POPULARIZING THE CLIL CLASSROOM

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Abstract

This study focuses on the dissemination of knowledge through processes of popularization in Content and Language Integrated Learning (henceforth CLIL) where English is the subject language. The article argues that non-language subject knowledge can be accommodated and re-contextualized in order to foster learning through the mediating act of popularization, which involves the presentation of areas of knowledge that are unknown to non-experts so as to ensure accessibility and usability. The author aims to establish a parallel between CLIL methodology and popularization processes, which must be brought to the surface and employed in providing more effective ways of integrating language and content without impoverishing the subject matter with oversimplification techniques.

The corpus of this study is based on responses from a questionnaire (Appendix) and transcripts from two different interview sessions conducted among 40 high school teachers who were either already teaching Science and History classes in English or attending a University-based and Ministry-funded CLIL training course (Ministero dell'Istruzione, dell'Università e della Ricerca (MIUR)). Evidence collected from May 2013 to November 2013 shows that teachers generally support student learning in CLIL classes through the simplification of both language and concepts rather than through the re-elaboration of content by using more semantically effective explanatory strategies. This paper presents some of these discursive strategies within a popularization framework, albeit in its initial stage of creation, with the purpose of providing access to an improved understanding of subject concepts introduced in a foreign language without reducing the cognitive challenge that is an essential ingredient in the learning process.

1. Introduction

Despite the popularity of CLIL in today's Italian educational system, many concerns remain among school stakeholders about the feasibility of this methodology and its actual long-term positive impact on learning processes. It is especially at the local level, however, that doubts and uncertainties persist, and more so among those who are directly involved in CLIL education, i.e. the teachers, many of whom have revealed that it is not an unusual practice to take on CLIL classes without proper training. Intervention from the recent

National Education Reform [1] has included CLIL in the standard national curriculum but, so far, this has not significantly impacted on in-school CLIL provision. What is still missing is an intelligent CLIL vision supported by whole-school involvement policies and commitment that would encourage ongoing teacher training initiatives. Those involved in planning and delivering the CLIL curriculum should be able to explore with professional insight the relationship between content and language and the degree to which these components should be integrated so that both are treated with equal importance.

2. Research questions and aims

The aim underpinning this ongoing project, which is represented by two overarching research questions, is to assess the effectiveness and the quality of content delivery when it becomes the object of a foreign language. The questions are:

1. how do subject teachers select and accommodate content to make it more accessible to students without reducing its cognitive load and coverage?
2. how is subject content disseminated in a CLIL lesson and what kind of strategies are employed?

This study is not only meant to investigate local conditions of a particular CLIL context, but it intends to use the data presented in this paper and in further investigations as a methodological proposal that will hopefully enhance the understanding of how to enable better learning and better teaching of a non-language subject content in English.

3. Methodology and corpus construction

The approach to data collection and analysis was based on the explorative ethnographic methods of observation and documentation which appeared to be the most appropriate to report teacher narratives regarding CLIL. The personal nature of the responses obtained from unstructured research items of the questionnaire and the interview sessions constitute working hypotheses about teacher decision-making and thought processes in content selection and preparation, while quantitative data from a number of structured items on the questionnaires regarding the delivery of subject content and teacher actions greatly contributed to the understanding of CLIL dynamics.

Consequently, the study presented in this paper is based on a corpus of responses from the following participants:

- eight teachers (four Science and four History), aged 35 to 50, of three upper secondary schools, two in Naples and one in Salerno, regularly involved in teaching third-year CLIL classes in a language high school. These teachers had also attended Comenius-funded CLIL courses and seminars held by associations of language teachers;
- thirty-two Science and History teachers from language high schools of the Campania Region, aged 28 to 55, attending a university-based CLIL teacher training course organized by the Italian Ministry of Education (MIUR). Of this group of teachers:

[1] Riforma Gelmini: Decreti del Presidente della Repubblica Ministeriali: DPR 88:2010; DPR 89:2010.

- 12 had participated in school-based extracurricular CLIL projects and attended brief courses or seminars;
- 20 had no prior experience with CLIL.

The English proficiency levels of the teachers ranged from B2 to C2. The questionnaire and the two interview types used as data collection tools are described in the following section.

4. Knowledge-based society, knowledge dissemination and popularization features

The above-mentioned research questions will be dealt with as the discussion unfolds, but it is worth focusing momentarily on this study's backbone concepts of 'knowledge dissemination' and the impact of a knowledge-based society on educational practices. A key feature of this society is that it uses knowledge as the fundamental resource for social and economic well-being with the result of transforming all of us into knowledge seekers. Dissemination means activating a process to re-package and communicate content with a particular audience in mind by using approaches that consider the message, the audience, the expected outcome and the best dissemination method (Van Dijck 2008). In this paper, knowledge dissemination is identified with the process of popularization which I specifically draw on to establish analogies with the CLIL environment. According to Calsamiglia and van Dijk (2004), popularization is a process consisting of a large class of discursive-semiotic practices in which specialized knowledge is mediated for the layperson. The authors state that non-specialized readers, by means of popularization texts, are able to relate their newly-acquired knowledge to old knowledge, thus enhancing their learning capability. Ciapuscio (2003: 210) adds that popularization of texts basically means "re-contextualizing and reformulating one's source in such a way that it is comprehensible and relevant for a different kind of addressee, in a discursive context that, though predictable, differs from that of the original source".

Due to increasing interest in the General Sciences on the part of non-experts, as in the case of the dissemination of medical information, the bulk of the literature on popularization processes is devoted to research in the field of scientific knowledge (Hyland 2010; Van Dijck 2008; Ciapuscio 2003), and this is the main reason behind the choice of Science as one of the subject domains under investigation in this paper, followed by the choice of History as the second CLIL subject in its representative role of the Humanities. It is important to state that a comparative view of how the results differ regarding each subject is not explicitly investigated, although subject-specific implications are certainly another aspect of CLIL education with research potential.

This paper argues that the act of popularization, which is indeed "a global communicative act" (Calsamiglia and van Dijk 2004: 370), can take on a broader meaning if we establish that it is a mediating strategy between the known and the unknown, between the expert and the non-expert, between the specialized and the non-specialized. Its conciliatory role can positively impact on the CLIL classroom, where the study of subject content can be difficult in Italian, but twice as challenging when students are faced with studying it in English.

In education, popularization is not one of the most familiar concepts, thus some keywords used in this paper have been re-contextualized within a classroom environment for the sake of establishing a common understanding.

Popularization language	Classroom language
non-expert/lay person/audience	student/students
knowledge	subject content/subject knowledge/discipline
dissemination	presentation/teaching/lesson delivery/mediation
context	CLIL classroom/lesson/environment

5. Findings

5.1. *Teacher questionnaires*

The questionnaire in the Appendix was administered to the eight high school teachers involved in teaching CLIL in Year Three classes in a language-oriented high school (*liceo linguistico)*, and to the 12 teachers with past CLIL experience who were attending the University training course.

Part One of the questionnaire contains four open-ended items related to methods of content sources, selection, lesson presentation and activities. The analysis of a total of 20 (8+12) answers resulted in the classification of responses compiled according to the criteria of frequency and similarity. The results are reported in the following charts.
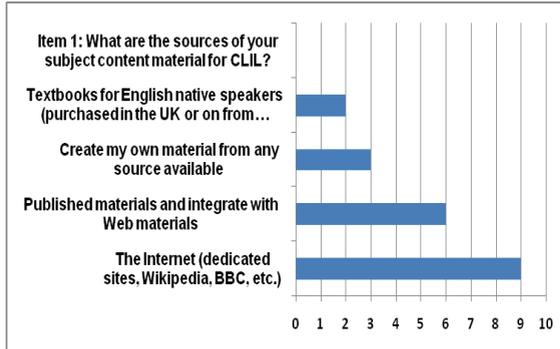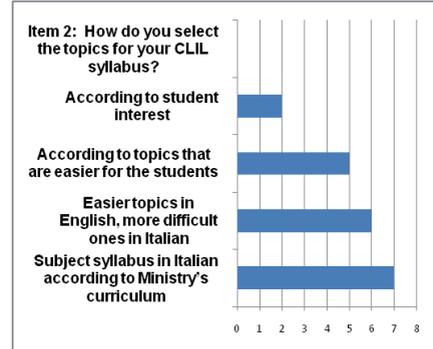

Figure 1. Item 1
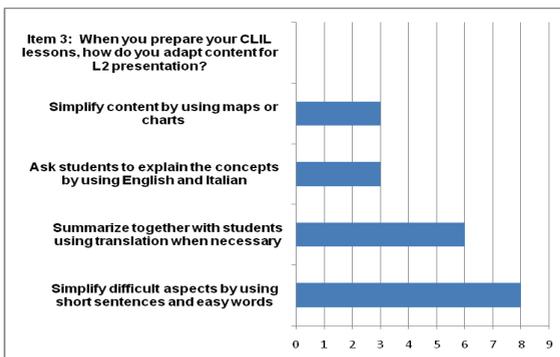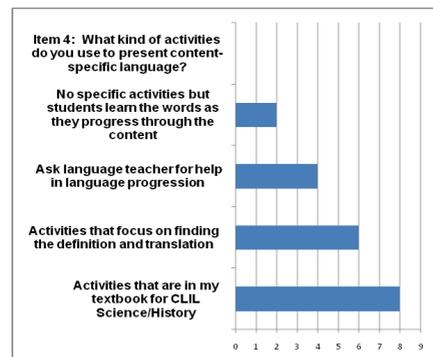

Figure 2. Item 2

Figure 3. Item 3

Figure 4. Item 4

Item 1 shows that the Internet is the primary source of content material, followed by the choice of other published materials available on the market. The topics are mostly chosen according to ministerial indications, but also according to those that are 'easier' to deal with in English (Item 2). As regards content presentation, the most recurrent strategy is simplification (*rendere semplice, elementare*), especially in terms of language difficulty (Item 3). Simplification according to the teachers' comments means using 'elementary phrases' that are 'easy to understand'. Item 4 reveals that one of the causes of teacher frustration is the lack of published CLIL materials containing a full repertoire of content-language integrated activities. When these materials are not available, teachers mostly focus on the activities involving definition and translation.

Part Two of the questionnaire was designed to tap into the teachers' own perceptions of style and content delivery in English, which is the aim of the second research question. In this part, popularization features were introduced as activities, albeit with the awareness that some teachers would not be totally familiar with some of the strategies, and this is what led to the integration of the interview as a supporting investigation method. The results are reported in the table below.

PART II - CONTENT DELIVERY					
To what extent do you conduct these activities (in English)?	Almost never	Sometimes	Often	Almost always	Always
1. Provide opportunity to speak about the topic before presenting it	1	12	3	2	2
2. Use visual organizers to help you present the topic	0	0	2	3	15
3. Use handouts to accompany main text	0	5	13	1	1
4. Use code switching techniques and translation (L2 to L1)	0	0	0	2	18
5. Use questioning techniques	0	0	2	15	3
6. Use corrective feedback techniques	0	1	3	14	2
7. Identification and definition of key lexical items	0	7	11	1	1
8. Explanation and description of theories, events, processes, etc. using your own words	1	7	9	2	1
9. Exemplification and description through analogies and metaphors	18	2	0	0	0
10. Marked lexis to give discourse emphasis	15	3	2	0	0
11. Sequencing techniques	16	3	1	0	0
12. Narration techniques	16	3	1	0	0
13. Personalization techniques	17	2	1	0	0
14. Generalization, reformulation and paraphrasing	17	1	1	1	

Table 1. Results from Part II of teachers' questionnaire

These items reveal that most classroom work focuses on typical and perhaps more traditional learning activities and on more familiar CLIL strategies such as code switching. The *Often* column draws the line of demarcation between higher and lower frequency activities. The first two columns on the right, the frequency indicators of *Always* and *Almost Always*, report that the highest ranking strategies are *using visual organizers, code-switching* and *corrective feedback techniques*. As for the first two columns on the

left, *Almost Never* and *Sometimes*, the items with the highest frequency indicators (with exception of Item 1) correspond to the discursive strategies that are rarely employed by the teachers such as *exemplification, description, analogies, metaphors*, *marked lexis, sequencing, narration, personalization, generalization, reformulation* and *paraphrasing*. The *Often* column also confirms that using *handouts, definition* and *explanation strategies* are the most frequently employed activities in regular L1 classes. The activity involving the definition of specific lexis needs further investigation as this might mean either translating the term or conducting specialized research work on the term itself. Nevertheless, through this item it was possible to detect that teachers are well aware of the importance of teaching content-obligatory language (Mehisto *et al.*, 2008), which is the manifest representation of subject knowledge, but they are often unsure of how to organize learning activities.

Part Three of the questionnaire (see Appendix) was a single question designed to elicit any other piece of information that teachers needed to share.

The comments, some of which are reported below according to those most frequently mentioned, provide interesting insights into how teachers actually feel about the additional responsibilities and challenges that inevitably come with CLIL teaching.

Confidence in L2
"I like teaching History in English, but my biggest worry is teaching for a full hour in the language. I know I will make mistakes. I'm afraid of setting a bad example for my students".
Preparation Time
"The CLIL lesson must be thought out differently from the L1 lesson, that's why it takes more time."
'I'm in it alone' feeling
My colleagues don't understand what responsibility I have in teaching CLIL. They think it's just a matter of translating my L1 lesson into L2!
Lack of materials
Sometimes I spend hours looking for good material to use in class the next day. The Internet is a wonderful source, but it's not that you can just print out materials the way it is presented.
Parents
You always have to prove to the parents that it is worthwhile. They love the idea that their son or daughter is learning more language, but are worried about the subject!
Rapport with language teachers
I've been teaching CLIL for 6 months now, and still have not spoken to the English language teacher.
L1 or L2?
I never know if I'm beginning to spend too much time on language work and not enough time on content.

5.2. *Thinking aloud pair interviews and whole-group questioning*

As mentioned earlier in the paper, two types of interviews were designed to help teachers 'voice' their actions. The first was a 'thinking aloud' technique that involved the eight high school teachers with CLIL classes who were paired up according to similar subject area. This facilitated the identification of the teachers' thinking processes when they approached the topics of content selection and preparation, content delivery and most frequently used activities. The second interviewing strategy, a straightforward questioning technique on the same three aspects, was conducted among the 32 teachers attending the training course.

Regarding the 20 course participants with no prior direct CLIL experience, as expected from teachers undergoing an induction period, they were especially concerned with more general aspects of how CLIL works, such as language and content integration, the

role of the L1 and L2 teachers and assessment issues, which are not specifically under investigation in this paper, and consequently not reported here.

A selection of comments from teachers with direct experience in teaching CLIL classes is provided below:

Content selection and preparation
Science teachers:
"I simplify it (the content topic) by making it elementary, I mean I simplify the difficult grammar constructions. Take out difficult words and substitute them with easier ones".
"I don't waste time in class. If I know it's difficult I translate words at home for them".
History teachers:
"I use only some parts of the texts I find on the Internet, I summarize them into easier ones, and often I have to use translation".
Content Delivery
Science teachers:
"Sometimes I ask them to read it first in Italian at home. Then it's easier to do in class. But I don't go into too much depth as it complicates things, students can't handle longer stretches of explanations or definitions".
"I ask them to read the text aloud and then we translate it together".
History teachers:
"When we are dealing with dates or important events I ask them questions about it before going on to reading about them. Use translation when I need to".
Science and history teachers:
"I show them pictures or maps or video and then ask them to talk about it".
"We read parts of texts then I ask them to stop and discuss what they have understood".
Most frequently used activities
History teacher:
"I put students in groups and give them a topic to study together so in class they can present it to the other groups".
Science teacher:
"I ask them to study the topic. They present it to the class".
"I ask them to work on a project together. Then they get a mark for it".
Science and History teachers:
"I ask them to do some Internet work on it (the topic). First in Italian so they understand it. Then we look at the English version".
"Ask them to study what we went through in class and be prepared to talk about it the next time".

The general response that emerges from these comments is that facilitation of text comprehension consists mainly of definition and translation strategies. There is very little evidence that any significant work is being done to develop other discursive strategies in favour of content accessibility.

6. Discussion and proposals

6.1. *Re-contextualizing subject knowledge*

What the above results highlight is that making content more accessible often means making things easier by employing brief question-and-answer sessions and translating strategies rather than developing and bringing to the surface discursive strategies that

would allow students to handle the re-formulation of content in a more specialized manner.

Many would argue that there is nothing wrong with that, but *elementarizing* content inevitably leads to transforming it into overly simplified texts, stripped of any sort of cognitive challenge. There is no evidence in the data collected that re-contextualization processes are actually taking place, which implies that these processes are probably not easily detected in teacher actions and teacher dialogue, thus making it difficult for students to pick up and use. Particularly interesting is the argument put forth by Dalton-Puffer (2007: 38-41) that these discursive strategies have an underlying recognizable structure that is naturally embedded in language. It is precisely this structure that needs to be made explicit to students through popularization strategies, in what Walqui (2006) describes as a continuing scaffolding cycle of presentation and re-presentation of content. At this relatively early stage of the project, I am able to offer a basic framework of *CLIL popularizing strategies*, with the obvious consideration that teachers will need to devise a series of activities in order to embed these support structures in the various stages of the lesson (preview, explanation, elaboration, exploration and engagement). The framework illustrated in the table below includes the most salient features and the functional aspects that these strategies generate.

Uses of popularization strategies
Analogy - Description - Metaphor: Employ - descriptive techniques: *looks like, smells like, sounds like*, adjectives, adverbs - appropriate vocabulary to describe objects, participants, events, actions, events, processes Create a clear image of what is being described Give information that can be easily grasped
Classification: Employs - clustering techniques (*mind maps, brainstorming*) - outlines with headings and subclasses Lists - items in each subclass with details and characteristics Organizes - information in a logical way
Definition: Classifies - objects, events, subjects, emotions, etc. Differentiates - subjects by presenting specific features Compares - theories, principles, objects, events, subjects, emotions. etc.
Explanation: Names and defines - objects, parts, purposes, etc. Describes - how something works - special features Uses - sequencing phraseology - transitional words and signposts (*I'm going to explain, the reason for, the cause/result is*) Gives - details

- topic words
- reasons
Exemplification
Chooses
- manageable topics
- clear support examples
Provides
- steps of the exemplification process
- details arranged coherently
Generalization
Provides
- sufficient evidence, samples, examples to support topic
- qualifying words or phrases (*among those studied, are likely to, one of the reasons*)
Marked Lexis
Creates
- emphasis
- strategic foregrounding of important meanings
Employs
- discourse markers to draw attention (*Yes*, *what you said is true, DNA is a very long and simple double helix molecule*)
Paraphrasing
Re-organizes
- the structure of the subject in a more familiar layout (*note form*, *outlines*)
Employs
- synonyms/antonyms to vary, compare, simplify, explain specific terminology and concepts
Personalization
Involves students through
- marked phraseology (*if you think this is not right...*)
- the 'I' pronoun *(I personally think...)*
- anecdotal and personal details (*when I studied this in school...*)
Questioning
Engages students through
- dialogic involvement to think about the topic, or acknowledge alternative views
- challenging, non-rhetorical structures
Reformulation
Revises
- discourse using different wording
Prompts
- 'noticing' techniques to detect differences
Categorizes
- noticed items into language areas
Sequencing
Identifies and defines
- the components of an event, process, procedure, theory, etc**.**
- the purpose or function within an event, process, procedure, theory, etc.
Retells
- the events, steps, processes within a given text in the order in which they occur

Table 2. Popularization strategies and functions

As acts of communication, the popularization strategies listed above have a strong affinity with academic language functions such as those contained within the Cummins framework of CALP – Cognitive Academic Language Proficiency (2007). The CLIL classroom, in the same way as the EAP (English for Academic Purposes) classroom, should model "what the student is trying to do in the future […] rather than what the student can do now" (Alexander *et al*: 2008: 8). This seems to address the issue of working to-

wards continuing education and autonomous learning in another language. The author argues that learner autonomy, which in itself is an essential aspect of CLIL (Wolfe 2011), can be enhanced by employing both popularization strategies and academic language functions in the regular teaching repertoire. The table below illustrates one of the possible visualizations of this blend of functions that can guide students towards CLIL proficiency in a lifelong learning perspective. One of the aspects that this visualization highlights, as is to be expected, is the overlapping of strategies and functions. However, it is worth noting that this occurrence is only natural as both discursive skills share one common goal, that of facilitating learning.

Popularization strategies (teacher initiated)	Academic language functions (student generated)
analogy-description-metaphor	comparing-explaining-describing-analysing-inferring
classification	analysing-ordering-classifying
definition	analysing-defining-explaining-evaluating
explanation	analysing-comparing-justifying-persuading-seeking information
exemplification	explaining-describing-comparing-giving information
generalization	hypothesizing-drawing conclusions-evaluating
marked lexis	justifying-persuading-ordering-giving information
paraphrasing	giving information-explaining-synthesizing-ordering-inferring
personalization	seeking information-explaining- giving information
questioning	seeking information-giving information-explaining-problem solving
reformulation	giving information-describing-narrating-synthesizing-comparing-analysing
sequencing	narrating-ordering-classifying-evaluating

Table 3. Blended popularization strategies and academic functions

At this point, one might ask: why not just concentrate on academic functions instead of popularization features? The reason is the attribution of focus. Academic functions, which are indeed more familiar to teachers, albeit insufficiently exploited in the classroom, are generated and processed by the student, thus they possess an inherent focus on the learning process. Popularization strategies, on the other hand, are teacher-initiated and represent the language facilitation techniques teachers can use to mediate their action and dialogue in the CLIL classroom (Linares *et al*. 2012). They act as model functions that students can acquire alongside CALP functions, but they possess an inherent focus on the teaching process. Through popularization teachers create "comprehensible input" (Krashen: 1985) which ensures that students understand, interiorize and reformulate the heavier linguistic and cognitive load that characterizes a CLIL learning environment.

When the domains of popularization strategies, academic language functions, the foreign language and the subject content (Figure 5) join forces to make integrated learning happen, the outcome is the creation of a new CLIL interactional context, a framework of discursive activity characterized by reduced complexity strategies that do not impoverish the authenticity of the original source content by the mere act of simplification.
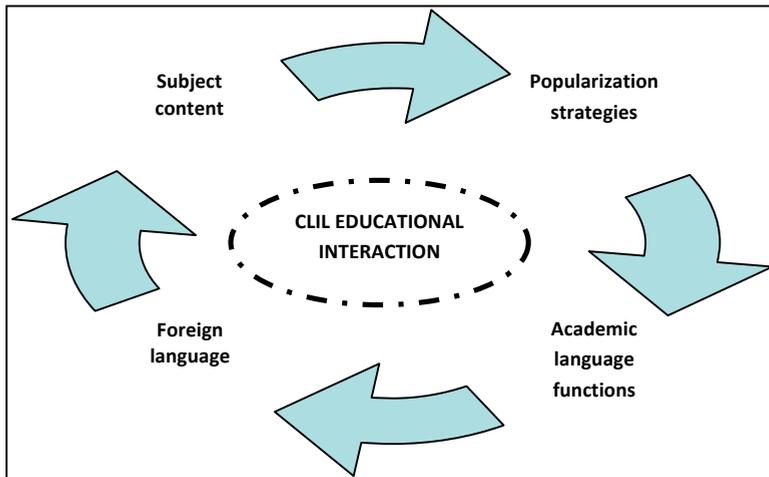
Figure 5. The CLIL Educational Interaction Model

It is quite a task for the author to give a full account within the scope of this single article of how the teachers can incorporate these discursive strategies into everyday activities However, the extract provided below of a Science lesson plan on DNA is an example of the popularization strategy of *exemplification.*

Title of lesson: the functioning of DNA
Subject aim(s): to introduce the topic of DNA;   Overview: A basic knowledge of DNA structure, function, and location, and that DNA contains heritable instructions for building and maintaining an organism.   **Language aim(s) and sub-aims:**   - to highlight discursive strategies used in **exemplification** (break down steps of the exemplification: process to explain, describe, define, give information)   **-** underline terms that students will need to define and use in their explanation of DNA.   **Assumptions:**   Students are familiar with DNA specific lexis presented in previous lessons.
Teacher activity   **Presentation**   **Teacher preparation notes –** write notes under a diagram of DNA shown on the Interactive Whiteboard and give students a handout of the same notes**.**   • DNA is a nucleic acid made of two **strands** of nucleotides **wound together** in a spiral called a double helix.   • Each nucleotide is **composed of** a sugar molecule known as deoxyribose, a phosphate group, and one of four different nitrogenous bases.   • The phosphate and sugar parts of the nucleotides form **the backbone** of each strand in the DNA double helix.   • In cells, each chromosome consists of DNA **wrapped around** proteins. The chromosomes are contained in the nucleus inside a nuclear membrane.   **Diagram**   To help students visualize DNA use the following diagram in your discussion (diagram not included).   **Specific lexis**   Webquest activity: link to online dictionary and thesaurus to find definition of words in bold.
Groupings   Whole class for first two activities   Pairs for Webquest activity

Student activity
- Listen to the teacher by looking at the whiteboard - Take notes on handouts provided by the teacher - Ask questions for clarification - Carry out the Webquest in pairs **Extension (homework)** Prepare a ppt. that includes information from the teacher's notes, notes taken in class and from Webquest
Materials The Internet Handouts Interactive Whiteboard (also for ppt. presentations)

Table 4. DNA lesson plan

6.2. *Production of quality materials for syllabus design*

There is, however, an aspect of extreme importance that has not received full attention in this paper, but has been mentioned throughout the discussion and that is the availability of CLIL materials for syllabus construction, which is one of the most commonly reported problems in Italian CLIL environments. The small number of teacher-prepared History and Science texts collected and analysed by the author in this phase of the study have made it impossible to report any conclusive results, but what should be apparent by now is the fact that L1 lessons cannot be simply translated to become a CLIL syllabus, which implies that teachers will have to use all available resources to develop a coherently structured CLIL subject curriculum that can display discursive features such as the ones presented above. One way that this can be done is by using lesson plans as learning materials, which basically involves the use of two simple routine activities that facilitates *flipping*[2] teaching materials into learning materials:

1. plan teaching materials that can be used in class both as teaching tools but also as models that can be used for student learning,
2. collect the teaching materials (power point presentations, teacher presentation notes, outlines, mind maps, chapter or article reformulations and summaries, handouts) and give them a coherent sequence and structure (headings, units, modules) to be used as student study packs and workbooks.

Mehisto (2012: 16) argues that "quality learning materials do more than just communicate information. They promote critical and creative thought, discussion and learner autonomy". Ready-made materials are always welcomed by any teacher for obvious reasons, but we should not underestimate the validity of in-house materials. The implication, of course, is that instead of stripping down texts and making them unchallenging, teachers should foster understanding by incorporating the scaffolding effect of popularizing features in content presentation, which means using quality materials as vehicles. Cummins (2007) explains that if teachers make learning cognitively easier, they may be impoverishing the learning environment, with the obvious result of making it more difficult for the student to learn essential academic language they need to acquire.

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[2] Retrieved from www.ted.com.

7. Limitations of study and further research

Two limitations need to be addressed in this project. The first is to be attributed to the nature of this study's exclusion of students' viewpoints. This was an inevitable research priority as the first stage of the project was meant to be an initial awareness-raising discussion primarily addressed to those involved in the teaching of CLIL, but soon to be followed by further research that will include students as the recipients. However, it is understood that although the students are not the direct targets of this survey, as their views have not been properly reported, any research in education is always about students and the discussion undertaken in this paper was ultimately about them.

The second limitation directly concerns the actual implementation of the popularization approach within a complex and still relatively unexplored educational setting where one-model-fits-all recipes are not functional. CLIL can only prosper within a flexible context, but there are quite a few unresolved issues related to teacher readiness and willingness to go beyond the definition-translation activities and explore more challenging ways to encourage content *and* language learning.

8. Conclusions

What started as a research interest in popularization features in non-educational fields soon turned into a research aim for the benefit of educational improvement. This study, small-scale as it is, has provided evidence that the majority of the teacher-participants can do a lot more to improve content accessibility in CLIL contexts in terms of:

1. reduced complexity rather than simplification;
2. re-presentation/re-formulation/re-contextualization of texts rather than impoverishment;
3. scaffolding through discursive strategies rather than translation from L1 to L2.

The students are the ones who probably suffer the complexities of CLIL education the most because they face the additional challenge of learning content in a foreign language. Teacher practitioners and researchers must therefore find methods and approaches to facilitate the integration of language, content and learning skills so that critical thinking is fostered. Popularizing the CLIL classroom is strongly advocated in this study as an approach that can help teachers and students progress towards an authentic and significant learning experience, and not only in a CLIL lesson but during a lifetime.

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Appendix
Teacher Questionnaire

PART I - CONTENT SELECTION AND PREPARATION
Please write your answers in the box provided below for each item.
Item 1   What are the sources of your subject content material for CLIL?
Item 2   How do you select the topics for your CLIL syllabus?
Item 3   When you prepare your CLIL lessons, how do you adapt content for L2 presentation?
Item 4   What kind of activities do you use to present content-specific language?

PART II - CONTENT DELIVERY					
To what extent do you conduct these activities (in English)?	Almost never	Sometimes	Often	Almost always	Always
1. Provide opportunity to speak about the topic before presenting it					
2. Use visual organizers to help you present the topic					
3. Use handouts to accompany main text					
4. Use code switching techniques and translation (L2 to L1)					
5. Use questioning techniques					
6. Use corrective feedback techniques					
7. Identification and definition of key lexical items					
8. Explanation and description of theories, events, processes, etc. using your own words					
9. Exemplification and description through analogies and metaphors					
10. Marked lexis to give discourse emphasis					
11. Sequencing techniques					
12. Narration techniques					
13. Personalization techniques					
14. Generalization, reformulation and paraphrasing					

PART III – Please share any other comment about your CLIL experience.