLIL. More precisely, intelligibility needs to be a part of the language triptych because it is regarded as an essential component of successful communication and the latter serves as a transmitter of both cultural norms and the content in the CLIL classroom. Language is a cognitively challenging 'drive' which enables the improvement of the learners' cognitive capacities, too. Therefore, not only is intelligibility relevant for communication, but it is also one of the linguistic requirements for the development of successful cultural competence, the acquisition of content in CLIL, and the development of (higher order) cognitive processes. In addition, intelligibility ought to assume its place within the each element of the Language Triptych, because it can facilitate the route towards the objectives of each of the three parts.

## 7. THE FUTURE

The question that remains is *how* to incorporate intelligibility into CLIL classrooms. Obviously, the first step would be addressing the question of intelligibility in the research within the context of CLIL. Henderson's study



(2004), for example, reveals that intelligibility is an aspect of language which had almost never been mentioned in the research on CLIL. Her research found that the term 'intelligibility' is mentioned only once in all the numbers of "The International CLIL Research Journal (ICRJ)" the only journal entirely devoted to CLIL (Henderson 2004). Secondly, although there are numerous difficulties of defining intelligibility, there are still some viable means of evaluation, such as writing out the sentences produced by non-native speakers, forming judgments about intelligibility on a 9-point Likert scale (Munro, Derwing 1997), or employing experts to listen to the speakers' recordings (Levis 2011), to name but a few. Drawing on what is known from the techniques of assessment (regardless of the language of the input) CLIL experts might want to consider devising certain variables that could help in establishing criteria for the introduction of intelligibility techniques into a CLIL context. Finally, as with other aspects of language learning, the question of intelligibility in CLIL does not only concern CLIL teachers, but it also requires a special dedication from the language teachers. More specifically, it demands the cooperation between the teachers and mutual agreement on what aspects of intelligibility in CLIL should be addressed and how.

In terms of supporting content teachers, language teachers can usefully contribute to making evidence-based choices which are appropriate for their context... Cooperation between language and content teachers - accompanied by appropriate institutional recognition and support - is a condition sine qua non for CLIL to be successfully implemented (Henderson, 2004: 78).

## 8. IMPLICATIONS FOR CEIL

When English is used as the vehicular language, or the language used in the CLIL classroom, the approach is called CEIL - Content and English Integrated Learning. In most of the CLIL classrooms, English is used, and as Setter and Jenkins (2005: 2) assert, pronunciation

is a matter which needs to be addressed in the teaching of all languages, as clearly there is little point in learning a (living) language if one does not mean to communicate with other speakers of that language. However, the main body of literature in this area is on teaching English pronunciation. This is probably unsurprising given the status of English world-wide.

Not only has English been granted the status of a lingua franca, but also ELF (English as a Lingua Franca) and its features have been the focus of

a wide range of research in a last couple of decades. Based on the rich material provided by the previous research on this matter, the present paper regards the core proposed by Jenkins (2000) as one of the starting points for revealing intelligibility variables that could affect communication both in CEIL and, generally, in CLIL (regardless of the language of input). Namely, Jenkins (2000: 209-210) sets forth the five most relevant stages in the core:

- “Addition of core [i.e., Lingua Franca Core] items to the learner’s productive and receptive repertoire
- Addition of a range of L2 English accents to the learner’s receptive repertoire
- Addition of accommodation skills
- Addition of non-core items to the learner’s receptive repertoire
- Addition of a range of L1 English accents to the learner’s receptive repertoire”.

The same author conducted a number of studies covering the pronunciation of the speakers coming from diverse backgrounds in order to compile an ‘LFC’, a lingua franca core, which lists the features indispensable for intelligibility: “consonant sounds except voiced/voiceless th and dark l; vowel length contrasts (e.g., the difference between the vowels in ‘pitch’ and ‘peach’); restrictions on consonant deletion (in particular, not omitting sounds at the beginning and in the middle of words); nuclear (or tonic) stress production/placement” (Jenkins 2009: 12). Jenkins also proposes a number of items that ought to be classified as ‘unnecessary’ for intelligibility within ELF. Some of

the non-core features can be summarised as follows: Vowel quality except for the vowel sound in RP ‘fur’; Consonants in (NS English) clusters separated by the addition of vowels (e.g. Japanese English ‘product’ as peroducuto), as well as vowels added to consonants at the ends of words (e.g. Korean English ‘luggage’ as luggagi); Features of connected speech such as elision, assimilation, weak forms (Jenkins 2009: 13).

In addition, Jenkins argued that the ‘core’ could be used as a model of defining features for intelligibility in other languages of instruction. Therefore, Jenkins’ core may serve as a model for devising intelligibility variables relevant not only in CEIL classrooms, but also in any CLIL classroom, regardless of the language used. This naturally demands a wide scope of research that could shed light on intelligibility within CEIL and CLIL. While it is uncertain what kind of items should comprise CEIL or CLIL core for intelligibility, what is evident is that this field is *thirsty for the fresh research*.

## 9. CONCLUSION

It is rather clear by now how important CLIL is for the modern education. It has become a mainstream approach in various parts of the world. This paper recognizes this role of CLIL and it insists, instead on the traditional approach, on a modified version of Zydatiŝ' 4Cs framework, considering the fact that communication plays the most important role in it. In order for communication to be successful, intelligibility must become a linguistic subject carefully analyzed. In addition, the research dealing with CLIL must turn to intelligibility as a consideration within the language Triptych with the view of tackling the problem of how intelligibility can be incorporated into the classroom. Both content and language teachers ought to be responsible for working together and devising the appropriate criteria for implementation of intelligibility into CLIL.

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