sciendo

CETAPS | UP-FLUP | UNL-FCSH

Number 9 | 2018

Special Edition
Content and Language
Integrated Learning (CLIL)

e-TEALS

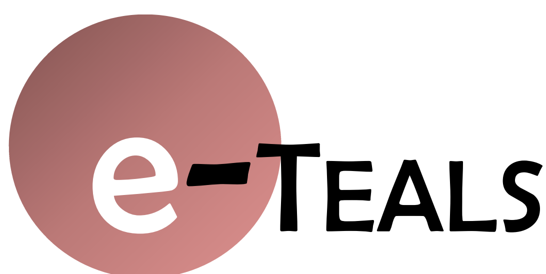
An e-journal of
Teacher Education and
Applied Language Studies

ISSN 1647-712X

FCT Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA EDUCAÇÃO E CIÊNCIA

Analysing English; Le
English; Listening to E
Reading English; Rese
English; Speaking En
Studying English; Tea
English; Translating E
Using English; Writing
English, Analysing En
Learning English; List
English; Reading Eng
Researching English;
Speaking English; Stu
English; Teaching Eng
Translating English; U
English; Writing Engli
Analysing English; Le
English; Listening to E
Reading English; Rese
English; Speaking En
Studying English Liste
English Reading Engl
Researching English;
Speaking English; Stu
English; Teaching Eng
Translating English; U
English; Writing Engli
Analysing English; Le
English; Listening to E
Reading English; Rese
English; Speaking En
Studying English; Tea
English; Translating E
Using English; Writing
English, Analysing En
Learning English; List

sciendo



An e-journal of Teacher Education and Applied Language Studies

No. 9 | 2018

Special Edition

Maria ELLISON
"Introduction"
| pp. 1-3

Maria ELLISON
"(Net)Working CLIL in Portugal"
| pp. 4-22

Aoife AHERN, Rachel WHITTAKER and Isabel Blecua SÁNCHEZ
"Reading and Writing to Learn: A Principled Approach to Practice in CLIL Bilingual Classes"
| pp. 23-40

Alexandra VRACIU and Yolanda Capdevila TOMÀS
"Focus on Form in Content-Based Instruction: Practical Ideas for Raising Language Awareness in Primary School Arts and Crafts CLIL"
| pp. 41-56

Valentina PIACENTINI, Ana Raquel SIMÕES and Rui Marques VIEIRA
"What Students Tell Teachers about Practices that Integrate Subjects with English in a Lower Secondary School in Portugal"
| pp. 57-76

Ruth KORO
"Developing Learners' Intercultural Understanding through a CLIL Approach"
| pp. 77-107

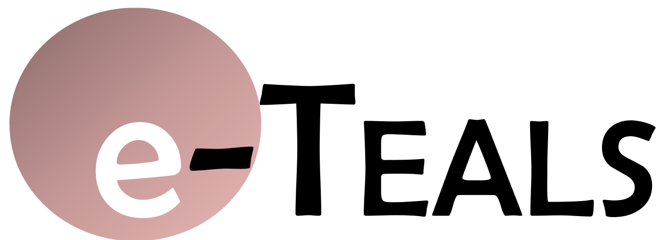
Pilar COUTO-CANTERO and María BOBADILLA-PÉREZ
"Ten Fundamentals for Novice CLIL Teachers"
| pp. 108-131

Margarida MORGADO
"CLIL4CHILDREN: Teaching Materials for CLIL Lessons in Maths, Geography and Science for Primary School"
| pp. 132-152

Plácido E. Bazo MARTÍNEZ and Sergio D. Francisco DÉNIZ
"Digital Competence and CLIL: The Use of WebQuests in Bilingual Education"
| pp. 153-172

ISSN 1647-712X

sciendo



An e-journal of Teacher Education and Applied Language Studies

This e-journal is sponsored by **CETAPS** (The Centre for English, Translation and Anglo-Portuguese Studies) with a view to providing a forum for the publication of papers which reflect the wide range of scientific perspectives included within the study of English. Articles of a diverse nature, especially those associated with the research sub-unit denominated **TEALS** (the Teaching of English and Applied Language Studies), will be the mainstay of the journal. The journal is supported by the *Faculdade de Letras, Universidade do Porto* and the *Faculdade de Ciências Sociais e Humanas, Universidade Nova de Lisboa*.

e-TEALS: An e-journal of Teacher Education and Applied Language Studies (ISSN 1647-712X) is published once a year by the Digital Information Services department of the Central Library at FLUP.

There is a standing **call for papers**, which should be sent to the CETAPS email address: cetaps@fcsh.unl.pt. Contributions to each annual issue should reach the Editorial Board between January 1st and **July 31st**. All articles submitted must conform to the **Guidelines for Authors (MLA style)** (see *OWL: Purdue Online Writing Lab*, 2016 MLA guide, at http://owl.english.purdue.edu/owl/owlprint/747/).

Editorial Board

Carlos Ceia (FCSH) – (Coordinator and) Director of the e-journal

Allyson Roberts (FCSH)

Ana Matos (FCSH/CETAPS)

Maria Ellison (FLUP)

Nicolas Hurst (FLUP)

Special Edition Editors

Maria Ellison (FLUP)

Margarida Morgado (IP Castelo Branco)

António Lopes (ESEC U. Algarve)

María Arau Ribeiro (IP Guarda)

Margarida Coelho (IP Portalegre)

CETAPS

Language Editor

Nicolas Hurst (FLUP/CETAPS)

Editorial Assistant

Laura Moreira, Faculty of Letters, University of Porto

Scientific Committee

Manuela Guilherme (Marie Curie Research Fellow at the Centre for Social Studies, University of Coimbra)

María Luisa Pérez Cañado (Departamento de Filología Inglesa, Universidad de Jaén)

Víctor Pavón Vázquez (Dpto. Filologías Inglesa y Alemana, Facultad de Filosofía y Letras, Universidad de Córdoba)

Jane Woodin (Director of Learning and Teaching, School of Languages and Cultures, University of Sheffield)

Publication Ethics and Publication Malpractice Statement

It is necessary to agree upon standards of expected ethical behaviour for all parties involved in the act of publishing at *E-TEALS: An e-journal of Teacher Education and Applied Language Studies*: the author, the journal editor, the peer reviewer and the publisher.

Our ethics statements are based on COPE's Best Practice Guidelines for Journal Editors.

Publication decisions

The editor of the E-TEALS is responsible for deciding which of the articles submitted to the journal should be published.

The editor may be guided by the policies of the journal's editorial board and constrained by such legal requirements as shall then be in force regarding libel, copyright infringement and plagiarism. The editor may confer with other editors or reviewers in making this decision.

Fair play

An editor at any time evaluate manuscripts for their intellectual content without regard to race, gender, sexual orientation, religious belief, ethnic origin, citizenship, or political philosophy of the authors.

Confidentiality

The editor and any editorial staff must not disclose any information about a submitted manuscript to anyone other than the corresponding author, reviewers, potential reviewers, other editorial advisers, and the publisher, as appropriate.

Disclosure and conflicts of interest

Unpublished materials disclosed in a submitted manuscript must not be used in an editor's own research without the express written consent of the author.

Duties of Reviewers

Contribution to Editorial Decisions

Peer review assists the editor in making editorial decisions and through the editorial communications with the author may also assist the author in improving the paper.

Promptness

Any selected referee who feels unqualified to review the research reported in a manuscript or knows that its prompt review will be impossible should notify the editor and excuse himself from the review process.

Confidentiality

Any manuscripts received for review must be treated as confidential documents. They must not be shown to or discussed with others except as authorized by the editor.

Standards of Objectivity

Reviews should be conducted objectively. Personal criticism of the author is inappropriate. Referees should express their views clearly with supporting arguments.

Acknowledgement of Sources

Reviewers should identify relevant published work that has not been cited by the authors. Any statement that an observation, derivation, or argument had been previously reported should be accompanied by the relevant citation. A reviewer should also call to the editor's attention any substantial similarity or overlap between the manuscript under consideration and any other published paper of which they have personal knowledge.

Disclosure and Conflict of Interest

Privileged information or ideas obtained through peer review must be kept confidential and not used for personal advantage. Reviewers should not consider manuscripts in which they have conflicts of interest resulting from competitive, collaborative, or other relationships or connections with any of the authors, companies, or institutions connected to the papers.

Duties of Authors

Reporting standards

Authors of reports of original research should present an accurate account of the work performed as well as an objective discussion of its significance. Underlying data should be represented accurately in the paper. A paper should contain sufficient detail and references to permit others to replicate the work. Fraudulent or knowingly inaccurate statements constitute unethical behaviour and are unacceptable.

Originality and Plagiarism

The authors should ensure that they have written entirely original works, and if the authors have used the work and/or words of others that this has been appropriately cited or quoted.

Multiple, Redundant or Concurrent Publication

An author should not in general publish manuscripts describing essentially the same research in more than one journal or primary publication. Submitting the same manuscript to more than one journal concurrently constitutes unethical publishing behaviour and is unacceptable.

Acknowledgement of Sources

Proper acknowledgment of the work of others must always be given. Authors should cite publications that have been influential in determining the nature of the reported work.

Authorship of the Paper

Authorship should be limited to those who have made a significant contribution to the conception, design, execution, or interpretation of the reported study. All those who have made significant contributions should be listed as co-authors. Where there are others who have participated in certain substantive aspects of the research project, they should be acknowledged or listed as contributors.

The corresponding author should ensure that all appropriate co-authors and no inappropriate co-authors are included on the paper, and that all co-authors have seen and approved the final version of the paper and have agreed to its submission for publication.

Disclosure and Conflicts of Interest

All authors should disclose in their manuscript any financial or other substantive conflict of interest that might be construed to influence the results or interpretation of their manuscript. All sources of financial support for the project should be disclosed.

Fundamental Errors in Published Works

When an author discovers a significant error or inaccuracy in his/her own published work, it is the author's obligation to promptly notify the journal editor or publisher and cooperate with the editor to retract or correct the paper.

CETAPS Centre for English, Translation and Anglo-Portuguese Studies
U.PORTO FACULDADE DE LETRAS UNIVERSIDADE DO PORTO
FCSH FACULDADE DE CIÊNCIAS SOCIAIS E HUMANAS UNIVERSIDADE NOVA DE LISBOA
FCT Fundação para a Ciência e a Tecnologia MINISTÉRIO DA EDUCAÇÃO E CIÊNCIA

sciendo

e-TEALS no. 9 | 2018
Special Edition

An e-journal of Teacher Education and Applied Language Studies

Introduction

Maria ELLISON
| University of Porto (FLUP)

This Special Issue of *e-TEALS* is dedicated to Content and Language Integrated Learning (CLIL), an educational approach involving the dual teaching and learning of an academic subject and an additional language. CLIL is now practised under many guises across educational levels all over the world and is particularly prolific in Europe where there is a rapidly evolving evidence base as well as an identified need for further teacher education (Cenoz et al.; Eurydice; Perez Cañado). Countries in which CLIL has been operational for some time have taken stock of the phenomenon whereas in others such as Portugal, it is relatively recent, unchartered terrain in need of thorough exploration, teacher education, and the development of communities of practice which support these endeavours (see Ellison this volume).

This was the stimulus for the creation of the new CLIL research strand of TEALS and for the first Working CLIL Colloquium, an international event hosted by the Centre for English, Translation and Anglo-Portuguese Studies (CETAPS) at the Faculty of Arts and Humanities of the University of Porto on 16-17 March, 2018. The dual purpose of the colloquium was to provide teacher education for CLIL from pre-primary to secondary levels through workshops given by experienced CLIL practitioners, teacher educators or scholars, and opportunities for poster presentations of experiences and practitioner or scholarly classroom-based research. The outcome was an interesting and stimulating range of workshops and posters reflecting a variety of perspectives on research, theory, and practice of CLIL from a range of contexts. This is

Citation: Maria Ellison, "Introduction." *e-TEALS: An e-journal of Teacher Education and Applied Language Studies* 9 Special Edition (2018): 1-3. ISSN 1647-712X

10.2478/eteals-2018-0009

represented by the selection of papers in this Special Edition which are united in their orientation towards effective and quality educational experiences for teachers and learners.

In the first of these, Ellison situates Portugal on the 'CLIL map' and describes the evolution of its grassroots and national initiatives. There are also cautionary words about the need for teacher education to prepare for future growth. The next two papers highlight the importance of understanding and supporting subject specific literacy development in CLIL classrooms. Ahern, Whittaker and Blecua focus on Reading to Learn pedagogy, whilst Vraciu and Capdevila Tomàs draw our attention to planned and incidental focus on linguistic form. The studies presented by Piacentini, Simões, and Vieira, and Koro provide all-important participant feedback on experimental CLIL projects in secondary education in Portugal and the UK, respectively. The perspectives of History and Science students are influential in shaping future teaching strategies in Piacentini et al.'s project. Koro's research focuses on developing students' intercultural understanding through the integration of History and French. For this author, CLIL stands for Content and Language *Intercultural* Learning.

Drawing on teacher education practices in the Galician context, Couto-Cantero and Bobadilla-Pérez offer ten CLIL fundamentals in a series of tips for novice CLIL teachers. The remaining two papers present guidelines and materials for use in CLIL classrooms. Those of Morgado relate to the CLIL for Children Project which suggests how quality materials and lesson plans can be developed for primary CLIL. Bazo and Déniz discuss the importance of competency--based learning and digital tools. They explain how these combine within Webquests and illustrate this through a didactic unit which incorporates web tasks and materials from the social sciences.

As readers will see, the collection of papers in this Special Edition provides valuable insights into 'CLIL at work' as well as theoretically-grounded suggestions for implementation in the classroom. We thank all those who have shared their experiences with us in this volume.

Works Cited

Cenoz, Jasone, et al. “Critical Analysis of CLIL: Taking Stock and Looking Forward." *Applied Linguistics*, vol. 35, no. 3, 2013, pp. 243-62.

Eurydice. *Key Data on Teaching Languages at School in Europe 2017,* Eurydice, 2017.

Perez Cañado, María Luisa. “Are Teachers Ready for CLIL? Evidence from a European Study.” *European Journal of Teacher Education*, vol. 39, no. 2, 2016, pp. 202-21.

sciendo

e-TEALS no. 9 | 2018
Special Edition

An e-journal of Teacher Education and Applied Language Studies

(Net)Working CLIL in Portugal

Maria ELLISON
| University of Porto (FLUP)

Abstract | Recent growth in Content and Language Integrated Learning (CLIL) across educational levels in Portugal has positioned it in European Commission reports (Eurydice 2012; 2017) and attracted much needed attention to the educational practice which warrants further in-depth exploration in order to better understand it and ensure quality provision in the country. This article explores the concept of CLIL at work in Portugal and highlights its brief trajectory to date as well as the challenges and opportunities it presents teacher educators and researchers. It provides an overview of the recently established *Working CLIL* research strand of TEALS (Teacher Education and Applied Language Studies) which is actively engaged in connecting CLIL communities in Portugal and beyond.

Key words | Working CLIL, CLIL in Portugal, teacher education, communities of practice

Citation: Maria Ellison, "(Net)Working CLIL in Portugal." *e-TEALS: An e-journal of Teacher Education and Applied Language Studies* Special Edition (2018): 4-22. ISSN 1647-712X

10.2478/eteals-2018-0010

1. Introduction

Now more than twenty years on from the coining of the acronym and launch of the educational approach on the European stage, Content and Language Integrated Learning (CLIL), "a generic umbrella term which would encompass any activity in which a foreign language is used as a tool in the learning of a non-language subject in which both language and the subject have a joint curricular role in the domain of mainstream education, pre-schooling and adult lifelong education" (Marsh 58) has become widespread across the continent, and its reach, under its many guises, is felt around the world (Ellison, "CLIL in the Primary School Context" 253). And while there are countries where it has been regular practice for some time and made its way into educational policy (e.g., Spain and Italy), that have already accounted for its success and shortcomings through research in their own context, others have yet to take stock of what is for them a recently evolving phenomenon. Such is the case of CLIL in Portugal.

Conceptualising activity[1] involving the integrated learning of content and an additional language (here English) in Portugal reveals discrepancy in the use of terminology. At least four acronyms have come and gone over the years (Ellison, "CLIL as a Catalyst" 37), with the consensus now on 'CLIL' (the acronym in English) and 'Ensino Bilingue' (bilingual education). Institutions within close proximity of each other operating similar models use either term, and some choose to use both (e.g., The Bilingual Schools Programme, a joint venture between the Portuguese Ministry of Education and the British Council, uses both on a continuum from Early Bilingual Education to CLIL in later schooling). These terms are somewhat all-encompassing 'umbrellas' which may be used to cover each other. For example, the most recent Eurydice survey on 'Key Data on Teaching Languages at School in Europe', defines CLIL as "a general term to designate different types of bilingual or immersion education" (Eurydice, "Key Data 2017" 141).

Scholars, however, make distinctions which draw on socio-political circumstances and ideology as well as more practical issues related to amount, age of learners, and teacher profile, (Cenoz et al.; Coyle, "Towards a connected research agenda"; Johnstone; Lasagabaster and

Sierra). For the purposes of this article, we use the term CLIL in accordance with Dalton-Puffer et al. as one that is "neutral and generally accessible" (3) and the language referred to is English given that this the main foreign language used in CLIL in Portugal. Terms like 'hard/strong' and 'soft/weak' CLIL (Ball et al. 26-27) are also used to describe models which are content- or language-led with the former given by content/subject teachers and the latter by teachers of English in the foreign language classroom, which may go some way to explaining the claim made by these teachers that they also 'do CLIL' in their lessons. This often transpires as project work from the English language coursebook linked to other areas of the curriculum and labelled as 'CLIL'. This may involve the presentation of content previously introduced in the mother tongue by subject teachers which, it may be argued, does not constitute CLIL (Coyle, "Motivating learners and teachers") since it is not genuine 'first-experience' content learning. The 'hard/soft' dichotomy is also used to distinguish between programmes which have high or low percentages of CLIL within their school curricula.

Whereas reasons for implementing CLIL at school level across national contexts converge largely on the need to improve proficiency in a foreign language (mainly English) through increased exposure, and to facilitate international communication for improved mobility for study and work, it is perhaps reasonable to say that those involved in early CLIL projects in Portugal took a 'proactive' stance which manifested itself in small-scale experimentation within grassroots projects realising the multiple benefits of the approach to holistic learning, cognitive development, intercultural understanding and teacher collaboration (see section 2 below).

Given the positive outcomes of these early projects, recent expansion of the Bilingual Schools Programme, and the burgeoning of English Medium Instruction in institutions of higher education in the country, it would seem that approaches involving the integration of content and an additional language are here to stay. And while Portugal may learn from those who have gone before it, it still has much to gain from an understanding of its own CLIL phenomenon, because even though principles apply across the board, CLIL remains a highly flexible approach

determined by contextual idiosyncrasies which make a study of it anywhere interesting and necessary, especially where it involves compulsory schooling and higher education.

It is, therefore, time to understand CLIL in Portugal, to highlight its trajectory to this point, and to address some of the challenges it will face as it continues to grow, namely in the domain of teacher education. As communities of practice spring up, it is important to give them space to flourish and opportunities to connect. These are some of the objectives of the Working CLIL research strand within the Teacher Education and Applied Language Studies (TEALS) group of the Centre for English, Translation and Anglo-Portuguese Studies (CETAPS) and highlighted in this article.

2. Early Projects

It is fair to say that most CLIL activity across educational levels to date has used English as the additional language. However, in one of the earliest projects 'Secções Europeias de Língua Francesa' (SELF) French was used to teach subjects in over twenty lower and upper secondary schools across Portugal. The project, which began in the academic year 2006-2007, was a joint initiative of the Portuguese Ministry of Education and the French Embassy and was the first to appear in a Eurydice survey (2012) for pilot CLIL projects in Portugal.

Most early forays into CLIL using English were from the grassroots. Each of these was, in some way, pioneering in its attempts to integrate content and language within specific school contexts. Despite the short life-spans of these projects, their influence has had long-term effects. One example is the STEPS – UP Project (Support for Teaching English in Primary Schools – University of Porto) which was developed from a protocol between FLUP and Porto City Council for the recruitment and support of primary English language teachers in schools within the city as part of the Ministry of Education's initiative to introduce English language as an extra-curricular activity. In STEPS – UP English language teachers were encouraged to engage in small-scale CLIL projects in the schools where they were teaching.

These projects had goals which went beyond developing linguistic competence in English. These were: to make learning in English language lessons more relevant and meaningful within the primary context; to improve collaboration within schools (between the generalist primary teachers and primary English language teachers) so that the school community could become aware of the positive contribution that English language lessons could make; and to raise the profile of the English language teachers and combat the sense of isolation they frequently experienced. In these projects, English language teachers initiated collaboration with primary generalist teachers to reinforce content from the primary curriculum in their English language lessons. In this sense, it was a type of 'soft CLIL'.

From questionnaires administered to English language teachers and their written reflections on the CLIL projects conducted in 2008, Ellison proved that there were benefits related to collaboration, teaching and learning, as well as constraints regarding generalist and English language teacher liaison (Ellison, "(De)constructing CLIL"). The STEPS – UP project which involved over 20,000 children in 56 schools during its four-years from 2005-2009 was awarded the European Language Label (2008) and Label of Label awards (2012) with its CLIL activity playing a central role.

Ellison furthered her study of CLIL in the primary context in research undertaken in 2010 - 2011 involving the implementation of CLIL by English language teachers in three state primary schools in the north of Portugal (see Ellison, "CLIL as a Catalyst"). These teachers taught multiple sequences of CLIL lessons over an academic year using the content of the primary curriculum, previously negotiated but not pre-taught, by the primary generalist teacher. Lessons were given in the generalist teacher's class time with her present. The rich data obtained through the study contributes an in-depth understanding of extended CLIL practice obtained by examining the content and types of teachers' reflections. Much was learned about contextual factors, teacher competences, learners, methodology, scaffolding strategies, and personal and professional development which has benefitted teacher education practices and implementation of CLIL projects elsewhere in the country.

'Project English Plus' (Simões et al.) is another example of early experimentation. In this project a 7th year class in a lower secondary school in the metropolitan area of Porto was taught 45 minutes of History through English each week in the academic year 2010-2011 by a History teacher with the support of an English language teacher during CLIL lessons. In addition, Project Area classes given by the English language teacher were used to prepare students for the language of History as well as engage them in activities which were related to historical concepts. English was also used in 20-30% of the evaluation instruments for History. Results obtained through questionnaires and interviews of stakeholders were highly positive with regard to students' "linguistic and communicative competences, attitudes towards Otherness, and increasing knowledge of History; teachers' professional development; the overall community's interest and participation in school activities; and the creation of interdisciplinary synergies within school and implementation of networks and partnerships with society" (31). Despite this, the project had to be discontinued because the History teacher moved away from the school. However, the same school has since revived it using Science as the CLIL content subject (see Piacentini et al. in this volume).

Benchmarking CLIL (BECLIL) was an early example of a European multilateral CLIL project involving two Portuguese secondary schools in the teaching of Civic Studies and Information Technology through English (see Costa and Lopes). The project enabled the identification of quality indicators and sharing of best practices of CLIL from countries with varied amounts and types of experience, namely in Finland, Romania, Spain and Holland. In the Portuguese schools involved in the project there were improvements in the students' attitude towards and motivation to use English in a "meaningful" (86) way as well as collaboration between language and non-language subject teachers.

CLIL was still a relatively unknown phenomenon during these years, barely present and little discussed at conferences about foreign language teaching in the country. Those within the educational community knew little about it and it was often dismissed as a trend. But this would change in subsequent years through ministerial initiatives at school level, more grassroots projects

and internationalisation strategies of higher education institutions bringing about more English--taught disciplines within degree programmes.

3. Growth and Momentum

3.1. *National and Grassroots School Projects*

A significant turning point in CLIL/bilingual education in Portugal was the piloting of the Early Bilingual Education Project, a collaboration between the Portuguese Ministry of Education and the British Council from 2011-2015 in primary schools in six school clusters across the country. This had been preceded by a feasibility study conducted in 2009-2010 and influenced by the success of bilingual schools projects involving the British Council and ministries of education in Spain and Italy. In this project, primary generalist teachers taught Social Studies (Estudo do Meio) and 'Expressions' for 5-10 hours per week (20-40% of the weekly timetable for primary education) over the four levels of primary education. Teachers received training in bilingual teaching practices and English language. Based on the success of the pilot project, the results of which (see Almeida et al) were disseminated at an international seminar held in Lisbon in 2015, the project, now the 'Programa Escolas Bilingues/Bilingual Schools Programme em Inglês' (PEBI) has gradually extended to other school levels from pre-primary to lower secondary with a corresponding increase in the number of hours per week where English is used to teach other subjects and as a subject itself (5 hours for pre-school; 7-8 hours for primary school; and 11-12 hours for lower secondary school). Broad aims of the PEBI relate to developing proficiency in English and competences in subject area study as well supporting education that is inclusive and intercultural.[2]

Since 2016-2017, schools in mainland Portugal interested in becoming involved in the PEBI must submit an application to the Ministry of Education. They are admitted if they meet all pre-requisites which include: designating it a priority project in the school; teacher education opportunities via Erasmus+ programmes; certified English language levels of teachers (minimum B1 level for pre-school and primary teachers, and B2 level for middle and lower secondary teachers); gradual implementation starting at pre-primary level; and planned collaboration between

content and English language teachers. It is suggested that teachers involved are permanent members of staff and that subjects chosen by schools are ones which ensure continuity over educational cycles. The Ministry of Education and British Council provide training for teachers in bilingual education as well as external monitoring of projects. In addition, extra support may be provided through the Teach Abroad Programme promoted by the Council on International Educational Exchange (CIEE) which offers American university graduates homestays with Portuguese families. These graduates volunteer English language support to teachers and students in the PEBI. There has been a steady growth in the number of clusters involved in the project each year. A goal is to reach 5% of school clusters by 2020. There are currently twenty-five clusters involved, the majority of which are in the north of the country. Owing to the PEBI, Portugal appeared in the Eurydice survey 'Key Data on Teaching Languages at School in Europe: 2017 Edition' as a country offering CLIL in English within its state schools.

What is now needed is further evidence of how school clusters across the country are working within this project. Some schools are 'visible' and there are clear signs of success. One example is Speak English, Reach Success[3] at the Santo António (Barreiro) school cluster which demonstrates how a school can formulate objectives to suit the specific needs of both its students and teachers, as well as use initial training via Erasmus+ to develop a self-sustaining programme of workshops provided by CLIL teams across all levels from pre-school to secondary.

Although the majority of state schools involved in CLIL across the country belong to the PEBI, a small number have developed their own initiatives. One such school is Escola Secundária Dr. Joaquim Gomes Ferreira Alves, located in Valadares near Porto in the north of the country. This school is not part of a school cluster. It signed an autonomy contract with the Ministry of Education in 2013 which afforded it up to 25% curricular autonomy. This has facilitated the development of its 'GoCLIL'[4] project which has been running since then and now involves CLIL classes taught by content teachers across a broad range of subjects in all of its lower secondary levels, as well as the first year of upper secondary. The project has been monitored by the Faculty of Arts and Humanities of the University of Porto since it began. This monitoring has involved

teacher education, classroom observation and research (see Ellison and Almeida Santos). Key to the project's success are its teacher coordination and stability year on year, realistic aims which include: general and cognitive academic proficiency in English, inclusivity, fostering interdisciplinary and integrated approaches to learning, and the development of 21st century skills. Another influential factor is the modular approach it has adopted. This involves modules or sequences of CLIL lessons given intermittently with lessons in Portuguese which has allayed parental fears of children missing out on content and language in the mother tongue, ensured continual contact with CLIL in a large number of subjects as well as provided time for teachers to adapt teaching methods and prepare lessons and materials. CLIL accounts for 25-40% curricular time. The project has managed to sustain itself through its committed teaching staff who have accumulated a high degree of expertise over the years and now provide their own CLIL teacher education programmes. They are also lead partners in a European project of the same name involving schools in Italy, Greece and Romania.[5]

CUBA CLIL IS IN[6] is a more recent example of a project developed within an Erasmus+ programme involving the school clusters of Cuba and Vidigueira, and the Professional School of Cuba (with its project CLIL ME IN[7]) in the Alentejo region. It is supported by the City Council of Cuba, the National Association for Inclusion and Innovation in Schools (AENIE) and the University of Évora. The goals of the project are a response to national as well as local needs to support the internationalisation of the regional community given the development of facilities which promote future employment (airport in Beja). CLIL is seen an opportunity to motivate students to use the English language for real purposes as well as improve collaboration within and between institutions. CUBA CLIL IS IN was the recipient of the 2018 European Language Label award for Portugal.

3.2. *Higher Education*

As is the case in many institutions of higher education (HEIs) across the world, English taught programmes (ETPs) are also increasing in number in HEIs in Portugal (see Wächter & Maiworm). This is set to continue given ministerial strategies and recommendations for the internationalisation

of Portuguese higher education (see Ministro Adjunto e do Desenvolvimento Regional e o Ministro da Educação e Ciência, "Uma Estratégia para a Internacionalização do Ensino Superior Português." Resolução do Conselho de Ministros n.º 78/2016; Coelho and Arau Ribeiro). The number of ETPs an institution can offer is a clear sign of its ability to internationalise. And whilst intentions include attracting higher fee-paying foreign students, they are also to prepare home students for a world of work which necessitates the use of a global language. Thus, the scope of internationalisation and its benefits are not only academic, but social, cultural and economic.

However, the absence of linguistic policy and mechanisms for ensuring quality in ETPs leaves them vulnerable and open to scrutiny (Marsh and Diaz; Marsh et al.; O'Dowd). Continual linguistic and methodological support for academic teaching staff is essential since teaching complex content through the medium of an additional language requires competences for which many teachers have not been previously trained (Ellison and Pavon). Merely switching to a different language of instruction assumes that teachers and students are highly proficient in it, which is not always the case. What is required is a change in methodological approach to one which supports the integrated learning of both content *and* language, i.e., CLIL. This is the key difference between English Medium Instruction (EMI) and Content and Language Integrated Learning (CLIL). There have been concerted efforts to develop awareness of and support for implementing CLIL in higher education in Portugal, notably through the ReCLES Guide (Morgado et al., "ReCLES Guide") which piloted CLIL training and implementation in polytechnic institutions across the country, and the Higher Steps project at the University of Porto which offers an English for Academic Purposes course incorporating methodology for CLIL (see Ellison et al.). In addition, these and associated research within HEIs (see for example Gaspar et al.; Morgado et al., "Content, Language and Intercultural Challenges in Engineering Education"; Morgado et al., "CLIL in Portuguese Higher Education"; Silva et al.) reveals a high degree of commitment to a study of CLIL practices in higher education in Portugal.

4. Future Challenges and Opportunities

4.1. *Teacher Education*

Teacher education across educational levels is vital to the provision of quality CLIL/bilingual education in Portugal and its longevity. This would need to incorporate the knowledge bases of English as a Foreign Language (EFL) and 'non-language' subjects. CLIL is a unique fusion of these knowledge bases which makes a study and practice of it potentially complex (Ellison, "CLIL as a Catalyst" 53). Thus, becoming a CLIL teacher is not an easy undertaking; it requires "multiple types of expertise" (Marsh et al. 5). So far teacher education for CLIL in Portugal has mainly been through in-service courses at HEIs (e.g. FLUP), the Portuguese Association of teachers of English (APPI), online courses (e.g., the British Council), Erasmus+ training courses where teachers study and work alongside those from other countries involved in CLIL projects, as well as programmes at schools provided by CLIL teachers for their colleagues (see section 3.1. above).

Those currently engaged in teaching CLIL are part of an ageing population of teachers. For long-term growth of programmes, CLIL needs to be addressed in pre-service teacher education for foreign language and 'non-language' teachers. This is not only for the purposes of ensuring longevity of programmes, but more importantly, a study of CLIL alongside approaches and methods of English language teaching (ELT) and other subject teaching, can provide valuable "content, linguistic, cognitive and cultural awareness-building" (Ellison, "CLIL the Added Value" 65) of the curricula of each as well as an appreciation of their reciprocal relationship which will support better collaboration and responsibility towards whole school approaches to learning.

Notably when the Portuguese National Education Council (CNE 2013) invited expert opinion on the implementation of English in the primary school curriculum, many suggested CLIL as an appropriate approach. However, there is little evidence of foreign language teaching degrees in Portugal which account for CLIL in their programmes not to mention non-language teaching degrees. Degrees in pre- and primary education and subject-specific secondary education do not currently contain an obligatory foreign language, yet it is these teachers who will be the future CLIL teachers in mainstream education. Another expectation is that foreign

language teachers will work with these teachers, yet they are not formally trained in terms of subject specific language, literacy and methodology, an awareness of which is needed for effective collaboration between teachers in CLIL projects. Clearly, for many institutions this would require changes in the structure of degrees in order to cater for both foreign language and CLIL methodology.

The Faculty of Arts and Humanities of the University of Porto is one institution which has been addressing the challenges and opportunities that pre-service teacher education for CLIL can provide in primary and lower secondary schools in its Masters degrees in teaching English (and other foreign languages) in basic education since 2008. Student teachers have learned about the principles and practice of CLIL during didactics for English language teaching, and have developed plans using the 4Cs framework which focuses on Content, Communication, Cognition and Culture (Coyle et al.) through liaison with generalist/non-language teachers as well as given CLIL lessons during their teaching practice in state primary schools. This framework is also used by student teachers of Masters degrees in teaching foreign languages in lower and secondary education when they are preparing English language lessons in order for them to support the development of 21st century skills in their own learners.

Since 2016, CLIL has been part of the Masters degrees in teaching English in primary and lower and upper secondary school. In the first of these, it is a subject worth six ECTS credits, and in the second it constitutes 50% of the six-credited subject on English for Specific Purposes. Common to both of these is the analysis of Portuguese school curricula according to the 4Cs, and subsequent design of a portfolio of lessons and materials for a specific subject area. Students also conduct their teaching practice in schools which have CLIL/bilingual projects, thus enabling them to observe and better understand CLIL in practice. Given that FLUP has a protocol with Escola Secundária Dr Joaquim Gomes Ferreira Alves for pre-service teacher education practica for History, a subject which is included in the GoCLIL project, student teachers of this subject may also benefit from observation of their mentors teaching History through English.

In addition to the above, the doctoral programme in didactics of languages also incorporates CLIL theory and practice in the curricular unit on specific didactics, thus stimulating engagement and much needed discussion of the phenomenon among researchers at this level.

4.2. *Research*

As yet, little research has been conducted into CLIL in Portugal. Investigation of the phenomenon is essential for better understanding and practice to evolve. The doors are wide open to further research through longitudinal studies incorporating quantitative and qualitative research methods, case studies, as well as teacher-led action research to add to the small amount that currently exists. Both pre- and in-service teacher education should provide modules on educational research so that teachers are equipped with skills and competences to investigate their own practice. Methods must now look beyond stakeholder satisfaction questionnaires to the effects of CLIL on learning in order to prove that it is not a risk to the education of a generation, but a worthy endeavour for all of those involved. Although research in other countries has done this, contextual idiosyncrasies also necessitate localised study in Portugal. There are recent examples of MA dissertations/reports (Almeida, "Tourism Vocational Education"; Franco, "Geometry in English in Primary School"; Xavier, "Assessment"), and PhD theses (Ellison, *Reflective Practices and Teacher Education*) but clearly room for so much more, as well as forums for dissemination and discussion to generate future synergies and pathways towards developing research opportunities within teacher education programmes.

5. The Working CLIL Network

Set up in 2018 by the newly established CLIL strand of the research group Teacher Education and Applied Language Studies (TEALS) at the Centre for Translation and Anglo-Portuguese Studies (CETAPS), and launched at the Working CLIL Colloquium in March of the same year, the Working CLIL network is, as the name suggests, one which aims to connect communities of CLIL

practice in Portugal so that they may be aware of teaching and research activity, and share resources and ideas about best practice.

Since CLIL is a relatively new phenomenon in Portugal, it is important that practitioners and researchers feel part of a wider community which is working together to better understand it. The creation of the network was also in response to an increasing number of requests from schools and individual teachers for guidance on the implementation of CLIL. Thus, among the objectives of Working CLIL are the following: to forge connections between communities of CLIL practice; develop partnerships between faculty and schools to develop practitioner inquiry and teacher education practices; develop a nationwide network of CLIL researchers; connect schools engaged in CLIL; conduct evidence-based research and longitudinal studies across educational levels; provide support for CLIL (through teacher education programmes; conferences; external coordination of CLIL projects in schools including teacher observation; development of materials for CLIL); host and support other CLIL researchers through research stays at TEALS member institutions.

Members of the Working CLIL research strand are currently mapping CLIL activity in Portugal in order to determine the extent to which CLIL is being implemented in the country and institutional/stakeholder needs with a view to providing recommendations on implementation and support. Further information about members, events, publications about CLIL in Portugal, outputs which include videos from experts in the field and lesson plans can be found on the Working CLIL network site.[8]

6. Conclusion

This article has provided an overview of CLIL/bilingual education practices using English in state education in Portugal. It is a recent and short trajectory, but one which highlights efforts made at ministerial and grassroots levels in the absence of a single template to implement this educational approach. It has also provided words of caution that whilst we may learn from the trials and tribulations of others elsewhere, we must also take measures prior to implementation. This means providing teacher education for CLIL at all educational levels, thus ensuring that success and

quality are guaranteed rather than short-lived. Finally, it provides reassurance for those involved in CLIL that they belong to a wider community of practitioners and researchers with whom they may connect in order to better understand the phenomenon and develop their professional practice. This is the *essence* of Working CLIL.

Notes

[1] Although there is CLIL/bilingual education using the English language in the private sector, projects referred to in this article are those from the mainstream (public) sector which are mentioned in the literature.

[2] Information about the Bilingual Schools Programme may be accessed at www.dge.mec.pt/programa-escolas-bilinguesbilingual-schools- programme and https://www.britishcouncil.pt/atividades/educacao-sociedade/ensino-bilingue

[3] The project 'Speak English, Reach Success' may be accessed at sites.google.com/view/aesa-working-clil-network/home

[4] Information about the GoCLIL project may be accessed at youtu.be/tnlhfOrGqhU

[5] GoCLIL European project may be accessed at goclil.wixsite.com/goclil?lightbox=dataItem-jbyzdtbd2

[6] CUBA CLIL IS IN may be accessed at sites.google.com/view/cubaclilisin/o-projetothe-project

[7] CLIL ME IN may be accessed at epcuba.pt/clil/

[8] Working CLIL network may be accessed at www.cetaps.com/research-areas/teals-teacher-education-and-applied-language-studies/clil/.

Works Cited

Almeida, Maria Altina. *Content and Language Integrated Learning in Tourism Vocational Training in Portugal*. (Unpublished Masters Dissertation). Escola Superior de Hotelaria e Turismo do Estoril, 2017, comum.rcaap.pt/handle/10400.26/19731. Accessed 10 Oct. 2018.

Almeida, Marta Mateus de, et al. *Evaluation Study on the Effectiveness of the Implementation of the Early Bilingual Education Project – Final Report,* 2014, www.dge.mec.pt/sites/default/files/ProjetosCurriculares/Linguas/Ensino_Bilingue/documentos/final_report_december_2014_en.pdf. Accessed 14 Nov. 2018.

Ball, Phil, et al. *Putting CLIL into Practice*. Oxford UP, 2015.

Cardoso, Carla Maria Franco Neves de Sá. *Geometria em Inglês – Oportunidades para a Aprendizagem Integrada de Língua Estrangeira no 1.º Ciclo*. (Unpublished Masters Report). Faculty of Arts and Humanities, University of Porto, 2018, repositorio-aberto. up.pt/ handle/ 10216/ 111384. Accessed 15 Nov. 2018.

Cenoz, Jasone, et al. "Critical Analysis of CLIL: Taking Stock and Looking Forward." *Applied Linguistics*, vol. 35, no. 3, 2013, pp. 243-62.

Coelho, Margarida, and María del Carmen Arau Ribeiro. "Internationalization Strategies in Portuguese Higher Education Institutions – Time to Move on and to Move Beyond." LSP in Multidisciplinary Contexts of Teaching and Research. Papers from the 16th International AELFE Conference 2017. *EPiC Series in Language and Linguistics*, vol. 3, 2018, pp. 33-39.

Conselho Nacional de Educação. *Relatório Técnico: Integração de Ensino da Língua Inglesa no Currículo do 1.º Ciclo do Ensino Básico*, 2013, www.cnedu.pt/content/edicoes/estudos_e_ relatorios/RelatorioTecnico_final.pdf. Accessed 10 Oct. 2017.

Costa, Manuela, and Manuela Lopes. "Boas Práticas na Aprendizagem Integrada de Conteúdos e de Língua: Uma Experiência." *Bilinguismo e Educação Bilingue,* edited by ILTEC, Fundação Calouste Gulbenkian, 2011, pp. 83-86.

Coyle, Do. "Content and Language Integrated Learning: Motivating Learners and Teachers." *Scottish Languages Review*, vol. 13, 2006, pp.1-18.

---. “Content and Language Integrated Learning: Towards a Connected Research Agenda for CLIL Pedagogies.” *International Journal of Bilingual Education and Bilingualism,* vol. 10, no. 5, 2007, pp. 543-62.

Coyle, Do, et al. *CLIL: Content and Language Integrated Learning*. Cambridge UP, 2010.

Ellison, Maria. *CLIL as a Catalyst for Developing Reflective Practice in Foreign Language Teacher Education.* (Unpublished doctoral thesis). Faculty of Arts and Humanities, University of Porto, 2014, repositorio-aberto.up.pt/handle/10216/78036. Accessed 1 Dec. 2018.

---. “CLIL in the Primary School Context.” *The Routledge Handbook of Teaching English to Young Learners*, edited by Sue Garton and Fiona Copland, Routledge, 2018, pp. 247-68.

---. "CLIL: The Added Value to Foreign Language Teacher Education for Young Learners." *Linguarum Arena*, vol. 6, 2015, pp. 59-69.

---. “(De)Constructing CLIL in the Primary Context: Primary Practice Revisited and Reconsidered." *APPINEP Bulletin,* vol. 22, 2010, pp. 8-11.

Ellison, Maria, and Álvaro Almeida Santos. “Implementing CLIL in Schools: The Case of the GoCLIL Project in Portugal.” *e-TEALS: An e-Journal of Teacher Education and Applied Language Studies,* vol. 8, 2017, pp. 43-72.

Ellison, Maria, et al. “Teachers' Perceptions of Need in EAP and ICLHE Contexts.” *Integrating Content and Language in Higher Education: Perspectives on Professional Practice,* edited by Jennifer Valcke and Robert Wilkinson, Peter Lang, 2017, pp. 59-76.

Eurydice. *Key Data on Teaching Languages at School in Europe 2012*. Eurydice, 2012.

---. *Key Data on Teaching Languages at School in Europe 2017*. Eurydice, 2017.

Gaspar, Mário, et al. “Lean-Green Manufacturing: Collaborative Content and Language Integrated Learning in an Engineering Course.” *Journal of Education Culture and Society*, vol. 7, no. 2, 2017, pp. 208-17, jecs.pl/index.php/jecs/article/view/10.15503.jecs20172.208.217/pdf, doi: 10.15503/ jecs20172. 208.217.

Johnstone, Richard. “An Early Start: What are the Key Conditions for Generalized Success?.” *Young Learner English Language Policy and Implementation: International Perspectives*, edited by Janet Evener, et al., Garnet Publishing, 2009, pp. 31-41.

Lasagabaster, David, and Juan Manuel Sierra. “Immersion and CLIL in English: More Differences than Similarities.” *ELT Journal*, vol. 64, no. 4, 2009, pp. 367-75.

Marsh, David. *CLIL/EMILE The European Dimension*: *Action, Trends and Foresight Potential*. European Commission, 2002.

Marsh, David, and Wendy Diaz. *Shaping the Future: A KDI Framework for Building CLIL Environments in Higher Education*. Universidad de Guadalajara, 2018.

Marsh, David, et al. *The Higher Education Languages Landscape: Ensuring Quality in English Language Degree Programmes*. Valencian International University, 2013, tempus-unico.eu/ images/ELT_training_Cordoba/Ensuring-Quality-English-Degrees.pdf. Accessed 30 May 2018.

Marsh, David, et al. *The European Framework for CLIL Teacher Education.* Graz: European Centre for Modern Languages (ECML), 2010.

Ministro Adjunto e do Desenvolvimento Regional e o Ministro da Educação e Ciência. *Uma Estratégia para a Internacionalização do Ensino Superior Português: Fundamentação e Recomendações.* 2014, www.portugal.gov.pt/media/1545745/201450926%20mec%20Internacionalizacao%20Ensino%20 Superior.pdf. Accessed 15 May 2018.

Morgado, Margarida, et al. “Content, Language and Intercultural Challenges in Engineering Education: (E-)strategies to Improve Instructional Design.” *New Trends and Issues Proceedings on Humanities and Social Sciences*, 2017, pp. 153-61, sproc.org/ojs/index.php/pntsbs/article/ view/3026/3203, doi: 10.18844/prosoc.v4i8.3026.

Morgado, Margarida, et al. *ReCLes.pt CLIL Training Guide. Creating a CLIL Learning Community in Higher Education*. De Facto Editores, 2015, paol.iscap.ipp.pt/~paol/docentes/recles/CLILTraining Guide.pdf. Accessed 1 Dec. 2018.

O'Dowd, Robert. “The Training and Accreditation of Teachers for English Medium Instruction: An Overview of Practice in European Universities.” *International Journal of Bilingual Education and*

Bilingualism, vol. 21, no. 5, 2018, pp. 553-63, doi.org/10.1080/13670050.2018.1491945, doi:10.1080/13670050.2018.1491945.

Pavón, Victor, and Maria Ellison. "Examining Teacher Roles and Competences in Content and Language Integrated Learning (CLIL)." *Linguarum Arena*, vol. 4, 2013, pp. 65-78.

Piacentini, Valentina, et al. "What Students Tell Teachers about Practices that Integrate Subjects with English in a Lower Secondary School in Portugal." *e-TEALS: An e-Journal of Teacher Education and Applied Language Studies*, vol. 9, 2018, pp. 57-76.

Silva, Manuel, et al. "Teacher Training for CLIL in Higher Education: Challenges in Blended Learning." *ICERI2017 Proceedings: 10th International Conference of Education, Research and Innovation,* edited by L. Gómez Chova et al., IATED Academy, 2017, pp. 8005-09. library.iated.org/view/SILVA2017TEA / ISBN: 978-84-697-6957-7. ISSN: 2340-1095, doi: 10.21125/iceri.2017.2139

Simões, Ana Raquel, et al. "The Project English Plus: A CLIL Approach in a Portuguese School." *Desenvolvimento Curricular e Didática – Indagatio Didactica*, vol. 5, no. 4, 2013, pp. 30-51.

Wächter, Berns, and Freidhelm Maiworm. *English-Taught Programmes in European Higher Education.* Lemmens, 2014.

Xavier, Ana. *Assessment for Learning in EBE/CLIL: A Learning-Oriented Approach to Assessing English Language Skills and Curriculum Content at Early Primary Level.* (Unpublished Masters Dissertation). Faculdade de Ciências Sociais e Humanas da Universidade Nova de Lisboa, 2015, run.unl.pt/handle/10362/17973?locale=en. Accessed 1 Dec. 2018.

e-TEALS no. 9 | 2018
Special Edition
An e-journal of Teacher Education and Applied Language Studies

Reading and Writing to Learn: A Principled Approach to Practice in CLIL/Bilingual Classes[1]

Aoife AHERN | Complutense University of Madrid
Rachel WHITTAKER | Autonomous University of Madrid (UAM)
Isabel Blecua SÁNCHEZ | IES La Senda Getafe and Complutense University of Madrid

Abstract | This article introduces a literacy programme based on a linguistic approach to teaching reading and writing across the curriculum, Reading to Learn (Rose, "Reading to Learn: Accelerating Learning"; Rose and Martin), with proven effectiveness for accelerating literacy development in both the L1 (e.g. Rose and Acevedo, among other studies) and for L2 in Content and Language Integrated Learning (CLIL) and programmes. Underlying the pedagogy are powerful theories of language, educational psychology and sociology which are applied to text analysis, lesson preparation and classroom interaction around reading and writing. Teachers starting to use the pedagogy see immediate results in students' engagement and learning, and the written texts they produce. The pedagogy is based on a functional analysis of a text from the curriculum – its structure and the way its language makes meaning in that subject-, and on scaffolding/ modelling the processes of reading and writing with the whole class. In this paper, we offer a brief presentation of some strategies from the R2L pedagogy, and provide examples of text analysis, teacher preparation and application in state bilingual schools in Spain.

Key words | Genre, Reading to Learn, CLIL, literacy across the curriculum

Citation: Aoife Ahern, Rachel Whittaker and Isabel Blecua Sánchez, "Reading and Writing to Learn: A Principled Approach to Practice in CLIL/Bilingual Classes." *e-TEALS: An e-journal of Teacher Education and Applied Language Studies* 9 Special Edition (2018): 23-40. ISSN 1647-712X

10.2478/eteals-2018-0011

1. Why Teach Literacy in the CLIL Classroom?

Working in the context of Madrid, where about half of all primary schools and more than half of secondary education programmes are now implementing Content and Language Integrated Learning (CLIL), we are surrounded by teachers and students who face the challenges of working on Science, Geography, History, Arts, Technology and other curriculum areas through the L2 (English in the great majority of cases). It is quite easy to think of reasons for the explicit teaching of literacy in these programmes: of course students require specialised language for the different subjects that they learn in the foreign language (hereon, L2), and this entails developing reading and writing. However, the tendency for content teachers to identify less with being responsible for language learning than they are for content learning can lead to a much greater emphasis on spoken, rather than written, language development. Content lessons which are taught through the L2, such as those mentioned above, require active student participation, frequently involving hands-on tasks. They are full of spoken interaction and negotiation around activities, and written language may have a low priority or not often be part of the central lesson focus.

Prioritising spoken language is one of the hallmarks of CLIL, since dialogue and interactive tasks are seen as crucial to ensuring students can understand the content and acquire subject-specific language (Nikula). Yet there is a cost for this emphasis, since written tests and exams are the main source of assessment and evaluation of students. This leads to the question of whether the input and scaffolding of learning that teachers provide are clearly related to the outcomes that are being assessed. Such a correspondence should be clear and explicit. Evaluating skills we do not teach certainly does not help to ensure an efficient learning process.

To get a picture of the kind of distance that exists between the spoken language in which students participate during CLIL lessons, on the one hand, and the written language that they grapple with alone (as it is often the basis of homework or evaluations), on the other, let's consider an example of each. In Llinares, Morton and Whittaker (246), examples of how the input provided through spoken and written language can differ can be found, such as the following, from the UAM-CLIL corpus. A teacher of Technology in a first-year class at a Madrid Secondary CLIL

programme, busy overseeing a practical classroom task involving students building a wooden toy in groups of four, interacted with a group like this:

1)

Teacher (T): Glue it, here. Just put this there, tie it tight, not just stick it to the wood but (...) it. Let's see. That's it, and the other, [name]?

Student (S): This is in here.

T: That's it, then it's (...?) And then you can (...?)…

S: Yeah.

T: You give it back, you (...?) it again.

Example 1 shows a typical fragment of the kind of language that is employed during many hands-on CLIL lessons like those that a subject such as Technology would often require. A brief look at the characteristics and structures produced is enough for us to notice how context-dependent it is. In other words, without being present, and actually seeing what the teacher and students are talking about, one can only get a very vague idea of the meanings being expressed. The discourse features many deictic expressions (this, that, then, here, there, it…) and a very low proportion of content words – in fact only 8 words out of the total of 50 shown here.

However, students also have to work on written language and build an understanding of the subject-specific genres that teachers ask them to read and expect them to learn to produce. Input like (1) can be contrasted with texts like (2), a written task given to students by the same Technology teacher, cited in Llinares et al. (247).[2]

2)

I. Tilt the shape and the limit angle beyond which the vertical from the CG (= Centre of Gravity) moves outside of the base area, which is the limit beyond which the figure would topple over.

II. Find out whether the given limit angle corresponds to the actual limit angle in the true object.

If we compare this text with the spoken interaction shown in (1), there are a number of very noticeable differences. The lexical density of this written text from the subject-specific field of Technology makes it clear that, without help, the challenges that understanding, and especially, producing this type of written register may be a source of frustration for many students. This means that intervention directly aimed at supporting CLIL students' subject-specific literacy development is an essential task for teachers concerned about how to address their students' needs effectively, and especially, the needs of those who have difficulties and may be at risk of failure.

As mentioned earlier, another reason why teachers in CLIL programmes should emphasise literacy development as one of their overarching objectives emerges when we look at how we assess our students. What are the assessment strategies that are being used in different CLIL subjects? When students sit written exams, to what degree are the teachers' criteria for formulating questions and assessing the responses based on subject-specific literacy instruction that the students have already received? Do we, as teachers, ask questions without deciding in what genre the students must write, and exactly which assessment criteria will be applied to judging their writing?

Example 3 contains some writing prompts taken from exams in Spanish schools implementing CLIL programmes:

3)

a. Explain the water cycle.

b. Explain Spartan society.

c. Write all you know about Shakespeare's life.

d. Write a story with this title: *The Wrong Bus*.

These questions show typical features of examinations we have encountered in primary and secondary schools in our area. Specifically, (i) a single verb (like "explain") can be used to elicit different kinds of texts; (ii) the genre which the prompts are intended to produce is not named (like in (3c); prompts like d) rarely produce a complete narrative, but rather a recount with no resolution.

Let's look in more detail at these questions. First, the instruction to *explain* in questions (3a) and (3b). The verb has several different but related meanings, for example "to make known"; "to make plain or understandable"; or "to give the reason or the cause of".[3] Yet each question creates certain, fairly specific, expectations about how the answer should be structured. An explanation of the water cycle presents a sequence of causes and effects structured by time. However, when asking students to explain Spartan society, the teacher probably expects a text describing the parts that make up the whole of this society, rather than a process explaining how this society came to be.

If we have a systematic approach to the metalanguage students learn and then are asked to use in examinations, our assessment of writing will measure the progress that it is intended to evaluate, rather than just detecting which students can intuitively work out what teachers expect, and which students are not so lucky, or have had less support with their homework. The types of texts that are elicited in these two questions would be a sequential explanation, for (3a), and a compositional report, for (3b) – since the latter is probably intended to produce a text naming and describing different component parts (constitution, social groups, etc.) that make up an entity (Spartan society).

Regarding question (3c), there is no explicit reference to the kind of text students need to compose in their answer; however, experienced readers will recognise that the answer should be structured as a biography, organized chronologically. Less experienced students may take the prompt literally and write a series of unstructured facts about Shakespeare, with the result that they are given lower scores for their texts which do not respond to the teachers' unwritten expectations.

What students are being required to do when they face exams with prompts like the ones we have seen is complex, to say the least. Not only do they have to reproduce facts that they

have memorised, but they also have to identify – perhaps by guessing, or by trying to imitate textbook materials they have had to study – the way their writing should be organised. At the same time, and at another level, they have to pay attention to the foreign language, with lexical searches and applying spelling and grammar rules and patterns of the L2. And to achieve top marks, additionally, they are probably expected to use subject-specific terminology, to adopt an objective, scientific register, or to achieve literary effects, among other demands teachers or examiners consciously or unconsciously place upon students.

This complexity may be an advantage: having high expectations of our students is known to be a positive factor that can help them to progress and succeed. However, if teachers do not provide instruction on the diverse competences that have to be put into practice in written exams, it is not possible for schools to achieve their purpose.

All in all, considering the challenges that students face in CLIL programmes in relation to reading and writing, it is clear that teachers need evidence-based approaches to ensure the progress and success of all of their students, and especially to enable them to provide support that has proven effectiveness. The next section offers a brief overview of such a programme.

2. Reading to Learn: Putting Theories into Practice

The Reading to Learn (R2L) approach (Rose and Martin) to literacy pedagogy has strong theoretical underpinnings. On the one hand, systemic functional linguistics (Halliday and Matthiessen) is the model that informs the understanding of the organisation and language of written texts. Based on Jim Martin's research projects in Australia (see e.g. Rose, "Writing as Linguistic Mastery"), a large-scale study of the texts students had to write over the years of primary and secondary schooling led to a classification of school *genres*, that is, recurrent configurations of meaning (Martin). The social function of a text, its main goal, was shown to determine the way that the text is organised into parts or *stages* (see section 3, below). Each school subject is characterised in part by the genres that learners read and learn to write, and the development of teachers' explicit understanding of subject-area genres is a fundamental basis for R2L pedagogy.

This pedagogy takes a socio-cultural view of learning that springs from Lev Vygotsky's view of the central role of social interaction in cognition. By way of teacher-led conversation focussing on different aspects of a written text, beginning with building context by bringing up the background knowledge learners already have, discussing the topic of the text, and later more specific features of the text, the R2L pedagogical cycle offers strong scaffolding to prepare students for independent reading and writing. Teacher-led discussion about how the text is structured and about the language resources that the author has used, and the effects the author's choices create, serves as a model for the ways students can think about what they read. During this process, the teacher is helping students focus on information that they can use when they face the task of writing a text in the same genre. The text that is being used for discussion and reading will also serve as a model for that task. This activity is also carefully prepared by the teacher beforehand and scaffolded as the students take over the task of writing a new text using lexis and phrases they have learnt during the reading activity, and following the stages and phases of the genre. The teacher, then, breaks the highly complex task of writing a text into steps and works with the students, letting them take over the task little by little.

The third pillar of the R2L approach is knowledge of types of language and the way that teachers use discourse in the classroom. Based on work by Basil Bernstein on pedagogical discourse, and its purpose of both controlling the activities in the classroom – regulative discourse – and teaching content – instructional discourse –, R2L offers teachers tools to prepare interactions which allow all pupils to participate successfully, rather than only the small group of "good" students. The approach takes into consideration the need for all children to build positive learner identities and, in particular, the teacher's role in contributing to this process.

As Rose and Martin explain, R2L pedagogy is explicit and interventionist, and was designed and developed by observing classes, collecting data and taking robust theories directly into the classroom.

As to its efficiency, the results documented when the R2L pedagogy is implemented in classes over a sustained period show its success in "closing the gap" between top and bottom

students. Data collected in a large professional development programme in Australia (originally reported in Rose, "Writing as Linguistic Mastery") show accelerated learning for all pupils, with lower achieving pupils advancing at four times the expected rate. The pedagogy is very successful in northern Europe (Acevedo), and in a number of South American countries, as well as in multilingual contexts like South Africa. In Europe teachers who participated in a R2L project, many of whom were CLIL teachers, noted improved written production, and also highlighted the positive effects of the pedagogical routines they participated in on their students' engagement in the reading and writing (Whittaker and Acevedo, Whittaker and García Parejo). In a university experience, student teachers specialising in EFL and CLIL who received training in this approach also valued R2L for its potential for teaching reading comprehension and contextualised treatment of the teaching of writing, grammar and spelling (García Parejo et al.).

3. The Genres of Schooling and CLIL Classes

Knowledge of R2L pedagogy is especially relevant to CLIL teachers; after all, to be true to the spirit of these programmes – namely the integration of content and language learning – requires teachers to have strong awareness of the specific characteristics of the language of each school subject (Ahern). This is even more necessary, of course, when a foreign language is used for instruction, as occurs in CLIL contexts. In this section we provide some information about the R2L classification of school genres, and then consider some examples of the subject-specific genres that are the means by which learning takes place at school – and at home when text-based homework is assigned.

The first step towards developing the knowledge needed for teachers to gain competence in the R2L approach is to look carefully at the texts that we ask students to work with and consider their overall structure and the features that characterise them. The genre map developed over the years by Jim Martin and the researchers working in his different projects (Rose, "Reading to Learn: Accelerating Learning"; Rose and Martin) shows the classification of school genres

according to purpose, depicting the relationship among different genres and the way that they are organised into stages. Table 1 contains a few examples.

Genre Family	Genre	Purpose	Stages
Engage	Personal recount	Recounting events	Orientation Record of events
	Narrative	Resolving a complication in a story	Orientation Complication Resolution
Inform	Explanations Sequential explanation	Explaining a sequence	Phenomenon Explanation
	Procedures Protocol	What to do and what not to do	Goal Rules
	Reports Descriptive report	Describing one kind of thing	Classification Description

Table 1. Examples of some Genres and their Stages (Adapted from Rose and Martin, 130)

The information in the table should be read beginning from the far left-hand column. Here we can find two of the three genre families proposed in R2L: genres whose main purpose is to *engage*, to *inform*, or to *evaluate*. Within each of these three families are a variety of genres that share the same overarching purpose, but are distinguished by way of more specific, sub-purposes. Column 2 gives the name of the genre, and column 3 the specific purpose. The map allows us to pick out differences between members of a genre family. For example:

- Both a *personal recount* and a *narrative* share the general purpose of *engaging* the reader, but a recount has a simpler configuration because it does not include a complication and resolution, as a narrative does.

- A *descriptive report* and a *sequential explanation* share the general purpose of *informing*. But an *explanation* informs about causes and effects; in the case of a *sequential explanation*, about cyclical sequences of causes and effects. On the other hand, *reports* are intended to inform readers by describing things. A *descriptive report* describes one kind of thing, or phenomenon, by presenting characteristics of different aspects of the object of the description.

- *Procedures* are also informative, but they are intended to direct the reader, by informing about how to do an activity. Within this class, we also find *protocols*, which express what to do and what not to do in a context, rather than steps needed to achieve a goal.

Finally, in the right-hand column of table 1, we find the *stages* needed for the text to achieve its purpose: a narrative, for instance, includes the stages of Orientation, Complication and Resolution. A sequential explanation provides information by identifying a Phenomenon, then an Explanation stage, accounting for cause-effect relationships. These functional stages at the macro-level are then made up of *phases* which are motivated by the field of the text, as shown in the examples below.

3.1. *Genres in the Primary School CLIL Classroom*

In this section, two examples show an analysis of texts typical of the materials teachers use for the primary CLIL classroom, in the area of Natural Science. Firstly, related to the animal world, we include a text about stick insects; and then an example of a text on a topic from the same subject suitable for the 3rd year of primary school: keeping healthy. This type of analysis is always the first step in the teacher's preparation of reading and writing on the topic.

Text 1, *Stick Insect* is an example of a Descriptive Report example.[4] In this text, the Classification stage is made up of just the three words at the top, *Arthropod, Stick insect*. The

rest of the text is the Description stage, and is divided into a fact-box, followed by descriptions of stick insects' appearance, behaviour, nutrition, etc. These are typical phases for this subject area.

Arthropod

Stick insect

Area	**All continents except Antarctica**
Habitat	Tropical forests and woodlands
Food	Leaves
Size	Body is 1 to 22 inches long, depending on the species
Babies	Nymphs must get their own food after they hatch

These thin insects are named for what they look like – a stick. But a stick insect doesn't just look like a twig, it acts like one, too!

During the daytime a stick insect usually stays perfectly still. But if it does need to move, it sways as it walks so it looks like a twig being moved by the wind.

Stick insects feed at night. When they eat leaves, it triggers the plant to create more. In this way, stick insects work like gardeners of the forest, helping to keep trees, bushes, and vines healthy!

Because they eat so much, stick insects can cause problems in places where they are not from. […]

The Stick Insect text is representative of the kind of texts students in primary school CLIL programmes are often presented with in learning materials for the subject of Natural Science. With teachers' guidance, enabling learners to identify the stages of this genre and the language features that characterise it, students can begin to develop the subject-specific literacy, the reading and writing skills, which will be expected and required at higher complexity levels in secondary school.

Text 2, on the topic of "keeping healthy", which is part of mid-primary school curriculum in Spain, is again an example of the materials many teachers have available (taken from *Cambridge Kid's Box* EFL textbook (Nixon and Tomlin 52)).

Example text 2. *A Healthy Body*

> 1) For a healthy body, it's very important to eat the right food. We need to eat different kinds of fruit and vegetables every day. Drinking water is good for us and we need to drink lots of it every day. Eating a lot of sweets, cake and chocolate is bad for our teeth.
> 2) Exercise is good for our bodies. We can run and swim or play sports like basketball and tennis. It's important to move our bodies to be healthy.
> 3) Our bodies need rest too. Everyone needs to sleep and children need to sleep about 10 hours every night.

Text 2 is also intended to inform, but in this case, to direct the reader about how to stay healthy. The text tells us what to do and what not to do in order to have a healthy body. It is a particular type of procedure, in which the instructions are not organized around a process taking place through time -an experiment-, but how to behave, so it belongs to the genre of protocols. As in the descriptive report, here we find the *Purpose* stage expressed in an abbreviated form: "For a healthy body", a preposition phrase rather than a clause. The second stage of the protocol, as shown in Rose and Martin (26), is expressed in the phases which make up the rest of the text, in which the reader is informed about things that are "good for us", and things that are "bad for us", yet which are not sequenced in time, which differentiates protocols from other procedural genres.

Knowing the genre and its stages offers support to students when they write their version of the same type of text.

4. Applying R2L Pedagogy

This approach to literacy instruction follows a cycle in which scaffolding is provided for students at each of the steps of the teaching-learning sequence. What teachers do, at each step of the sequence, is to prepare students for the tasks that they will be asked to complete independently later on. The R2L pedagogical cycle begins with the teacher's selection of a text in the genre that the students need to learn. Before students read the text, they are guided, by way of a "think-

aloud" style discussion led by the teacher, to activate their knowledge that will contextualise what they read and to take into account the visual features that frame the text, such as tables, pictures or differences in font, a process exemplified in the next subsection.

The cycle continues with a close reading of a short segment of the text, chosen for its importance for the learning objectives the teacher has fixed. This may be related to content or to language in the case of stories or evaluative genres. In this R2L strategy, known as *Detailed Reading*, the teacher helps students understand each sentence, and discusses the wordings and other meaning-making resources. During detailed reading, students identify and then highlight key words and expressions, which they use to make notes that serve as a skeleton for rewriting the text under the teacher's guidance, in activities of Joint Construction or Joint Rewriting. Finally, students are prepared to begin writing a similar genre, the content of which they research or generate, now writing independently, using the support they have received and the understanding attained in the previous stages.

4.1. *Preparing for Reading in a Primary CLIL Science Classroom*

Taking as an example the text about stick insects (example 1, above), this section shows how a teacher might talk to students in preparation to work on reading comprehension with this text, and later on, to write texts in the same genre. The teacher, by means of discourse like that which is shown here, leads the students to visually "walk around the page". In addition, in contrast with everyday classroom interaction, in this interaction, the teacher introduces the kind of wordings that they will find in written science texts.

Now we're going to read about the Stick Insect. You see on the right at the top of the page the insect sitting on a shiny green leaf. It looks just like a stick! On the left of the photo, in orange, is the ***class****, or* ***phylum*** *that the insect belongs to. It's an Arthropod.* [Linking with previous topics, as is usual practice].

[Guiding students round the page] *In the box on the left of the photo are the basic facts about this insect. First the areas in the world where it lives. Does it like the cold? Then the type*

of habitat it lives in. Does it need plants around its home? Then we see the food it eats [...] *the scientific name for the baby insects, who can find this name? Yes, **nymphs**.*

[Giving information about the genre, which students use later to structure their texts when they write; different from usual practice.] *This is a **descriptive report**. It describes a class of things. It starts with the **Classification**. In this text, it's not in a sentence, it's just there at the top. Who can read it? Good!! We could say "A stick insect is an arthropod" as a more complete definition. Then, in the **Description** stage, we have the summary, that we've looked at, with different types of information about the insect.*

[Guiding students round the page. Preparing orally for what they will read.] *Now we're going to read the text below the photo and the fact box. It has different types of information: what the insect looks like, how it moves, and then what, when and how it eats…*

As this example shows, the teacher verbalises the way a skilled reader prepares to read a new text, skimming the whole page (or screen), to identify what is expressed, some key words and the way the text is structured. This strengthens the learners' comprehension skills and reinforces their confidence in different ways, leading them to eventually apply the same techniques independently.

4.2 *Detailed Reading in a CLIL Mid-secondary Content-rich Language Classroom Working towards the Global Classrooms Competition*

As an example of what the author of the pedagogy calls its "turbo-engine", the Detailed Reading strategy, we show a snippet -just part of one sentence. The context is a grade nine class which was working towards writing a position paper as part of the "Global Classrooms" competition which many of the state bilingual secondary schools in the Madrid Region participate in. The teacher decided to focus on the most important part of the position paper, the proposal stage, in the model text, and uses the detailed reading strategy to help the students understand and interiorise the language.

First, she prepares the sentence orally, so that the students know what it is about as they try to identify the meanings in the complex administrative register of the document: "*The next*

sentence tells us that Vietnam is going to propose a law for factories and it says that factories should take half of the energy that they use from renewable energies. Look at the sentence while I read it." She reads, "*We uphold the creation of a law requiring every factory built to be maintained at least in half by renewable energies such as solar or hydroelectric power* ", and then begins to guide the students to key phrases. The students' task is to identify wordings by using clues as to position and to meaning, and highlight them (bringing in physical action) for use later at the rewriting stage. "*Who can see the word at the beginning of the sentence that means we propose the creation of a law for factories?* ". The teacher has used a cognate, "propose", to help students understand and focus on "uphold". All the students can answer correctly, and highlight the word.

Once students have identified the word or phrase, the teacher may elaborate on the language or the content. Here, she could comment on the composition of "uphold", give an example of holding something up, and point out the formal register of "to uphold". Then, to get the students to understand "to be maintained", she asks: "*Which three words tell us that the factory* has to function *with renewable energies?*". Then, after focusing on other words or phrases which will be needed for the writing task, the teacher asks "*Which two words at the end of the sentence refer to two types of renewable energies?*". The identification of "solar or hydroelectric" is an opportunity for work on language: "such as" introduces an example; the word "SOlar" in English is stressed on the first syllable, unlike Spanish "solAR". At this point, she can also elaborate on the content, taking the topic beyond the text, to the students' experience: "*Spain produces renewable energy. What methods have you seen in the countryside. Where? Why is renewable energy important for Spain? Do you know of other renewable energies?*".

This type of carefully prepared detailed work on a short segment permits real integration of work on language and content. The writing activity which would follow allows students to take an active role in the use of the language to create a new text.

5. Conclusions

This paper has shown why CLIL teachers should work on literacy in their classrooms, and presented a theoretically robust and well-tested pedagogy allowing them to integrate this work with the teaching of the content of their classes. Knowledge of the subject-specific genres can be applied to scaffolding pupils at primary or secondary school in reading and writing texts in the L2. *Reading to Learn* pedagogy is flexible, yet complete, since it offers a choice of strategies from which teachers can select according to their objectives, and a metalanguage to help pupils in the complex task of writing in a school discipline. With periodic, but consistent, use of this approach, teachers can impulse greater equity and opportunities for all their students to progress in literacy skills across the languages that they use, and through which they learn the different school curriculum areas.

Notes

[1] Thanks to the to the EU for funding the project *Teacher Learning for European Literacy Education (TeL4ELE)* and to the project leaders, Claire Acevedo and Ann-Christin Lövstedt (tel4ele.eu, telcon2013, formule.com)

[2] Grateful thanks to technology teacher for sharing his work with the UAM-CLIL research team.

[3] Merriam-Webster online dictionary (consulted 27 November 2018 at www.merriam-webster.com/dictionary/explain).

[4] From the San Diego Zoo website, accessed 14 October 2017 (No longer online).

Works Cited

Ahern, Aoife. "The Roots of CLIL: Language as the Key to Learning in the Primary Classroom." *Integration of Theory and Practice in CLIL*, edited by Ruth Breeze, Carmen Llamas, Concepción Martínez and Cristina Tabernero, Rodopi / Brill, 2014, pp. 14-35.

Bernstein, Basil. *Pedagogy, Symbolic Control and Identity: Theory, Research, Critique* (revised edition). Rowman & Littlefield, 2000.

García Parejo, Isabel, et al. "La 'pedagogía de los géneros discursivos' en Grados de Formación del Profesorado: Presentación de dos proyectos de innovación docente." *Lenguaje y Textos*, vol. 46, 2017, pp. 69-80.

García Parejo, Isabel, and Rachel Whittaker, editors. "Teoría y práctica del modelo Reading to Learn (Leer para aprender) en contextos educativos transnacionales." *Lenguaje y Textos,* vol. 46, 2017, Sección Monográfica.

Halliday, Michael, and Christian Mathiessen. *An Introduction to Functional Grammar*. 3rd ed., Routledge, 2013.

Llinares, Ana, et al. *The Roles of Language in CLIL*. Cambridge UP, 2012.

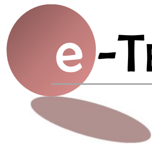
Martin, Jim. *English Text: System and Structure*. John Benjamins, 1992.

Nikula, Tarja. "Hands-on Tasks in CLIL Science Classrooms as Sites for Subject-Specific Language Use and Learning." *System*, vol. 54, 2015, pp. 14-27.

Nixon, Caroline, and Michael Tomlinson. *Kids Box 3*. Cambridge UP, 2013.

Rose, David. *Reading to Learn: Accelerating Learning and Closing the Gap*. Teacher Training Books and DVD, 2018, www.readingtolearn.com.au.

---*. Reading to Learn: Implementation and Outcomes of the Professional Development Program.* Report for the Western NSW Region, 2011, NSW Department of Education and Training, Australia.



---. "Writing as Linguistic Mastery: the Development of Genre-Based Literacy Pedagogy." *Handbook of Writing Development*, edited by Roger Beard et al., Sage, 2008, pp. 151-66.

Rose, David, and Claire Acevedo. "Closing the Gap and Accelerating Learning in the Middle Years of Schooling." *Literacy Learning in the Middle Years,* vol. 14, no.2, 2006, pp. 32-45.

Rose, David, and Jim Martin. *Learning to Write, Reading to Learn. Genre, Knowledge and Pedagogy in the Sydney School*. Equinox, 2012. (Spanish translation: *Leer para aprender. Lectura y escritura en las áreas del currículo*, 2018, Pirámide).

Vygotsky, Lev. *Thought and Language*. MIT Press, 1962.

Whittaker, Rachel. "Reading to Learn in CLIL Subjects: Working with Content-Language." *CLIL Journal of Innovation and Research in Plurilingual and Pluricultural Education,* vol. 1, no. 1, 2018, pp. 17-25.

Whittaker, Rachel, and Isabel García Parejo. "Teacher Learning for European Literacy Education (TeL4ELE): Genre-Based Pedagogy in Five European Countries." *European Journal of Applied Linguistics*, vol. 6, no. 1, 2018, pp. 31-59.

Whittaker, Rachel, and Claire Acevedo. "Working on Literacy in CLIL/Bilingual Contexts: *Reading to Learn* and Teacher Development." *Estudios sobre Educación*, vol. 35, 2016, pp. 37-55.

sciendo

e-TEALS no. 9 | 2018
Special Edition
An e-journal of Teacher Education and Applied Language Studies

Focus on Form in Content-Based Instruction: Practical Ideas for Raising Language Awareness in Primary School Arts and Crafts CLIL

Alexandra VRACIU[1] & Yolanda Capdevila TOMÀS
| University of Lleida

Abstract | Despite their alleged dual focus on content and language learning, CLIL classes are, more often than not, focused on meaning transmission and comprehension and promote an incidental approach to language learning. Yet, empirical evidence from second language acquisition research points out that a mere focus on meaning is not enough for learners to reach proficiency in the target language and some awareness of the linguistic form is necessary for language learning to occur. In order to foster simultaneous subject matter and foreign language learning, CLIL practitioners need to create opportunities for learners to notice the language of the content while performing content-related activities and tasks. We propose a series of pedagogical strategies to achieve this awareness of the form in the context of the CLIL class, drawing on empirical evidence from language learning research and our own experience as CLIL teachers and teacher trainers.

Key words | CLIL, focus on form, young learners, primary education, EFL, disciplinary literacy

Citation: Alexandra Vraciu and Yolanda Capdevilla Tomàs, "Focus on Form in Content-Based Instruction: Practical Ideas for Raising Language Awareness in Primary School Arts and Crafts CLIL." *e-TEALS: An e-journal of Teacher Education and Applied Language Studies* 9 Special Edition (2018): 41-56. ISSN 1647-712X

10.2478/eteals-2018-0012

1. Introduction

Content-based language instruction has long crossed the Atlantic and settled on European ground predominantly in the shape of Content and Language Integrated Learning (CLIL) programmes, in primary, secondary and tertiary education. Certainly, one of the main arguments in favour of this transversal implementation of CLIL has been its potential to enhance the learning of foreign languages, mainly English, through the instruction of non-linguistic subjects in a language different from the language of schooling (Eurydice 55). CLIL is believed to overcome many of the weaknesses of the standard foreign language class, where the language is an object of study seldom used meaningfully and, hence, not learnt successfully (Muñoz 23). CLIL is assumed to encourage learners to engage in authentic communication in the context of non-linguistic curricular topics and tasks (Dalton-Puffer, "Discourse in Content"; Pérez-Vidal, "The Integration of Content") and to provide the necessary scaffolding for developing the language needed to internalise and verbalise new knowledge (Coyle, "Strengthening Integrated Learning" 90).

Nonetheless, when we cross the threshold of the CLIL class, teaching practices are much more content oriented than one would expect from a dual-focused educational approach which should devote balanced attention to content and language (Mehisto, Marsh & Frigols; Coyle, Hood & Marsh). In an observational study of CLIL programmes in primary and secondary education in Catalonia (Spain), Pérez-Vidal found that the CLIL teachers were particularly concerned with content comprehensibility and encouraging student output, but paid very little attention to the linguistic dimension of content learning (Pérez-Vidal, "The Need for Focus on Form" 49). This seems to indicate that CLIL teachers' understanding of the language learning mission of CLIL is, at least in the Catalan context, that this learning occurs incidentally, through exposure to input in the target language and through numerous language production opportunities.

Two major ideas can be invoked to question this understanding of language learning in CLIL. Firstly, second language acquisition studies have shown that incidental second language (L2) learning needs massive amounts of exposure for learners to experience observable gains in

the L2 competence (DeKeyser and Larson-Hall 101). In most European contexts, CLIL classes cannot offer the amount and intensity of exposure needed for substantial incidental L2 learning to occur. Secondly, recent models mapping the development of the L2 competence in content-based language instruction showcase the connection between progress in terms of content learning and progress in terms of subject-specific language use, the latter being fundamental for understanding and integrating new concepts and meanings (Meyer et al. 49). Deep content learning cannot occur without attention to the linguistic form because language articulates the development of knowledge in the different CLIL disciplines.

From a practitioner's standpoint, what seems to be a major hurdle in the deployment of "an effective teaching performance for language acquisition in CLIL" (De Graaff et al. 607) is the lack of practical strategies on how to carry out this language work within content-focused tasks and activities. According to Gajo, the content/language integration requires "precise reflection on the linguistic aspect of subject knowledge and on the role of discourse in the learning process" (568). In other words, CLIL teachers need to develop a language lens through which to scrutinise teaching materials and design classroom tasks and activities (Lindahl & Watkins 778). In this paper, we aim to provide CLIL practitioners with a series of strategies to create language learning opportunities in the CLIL class by enhancing learners' awareness of language use in relation to content. To achieve this, we bring together the insight provided by numerous studies in instructed foreign language learning and our experience as CLIL practitioners and teacher trainers.

Our proposal will be contextualised in primary school Arts and Crafts CLIL, a typical venue for CLIL implementation in Catalan primary schools. Arts and Crafts is supportive of low L2 proficiency levels in that input is not just verbal but also visual and manipulative, which increases its comprehensibility, and output is often non-linguistic (*e.g.*, crafts, experiments, performances). It is also a subject which is not literacy-dependent. Underdeveloped literacy skills have been identified as a challenge for the implementation of CLIL in early age education (Halbach 22) but, due to its limited reliance on reading and writing, Arts and Crafts CLIL can be taught even with very young

learners, whose literacy skills are only just emerging. Nevertheless, the activities and tasks that illustrate the different strategies proposed in this paper were designed for literate primary school learners, aged between 10 and 12 years old.

2. Discourse Genres in CLIL: Form Awareness for Content Learning

Second language learning research has provided robust empirical evidence that focusing exclusively on understanding meaning is not enough for learners to reach proficiency in the target language and to develop productive skills, and some attention or noticing of linguistic form is necessary for language learning to occur (Spada; Doughty). How do we get CLIL learners to notice the language of content-focused activities and tasks? It is important to bear in mind that the strategies used to raise students' language awareness in the CLIL class need to be different from the ones employed in the standard foreign language class. In the foreign language class, students are aware that the language is an object of study, no matter how communicative or meaning-focused the instructional approach is, and they are sensitive to noticing language forms and often expect metalinguistic explanations and an itemised treatment of the language, from simple to more complex structures. In CLIL, the language is instrumental to understanding and communicating about the content and, as such, it cannot be approached in an itemised way, in terms of grammatical categories or lexical items, or dealt with in isolation from the content without losing the spirit of CLIL. One should not forget that the CLIL class is timetabled as a content class (*i.e.*, Science, Physical Education, Arts and Crafts, etc.) and, as such, CLIL students are in a meaning-processing disposition, expecting to focus on discipline-specific concepts and topics. In this context, raising their language awareness means creating opportunities for noticing the linguistic "mesh" of the content while doing content-related activities and tasks. If we adopt a terminological distinction from applied linguistics, the foreign language class and the CLIL class differ in that the former often promotes a focus on forms, whereas the latter fosters a focus on form, namely it tries to divert learners' attention from meaning processing to the linguistic form in

activities or tasks where the meaning is the primary focus (see Ellis for a thorough discussion of the distinction between focus on form and focus on forms (Ellis, "Focus on form"). The strategies that we propose in this paper are strategies for doing focus on form in (Arts and Crafts) CLIL settings.

Additionally, we have to establish what form one needs to notice in the context of a CLIL subject. Following the recent reflection on the role of language in CLIL carried out by the Graz Group (Coyle "Strengthening Integrated Learning"), we believe that form (*i.e.*, language) in CLIL should be understood as disciplinary literacy (Shanahan & Shanahan 44), namely the linguistic tools that inform knowledge construction and verbalisation in a given discipline, such as text genres and cognitive discourse functions (Dalton-Puffer, "Cognitive Discourse Functions" 29). Developing this literacy is intrinsic to deep content learning as it allows the students to think clearly about the subject matter and communicate about it effectively and in accordance with the conventions of the field (Vollmer 7). In our opinion, thinking about language in CLIL in terms of disciplinary literacy better aligns with the language expertise of content teachers than the Language Triptych (Coyle et al. 34) of language of/for/through learning, which draws on a conceptualisation of language as a collection of forms and functions and, as such, requires a type of expertise normally associated with language specialists. Working on disciplinary literacy is, for us, how content/language integration can be practically achieved in the CLIL class.

Discourse genres constitute an entry point into dealing with disciplinary literacy in CLIL. The genre refers to the types of texts or discourse that the students need to understand and produce in the process of learning the content. Each genre is associated with a series of cognitive discourse functions which, in turn, are encoded by means of specific lexis and language structures. Rose and Martin have put forward a taxonomy of the major genres in an educational setting (128), which we find particularly useful for identifying the discourse genres that underlie different CLIL subjects (see Figure 1). Once we have identified the relevant genres for a given subject, we can scrutinise them for their communicative intention(s) and match it (them) to the corresponding cognitive discourse functions, namely classify, define, describe, evaluate, explain,

explore, and report (we refer the readers to Dalton-Puffer's detailed discussion of each of these functions (Dalton-Puffer, "Cognitive Discourse Functions" 33-51). A text belonging to a given genre may cover more than one cognitive discourse function, for instance in a narrative we may report a series of events and evaluate their outcome. From here, the language needed to encode these communicative intentions can be scrutinised for temporal anchorage (present, past, future), dominant lexical categories (nouns, verbs, adjectives, adverbs), recurrent grammatical forms (*e.g.*, gerunds, participles, comparatives and superlatives, etc.), among others. This genre-based treatment of the language in CLIL is a "pragmatic approach" (Coyle, "CLIL: Planning Tools" 7) to identifying the language that needs to be brought to students' attention in relation to content - the focus on certain forms and structures is driven by the characteristics of the genre and the communicative needs of the learners, not by their linguistic difficulty.

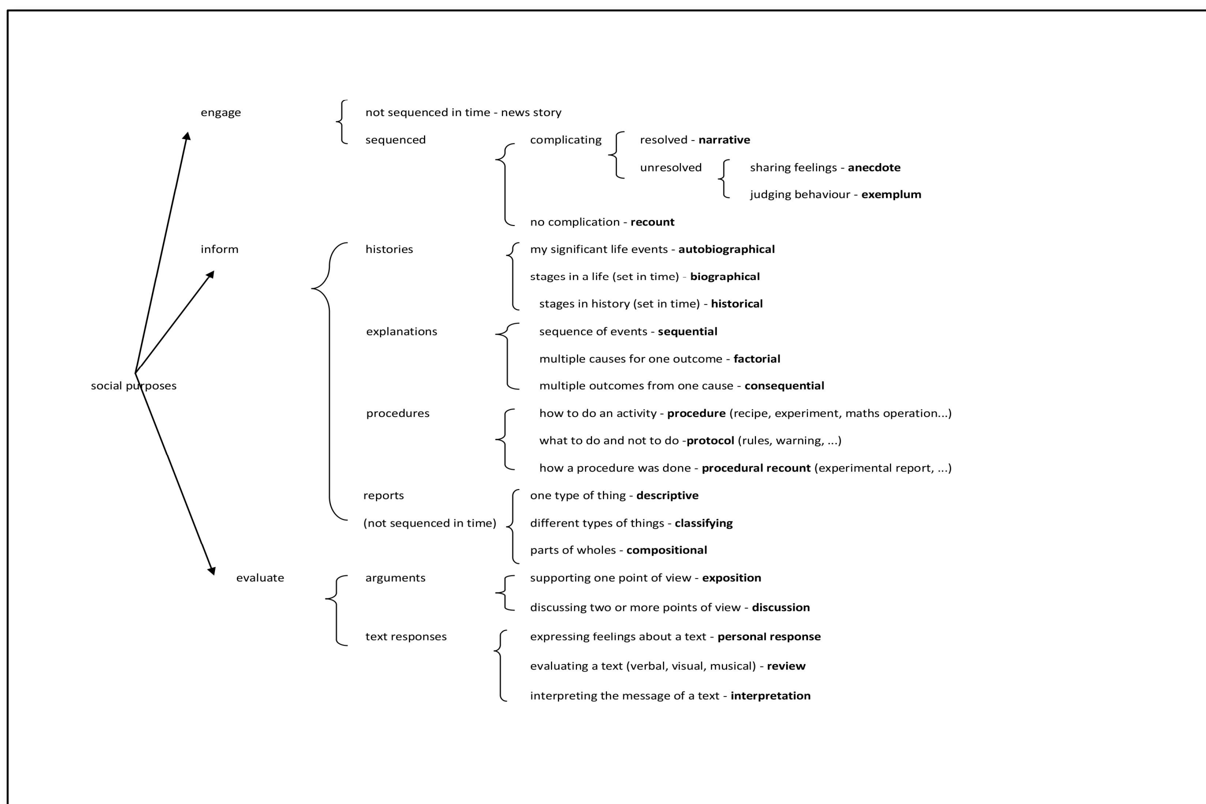


Figure 1 - Map of Genres in School (Rose & Martin 128)

In the case of Arts and Crafts, some relevant text genres could be reports (*e.g.*, descriptions of paintings), histories (*e.g.*, biographies of artists), procedures (*e.g.*, how to perform a given painting or drawing technique), or text responses (*e.g.*, personal responses about a drawing, an interpretation of a work of art, etc.). If we take, for instance, the description of a painting, the cognitive discourse functions we may encounter are, of course, describing the elements in the painting, but also exploring their meaning or evaluating their impact on the beholder. In terms of language, painting descriptions rely on an abundant use of descriptive adjectives related to colour, shape, size, texture, etc., alongside existentials (*there is/are*), prepositional phrases of location (*e.g.*, *in the foreground/in the background*), normally with a present temporal anchor, among others. The perusal of the texts used in a CLIL subject with this genre lens is, in our opinion, the foundation of content/language integration. This lens should also accompany the teacher in the implementation of the strategies for doing focus on form in CLIL contexts that we present hereafter.

3. Strategies for Doing Focus on Form in CLIL

Drawing on the typology of focus on form approaches established in language learning research (Ellis, "Investigating Form-Focused Instruction" 16-17), we suggest that CLIL practitioners can raise students' form awareness in CLIL classes in two different ways: either by intentionally creating the conditions for students to notice the language of the content (what is known as doing planned focus on form) or by reacting to students' performance in content-related tasks, when there is some kind of communication breakdown or because there is a problem of form and the teacher chooses to temporarily abandon his/her role as a language user in order to function as a language instructor (what is known as doing incidental focus on form).

With regard to the planned focus on form, two practical approaches seem to us feasible in the CLIL class. First of all, teachers can enhance the psycholinguistic processes that underlie learners' language processing during class activities. This can be achieved either by manipulating

the input learners receive in order to induce the noticing of predetermined language forms and structures or by harnessing the output so that students need to use a certain form or structure to complete a task (Ellis, "Investigating Form-Focused Instruction" 20-21). More specifically, input manipulation can involve, for instance, input enrichment (*e.g.*, increasing the frequency of use of a language structure in a text, or making certain structures salient by graphological enhancement) or input-processing manipulation (*e.g.*, encouraging learners to make better form-meaning connections by asking them to match paragraphs in a text with appropriate headings or re--organise jumbled texts). As for output harnessing, an example from the primary school Arts and Crafts CLIL class are picture dictation activities where learners describe a drawing to one of their peers who cannot see it and who has to draw it following the description. The completion of this activity requires the use of language forms and structures typically encoding the cognitive discourse function of describing.

The second strategy for doing planned focus on form in CLIL is to create focus on form opportunities through lesson planning and task/activity design. Once more, evidence from second language learning research points at the fact that learners are more likely to pay attention to the language in meaning-focused instruction when the lessons are organised around tasks (Ellis, "Task-Based Language Learning"). We understand by task a real-life activity in which meaning is primary and there is a goal to be reached which involves some kind of outcome or "product" (Skehan 38). Tasks push learners to negotiate for meaning and, in so doing, they become more prone to notice gaps in their linguistic resources when verbalising their knowledge and understanding. Hence, tasks create opportunities for both content and language learning, the ultimate objective of CLIL instruction.

Task-based lesson planning involves three principal phases: 1) the pre-task stage, 2) the task, and 3) the post-task stage (Skehan 53-54). Opportunities for focus on form can occur in each of the stages of a task-based lesson. We can normally plan these opportunities in the pre- and post-task stages. In the pre-task stage, the teacher can try to guide learners' attention to

preselected language features that are useful for the completion of the task or model the task for the learners, with attested benefits for students' L2 fluency (Ellis *ibid.*). Likewise, the teacher can use the post-task stage to plan opportunities for task repetition, which has been shown to have a positive impact on the learners' L2 complexity, accuracy and fluency (Wang). During the task stage, if we abide by the definition of task as a meaning priming activity (Skehan 38), the focus on form should be incidental, for example by dealing with communicative breakdowns or inaccuracies of language use arising during the performance of the task.

Discourse genres can be interwoven in the task-based CLIL lesson to generate opportunities for focus on form. The teacher could identify the discourse genres that are related to the learning objectives and the content topic and then introduce the students to these genres in the pre-task stage through focused communicative activities (Ellis, "Investigating Form-Focused Instruction" 21) targeting language features and functions characteristic of the genres. Moreover, the genres could also be used to create (oral and/or written) output activities in the post-task stage.

To illustrate this point, we present a task sequence from an Arts and Crafts CLIL unit on the technique known as action painting. The task proposed to the primary school learners consisted in painting a feeling or an emotion using the technique of action painting, to be carried out in small groups. The pre-task stage was used to familiarise the students with the painting technique and the life of its main exponent, Jackson Pollock, as well as to model the connection between feelings and painting. For the former, a video presenting Pollock's life and explaining how Pollock performed the action painting technique was played in class. As can be seen in the following excerpt from the transcript of the video, one of the genres used in the video was the procedural recount:

> Now in the studio, let's see exactly how Pollock worked. Placing the canvas on the floor, Pollock no longer remained in physical contact with the canvas while painting. Instead of using conventional artist brushes to push or smear paint across the surface of the painting, Pollock now used things like sticks, even turkey basters and dried paint brushes, hard as a rock, that he variously dripped, drizzled, poured,

> or splashed paint onto the canvas below him from. Pollock used very fluid alkyd enamel paints, the kind of paint you could paint your car with, the kind of paint you could paint your radiator with. Because the paint was so fluid, Pollock essentially drew in space, so that drawing elements would happen quite literally in the air, before falling down to the canvas below, sometimes thick, sometimes thin, a rhythm of poured paint would develop across the surface of the painting. (The Museum of Modern Art)

The procedural recount is characterised by the past time anchorage and the use of activity verbs, in our case referring to different ways of using paint (*e.g.*, "draw", "push", "smear", "drip", "drizzle", "pour", "splash"). A focused communicative activity was designed around these linguistic cues, which were believed to be relevant for the subsequent task sequence. Students were asked to create a Pictionary with an entry for each of the verbs, including a visual representation and the infinitive and past forms of the verb. According to Skehan, this anticipated language work also increases the salience of the selected language for the learners and, with it, the likelihood that it will be incorporated into their oral/written output as they perform the task (53).

The second pre-task activity consisted in partially modelling the main task by means of a quick activity in which the learners had to decide on a colour to represent feelings such as anger, happiness, or sadness. The students were given dictionaries to look up the English translation of feelings whose name they only knew in Catalan/Spanish. Modelling a task in the pre-task stage is an effective strategy for fostering focus on form because it decreases learners' meaning processing load in the main task stage and frees up attentional capacity for noticing the language that is being used (Van Patten).

In the post-task, the different groups displayed their paintings on the board, next to a number assigned by the teacher. Each group then observed their peers' paintings and wrote on a sheet the feeling they thought each painting represented. After this, the authors of the paintings explained which feeling they had represented in their artwork and how they had achieved this representation (*i.e.*, choice of colours, forms, shapes, technique). The initial predictions were, then, validated or refuted, leading to a debate among the students on the feeling-colour

associations used in the paintings. In our sequence, the post-task stage contains an oral output activity which draws, among others, on the genre of procedural recount that was introduced in the pre-task stage. It creates opportunities for CLIL learners to recycle the lexis of activity verbs and the regular and irregular forms of the past while focusing on meaning transmission. Note, though, that this activity is not a controlled practice of the language features highlighted in the pre-task stage - whether the learners will actually seize the opportunity to use the intended activity verbs in the correct past form is not under the control of the teacher. The focus on form approach is about enhancing the conditions for the learners to notice the language features of the content, with the risk that these features may not come into focus when the learners perform the task. We believe this risk needs to be taken if we want to preserve the dual focus of CLIL instruction and, with it, the meaningfulness of the language learning experience.

Not only the sequence but also the type of tasks that go into it can enhance learners' form awareness in the CLIL class. Research on task-based language learning has shown that production tasks with one or more of the following characteristics promote focus on form: 1) they involve an information gap, 2) they require a two-way exchange (*i.e.*, each of the participants holds some information that the other participant needs to complete the task), 3) they have a closed goal or outcome (*i.e.*, they require students to reach a single, correct solution or one of a small finite set of solutions), 4) they involve collaborative and convergent dialogue between peers (*i.e.*, pair or group work), and 5) they involve different output modalities (*i.e.*, speaking and writing) (Ellis, "Task-Based Language Learning"). Some examples of tasks that comply with these characteristics are "find-the-difference", jigsaw reading, dictogloss or text reconstruction, problem--solving tasks, decision making tasks.

Let us now turn to the second main category of focus on form approaches listed at the beginning of this section, namely incidental focus on form. As already mentioned, this refers to unplanned reactions to linguistic or communicative problems that may arise during the completion of an activity or a task sequence. We outline two strategies of incidental focus on form: pre-

-emptive and reactive focus on form (Ellis, "Investigating Form-Focused Instruction" 22). Both approaches have been shown not to interfere with the primary focus of the lesson on meaning and to induce learners to notice linguistic features that lie outside or at the edges of their developing L2 competence (Lyster and Ranta; Ellis, Basturkmen and Loewen).

In the case of pre-emptive focus on form, the teacher (or a learner involved in pair/group work) takes time out from a meaning-focused activity to draw attention to a form that could be problematic. The following is an example of pre-emptive (incidental) focus on form from our Arts and Crafts CLIL class:

"Teacher: If you touch this piece of sandpaper, you will feel it is coarse. *Do you know what coarse means*?"

The reactive focus on form involves providing either implicit or explicit language correction in reaction to inaccurate language use. Typical examples of implicit correction are clarification requests and recasts (*i.e.*, reformulations). We provide an illustration of the two techniques from our Arts and Crafts CLIL class:

1. Clarification request:

Student: I feel hungry.

Teacher: *Do you feel hungry* (putting her hand on her tummy) o*r do you feel angry* (showing an angry face)?

Student: Ah! Yes, yes…I feel angry.

2. Recast:

Student: The painting show five children playing in a garden.

Teacher: *shows*.

Student: Yes, it shows.

Finally, explicit correction can also be a reactive (incidental) focus on form technique. An alternative to using metalinguistic explanations is to approach correction in an inductive way, letting learners discover the language problems and attempt to solve them among themselves. In our Arts and Crafts class, the teacher often asked a student to dictate a sentence that contained an error that she would write on the board and then she encouraged the whole class to spot the error and correct it.

4. Conclusion

We hope that the strategies proposed in this paper can be of help to CLIL practitioners everywhere in the challenging task of facilitating both content and language learning. This is no doubt an arduous task but we believe that the focus on form strategies outlined here lead to sustainable content/language integration in CLIL classes. The type of linguistic insight that is needed for their implementation is linked to the disciplinary literacy a content specialist has, as a member of a given field of knowledge. To a certain extent, this type of literacy is "the turf" of the content specialist, more than it is of the language specialist, though the latter may find it easier to activate the necessary language lens. We want content specialists teaching CLIL to feel empowered to address language in their subjects after having read this article.

Maximising the opportunities for focus on form in the CLIL class, whether planned or incidental, is a way to understand how language learning occurs in meaning-focused contexts. Without this understanding, we might be missing out on the language learning potential of CLIL instruction.

Note

[1] Alexandra Vraciu is a Serra Húnter Fellow at the Faculty of Education (University of Lleida, Spain).

Works Cited

Coyle, Do. *CLIL: Planning Tools for Teachers*. University of Nottingham, 2005.

---. "Strengthening Integrated Learning: Towards a New Era for Pluriliteracies and Intercultural Learning." *Latin American Journal of Content & Language Integrated Learning*, vol. 8, no. 2, 2015, pp. 84-103.

Coyle, Do, Philip Hood and David Marsh. *Content and Language Integrated Learning*. Ernst Klett Sprachen, 2010.

Dalton-Puffer, Christiane. *Discourse in Content and Language Integrated Learning (CLIL) Classrooms*, vol. 20, John Benjamins Publishing, 2007.

---. "Cognitive Discourse Functions: Specifying an Integrative Interdisciplinary Construct. *Conceptualising Integration in CLIL and Multilingual Education*, edited by Nikula, Tarja et al., Multilingual Matters, 2016, pp. 29-54.

De Graaff, Rick, et al. "An Observation Tool for Effective L2 Pedagogy in Content and Language Integrated Learning (CLIL)." *International Journal of Bilingual Education and Bilingualism*, vol. 10, no. 5, 2007, pp. 603-24.

DeKeyser, Robert, and Jenifer Larson-Hall. "What Does the Critical Period Really Mean?" *Handbook of Bilingualism: Psycholinguistic Approaches*, edited by Judith Kroll and Annette Groot, Oxford UP, 2005, pp. 88-108.

Doughty, Catherine. "Cognitive Underpinnings of Focus on Form." *Cognition and Second Language Instruction*, 2001, pp. 206-57.

Ellis, Rod. "Introduction: Investigating Form-Focused Instruction." *Form-Focused Instruction and Second Language Learning: Language Learning Monograph*, edited by Rod Ellis, Wiley-Blackwell, 2001, pp. 1-46.

---. *Task-Based Language Learning and Teaching*. Oxford UP, 2003.

---. "Task-Based Language Teaching: Sorting out the Misunderstandings." *International Journal of Applied Linguistics*, vol. 19, no. 3, 2009, pp. 221-46.

---. "Focus on Form: A Critical Review." *Language Teaching Research*, vol. 20, no. 3, 2016, pp. 405-28.

Ellis, Rod, et al. "Preemptive Focus on Form in the ESL Classroom." *Tesol Quarterly*, vol. 35, no. 3, 2001, pp. 407-32.

Eurydice. *Key Data on Teaching Languages at School in Europe.* Publications Office of the European Union, 2017.

Gajo, Laurent. "Linguistic Knowledge and Subject Knowledge: How Does Bilingualism Contribute to Subject Development?" *International Journal of Bilingual Education and Bilingualism*, vol. 10, no. 5, 2007, pp. 563-81.

Halbach, Ana. "The Primary School Teacher and the Challenges of Bilingual Education." *CLIL across Educational Levels*, edited by Emma Dafouz and Michele Guerrini, Richmond, 2009, pp. 19-26.

Lindahl, Kristen, and Naomi M. Watkins. "Creating a Culture of Language Awareness in Content--Based Contexts." *TESOL Journal*, vol. 6, no. 4, 2015, pp. 777-89.

Lyster, Roy, and Leila Ranta. "Corrective Feedback and Learner Uptake: Negotiation of Form in Communicative Classrooms." *Studies in Second Language Acquisition*, vol.19, no. 1, 1997, pp. 37-66.

Mehisto, Peeter, et al. *Uncovering CLIL Content and Language Integrated Learning in Bilingual and Multilingual Education*. Macmillan, 2008.

Meyer, Oliver, et al. "A Pluriliteracies Approach to Content and Language Integrated Learning--Mapping Learner Progressions in Knowledge Construction and Meaning-Making." *Language, Culture and Curriculum*, vol. 28, no. 1, 2015, pp. 41-57.

Muñoz, Carmen. "CLIL: Some Thoughts on its Psycholinguistic Principles." *Revista española de lingüística aplicada*, vol. 1, 2007, pp.17-26.

Pérez Vidal, Carmen. "The Integration of Content and Language in the Classroom: A European Approach to Education (the Second Time around)." *CLIL across Educational Levels*, edited by Emma Dafouz and Michele Guerrini, Richmond, 2009, pp. 3-16.

---. "The Need for Focus on Form (FoF) in Content and Language Integrated Approaches: An Exploratory Study." *Revista española de lingüística aplicada*, vol. 1, 2007, pp. 39-54.

Rose, David, and JR Martin Hardback. *Learning to Write, Reading to Learn: Genre, Knowledge and Pedagogy in the Sydney School*. Equinox, 2012.

Shanahan, Timothy, and Cynthia Shanahan. "Teaching Disciplinary Literacy to Adolescents: Rethinking Content-Area Literacy." *Harvard Educational Review*, vol. 78, no. 1, 2008, pp. 40-59.

Skehan, Peter. "A Framework for the Implementation of Task-Based Instruction." *Applied Linguistics*, vol. 17, no. 1, 1996, pp. 38-62.

Spada, Nina. "Beyond Form-Focused Instruction: Reflections on Past, Present and Future Research." *Language Teaching*, vol. 44, no. 2, 2011, pp. 225-36.

The Museum of Modern Art. "How to Paint like Jackson Pollock – One: Number 31, 1950 (1950)". *YouTube*, 24 Oct. 2010, www.youtube.com/watch?v=EncR_T0faKM&t=62s.

Van Patten, Bill. "Evaluating the Role of Consciousness in Second Language Acquisition: Terms, Linguistic Features & Research Methodology." *Consciousness in Second Language Learning*, 1994, pp. 27-36.

Vollmer, Helmut Johannes. *Language across the Curriculum*. Intergovernmental Conference Languages of Schooling: Towards a Framework for Europe. Language Policy Division, 2006.

Wang, Zhan. *Modelling Speech Production and Performance: Evidence from Five Types of Planning and two Task Structures*. Unpublished PhD. thesis, Chinese University of Hong Kong, 2009.

sciendo

e-TEALS no. 9 | 2018
Special Edition
An e-journal of Teacher Education and Applied Language Studies

What Students Tell Teachers about Practices that Integrate Subjects with English in a Lower Secondary School in Portugal [1]

Valentina PIACENTINI, Ana Raquel SIMÕES and Rui Marques VIEIRA
|University of Aveiro (CIDTFF)

Abstract | CLIL (Content and Language Integrated Learning) is an approach thought to provide, mainly during Content (non-language, subject) classes, a meaningful environment at school for the use and learning of a foreign language (FL), and may also improve conditions and practices of the specific subject. Moreover, CLIL can represent a research context to gauge the importance of language-aware teaching as is the case with the Portuguese "English Plus" project (EP), in which History and Science are taught/ learnt with/in English at lower secondary school. Our doctoral research is designed as a descriptive-explanatory case study on the EP project and its participants (English and Science teachers, former and current students). More specifically, this work focuses on students and shows their relationship with the EP approach and (dis)advantages in learning a subject with a FL. Data were collected through a semi-structured questionnaire and interview, with subsequent content analysis. The importance of "integrated learning" and of diverse strategies used by the teacher to support/scaffold learning is present in students' perspectives which may further influence teaching practices.

Key words | CLIL (Content and Language Integrated Learning), English as a foreign language, subjects (History and Science), language-aware teaching, students' perspectives

---

Citation: Valentina Piacentini, Ana Raquel Simões and Rui Marques Vieira, "What Students Tell Teachers about Practices that Integrate Subjects with English in a Lower Secondary School in Portugal." *e-TEALS: An e--journal of Teacher Education and Applied Language Studies* 9 Special Edition (2018): 57-76 ISSN 1647-712X

10.2478/eteals-2018-0013

1. Introduction

When considering the importance of scientific literacy (Roberts and Bybee; Vieira, Tenreiro-Vieira and Martins) and language proficiency (Common European Framework of Reference for Languages, CEFR, Council of Europe) for education and its global demands, research on the "combination" of Science education and English language learning as well as on the language focus of Science education (Lin; Bunch, Shaw and Geaney; Wellington and Osborne) is highly relevant. For many students the greatest difficulty in studying Science is to learn the language of Science, therefore a language-focused Science education is justified (Wellington and Osborne). Owing to the presence of a foreign language (FL), Content and Language Integrated Learning (see section 2 below) represents a possible educational approach for scholars to gauge the importance for (Science) teachers of becoming language-aware (Blanchard, Masserot and Holbrook; Coyle, Hood and Marsh; Wolff).

As claimed by Scott, Mortimer and Aguiar, researchers should work on understanding how the construction of scientific knowledge develops through language and other modes of communication. Research is also required on CLIL Science learning contexts, in which an additional language has to be learnt besides the mother tongue. Furthermore, a greater collaboration between applied linguists and researchers in subject-specific education is sought in studies on CLIL practice (Nikula, Dalton-Puffer and Llinares). For more than ten years, works mapping European CLIL initiatives at compulsory school levels contained no reference to Portugal [European Commission, "Content and Language Integrated Learning (CLIL) at School in Europe"], but recently more and more projects have appeared (European Commission, "Key Data on Teaching Languages at School in Europe – 2017"). Nevertheless, corresponding research is still represented by individual examples and many studies are focused on the tertiary level.

The relevance of carrying out research on school programmes, such as the Portuguese CLIL-type "English Plus" project (first in History then Science) presented here, is clear. More specifically, the objective of this work (part of a broader PhD study) is the characterization of students' perspectives through exploring their relationship with the "integration project" and its approach, as well as benefits

and difficulties they identify in learning a specific discipline with/in a FL. Their point of view may contribute, in turn, to a reflection on and orientation of educational practices.

2. The CLIL Educational Approach

Considered as one strategy to promote plurilingual and intercultural education (Beacco *et al.*) and one possible initiative for foreign language education in Europe (European Commission, "Civil Society Platform on Multilingualism"), CLIL is described as "any dual-focused educational context in which an additional language, thus not usually the first language of the learners involved, is used as a medium in the teaching and learning of non-language content" (Marsh, "CLIL/EMILE – The European Dimension" 2). It stems from immersion programmes of bilingual countries such as Canada, but differences have been noted in CLIL initiatives: for instance, the "non-nativeness" of teachers and students, and readapted/scaffolded teaching materials (Lasagabaster and Sierra).

According to Krashen's theory on Second Language Acquisition, languages are learnt while they are used, and CLIL classes are authentic learning environments to achieve communicative competence through daily classroom activities (Dalton-Puffer and Nikula). As opposed to what happens in traditional language classes where form and structure of a FL are the main learning object, in CLIL language and content (of a specific subject) converge in a "dual focus" for learning and teaching (Coyle, Hood and Marsh; Marsh *et al.*; Pavón Vázquez and Ellison). CLIL is flexible. There is no formula for organising a CLIL programme; it is the context that determines this (Coyle, "CLIL Planning Tools for Teachers"). However, the 4Cs framework (Coyle, Hood and Marsh 53-56) is useful for planning CLIL lessons where students learn subject topics (**C**ontent: new knowledge, skills and understanding) and related **C**ultural and societal issues, through activities which provide **C**ognitive challenge; at the same time, they **C**ommunicate and learn how to use the languages OF, FOR and THROUGH learning (the so called "language triptych", cf. Coyle).

In making the language use authentic for the specific need to understand content and to construct meaning (Coyle, Hood and Marsh), CLIL promotes interaction between learners who

thus become central in the learning process (Ting). As Mehisto clarifies, quality CLIL implementation is based on intention and process visibility, and may foster learner autonomy and cooperative learning, self and peer formative assessment (17-25); it requires the development of a "language-supportive pedagogy" (Clegg) also through a diversity of teacher scaffolding strategies. Actually, challenges encountered using an additional language increase teacher awareness of learner linguistic needs (Blanchard, Masserot and Holbrook; Marsh, "Content and Language Integrated Learning. A Development Trajectory") and a possibly better treatment of content (Escobar Urmeneta and Evnitskaya). Major difficulties in the implementation of CLIL classes are caused not by using a FL, but by the lack of appropriate methodology used in class (Barbero). Students not having sufficient time to apply what they have learned is indicated as the main constraint (Beacco et al.; Coyle, Hood and Marsh; Marsh and Langé; Milton and Meara); other obstacles typical of such programmes are curriculum and policy constraints, as well as limited material.

In defiance of these aspects, CLIL is acknowledged as a "change agent": it provides experiences in more than one language within monolingual learning environments (Coyle, "An Investigation into 'Successful Learning' across CLIL Contexts") and entails teaching strategies that prepare any teacher to work in CLIL-like contexts in European schools[2] (Wolff). Therefore, reflecting on "beliefs, values and practice" is fundamental (Pavón Vázquez and Ellison 77), "to equip CLIL teachers to bear the challenge of that change" (Pérez Cañado 217). One possible way is to understand the student perception of CLIL projects and of learning through CLIL. A variety of approaches to exploring student perspectives about and attitudes toward such programmes exists (Tedick and Cammarata). The present study aims to continue and extend previous studies on CLIL learners' points of view in Portugal (Simões et al.) as well as to integrate voices from students of different ages.

3. Context, Participants and Methods

In Portugal, alongside the top-down *Programa Escolas Bilingues em Inglês* / Bilingual Schools Programme (organised by the Ministry of Education and the British Council and currently involving 25 state school clusters[3]), different bottom-up CLIL initiatives developed by teachers exist. We describe here the CLIL-type "English Plus" (EP) project, implemented in one lower secondary state school (from the 7th to the 9th grades) in North Portugal (District of Aveiro). The EP project integrates the use/learning of English with History (from 2010 to 2013, Simões et al.) and Science (since 2014 onwards, Piacentini, Simões and Vieira, "Holistic Approach in the Portuguese Education System to Develop Literacies of Science Integrated with English" and "The Language Focus of Science Education Integrated with English Learning").

Considering the specificity of the project, a descriptive-explanatory case study was designed in 2015-2016 within our doctoral research. It is an in-depth study, having teachers and students "constructing the reality" of EP at different times and levels. In the present work we focus on students, with the following profiles, A and B:

- **A.** Lower secondary school students provided with EP in Science in the year of the study (current students); N = 96: 44 7th graders in their first year of the project and 52 8th graders in their second year;

- **B.** High school students in the year of the study who previously (2010-2013) had EP in History (former students); N = 11: 1 in Humanities (sHum-10), 4 in Economics (sEcn-4,5,8,9) and 6 in Science (sSci-1,2,3,6,7,11).

EP students attended on a weekly basis: 45 minutes of History or Science with English (co-teaching: both the subject teacher and the English one are present and using English); 45 minutes of same subject (single-teaching: classes are given by the non-language teacher alone, who can choose to use Portuguese or English); 45 minutes of English on socio-cultural subject-

-related topics (project time: only the English teacher is present). The "English Plus" project means the engagement of all participants (including parents), in and out of school: it requires of teachers more complex planning and implementation of classes; for students, it is demanding and requires more responsibility and autonomy. Students are usually involved in extra-curricular activities related to the project: school trips and their organization; cinema sessions and theatre performances; open day, and so on.

During the broader PhD-related empirical study, data from students were collected, in the Portuguese language, through the following techniques[4] for the cohorts as defined above:

A. because of the large number of current students, an online semi-structured questionnaire was administered; questions about the importance given to the EP project in Science (Q18.1) and advantages/disadvantages connected with the project (Q20/Q21) were selected for the purpose of this paper;[5]

B. considering the maturity and small number of former students, a semi-structured interview was conducted; questions about the opinion on the EP project in History (Q1) and differences between single-teaching and co-teaching in non-language classes (Q4) were selected for this paper.[6]

Qualitative content analysis was performed on open-ended (questionnaire) and transcribed (interview) answers, resulting in inductive coding (peer-checked). We first present results emerging from data collected from former students, then those from current students.

4. Findings: Presentation[7] and Interpretation

4.1. *Learning through EP-History for Former Students*

Perspectives on Disciplines Involved and the Approach

Students were prompted as follows: *I would like you to express your opinion about the "English Plus" project in History…* (Q1). As evident in Figure 1, their answers indicate an accomplishment in: Language (English); learning experience (different activities and membership); composite learning (when both English and History are mentioned as combined); Content (History). Answers are given in descending order: 11 students indicate "Language"; 7, "learning experience"; 6, "composite learning"; 5, "Content".

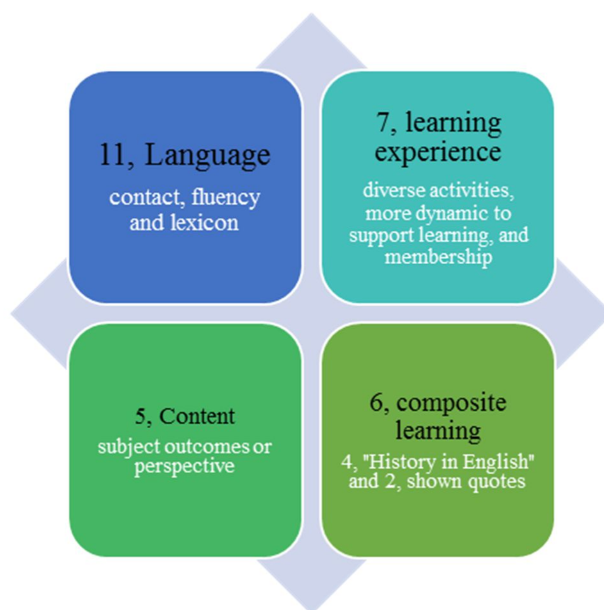


Figure 1: Student Opinion on the EP-History Project (numbers represent occurrences).

Language improvement is unquestioned for students: most of them feel they are more fluent and they possess an enhanced lexicon in English, due to increased contact with the language through the programme. Improvement linked to History is mainly associated to better marks. A deep idea of what Integrated Learning may mean is present in: fs Sci_7, […] *project*

enables students to focus not just on English but also on History […] *using the language like that* […] *not only the learning of terms* […] *we start internalising the language and using it more easily* […] *giving to the [specific] subject a more original shape* […]; and sHum-10, […] *it helped a lot with the language we did not learn just English in the subject of English* […] *which is basically numbers verbs* […] *we learn about a different History* […] *we don't really have this variety in the subject of History* […].

That is, the learning of both becomes authentic, English is learnt naturally and History is somehow expanded, beyond just "learning History in English" (as pointed by two other students). Furthermore, a greater diversity of activities for the learning of subject content (other *methods* and *learnings*, *different and diverse*, some students said) has been reported, which were more dynamic and became increasingly more cognitively demanding. A great sense of students' responsibility and membership is revealed in sSci-2's words: *because we had History in English* […] *in this school* […] *we were pioneers* […] *it also gave us responsibility* […] *even outside the project there was this [intense] relationship with our teachers* […] *in every activity* […] *during that [project] time* […] *we were all working for the same [goal]*.

Perspectives on the Teaching Experienced in Content Classes

Students were asked *Do you think there was any difference between classes taught by the History and English teachers together* (co-teaching; see section 3) *and classes taught only by the History teacher* (single-teaching; see section 3)*?* (Q4). We encouraged them to talk about the roles of teachers during the co-taught History EP classes or to describe classes led by only the History teacher, rather than to relate a possible difference in the English proficiency of the two teachers. Answers are summarised in Figure 2.

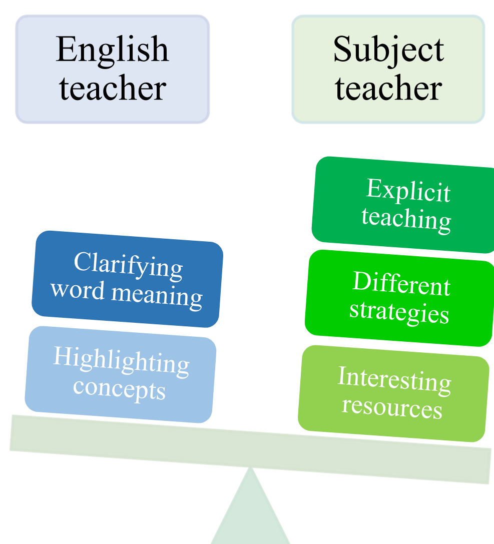


Figure 2: Roles of Teachers in Subject Classes, based on the former EP students' experience; the leaning scale serves to highlight the pivotal practices of the specific discipline teacher, as explained in the text.

With regard to features of the project lessons, as well as the role of teachers involved in them, their voices indicate that interesting and interactive classes have been co-planned and performed, capturing the students' attention and making them focused on learning, and effectively supported by explicit input. Some students state that they have learned better and enjoyed the History classes in English more than the ones in Portuguese: sEcn-5*, [during classes in English we used] Internet and the smart board and in Portuguese it was with textbook and worksheets to fill in by hand* […] *because they are conventional classes*; sEcn-8*, [History classes in English and all their activities] helped me to learn* […] *sometimes I enjoyed studying History in English even more than* […] *in Portuguese because* […] *it worked better and I managed to recall and learn it better* […].

Talking more specifically about the History teacher, students report her open-mindedness in learning/developing new teaching strategies and clear verbal input. This has played a pivotal role (emphasised by the scale of Figure 2 leaning to the right), even during single-taught classes and despite not being proficient in English. Actually, she also went through a learning process ([…] *teacher had to do some research to give classes to us* […] *stories on Internet* […] *words she didn't know and new sheets she had never seen before* […], sEcn-5) and had some difficulty with

the language herself ([…] *she was* […] *more expressive in speaking English* […] *in spite of having some difficulties with the* language […] *she ended up saying things maybe with a simpler vocabulary but we understood better* […], sHum-10).

Hence, the Content teaching, whether through co-teaching or individual teaching, has resulted in the development of alternative resources (compared with the conventional classes, according to sEcn-5) and effective strategies (as evidenced by the positive effects on learning mentioned by sEcn-8, for instance). Moreover, a more explicit teaching through language support and greater interaction has been provided, in order to overcome the learner's difficulties ([…] *in English we had more support* […] *to understand better* […]*than in Portuguese because we understood normally and naturally*, sSci-7), difficulties also experienced by the teacher (as commented by sHum-10).

4.2. *Learning through EP-Science for Current Students*

The Project, its Importance, Benefits and Constraints

Students answered Q18.1 (*Justify why you consider the "English Plus" project in Science (not) important*) and Q20/21 (*In your opinion, what are the advantage(s) / disadvantage(s) of this Project?*). Categories resulting from coding student answers about importance (Q18.1) and advantages (Q20) are the same (Figure 3[8]): A) composite learning ("learning aspects" associated to both Science and English are mentioned); B) language sphere (enhancement in the English language or relevance of it); C) future implications (references to future possibilities of study or job); D) general learning (improved and/or broadened knowledge).

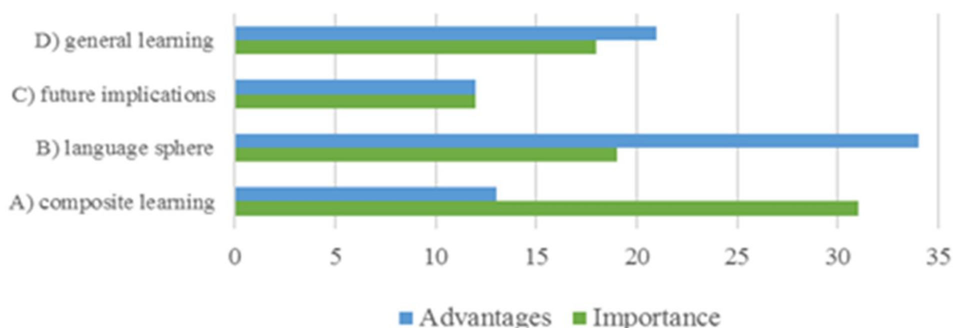


Figure 3: The EP-Science Project and its importance (Q18.1) and advantages (Q20); values on the horizontal axis indicate number of students.

The main advantage for students attending the Science EP project, especially for ones who have already had one year's experience with it (data not shown), is achievements in the language sphere, B); one may consider that language proficiency and vocabulary increase are not difficult processes/abilities to self-assess. It is followed by the advantage offered by developing one's own broader knowledge, D), not specifically referred to as scientific knowledge. A similar level of importance, then, is attributed to the learning of the language, B), and learning in general, D). The field related to future studies and job, C), is definitively more important for 8th than for 7th graders (data not shown), probably because of a tendency to be thinking concretely about their future. The "composite learning" category constitutes the most reported reason for the importance of the project and will be discussed in the following section.

As for difficulties (Q21), students seldom refer to language understanding as an obstacle, even though the older students are more aware of it (data not shown). In fact, they do not seem to identify many disadvantages in the project (more than half of students do not answer), with the exception of the extra dedication required (around 13%). A small percentage of students (around 7%) are also concerned about negative effects on the assessment.

The Combined Learning of Science and English

In the specific case of "composite learning" – the A) field emerging from student answers to both Q18.1 (importance) and Q20 (advantages) in Figure 3 – absolute occurrences of sub-codes (a. learning Science in English; b. scientific English mastery; c. greater learning of both; d. learning Science together with English; e. increased vocabulary of both; f. improvement of Science learning and English vocabulary; g. improvement of Science vocabulary and English proficiency) are plotted in a column chart (Figure 4) to represent aspects of learning associated to both the foreign language and the specific subject, in students' perceptions. To clarify further, the statements coded as c. report the learning of Science and of English as improved (*it helps us to reinforce knowledge both in English and Science*, for instance), whereas those coded as d. Science and English learnt as one (*like that we reconcile two disciplines and turn them into just one*, for instance).

Unlike the previous figures, data are visualised separately for the two grades of students, as there are noticeable differences.

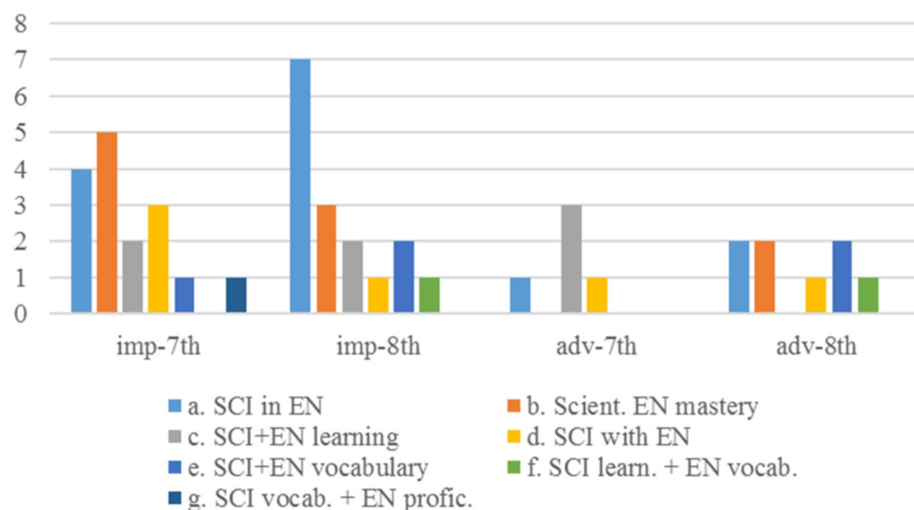


Figure 4: Learning aspects including both Science and English; abbreviations in the key summarise the full description of sub--codes with corresponding letters in the text; values on the vertical axis indicate number of students.

The distribution of importance basically covers all achievements/competences, but the younger students attribute a similar level to the acquisition of scientific terms in English and to the learning of Science in English, whereas for the older ones the EP project is important mainly because they are learning Science in English. Students who still do not know the project effects (7th *vs* 8th) can easily imagine its contribution to an increased knowledge in the subject and in the language but could not perceive any advantage for vocabulary.

With a view to extracting conceptualizations of Integrated Learning from students' perspectives, the results shown in Figure 4 (sub-codes of "composite learning", Importance and Advantages for 7th and 8th graders) have been merged and drawn in Figure 5.

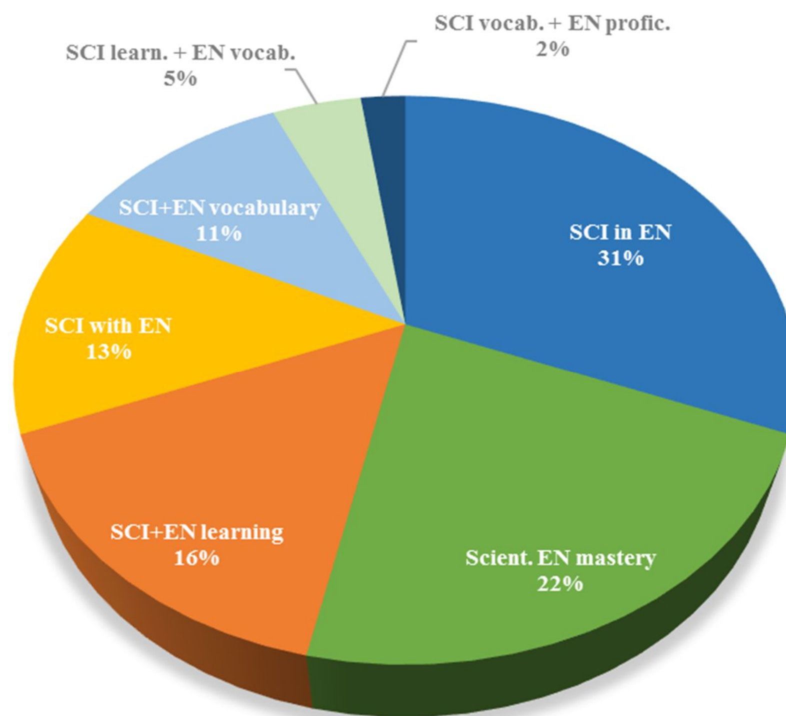


Figure 5: A) Composite learning, possible associations and relative percentages.

The exploration of possible associations reveals that students acknowledge that the CLIL--type EP provision implies the learning of both Content (Science) and Language (English), this category being the most represented one, at least in terms of importance (see A) in Figure 3). However, more than half of the answers convey the learning of Science in English and the acquisition of scientific terms in English. So, the idea that being taught through CLIL could entail learning one discipline just speaking another language is – notable.

5. Considerations

According to students' perspectives, it becomes clear how engaging them as members of the project and providing a different learning experience – activities and methods offered by the CLIL--type "English Plus" project – develop quality teaching that motivates and supports learners. Content (History, for former students, and Science, for current ones) is rarely indicated as improved through project attendance, at least in itself. On the other hand, improvement in English

is a given for EP former and current learners. Here we are reminded that CLIL was developed in Europe as a strategy for language promotion (Marsh, "CLIL/EMILE – The European Dimension").

It is worth considering former students' point of view regarding the Integrated Learning implied/implicit in the approach: the foreign or additional language is learnt in more authentic settings and the subject-specific education is improved. This is in line with the study of Grandinetti, Langellotti, and Ting on CLIL and Science education, and the idea that "CLIL is one pedagogical way"[9] to improve practices (one vision "materialised" in the 2018 Working CLIL Colloquium in Porto). Moreover, the voices of current students contribute to the understanding of conceptions on the integration of Content and Language through a diversity of combinations: "Science merely translated into English", increasing Science lexicon and English vocabulary but also "learning Science interwoven with English", which draws attention to CLIL as a range of educational practices and settings aiming at the learning of both Language and Content, in agreement with Coyle, Hood and Marsh.

The exposure to a different and effective teaching method (explicit, interactive, not conventional, etc.) is a crucial positive outcome of our study. Quality teacher practices are often detected in CLIL environments (Marsh, "Content and Language Integrated Learning. A Development Trajectory") as a consequence of the challenge of working in an additional language. This may make the (subject) teacher adopt a more language-aware attitude in general (Coyle, Hood and Marsh; Wolff), clarifying meanings and ensuring students understand, and developing a more relaxed relationship with them (Blanchard, Masserot and Holbrook 81). In other words, a teacher may become open to the students' (language) learning difficulties and to adapting and changing strategies and resources in order to support/scaffold the "new" learning conditions. As Canet Pladevall and Evnitskaya state, it is a "constant process of rethinking the way one teaches" (176), Science and other content topics. The importance for teachers of assuming and developing a language focus in Science education has been noted in previous studies within CLIL (Piacentini, Simões and Vieira, "The Language Focus of Science Education Integrated with English Learning").

Although significant difficulties connected with this CLIL-type approach are not apparent here, students with some experience with the EP programme have provided, in other contexts within this project, suggestions to their teachers for improving (subject and language) lessons, mostly in terms of content scaffolding and representation (Piacentini, Simões and Vieira, "Holistic Approach in the Portuguese Education System to Develop Literacies of Science Integrated with English"). Further research is necessary to develop a characterization of the EP teachers, who learn throughout the project implementation and from student feedback. The perspective of students with different levels of experience and of learning through CLIL, as portrayed in this work, is indeed a fundamental issue for teachers to understand what strategies are meaningful and effective in general and to orientate teaching in the specific settings of CLIL practice.

Notes

[1] This work is financed by national funds through the FCT – *Fundação para a Ciência e a Tecnologia*, I.P., under the PhD grant SFRH/BD/102895/2014 and within project UID/ CED/00194/2013.

[2] Because of the increasing migratory phenomena, several European countries witness classes where conversational and academic competence levels in the schooling language [BICS (Basic Interpersonal Communication Skills) and CALP (Cognitive Academic Language Proficiency), cf. Cummins, 1987] among learners are heterogeneous.

[3] For further information see www.dge.mec.pt/programa-escolas-bilinguesbilingual-schools-programme.

[4] Complete data are in the process of being analysed and will be presented in future works.

[5] For the complete version of the questionnaire see http://goo.gl/forms/ls5tXdzQNc.

[6] The whole interview guide is comprised of the following questions: **1.** *Gostaria que expressasses a tua opinião sobre o projeto "English Plus" de História [organização, constrangimentos, desafios, vantagens].* **2.** *Tiveste dificuldades durante o projeto? Se sim, quais? Como conseguiste superá-las?* **3.** *Qual a disciplina que mais beneficiou (em termos de estruturação e compreensão, possibilidades de comunicação, integração com a realidade) com o projeto? Porquê? E agora que estás no secundário?* **4.** *Achas que havia diferença entre as aulas em que a professora de História e a professora de Inglês estavam juntas e as aulas em que havia só a de História (maneira da professora apresentar e tratar a disciplina de História)?* **5.** *Lembras de alguma situação em que o facto de utilizar o Inglês facilitou a aprendizagem com respeito ao uso do Português?* **6.** *Gostavas de conhecer ou conheces outras línguas? Quais?* **7.** *Achas que o Inglês (o facto de aprender/usar esta língua) despertou-te a vontade de estudar/aprender outras línguas e culturas? De que maneira?* **8.** *Consideras que o projeto trouxe algumas facilidades no estudo das disciplinas científicas? Se sim, como?* **9.** *Quais as sugestões aos alunos do 3.º ciclo que estão agora envolvidos no "English Plus" de Ciências Naturais?*

[7] Questions asked to students and responses are typed in italic and have been translated from Portuguese by the researcher.

[8] Total does not equal 96 (44 7th graders + 52 8th graders), some answers not having been considered (idiosyncratic, unclear, etc.).

[9] Stated by Golubeva in the "Working CLIL into the future – 10 visions" final session of the *Working CLIL Colloquium* (16th and 17th of March 2018, Faculty of Humanities, University of Porto).

Works Cited

Barbero, Teresina. "Insegnare in Lingua Straniera: Quali Sfide? Quali Difficoltà?" *CLIL: Un Nuovo Ambiente Di Apprendimento. Sviluppi e Riflessioni Sull'uso Veicolare Di Una Lingua Seconda/ Straniera*, edited by Carmel Mary Coonan, Libreria Editrice Cafoscarina, 2006, pp. 105-17.

Beacco, Jean-Claude, et al. *Guide for the Development and Implementation of Curricula for Plurilingual and Intercultural Education*. Council of Europe, 2010.

Blanchard, Brigitte, et al. "The PROFILES Project Promoting Science Teaching in a Foreign Language." *Science Education International*, vol. 25, no. 2, 2014, pp. 78-96. www.icaseonline.net/sei/june2014/p4.pdf. Accessed 11 Feb. 2018.

Bunch, George C., et al. "Documenting the Language Demands of Mainstream Content-Area Assessment for English Learners: Participant Structures, Communicative Modes and Genre in Science Performance Assessments." *Language and Education*, vol. 24, no. 3, 2010, pp. 185-214, doi: 10.1080/09500780903518986

Canet Pladevall, Roser, and Natalia Evnitskaya. "Rethink, Rewrite, Remake or Learning to Teach Science Through English." *AICLE – CLIL – EMILE. Educació Plurilingüe: Experiencias, Research & Polítiques*, edited by Cristina Escobar Urmeneta et al., Servei de Publicacions de la Universitat Autònoma de Barcelona, 2011, pp. 167-77.

Clegg, John. "Analysing the Language Demands of Lessons Taught in a Second Language." *Revista española de lingüística aplicada*, vol. 1, 2007, pp. 113-28, dialnet.unirioja.es/servlet/articulo?codigo=2575499. Accessed 11 Feb. 2018.

Council of Europe. *Common European Framework of Reference for Languages: Learning, Teaching, Assessment (CEFR)*. COE, 2011, rm.coe.int/1680459f97. Accessed 11 Feb. 2018.

Coyle, Do. *CLIL Planning Tools for Teachers*. School of Education – University of Nottingham, 2005, www.unifg.it/sites/default/files/allegatiparagrafo/20-01-2014/coyle_clil_planningtool_kit.pdf. Accessed 11 Feb 2018.

---. “Listening to Learners: An Investigation into ‘Successful Learning’ across CLIL Contexts.” *International Journal of Bilingual Education and Bilingualism*, vol. 16, no. 3, 2013, pp. 244-66, doi:10.1080/13670050.2013.777384.

Coyle, Do, Philip Hood, and David Marsh. *CLIL Content and Language Integrated Learning*. Cambridge UP, 2010.

Cummins, Jim. “Bilingualism, Language Proficiency and Metalinguistic Development.” *Childhood Bilingualism: Aspects of Linguistic, Cognitive and Social Development*, edited by Peter Homel et al., Erlbaum, 1987, pp. 57-73.

Dalton-Puffer, Christiane, and Tarja Nikula. “Pragmatics of Content-Based Instruction: Teacher and Student Directives in Finnish and Austrian Classrooms.” *Applied Linguistics*, vol. 27, no. 2, 2006, pp. 241-67, doi:10.1093/applin/aml007.

Escobar Urmeneta, Cristina, and Natalia Evnitskaya. “Do You Know Actimel? The Adaptive Nature of Dialogic Teacher-Led Discussions in the CLIL Science Classroom: A Case Study.” *The Language Learning Journal*, vol. 42, no. 2, 2014, pp. 165-80, doi:10.1080/09571736.2014.889507.

European Commission. *Content and Language Integrated Learning (CLIL) at School in Europe*. Eurydice Reports, 2006, publications.europa.eu/en/publication-detail/-/publication/756ebdaa-f694-44e4-8409-21eef02c9b9b. Accessed 11 Feb. 2018.

---. *Civil Society Platform on Multilingualism*. COM, 2011, elen.ngo/wp-content/uploads/ 2016/ 05/ report-civil-society_en.pdf. Accessed 11 Feb. 2018.

---. *Key Data on Teaching Languages at School in Europe – 2017*. Eurydice Reports, 2017, doi:10.2797/12061.

Grandinetti, Maria, et al. “How CLIL Can Provide a Pragmatic Means to Renovate Science Education – Even in a Sub-Optimally Bilingual Context.” *International Journal of Bilingual Education and Bilingualism*, vol. 16, no. 3, 2013, pp. 354-74. doi:10.1080/13670050.2013.777390.

Lasagabaster, David, and Juan Manuel Sierra. “Immersion and CLIL in English: More Differences than Similarities.” *ELT Journal*, vol. 64, no. 4, 2010, pp. 367-75, doi:10.1093/elt/ccp082.

Lin, Angel M. Y. *Language Across the Curriculum & CLIL in English as an Additional Language (EAL) Contexts. Theory and Practice*. Springer, 2016.

Marsh, David. *CLIL/EMILE – The European Dimension. Actions, Trends and Foresight Potential*. Continuing Education Centre in Jyväskylä, 2002.

---. *Content and Language Integrated Learning (CLIL) A Development Trajectory*. Servicio de Publicaciones de la Universidad de Córdoba, 2012.

Marsh, David, and Gisella Langé, editors. *Using Languages to Learn and Learning to Use Languages*. University of Jyväskylä, 2000.

Marsh, David, et al. *European Framework for CLIL Teacher Education*. ECML, 2011, www.ecml.at/Portals/1/documents/ECML-resources/CLIL-EN.pdf?ver=2018-03-21-153925-563. Accessed 11 Feb. 2018.

Mehisto, Peeter. "Criteria for Producing CLIL Learning Material." *Encuentro*, vol. 21, 2012, pp. 15-33, files.eric.ed.gov/fulltext/ED539729.pdf. Accessed 11 Feb. 2018.

Milton, James, and Paul Meara. "Are the British Really Bad at Learning Foreign Languages?" *Language Learning Journal*, vol. 18, no. 1, 1998, pp. 68-76, doi:10.1080/09571739885200291.

Nikula, Tarja, et al. "CLIL Classroom Discourse: Research from Europe." *Journal of Immersion and Content-Based Language*, vol. 1, no. 1, 2013, pp. 70-100, doi:10.1075/jicb.1.1.04nik.

Pavón Vázquez, Víctor, and Maria Ellison. "Examining Teacher Roles and Competences in Content and Language Integrated Learning (CLIL)." *Lingvarvm Arena*, vol. 4, 2013, pp. 65-78, ler.letras.up.pt/uploads/ficheiros/12007.pdf. Accessed 11 Feb. 2018.

Pérez Cañado, María Luisa. "Are Teachers Ready for CLIL? Evidence from a European Study." *European Journal of Teacher Education*, vol. 39, no. 2, 2016, pp. 202-21, doi:10.1080/ 02619768.2016.1138104.

Piacentini, Valentina, et al. "Abordagem Holística no Sistema Educativo Português para Desenvolver a(s) Literacia(s) das Ciências Integradas com o Inglês – Holistic Approach in the Portuguese Education System to Develop Literacies of Science Integrated with English." *Indagatio*

Didactica, vol. 8, no. 1, 2016, pp. 1975-992. revistas.ua.pt/ index.php/ID/article/view/3981/3663. Accessed 11 Feb. 2018.

---. "The Language Focus of Science Education Integrated with English Learning." *Enseñanza de las Ciencias*, vol. Extra, 2017, pp. 399-404, ddd.uab.cat/record/184622. Accessed 11 Feb. 2018.

Roberts, Douglas A., and Rodger W. Bybee. "Scientific Literacy, Science Literacy, and Science Education." *Handbook of Research on Science Education Volume II*, edited by Norman G. Lederman and Sandra K. Abell, Routledge, 2014, pp. 545-58.

Scott, Philip H., et al. "The Tension between Authoritative and Dialogic Discourse: A Fundamental Characteristic of Meaning Making Interactions in High School Science Lessons." *Science Education*, vol. 90, no. 4, 2006, pp. 605-31, doi:10.1002/sce.20131.

Simões, Raquel A., et al. "The Project English Plus: A CLIL Approach in a Portuguese School." *Indagatio Didatica*, vol. 5, no. 4, 2013, pp. 30-51, revistas.ua.pt/index.php/ID/ article/ viewFile/ 2565/2430. Accessed 11 Feb. 2018.

Tedick, Diane J., and Laurent Cammarata. "Content and Language Integration in K-12 Contexts: Student Outcomes, Teacher Practices, and Stakeholder Perspectives." *Foreign Language Annals*, vol. 45, no. 51, 2012, pp. S28-S53, doi:10.111/j.1944-9720.2012.01178.x.

Ting, Yen-Ling Teresa. "CLIL Appeals to How the Brain Likes its Information: Examples from CLIL-(Neuro)Science." *International CLIL Research Journal*, vol. 1, no. 3, 2010, pp. 3-18, www.icrj. eu/ 13/ article1.html. Accessed 11 Feb. 2018.

Vieira, Rui M., et al. *A Educação em Ciências com Orientação CTS. Atividades para o Ensino Básico*. Areal Editores, 2011.

Wellington, Jerry, and Jonathan Osborne. *Language and Literacy in Science Education*. Open UP, 2001.

Wolff, Dieter. "The European Framework for CLIL Teacher Education." *Synergies Italie*, vol. 8, 2012, pp. 105-16, gerflint.fr/Base/Italie8/dieter_wolff.pdf. Accessed 11 Feb. 2018.

sciendo

e-TEALS no. 9 | 2018
Special Edition
An e-journal of Teacher Education and Applied Language Studies

Developing Learners' Intercultural Understanding through a CLIL Approach

Ruth KORO
| University of Nottingham

Abstract | Language and culture are interconnected and teaching a language should also be concerned with offering learners a wide range of opportunities to gain insights into other cultures. Content and language integrated learning (CLIL) approaches have an invaluable contribution to make towards developing learners' intercultural understanding (ICU), by making the content culturally relevant to the language of instruction. Within this paradigm, this paper presents the findings of an action-based research project seeking to develop ICU among secondary learners of French in England, through the teaching of a series of lessons following a CLIL approach. Stemming from its findings, it is proposed here that a renewed understanding of CLIL be defined, in which CLIL would stand for **Content and Language Intercultural Learning.** Within this framework, the **content** would be conceptualised through the lens of culture, to offer learners opportunities to compare and contrast experiences and viewpoints, to develop their cultural knowledge, as well as their **intercultural skills and attitudes** – by means of exposure, independent exploration and collaborative work. The **language**, still driven by the content, would encompass both the language of learning, and the language required through the learning processes - and would be language that is both accessible and cognitively challenging. **Learning** would occur through cognitively demanding content that is real, relevant and engaging, yet accessible to all.

Key words | CLIL, intercultural understanding, modern languages, secondary education, curriculum, England

Citation: Ruth Koro, "Developing Learners' Intercultural Understanding through a CLIL Approach." *e-TEALS: An e-journal of Teacher Education and Applied Language Studies* 9 Special Edition (2018): 77-107. ISSN 1647-712X

10.2478/eteals-2018-0014

1. INTRODUCTION

1.1. *Culture, Intercultural Understanding and Intercultural Communicative Competence*

Defining culture is complex. Little consensus exists on how best to define the concept – with much of the literature retaining the longstanding distinction between 'little c' and 'big C' culture, between cultural knowledge and cultural awareness (Saniei 11-12). For the purpose of the study, Byram's useful definition of culture as "shared beliefs, values and behaviours" (*From Foreign Language Education* 60) was adopted. Intercultural understanding (ICU), therefore, is the willingness to alter one's viewpoint with the aim to discover and understand otherness, and intercultural communicative competence (ICC), the ability to demonstrate the necessary attitudinal attributes in order to interact and mediate between the two perspectives (Byram 68).

1.2. *The Place of ICU in Language Education*

Brown contends that language is the most evident manifestation of culture (171). As such, it could be argued that language educators need to embrace this necessary cultural dimension. This is further emphasised by the imperative to support our learners into becoming competent global citizens (Byram and Wagner 141). However, while much has been written about the importance of the intercultural dimension in languages education, very little of this concerns the secondary context (Hennebry 144) or the place of ICU in everyday practice (Baker 134). While the majority of language teachers view intercultural teaching as an important aspect of language learning, there is much literature pointing to a disparity between these beliefs and classroom practice (Grenfell 39).This is particularly true in England, where despite earlier attempts to include the development of intercultural understanding in the curriculum for languages (QCA 166), this is given little place in current policy and everyday practice.

1.3. *CLIL and Intercultural Understanding*

Content and Language Integrated Learning (CLIL) can be defined as the teaching and learning of subject content through the medium of an additional language; within a CLIL framework, the

purpose of learning needs to be authentic and relevant to the learners' context, and while the focus may need to shift between the content and the language, both content and language are given parity. Coyle and her colleagues provide a useful framework for CLIL implementation, the 4Cs model, where content, communication, cognition and culture are considered in equal measures for planning, teaching and learning purposes (Coyle et al. 53-56). Because the cultural dimension is central to the CLIL framework, Byram argues that the approach could facilitate teaching for ICU (320), and Sudhoff contends that this may be because CLIL classes offer the "added dimension" of interculturality by offering differing perspective on a wide range of topics (33).

However, despite the need to develop ICU further within languages education in England, and the potential of CLIL to achieve this, CLIL approaches remain experimental and isolated in the national context. This paper presents the findings of an action-based research project exploring the perceptions of teachers and learners in this context, and the outcome of a CLIL intervention programme aimed at developing ICU.

2. The Place of ICU in Language Education

There has been sustained interest in ensuring that the various languages curricula provide opportunities to develop the intercultural skills, knowledge and understanding learners will need to ready them for the demands of an increasingly changing and globalised society. While it is worth noting that in diverse classrooms, many learners will already be actively engaged in multilingual and intercultural interaction (Campos 384), this often remains to be fully acknowledged, celebrated and built on. Therefore, it could be argued that pedagogical models offering scope for intercultural engagement have become an imperative (Aktor and Risager 221) even if teachers and policy makers' motivation in addressing this need is purely a pragmatic one (Furstenberg 329-330). Indeed, Byram argues that the intercultural dimension can only be fully realised if it "fulfil[s] purposes that are both educational and utilitarian" (Byram 319-320).

Therefore, language teaching and learning should include opportunities to acquire and develop both language and culture (Sudhoff 32), as well as intercultural capability (Scarino 325).

Duffy and Mayes further contend that such opportunities should be available to all and not be dependent on advanced levels of linguistic competence (Duffy and Mayes 93).

While an element of cultural transmission is always inherent in the teaching of languages, Scarino argues that this has often taken a subordinate place (324), a view shared by Kramsch (8). Despite the low importance attributed to intercultural aspects, the role of language teachers in contributing to the development of global, interculturally-competent future citizens is viewed as central by some (Driscoll and Simpson 170-171; Goodman 611), while approaches to teaching languages which reduce the place of the intercultural dimension can be seen as inadequate.

Integrative approaches to language teaching are often seen as an ideal vehicle to develop intercultural learning opportunities (Beacco et al. 16) through their dual focus on developing both linguistic and intercultural aspects. Such approaches have been implemented over the years in a range of contexts, including content-based instruction, bilingual education and immersion programmes. In Europe, CLIL was introduced in the early 1990s as an umbrella term for integrative approaches to language teaching and learning and is best defined as "the planned pedagogic integration of contextualized content, cognition, communication and culture into teaching and learning practice" (Coyle et al. 6).

Since the inception of the term, CLIL approaches have become prevalent in much of Europe, albeit to varying degrees (Eurydice 55), with some noted benefits: for Dalton-Puffer, CLIL offers opportunities to increase learners' motivation (8), and Coyle adds that this may be particularly true where learners may otherwise have a negative attitude towards either the content or the language studied (89). Coyle further contends that CLIL approaches can support learners' conceptualisation processes (10-11), and therefore help develop their cognitive competence, a view supported by Marsh (8) – although Coyle highlights a need for careful scaffolding to ensure cognitive gains and the retention of motivation.

Campos also suggests that integrated approaches may be more efficient in developing students' cultural knowledge than isolated exposure to cultural elements (387-388). Beyond cultural knowledge gains, Wolff notes that such approaches, including CLIL, offer opportunities

for reflection on otherness and differing perspectives, a key aspect of intercultural understanding (78). Sudhoff further notes that the CLIL classroom offers this added intercultural dimension (33), by providing learners with the required tools for intercultural competence – although Kearney aptly notes that, for this to be realised, learners' engagement and experiences with both language and culture need to be carefully considered (333).

However, despite the above-mentioned importance and benefits, the development of intercultural understanding through integrated approaches has been given little place in recent languages education policy in England. This can seem an apparent contradiction given the documented issues with learners' motivation for language learning in the country (Davies 57). This contradiction may well stem from the constant shift that languages have seen in terms of the place they were given in the curriculum over the years, despite recent assertions that "learning a foreign language is a liberation from insularity and provides an opening to other cultures" (Gov.uk). Another reason could be the overarching focus on formal, summative assessment serving a performativity agenda at all levels of the curriculum, which seems to compel language teachers in England to shy away from more innovative approaches and materials, with an over-reliance on less engaging sources such as textbooks, often seen as a poor medium for the transmission of intercultural awareness and understanding (Baker 134). Nonetheless, there remains a marked need for England to do more to empower its young citizens to face the growing demands of an internationalised world, and language learning holds a key role in facilitating this (British Council 3).

3. Design of the Research Project

3.1. *Background and Rationale*

The project contributed to the completion of a doctoral thesis on the topic of CLIL. The study stemmed from my own experiences teaching languages in English secondary schools, from my belief that culture and language are intrinsically linked, and from the ensuing frustration in observing that often, in the context of language teaching in England, this was not the experience

for learners. I also viewed the project as a means to actualise my belief that teachers have agency in the curriculum they deliver to their learners.

Having initially experimented with short CLIL projects, I wished to explore its potential further, and to investigate the scope of the approach for developing learners' ICU. It was hoped that the project would enhance my practice as well as contribute to the wider body of knowledge, and provide a possible model of application in the context of language teaching and learning in England. For the purpose of the study, the following three research aims were formulated:

- to explore the importance attributed to the development of ICU within language teaching and learning;
- to observe whether ICU is evident in practice;
- to investigate the potential for a CLIL approach and teaching materials to contribute to the development of learners' intercultural understanding.

3.2. *Participants*

The study aimed to explore the rationale for cross-curricular, integrative approaches traditionally only being aimed at higher-performing, older language students – and so younger secondary students (aged 12-13) in lower attaining groups were selected as the focus for the inquiry. One group was my own, as the study was intended to take the form of an action-research project; further schools were selected for broad comparability: all were mixed-gender, state-maintained secondary schools in England, with classes selected as French was the sole foreign language studied by participants.

Overall, the research involved the participation of 94 students across four different schools, and 19 teachers; as can be expected in many language faculties, the profile of teachers ranged in experience, personal theories of practice and levels of language proficiency.

Teachers were offered a choice of intercultural topics, each linked to prescribed language content in the textbook used across all schools, while at the same time connected to another area of the curriculum: French children in the second World War (history), daily life in French-speaking

developing countries (geography) or industrial and technological advances from the French-speaking world (design and technology). All teachers opted for the first topic, due to the nature of the language content as well as the likely level of interest this might generate among their students.

In the belief that intercultural gains cannot be measured against rigid parameters, it was decided that only the achievements of students having participated in the CLIL lessons would be measured pre and post-intervention, rather than attempting to compare these to that of their peers in non-intervention, 'control' schools, an approach advocated by Coyle (139). Responses from these schools served to explore broader issues and perspectives, and in recognition of their contribution to the study, the teaching materials were shared with them post intervention.

3.3. *Research Design*

A literature review was first carried out to explore the existing body of knowledge pertaining to culture in language education, the dichotomy between teachers' beliefs about intercultural understanding and their everyday practice and the potential benefits of integrated approaches such as CLIL to develop ICU (as discussed in the previous section) – with an exploration of what the literature perceived to be the optimal audience as well as the most suited materials for intercultural teaching.

3.4. *Instruments: Questionnaires*

Following the literature review, research instruments were designed to reflect key emerging themes identified. In order to address the first two research aims (the importance attributed to the development of ICU within language teaching and learning, and its place in actual practice) teacher and student questionnaires, as well as teacher interviews, were used to measure experiences, perceptions and attitudes.

The students' questionnaires were designed in line with the findings of the literature review, and organised around three broad themes:

a) Attitudes and perceptions;

b) Experiences of learning a language;

c) Existing intercultural knowledge and understanding.

In line with these, the student questionnaire consisted of five sections:

1. A first section, gathering basic information on the profile of individual students;
2. A second section, seeking to establish their linguistic heritage and background, and their language learning history;
3. A third section, exploring learners' attitudes towards language learning, through a mixture of multiple-choice, open response and ranking questions;
4. A fourth section, consisting of a quiz to establish their existing level of ICU;
5. A fifth section, providing a further quiz, aimed at establishing learners' existing (or lack of) cultural knowledge on France, its culture and people.

The teachers' questionnaires were also organised around three broad themes:

a) Beliefs, attitudes and perceptions;

b) Current practice, including use of materials;

c) Barriers to the teaching and learning of intercultural understanding.

These also consisted of five sections, exploring the following aspects:

1. Languages spoken and taught;
2. Their school context, and the place of languages in the school's *curriculum*;
3. Teachers' own definition of the term 'culture';
4. The place of culture in the teaching and learning of languages, including a range of scale and ranking questions;

5. Teachers' length of service – this section also provided an opportunity for teachers to write further comments and to indicate their willingness to participate in interviews.

3.5. *Instruments: Intervention Lessons*

In order to fully explore the third research aim (whether a CLIL approach and teaching materials can contribute to the development of learners' intercultural understanding), a taught intervention was designed, consisting of a series of fifteen lessons (and related teaching materials) following a CLIL approach integrating history and French, delivered to two of the four classes / schools involved in the study.

In planning the history content, subject specialist teachers were consulted to establish learners' existing historical knowledge, as well as the subject-specific skills and terminology they needed to acquire or develop. However, the constraints within each of the participating schools did not allow for the team teaching of the sequence of lessons.

Adapted from the 4Cs model (Coyle et al. 53-56), a framework for the planning of the intervention lessons was designed, in which content is conceptualised through the lens of culture in order to achieve six broad aims (see Figure 1).

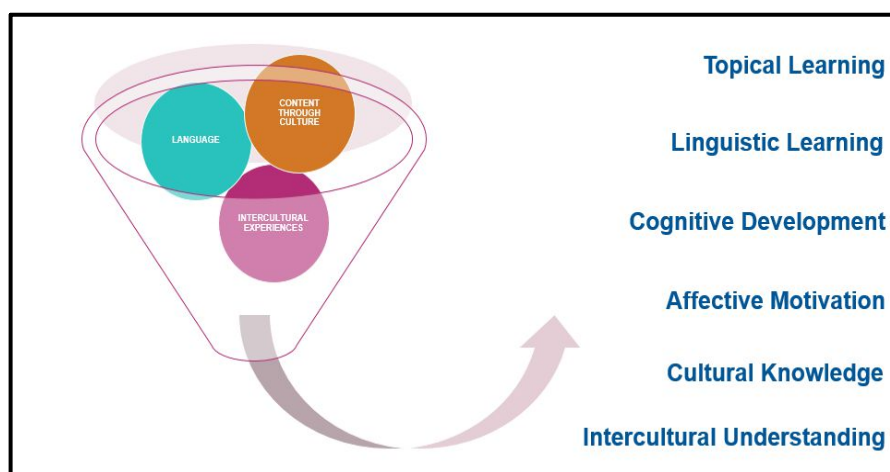


Figure 1. A CLIL Framework for Intercultural Understanding: Content through the Lens of Culture

The premise of the framework was to ensure that the content aspect was steeped in a French cultural perspective, a process termed 'content through the lens of culture', with the aim to offer learners opportunities to explore familiar events through the eye (and the language) of the 'other', in the hope to foster intercultural attributes. The principles of this intercultural CLIL framework are presented in Table 1.

Content through Culture	Language of/for/through Learning	Intercultural Attributes and Experiences	Learning – Cognition and Meaningful Outcomes
presenting content through the lens of the target culture	using highly recyclable language, applied in the topic's context	offering intercultural experiences – through familiar events / themes, but through different perspectives	supporting learners in ***accessing*** cognitively challenging language
offering authentic content	offering challenging content, manageable through the use of cognates	developing intercultural attributes, with a focus on empathy and a sense of curiosity	supporting learners in ***producing*** cognitively challenging language
using a wide range of sources and types of materials	providing language needed by the students to carry out the planned activities	promoting affective motivation through the use of engaging and relatable content	developing learners' ability to work independently ***and*** collaboratively to produce meaningful outcomes

Table 1. Principles of a CLIL Framework for Intercultural Understanding

Examples for each of the principle are presented in Appendix 1.

A quantitative approach was needed to establish whether the use of the teaching intervention had an impact on developing learners' intercultural understanding through the completion of a pre and post-test quiz. Qualitative methods were also used to complement the quantitative findings through lesson observations and interviews to gather teachers' and learners' views about the intervention approach and materials.

3.6. *Instruments: Teaching Materials*

The teaching materials for the intervention were designed to present learners with opportunities to engage with less frequent types of materials, and to provide a learning experience different to that which they were accustomed. A full set of ready materials was designed, focusing on a range of skills and investigative and collaborative activities. Materials included presentation slides, worksheets, online resources, songs, poems and a full-length movie leading to a film study.

As previously mentioned, teachers had been able to select the topic / cross-curricular link, but care was taken to retain key linguistic structures as prescribed by the schools' language programme – to ensure that participating students would not be academically disadvantaged. Teachers approached for participation had unanimously opted for a cross-curricular link with history on the topic of 'children in France during the second world war (WW2)', a familiar topic to students, but approached through the lens of another cultural perspective. The aim of this approach was to make the content more relevant to learners, and to develop their sense of empathy, a key aspect of intercultural understanding. In particular, the topic was centred on events in a martyred village, Oradour sur Glane.

4. The Taught Intervention

Before the teaching intervention took place, students completed their questionnaires. They then participated in the series of fifteen lessons which took place over a period of six to eight weeks, depending on the curriculum time allocated to language lessons in each of the participating schools. Lessons were delivered by a language teacher in each participating school.

In the first and second lessons, the scene was set, and students were introduced to the village of Oradour sur Glane. Through a series of collaborative investigative tasks, students then had to find out for themselves what had made the village so notorious.

In the third lesson, students consolidated their knowledge of WW2, with a focus on determining events from a French perspective. This was achieved through the use of a range of video materials, as well as an extended reading task, explored collaboratively as a class.

In lessons four to eight, students explored the life of a child in the village through the medium of a diary, narrating life before and after the German attack.

Lesson nine gave an opportunity for students to recount the events in their own words and in their own language through the writing of a newsletter article aimed at the local school community – and they shared this with each other in the twelfth lesson.

The tenth lesson exposed learners to opportunities to engage with lesser-used materials, namely French songs and poems related to WW2, to further develop their understanding of the period.

In lesson eleven, they looked at other key events having affected children in France during WW2, while lessons thirteen, fourteen and fifteen explored the period through a structured film study using the movie *La Rafle*.

Following the end of the taught sequence, students who participated were asked to complete the same questionnaire again to provide an insight into the impact of the intervention on their intercultural attitudes, knowledge and understanding. This data was used to supplement those gathered through interviews, lesson observations and collated students' work (see Appendices 2 and 3).

5. Findings

For clarity of discussion, the findings section, as well as the subsequent discussion, will first discuss teachers' perspectives followed by those of the students. The choice of materials will then be explored before a reflection on the scope for a CLIL approach to develop students' intercultural understanding.

5.1. *Teachers' Perspectives: Beliefs vs. Practice*

Although most language teachers surveyed (78.9%) believed that ICU should be an integral part of language instruction and acquisition, cultural awareness was ranked as the least important of a range of skills to be developed in the language classroom by most (63.1%), as can be seen in Figure 2.

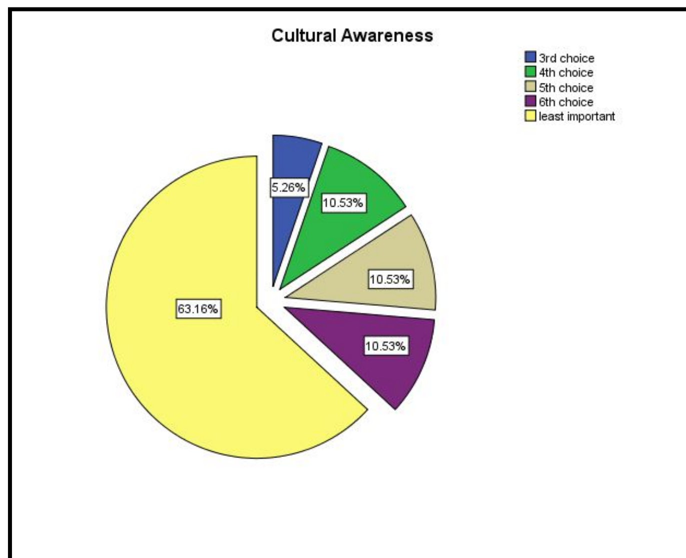


Fig. 2. The Importance Attributed to Cultural Awareness in Language Teaching according to Teachers of MFL (N=19)

It was also interesting to note teachers' expectations with regards to their learners' desired attitudinal attributes with those related to intercultural understanding and competence, such as empathy and an understanding of different social conventions and customs, ranked low when compared to more 'traditional' linguistic aspects, as shown in Table 2 below.

Item	ranked 1st	ranked 2nd	ranked 3rd	ranked 4th	ranked 5th	Cumulative
				%		
positive attitude	26.3	21.1	10.5	10.5	0	68.4
understanding of gramar	0	15.8	5.3	26.3	15.8	63.2
interest for the subject	31.6	5.3	5.3	10.5	10.5	63.2
Motivation	15.8	21.1	15.8	0	5.3	58
sense of curiosity	10.5	26.3	10.5	10.5	0	57.8
ability to memorise a large amount of vocabulary over time	10.5	0	26.3	10.5	0	47.3
knowledge of a wide range of vocabulary	0	0	10.5	10.5	10.5	31.5
open-mindedness	0	5.3	5.3	5.3	10.5	26.4
good pronunciation	0	5.3	5.3	5.3	10.5	26.4
ability to write at length and accurately	0	0	5.3	0	10.5	15.8
ability to understand and use idioms	0	0	0	5.3	5.3	10.6
spends time abroad practising the language	5.3	0	0	0	5.3	10.6
knowledge about cultural facts	0	0	0	0	10.5	10.5
understanding of differing social conventions and customs	0	0	0	5.3	0	5.3
Fluency	0	0	0	0	5.3	5.3
sense of empathy	0	0	0	0	0	0

Table 2. Desired Language Learners' Attributes, as ranked by teachers (N =19)

5.2. *Teachers' Perspectives: Perceived Barriers to Intercultural Teaching*

Many language teachers identified barriers preventing them from implementing intercultural teaching. Most teachers commented on the adverse impact of rigid and demanding curriculum and assessment frameworks on their ability to explore more innovative approaches:

> [the current examination framework] is a really poor foundation for helping the students to appreciate the culture of learning another language. […] Unfortunately, today, everything is measured in exam success, so there's little time to develop a love or appreciation for the culture of the country. (Teacher F)

In addition to the scarcity of time left for intercultural teaching because of these demands, many teachers (57.9%) also noted that more general time constraints would prevent them from designing suitable teaching materials for intercultural teaching.

Another important aspect which teachers identified as a likely barrier to intercultural teaching was their learners' lack of linguistic proficiency; in other words, teachers often stated that only learners with a more advanced linguistic level would be able to access intercultural teaching. As a result, lower attaining or younger students were not seen as the ideal audience, as stated by Teacher E: "It depends on the students – I use far more [cultural] materials at Key Stage 5 [advanced learners]".

When intercultural opportunities were offered to learners, this was often approached as an 'add-on', end of term short and isolated activity, mostly aimed at fostering a little more motivation and to fill time once the 'important' work had been completed, or as a treat or a special occasion, for instance when discussing festivals and traditions.

Interestingly, teachers also begrudged their students' lack of cultural awareness, although they were quite honest in their assessment that this may be a direct result of their own practice, with Teacher C noting that:

> Students don't even know enough about their own culture so it's hard for them to compare with others [...] Mind you, that might be our own fault, because a lot of teachers are just too afraid of giving time to teaching cultural stuff [...] but then we can't really complain at their lack of awareness.

5.3. *Learners' Perspectives*

Learners, although aware that little place was given to intercultural learning in their regular lessons, showed motivation for greater intercultural opportunities when responding to a range of statements: 56% said that they wanted to learn more about French-speaking countries and people, 70.6% that they liked learning about different people, and 82.6% that they enjoyed learning about different countries.

5.4. *Materials for Intercultural Teaching*

Many learners were perceptive of the fact that their teachers rarely used materials seen as more interculturally rich, as detailed in Table 3.

Item	almost always	often	sometimes	rarely	never
			%		
textbook	37.5	30.6	18.1	12.5	1.4
worksheets	26.4	33.3	27.8	9.7	2.8
teacher's presentations and slides	83.3	9.7	4.2	2.8	0.0
online resources	5.6	14.1	35.2	31.0	11.3
magazines, books, newspapers	1.4	4.2	4.2	18.3	69.0
songs and poems	2.8	4.2	18.3	21.1	50.7
video clips	2.8	15.3	27.8	33.3	20.8
movies	0.0	0.0	6.9	48.6	41.7
quizzes and games	19.4	44.4	23.6	9.7	2.8

Table 3. Learners' Perception of the Frequency of Use of Teaching Materials in Language Lessons (N=75)

Teachers valued the use of video clips for the teaching of ICU (47.4%), but movies, pictures, internet resources, songs and poems were ranked much lower, with 10.5% each. Furthermore, teachers failed to note the importance of texts, magazines, newspapers and books for intercultural teaching, a likely reflection of the low importance they seemed to attribute to reading skills as an aspect of language learning.

Despite their teachers not attributing much value to the use of certain materials in developing intercultural understanding, learners were particularly responsive to the use of video clips and movies and, following the intervention and related exposure to a wider range of material types, the learners' preferences had shifted, as seen in Table 4.

Type of material	Pre-test %	Post-test %
textbooks	34.3	19.4
worksheets	11.4	5.6
teacher's presentations / slides	25.7	19.4
online resources	11.4	25
magazines, books, newspapers	0	0
songs and poems	0	0
video clips	0	8.3
movies	5.7	16.7
quizzes and games	11.4	5.6

Table 4. Learners' Preferred Material Type, pre and post-test (N=36)

This shift could be interpreted as a willingness on the part of learners to embrace more authentic, challenging and culturally rich materials, if given the opportunity.

5.5. *CLIL to Develop Cultural Knowledge*

While intercultural competence also requires the demonstration of intercultural skills and attitudes, developing cultural knowledge can contribute to developing learners' ability to operate the necessary compare / contrast. Following the intervention, learners had increased their cultural

knowledge, and were able to identify or recall more factual cultural items. For instance, while 50% of learners were unable to name more than one famous French city or town before the intervention, and 61.8% unable to name more than two, this fell to 12.1% and 33.3% respectively following the intervention.

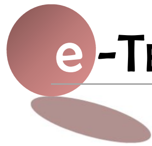
5.6. *CLIL to Develop Intercultural Understanding*

Findings also revealed implications in terms of learners' motivation for language learning. They were asked to rank the different benefits of language learning, indicated by a range of statements, seen in Table 5.

Benefits of language learning	pre-test%	post-test%
it can get you a better job later	43.2	23.1
it can help you get into university	14.3	24.5
you can use the language when you go on holidays	7.1	3.8
it gives you access to more jobs	17.9	18.5
INSTRUMENTAL ASPECTS – CUMULATIVE	**82.5**	**69.9**
it helps you meet people from different countries	3.6	14.8
it can help you understand and use your own language better	3.6	3.8
it can help you understand how people may do things differently	10.3	11.5
INTERCULTURAL ASPECTS – CUMULATIVE	**17.5**	**30.1**

Table 5. Pre and Post-Test Students' First Responses on the Benefits of Language Learning (N=36)

Items related to instrumental motivation were given more prominence before the intervention (82.5% of first responses) while those relating to intercultural attitudes and attributes less so (17.5%). Following the intervention, rankings had changed to 69.9%, and 30.1% respectively, indicating a shift from the instrumental towards the affective and intercultural. Although Wilcoxon signed rank tests did not overall demonstrate statistically significant differences pre and post-test, the one statement: *'It can help you understand how people may do things*



differently' did indicate a significant change (z=1.497, p=134, r=.21), seemingly indicating a shift towards a greater ability to consider different perspectives.

Also of significance was the proportion of students who indicated that they enjoyed language learning because of intercultural elements in their language lessons that increased from 4.3% pre-test, to 26.1% post-test, a possible indication that intercultural learning can contribute to improving learners' enjoyment and engagement with the subject. Perhaps more interestingly, while those who did not enjoy learning French did not change their mind following the intervention, none said this was because it was 'too different', perhaps an indication of a shift in attitudes, too. Results can be found in Table 6.

Item	Pre-test %	Post-test %
I enjoy learning about France, French culture, French people	4.3	26.1
I enjoy learning collaboratively with friends	4.3	0
it is challenging, hard, difficult	4.3	0
it is easy	4.3	0
it is educational, you learn something new	4.3	0
it is fun or enjoyable	52.2	26.1
it is good to know more than one language	4.3	7.7
it is interesting, diferente	13.0	17.4
it prepares you for real interaction	4.3	0
I have good, helpful teachers	4.3	4.3
it will facilitate future travel	4.3	4.3
it will help for future career or prospects	4.3	0
it is boring, it lacks interest	57.1	46.2
it is difficult	28.7	23.1
I don't like it	0	15.4
there is no need to learn another language	7.1	7.7
it is too diferente	7.1	0
I don't get on with the teacher	0	7.7

Table 6. Pre and Post-Test Reasons given by Students for Enjoying / not Enjoying Language Learning (N=36)

There was also evidence of learners' ability to consider different perspectives and to express empathy following exposure to the intervention materials, both through their own language (English) and that of instruction (French), collaboratively and on their own (Appendices 2 and 3).

6. Discussion

6.1. *Teachers' Perspectives: Beliefs vs. Practice*

As suggested by Baker (134), there was a marked dichotomy between teachers' beliefs and their practice. Many perceived linguistic performance as the driving force for their practice, as found by Aktor and Risager (222); at the same time, in line with Baker' findings, cultural aspects were not seen as an integral part of language teaching for many – despite teachers' having a clear understanding of the role they could play in promoting this dimension of language learning. Perhaps, if teachers only attribute value to what can be measured, as suggested by Hennebry (148) it should be deemed necessary to consider models for assessing intercultural competence – although as Coyle and colleagues argued, such models should view language learning as a holistic process, where performance and affective aspects are afforded parity (157).

6.2. *Teachers' Perspectives: Perceived Barriers*

Teachers identified a range of constraints to the implementation of intercultural teaching within the context of language education in England. For many, such constraints pertained to learners' lack of sufficient linguistic competence to access intercultural materials, and their perceived lack of motivation for the subject – yet the intervention phase of the study demonstrated that, with careful planning and design, interculturally rich and cognitively challenging materials can be made accessible and can further develop learners' intrinsic motivation for the subject. Another constraint related to the rigidity of the curriculum, yet it was found that teachers had enough scope for agency in presenting prescribed language through a more challenging and engaging medium, serving to develop in equal measures learners' linguistic competence and their intercultural understanding.

6.3. *Learners' Perspectives*

The study found that learners valued intercultural aspects of language learning to a greater extent than their teachers did, and relished opportunities to engage with intercultural content; where this happened, motivation, cultural knowledge and intercultural understanding increased.

Another interesting point to draw from the findings is that of what constitutes the 'ideal' audience for intercultural instruction; teachers were quick to dismiss the potential of intercultural teaching for their lower attaining and/or younger students, often on account of their level of linguistic competence – yet Dalton-Puffer argues that an increase in cognitive challenge can only serve to contribute to successful language learning for all students (126). Indeed, the very fact that the participants in this study belonged to this demographic served, albeit on a small scale, to demonstrate the value of offering younger secondary learners such opportunities. At an age when motivation for language learning begins to decrease, surely providing learners with alternative approaches can only help (Davies 57). With the pragmatic teachers in mind, it might also be worth noting that intercultural teaching with this age group is less likely to be subject to the same constraints linked to the high-stakes assessment frameworks their older peers may have to abide by.

6.4. *Materials for Intercultural Teaching*

Effective materials are essential for intercultural teaching (Aktor and Risager 223). This study has also highlighted the importance of materials for intercultural teaching and determined that learners will readily engage with a broader range of culturally rich materials and develop both their cultural knowledge and intercultural understanding. It was interesting to note that films, often identified as a rich source of intercultural content (Gross 794), were not valued by teachers – yet the use of film seemed to have the most impact on participating students.

Students responded positively to the range of materials; these were authentic in nature, cognitively challenging yet accessible, spanning a range of skills and, most importantly, presented content which they could relate to.

6.5. *CLIL for the Development in Intercultural Understanding*

The CLIL framework followed, presenting the history content through the lens of French culture, provided a challenging yet engaging springboard to develop the students' intercultural understanding. Our initial premise was that intercultural understanding is defined as the willingness to alter one's viewpoint with the aim to discover and understand otherness. The CLIL intervention lessons provided ample opportunity for this process of discovery, an opportunity which learners embraced and indeed expressed strong affective motivation for – confirming Dalton--Puffer's argument that a CLIL approach can be successful in that respect (8). This was a particular achievement if we consider that many of the students who participated would not initially engage with the language subject content, perhaps an indication that an integrated approach could also address some of the issues identified by Davies (57) in the context of language learning in England.

If we further recall Byram's point that intercultural communicative competence (ICC) is the ability to demonstrate the necessary attitudinal attributes in order to interact and mediate between two perspectives (68), then we could argue that the range of work which students were able to access, but also to produce was testament to the potential of a CLIL approach for intercultural understanding (Appendices 1, 2 and 3).

7. Conclusion

As mentioned earlier, language and culture are intrinsically connected, and this should be reflected in our practice as language educators. It is hoped that this small-scale, action-based research project has demonstrated that learners have a clear appetite for intercultural learning, and much to gain in developing the key skills, knowledge and attributes required of them as future globally competent citizens.

Of course, the responsibility to equip them with such skills, knowledge and attitudes is one which must be shared by teachers, parents, educational organisations and policy makers alike. As we see a growing trend towards an education for global competencies, CLIL approaches

which envision the content through the lens of culture may offer solutions that are both practical and innovative, and that will contribute to making learners open to, and ready for interculturality.

To implement this vision of CLIL for intercultural understanding, three aspects should be considered:

- **A broad range of teaching materials**, authentic in nature, for real, diverse and relevant insights into the culture and language, at a level that is cognitively challenging;
- **An online community of CLIL practitioners**, to enable the sharing of successful CLIL materials and experiences, and to alleviate some of the constraints identified;
- **An opportunity for all learners**: CLIL approaches can be of benefit to all, and should not be limited to more advanced learners, be it on account of their age or their level of linguistic proficiency. Younger secondary learners may represent the best audience for intercultural teaching and gain in affective motivation for language learning – even (or especially) when they find language learning a challenge.

It is therefore argued that implementing CLIL for intercultural learning is **possible, desirable and necessary**.

Possible, because for every constraint identified, real or perceived, there is a solution – and practitioners' research is beginning to offer a cumulative corpus of evidence to that effect. Teachers are the agents of change in their classrooms, and teachers and learners alike should have an expectation that language learning is exciting, challenging and enriching. Anything less would be to short-change both learners and teachers.

Desirable, because there is evidence that an intercultural CLIL approach can contribute to learners' affective motivation for language learning, their intercultural understanding, and their ability to handle cognitively challenging content.

Necessary, because our language classrooms need to reflect learners' diversity, and where there is none, offer a platform to explore otherness, to ensure learners' readiness for the challenges and opportunities that a globalised world presents.

Works Cited

Aktor, Leon, and Karen Risager. "Cultural Understanding in Danish Schools." *Developing Intercultural Competence in Practice,* edited by Michael Byram, Clevedon, 2001, pp. 219-35.

Baker, Will. "Research into Practice: Cultural and Intercultural Awareness." *Language Teaching,* vol. 48, no. 1, 2015, pp. 130-41.

Beacco, Jean-Claude., et al. *Guide for the Development and Implementation of Curricula for Plurilingual and Intercultural Education*. Council of Europe, 2010.

British Council. "Languages for the Future. Which Languages the UK Needs most and Why." 2014, www.britishcouncil.org/sites/britishcouncil.uk2/files/languages-for-the-future.pdf. Accessed 23 Nov. 2018.

Brown, Douglas. *Principles of Language Learning and Teaching.* Pearson Education, 2007.

Byram, Michael. *From Foreign Language Education to Education for Intercultural Citizenship: Essays and Reflections*. Multilingual Matters, 2008.

---. "Linguistic and Cultural Education for Bildung and Citizenship." *The Modern Language Journal,* vol. 94, no. 2, 2010, pp. 317-21.

Byram, Michael, and Manuela Wagner. "Making a Difference: Language Teaching for Intercultural and International Dialogue." *Foreign Language Annals*, vol. 51, no. 1, 2018, pp. 140-51.

Campos, Ana Tristana Solano. "Strategies to Raise Cultural Awareness and Create Multicultural Materials and Activities in the Language Classroom." *Revista de Lenguas Modernas,* no. 11, 2009.

Coyle, Do, et al. *Content and Language Integrated Learning*. Cambridge UP, 2010.

Dalton-Puffer, Christiane. *Discourse in Content and Language Integrated Learning (CLIL) Classrooms*. John Benjamins Publishing, 2007.

Davies, Beatrice. "The Gender Gap in Modern Languages: A Comparison of Attitude and Performance in Year 7 and Year 10." *The Language Learning Journal,* vol. 29, no. 1, 2004, pp. 53-58.

Department for Education. "National Curriculum in England: Languages Programmes of Study." 2013,www.gov.uk/government/publications/national-curriculum-in-england-languages-progammes-of-study/ national-curriculum-in-england-languages-progammes-of-study. Accessed 17 October 2018.

Driscoll, Patricia, and Helen Simpson. "Developing Intercultural Understanding in Primary Schools." *Teaching English to Young Learners: Critical Issues in Language Teaching with 3-12 Year Olds*, edited by Janice Bland, XXX, 2015, pp. 170-71.

Duffy, Sylvia, and Janet Mayes. ""Family life" and "regional identity"- Comparative studies while learning French." *Developing Intercultural Competence in Practice*, edited by Michael Byram et al., Channel View Publications, 2001, pp. 93-110.

Eurydice. *Key Data on Teaching Languages at School in Europe 2017*. Eurydice, 2017.

Furstenberg, Gilberte. "Making Culture the Core of the Language Class: Can It Be Done?" *The Modern Language Journal,* vol. 94, no. 2, 2010, pp. 329-32.

Goodman, Allan. "Language Learning and Study Abroad: The Path to Global Citizenship." *The Modern Language Journal,* vol. 93, no. 4, 2009, pp. 610-12.

Grenfell, Michael. *Modern Languages across the Curriculum*. Routledge Falmer, 2002.

Gross, Janice. "Making Reel to Real Contact: Film in the French Culture Course." *The French Review*, vol. 80, no. 4, 2007, pp. 782–801.

Hennebry, Mairin. "Cultural Awareness: Should It Be Taught? Can It Be Taught?" *Debates in Modern Languages Education*, edited by Patricia Driscoll, et al., Routledge, 2014, pp. 135-49.

Kearney, Erin. "Cultural Immersion in the Foreign Language Classroom: Some Narrative Possibilities." *The Modern Language Journal,* vol. 94, no. 2, 2010, pp. 332-36.

Kramsch, Claire. *Language and Culture*. Oxford UP, 1998.

Marsh, David. "Using Languages to Learn and Learning to Use Languages.", 2000, http://archive.ecml.at/mtp2/clilmatrix/pdf/1uk.pdf. Accessed 21 Nov. 2018.

Qualifications and Curriculum Authority. "Modern Foreign Languages Programme of Study for Key Stage 3 and Attainment Targets." *National Curriculum in England,* 2007, https://webarchive.

nationalarchives.gov.uk/20110203184640/http://curriculum.qcda.gov.uk/uploads/QCA-07-3340-p_MFL_KS3_tcm8-405.pdf. Accessed 17 Oct. 2018.

Saniei, Andisheh. "Developing Cultural Awareness in Language Instructional Materials." *International Conference of Language, Medias and Culture*, 10-11 March 2012, Chennai, India.

Scarino, Angela. "Assessing Intercultural Capability in Learning Languages: A Renewed Understanding of Language, Culture, Learning, and the Nature of Assessment." *The Modern Language Journal,* vol. 94, no. 2, 2010, pp. 324-29.

Sudhoff, Julian. "CLIL and Intercultural Communicative Competence: Foundations and Approaches towards a Fusion." *International CLIL Research Journal,* vol. 1, no. 3, 2010, pp. 30-37.

Wolff, Dieter. "Germany." *Modern Languages across the Curriculum,* edited by Michael Grenfell, Routledge Falmer, 2002, pp. 78-87.

sciendo

e-TEALS no. 9 Special Edition (2018): 77-107

APPENDIX 1

Presenting content through the lens of the target culture

Here, learners were introduced to the events leading to the second world war, using the target language and presenting a different perspective to that they would have been familiar with.

Offering authentic content and using a wide range of sources and types of materials

In this lesson of the sequence, learners studied a range of songs and poems on the theme of the second world war, discussing a wide range of topics, for instance the Resistance movement.

The Partisan

When they poured across the border
I was cautioned to surrender,
This I could not do ;
I took my gun and vanished.

I have changed my name so often,
I've lost my wife and children
But I have many friends,
And some of them are with me.

An old woman gave us shelter,
Kept us hidden in the garret,
Then the soldiers came ;
She died without a whisper.

There were three of us this morning
I'm the only one this evening
But I must go on ;
The frontiers are my prison.

Oh, the wind, the wind is blowing,
Through the graves the wind is blowing,
Freedom soon will come ;
Then we'll come from the shadows.

Les allemands étaient chez moi,
Ils m'ont dit : "résigne-toi",
Mais je n'ai pas peur;
J'ai repris mon arme.

J'ai changé cent fois de nom,
J'ai perdu femme et enfants
Mais j'ai tant d'amis;
J'ai la France entière.

Un vieil homme dans un grenier
Pour la nuit nous a cachés,
Les allemands l'ont pris ;
Il est mort sans surprise.

Using highly recyclable language, applied in the topic's context

Grammatical concepts were introduced as part of the content study, with learners developing their linguistic understanding through exposure and application~

.

j'ai joué	I have played
ils ont cassé	They have broken
ma sœur a aidé	My sister has helped
j'ai écouté	I have listened
Les alliés ont débarqué	The Allies have landed
Nous avons mangé	We have eaten
maman a caché	Mum has hidden
j'ai visité	I have visited
Nous avons rencontré	We have met
Paul a demandé	Paul has asked
vous avez parlé	Have you spoken
Ils ont massacré	They have massacred
Les allemands ont débarqué	The Germans have arri
Ils ont emmené	They have taken away
J'ai attendu	I have waited

Offering challenging content, manageable through the use of cognates

Here, learners were presented with a range of statements following the same sentence structure (repetition) and the use of cognates to support their understanding of more complex language (use of context).

Le mystère d'Oradour-sur-Glane

Oradour est un ancien village qui date de la période romaine.
Oradour n'est pas un vieux village: il a été construit en 1947.

Providing language needed by the students to carry out the planned activities

This is an example of a speaking frame learners were provided with to complete one of the collaborative tasks.

Le mystère d'Oradour-sur-Gla

est-ce que…	aller	pendant	génial
je peux…	visiter	avant	amusant
tu peux…	faire	après	terrible
il y a…	voir	depuis	affreux
c'est…	jouer		intéressant
parce que…	se promener		joli
à cause de…	acheter		
grâce à…	manger		
quelque chose que			
quelqu'un qui			

Offering intercultural experiences – through familiar themes, but unfamiliar perspectives

Here learners were given an opportunity to explore a known theme, that of the second world war, but through an unfamiliar perspective in more depth, by focusing on the events in Oradour sur Glane.

Paris
FRANCE
Oradour-sur-Glane

Tu peux trouver Oradour-sur-Glane sur la carte de France.

Tu peux expliquer en 1 phrase les événements qui ont rendu Oradour-sur-Glane célèbre?

Mais comment était la France pendant la Seconde Guerre Mondiale?

developing intercultural attributes, with a focus on empathy and a sense of curiosity

Here, learners were introduced to the events through the eyes (and the personal diary) of Roger Godfrin, a child survivor from the massacre in Oradour sur Glane.

Promoting affective motivation through the use of engaging and relatable content

Learners had the opportunity to watch a full-length movie in the target language (French) with English subtitles – engaging with a different and relatable medium.

supporting learners in *accessing* cognitively challenging language

This was a challenging listening task, involving authentic testimonials from survivors – the task was carefully scaffolded so that learners were successful in applying their listening skills.

	NOM	AGE	PROFESSION	HEURE?	OU?	AVEC?	BLESSE(E)?
1	Marguerite Rouffranche	47		14h	maison	fille	OUI
2	Roger Godfrin		écolier		école	professeur	NON
3	Robert Hébras		mécanicien		Oradour	copain	OUI
4	Jacqueline Pinède	19		14h	maison	soeur et frère	NON

supporting learners in *producing* cognitively challenging language

This was another example of a speaking frame used for a paired activity where learners had to take on the role of one of the survivors sharing their experience with a reporter.

Tu t'appelles comment?
Ça s'écrit comment?
Tu as quel âge?
Quel est ton métier?
A quelle heure sont arrivés les allemands?
Où étais-tu?
Avec qui étais-tu?
Où t'ont amené(e) les allemands?
Comment t'es-tu échappé(e)?
Etais-tu blessé(e)?

J'ai … ans.
Je me suis échappé(e) …
Je travaille comme…
J'étais …
Je m'appelle…
J'étais / Je n'étais pas…
J'étais avec …
Les allemands m'ont amené(e) dans…
Ça s'écrit…
Les allemands sont arrivés à… heures.

Developing learners' ability to work collaboratively to produce meaningful outcomes

Students had to produce their own account to share what they had learnt and were expected to supplement their work with their own research and illustrations.

Oradour-sur-Glane

You are going to prepare an article for the next newsletter / scho
website.

In this article, you will explain what you have been learning so fa
French lessons about World War 2 and the village of Oradour-su
Glane, and what happened there.

You will work in pairs.

The best 3 entries will win a prize and will feature on the school'
website / in the next newsletter.

Developing learners' ability to work independently to produce meaningful outcomes

Here, learners were asked to prepare an individual presentation in the target language, following pair practice in class.

LES DEVOIRS

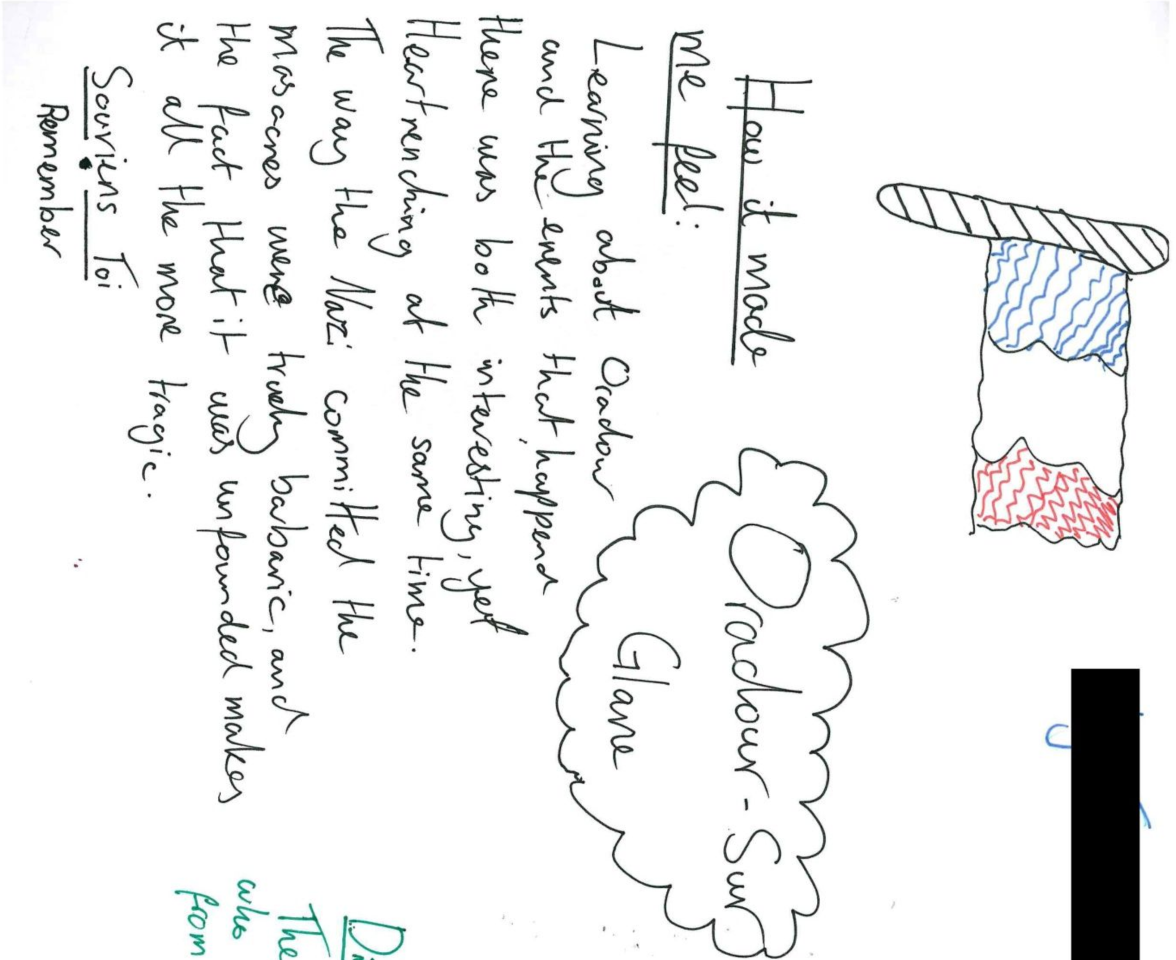
Imagine that you are one of the survivors. You may keep your name or invent a French name for yourself, or even research one of the other survivors of the massacre.

Prepare a spoken presentation lasting 2 minutes about yourself, and your experience in Oradour. It should cover your basic personal details (name, spelling, age, job, family) as well as detail where you were, who with, what happened etc.

Use the notes you made today, as well as handouts from previous lessons. Use the internet to help you if necessary.

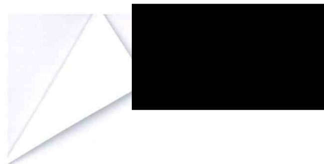
You will present and/or record your presentation next lesson.

APPENDIX 2



MIND MAP - PUPIL REFLECTION ON CONTENT (HALF-WAY THROUGH INTERVENTION PHASE)

APPENDIX 3



Creative written piece from pupil putting himself in the place of one of the survivors. Low ability pupil who only started French at the start of the academic year. No writing frame provided. Pupils only used notes from previous tasks, such as the extended reading tasks, to complete the work.

Mon Témoignage

10th Juin 1944

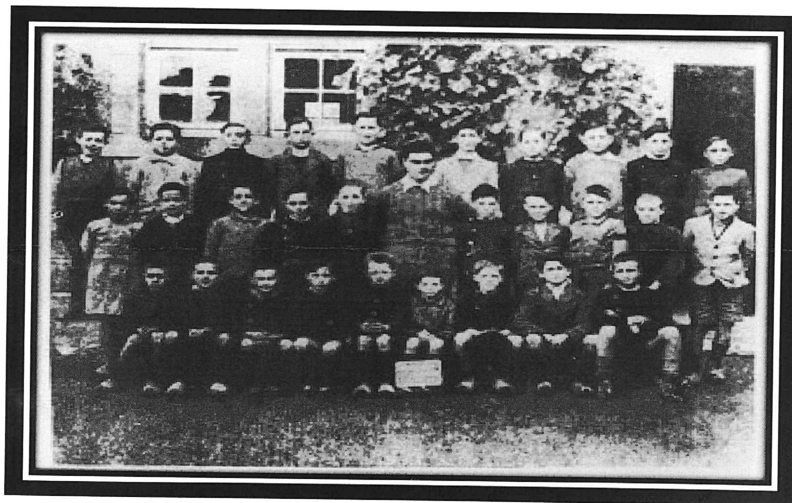
Je m'appelle Sur Vivoir, ca s'écrit avec en V. J'ai treize ans et je n'ai pas en métier. J'adore bonbons et faire du vélo. Je habité a la Oradour-sur-Glane, jusqu' a les allemands arrivé...

J'ai, je eu, une sœur, qui s'appelé Maria, elle est morte.

Quand les allemands arrivé, j'étais à l'école. Je savais que les allemands étaient dangereux parce que mon père a été lue par les a la guerre.

J'ai couru pour le foret, avec un ami, qui s'appelle Roger. Nous avons vu la fumée, le village était massacré

Apres la guerre, je vais aller et résidé dans le Oradour-sur-Vayes, avec ma grand mère et mon grand père.



sciendo

e-TEALS no. 9 | 2018
Special Edition
An e-journal of Teacher Education and Applied Language Studies

Ten Fundamentals for Novice CLIL Teachers

Pilar COUTO-CANTERO & María BOBADILLA-PÉREZ
| University of A Coruña

Abstract | The main aim of this paper is to provide novice CLIL teachers with advice on key areas related to the implementation of this approach. This is done through the presentation of 'ten fundamentals' with their corresponding literature review, activities and suggestions contextualised within the framework of a defined Teaching and Learning Unit, and a final tip, all of which, it is hoped will empower future CLIL teachers in their classroom practice. Materials have been designed by the authors according to the Spanish National Curriculum and the textbook selected to use as an example is: *Natural Science 6. In Focus* for 6th year at Primary School Level with content designed by Spencer and published by Anaya.

Key words | CLIL, Bilingual Education, Teacher Training, Didactics, EFL

Citation: Pilar Couto-Cantero and María Bobadilla-Pérez, "Ten Fundamentals for Novice CLIL Teachers." *e--TEALS: An e-journal of Teacher Education and Applied Language Studies* 9 Special Edition (2018): 108-131. ISSN 1647-712X

10.2478/eteals-2018-0015

1. Introduction

The implementation of plurilingual policies in many schools in across Europe is a quite recent practice which was originally encouraged by the publication of the Common European Framework of Reference for Languages (CEFRL). The immediate consequence has been that teachers who become involved in Content and Language Integrated Learning (CLIL), whose institutions become part of plurilingual school networks, are neither sufficiently competent L2 users nor possess basic training in CLIL principles. This article has been driven by our experience with teachers in the context of Galicia, Spain, who are facing this new challenge of introducing Science, Maths, Music and many other subjects through English. It should also be useful for pre-service teachers, because in the face of the linguistic policies promoted by the Council of Europe, it is very likely that in their future profession they will be asked to teach through CLIL.[1]

In order to design and put into practice a CLIL Teaching and Learning Unit[2] (henceforth TLU) without becoming too despondent, it is important to be guided and to have some structured ideas about what exactly needs to be done. Moreover, in our teacher training faculties and in international conferences about CLIL, it is very common to hear pre-service teachers, and even in-service teachers, asking for the miraculous recipe to create CLIL TLUs and wanting to know exactly how to implement this approach. Copious articles which draw on the complexity of Content and Language Integrated Learning and the need for teacher education have been written (see Coyle in “CLIL: Motivating Learners and Teachers”; Marsh; Mehisto; Ellison), as well as others which focus on specific national contexts (see Pérez Cañado; Lasagabaster; Cenoz; Bobadilla--Pérez; Couto-Cantero; Pavón; Huertas Abril & Gómez Parra for discussion on this in the Spanish context). Despite this, some teachers remain hesitant about implementing this approach, and continue to ask the same questions: *Yes, I know the principles, I have read the theory… but now, what can I do in my classroom? How do I start?*

Therefore, the idea for this article was conceived within the framework of a workshop implemented by the authors at the Working CLIL 2018 Colloquium at the University of Porto with

the purpose of answering these questions in a practical and clearly structured way. To this end, ten key suggestions with contextualised examples are presented in order to help teachers know how, when and where to start with CLIL. Finally, some conclusions and further information are included which may contribute to their lifelong learning and professional development.

2. Ten CLIL Fundamentals

It is important to highlight that first-time implementation of any educational approach requires great effort and prior study. From the many pieces of advice which could be given to enrich CLIL teachers' first experiences in the classroom, we have selected ten 'key fundamentals' which we consider of paramount consideration. These are framed within the following areas: Basics – the 4Cs, Teacher roles, *Curriculum*, Materials, Languages, Management, 21st Century Skills, Online resources, Cooperative Learning, and Assessment.

In order to contextualise and give real shape to our ten CLIL fundamentals, some specific examples taken from Unit 1: "Living beings: cells and functions" from the textbook *Natural Science 6. In Focus.* (Primary 6, 11-12 years old) with content designed by Spencer are offered after each one. A tip which encompasses the main idea of each section is also provided (4-13).

2.1. *CLIL Basics – the 4 Cs*

One of the most important considerations when preparing for CLIL is its multiple focus on four interrelated principles: Content, Cognition, Communication and Culture. These can be viewed as a useful framework for planning lessons (Coyle, Hood and Marsh). Regarding the first, when planning for Content in CLIL it is important to allow for knowledge acquisition while simultaneously fostering personalised learning (Meyer et al.) by helping students build their own knowledge as will be explained below.

As far as Cognition is concerned, the progressive development of cognitive skills is central in the CLIL classroom (Coyle, Hood and Marsh). These skills based on Blooms' Taxonomy of

thinking skills and later revision by Anderson & Krathwohl are: Lower Order Thinking (LOTS): remembering, understanding, and applying, and Higher Order Thinking (HOTS): analysing, evaluating and creating. The idea in CLIL is to progressively promote a learning environment where students, from early childhood stages, are challenged to use all thinking skills. The level at which they are practised at any learning stage will be defined by the complexity of the activities implemented.

The C for Communication encourages students to participate in meaningful interactions aiming to increase Student Talking Time (STT) while reducing Teacher Talking Time (TTT). When planning CLIL lessons, it is helpful to organise linguistic objectives following Coyle, Hood and Marsh's *Language Triptych* which "supports learners in language using through the analysis of the CLIL vehicular language" (36). This Triptych is composed of three elements: The Language *of* learning, related to the content and structures related to the topic; the Language *for* learning, which is the language needed to operate in any learning environment such as asking and answering questions or language for cooperative work, and the Language *through* learning, which refers to all the language which has not been planned for, but emerges during the teaching and learning process.

The CLIL teacher must always plan for the language *of* learning and the language *for* learning. Just as a CLIL lesson should aim to challenge students and all thinking skills, students should also have access to "unknown language" (Coyle, Hood and Marsh 63) that might come up, for example, while researching for a particular project where students might need the help of a dictionary, or the teacher´s support.

'Culture is at the core of CLIL' as Coyle states in "CLIL: Motivating Learners and Teachers". The role of Culture as a means of understanding ourselves and other cultures is an important element of CLIL as well as for the development of intercultural competence. The development of intercultural competence is also discussed in the *Common European Framework of Reference for Languages* document (CEFRL) where the relationship of language and culture is addressed:

> Language is not only a major aspect of culture, but also a means of access to cultural manifestations. Much of what is said above applies equally in the more general field: in a person's cultural competence, the various cultures (national, regional, social) to which that person has gained access do not simply co-exist side by side; they are compared, contrasted and actively interact to produce an enriched, integrated pluricultural competence, of which plurilingual competence is one component, again interacting with other components. (4)

The promotion of intercultural awareness in the CLIL classroom should not aim to address other cultures exclusively; it should prepare students to succeed in the globalised world. It is also important to acknowledge that "factual knowledge about other countries and cultures is not enough for successful intercultural communication; neither are foreign language skills alone. Cultures differ in many aspects including view of self, perceptions of time, and verbal and non-verbal communication styles, which need to be taken into account also" (Meyer 19). Therefore, all of these elements should be introduced in any CLIL learning environment.

If the teacher chooses to use a particular textbook, the following questions might be helpful to check if the CLIL approach is effectively implemented in the TLU: Which topics are students going to learn about? (Content); what language is needed and what new language might come up? It could be helpful to plan language using the above mentioned Language Triptych (Communication); are LOTS and HOTS developed in the different activities included in the textbook? (Cognition); and how is culture integrated in the Unit? (Culture).

Tip 1. Do not forget to plan according to the 4Cs. All are equally important and should be adapted to the context of the classroom.

2.2. *The CLIL Teacher's Role*

Most recent studies have based the teaching and learning process on a student-centred approach or curriculum (Nunan), and even though this is an important aspect to bear in mind, the teachers' role in CLIL settings has become a more and more concerning issue. According to Pavón and Ellison:

> CLIL is above all else ´thinking-centred´. As it is participatory and dialogic, it involves teachers and learners in thinking about ways of 'reaching' content and the means of expressing an understanding of it. It demands self-awareness and self-regulation as it involves conscious thinking about learning processes. (63)

Although it may be agreed that the learning process requires conscious thinking by both parties, teachers play the most important role in ensuring a successful experience (Couto-Cantero & Bobadilla-Pérez). As learners are guided by teachers, it is the teacher's responsibility to conduct the learning experience from the beginning to the end to reach the expected outcomes. Moreover, Pérez Cañado insists on the fact that there must be a "reconfiguration of the teacher´s roles" due to the relative novelty of the CLIL approach:

> This reconfiguration of teacher roles is an initial demand which CLIL places on the practitioner. Concomitantly, there are other potential barriers which they may encounter in CLIL implementation. A first of them is the relative novelty of the project: teachers who embark on this difficult enterprise can apply little of others' navigational knowledge. A further issue which is highlighted as a possible pitfall is the increased workload which CLIL entails for instructors: it requires a great deal of initiative and effort on their part, as well as learning to collaborate and liaise with other content and/or language colleagues in order to guarantee integration. (203)

This fact makes teachers feel insecure and therefore need to learn how to prevent anxiety and negative feelings or emotions (Arnaiz). Teachers must be capable of creating a positive atmosphere using techniques or strategies to connect with learners and build up mindful settings which help them to focus on the tasks and avoid stress, anxiety and lack of motivation (Gámez). The perfect balance lies in the CLIL teacher's ability to do this and engage students' participation at the same time.

The teacher's role as the leader guiding a successful CLIL learning experience can be illustrated briefly by the following practical example entitled: "What are living beings?" from the coursebook designed by Spencer entitled *Natural Science 6. In Focus.*

There are certain scientific conditions that differentiate a living being from a non-living being. Living beings are made up of cells and complete the three vital functions of nutrition, interaction and reproduction.[3]

Figure 1. What are living beings? (Source: *Natural Science 6. In Focus* (Spencer 4))

In order to be prepared to explain the difference between living beings and non-living beings in Unit 1, the CLIL teacher must make a lot of prior decisions. First, check if the 4Cs are applied and decide if the concepts are clear. What exactly does the translation from *materia inerte* (in the Spanish textbook) to 'non-living beings' mean? Can a `being' be 'non-living'? Wouldn't it be better to find another word in English to clarify the difference? Second, should the teacher play the audio track or not? If so, how many times? Would it be better to read it? Third, is it possible to change this sentence into an active task to be done by students so that they internalise the concept and the meaning of both terms? Our suggestions give answer to these questions. Perhaps we could use the word "objects or things" instead of "living beings". We could play the audio track two or three times, or read the sentence first and ask students to read it after. Finally, learners could do one or more of the following: prepare a drawing including both concepts, a list including the main characteristics of each concept, play roles (a cell, a rock, etc.).

Tip 2. CLIL teachers must make decisions when comparing textbooks with the corresponding Curriculum in order to ensure that tasks presented allow for meaningful learning.

2.3. *CLIL & Curriculum*

Teaching through CLIL should not imply a reduction in the coverage of subject-specific content. This is actually one of the biggest concerns of many teachers attempting to implement CLIL in their classrooms. Some instructors seem to be afraid that teaching through a foreign language will make it difficult to cover all the specific content for a particular year, while simultaneously attempting to foster communication in a foreign language and promote cooperative learning.

Several actions or strategies should be taken when implementing plurilingual methodologies in the classroom in order to properly address and apply the guidelines required in the Curriculum. Scaffolding language and content learning is one of them. Scaffolding is temporary support in the present, for what students will be able to do alone in the future. It is linked to Vygotsky's Zone of Proximal Development which, according to Coyle, Hood and Marsh refers to "the kind of learning which is always challenging yet potentially within reach of each individual learner on condition that appropriate support, scaffolding and guidance are provided" (29).

Regarding the scaffolding of language without reducing subject-specific content, language support can be provided using different strategies: using glossaries; speaking slowly and clearly; using body language; using the L1[4] (which shall be discussed later); modifying the presentation of task outcomes by the students; for example, instead of writing an essay; drawing a picture, a diagram, etc. Communication does not always have to be verbal; non-verbal communication can be used and it is strongly recommended.

Content scaffolding can be provided using multi-modal input such as "ways of presenting subject specific matters visually (through maps, diagrams, etc.) which not only allow for diversified teaching and promote visual literacy, but also enable a deeper understanding of the specific subject content and serve to illustrate and clarify complex matters presented in a foreign language" (Meyer 14). It would be advisable to diversify the way content is presented as much as possible, avoiding the exclusive use of written texts to explain or define new concepts.

It is also important to carefully review the national curriculum which the teacher must follow. Therefore, when creating one´s own material or using textbooks, one needs to always make sure that the content and concepts specified in the curriculum are presented. For example, when using a textbook from any publisher, it is a good idea to review and compare the contents discussed in a particular TLU with those required for the year it is intended as textbooks might sometimes provide more information than needed.

Pavón and Rubio emphasise the importance of an open integrated Curriculum in CLIL where "teachers involved in plurilingual teaching contribute to the goals and common contents of their linguistic and non-linguistic subjects" (59). Within the frame of an integrated curriculum, foreign language teachers should coordinate with content teachers to support communication in the CLIL classroom. We agree with Pavón and Rubio when they argue that "the selection and organisation of the contents of the Foreign Language should be subject to the needs of the non-linguistic subjects, but that an effort should be made to adapt the sequence of those contents" (52).

Full coordination between a foreign language subject and non-linguistic subjects is in fact very difficult, but language can be given in the foreign language classroom. For instance, the passive voice as in the example "…living beings are made up of…" (6) is a very common structure in Primary Science books, but it is not grammatical content included in the FL Curriculum for that level. These grammar structures that arise in CLIL lessons and that are not included in the FL Curriculum might be practised in communicative activities or games in the English classroom, so that students become familiar with them naturally.

Tip 3. CLIL teachers must not reduce curricular content when implementing the CLIL approach.

2.4. *CLIL & Materials*

It is common to find CLIL teachers adapting or designing their own materials in order to focus on attention to both language points and subject content, whilst adhering to the corresponding

Curriculum in which the context of the teaching and learning process is going to take place. Moreover, special attention to different learning styles (Massler et al. 66-95) is also needed, and students with Special Educational Needs (SEN) have to be taken into consideration in materials design. Educators may think that this is a very hard, time-consuming process which indeed it is, but, as a starting point, we suggest first selecting a small section of the TLU in the recommended textbook in order not to be overwhelmed.

Once this has been done, the next step would be to transform any complex content into feasible tasks through an active learning methodology, so that learners are aware and conscious of their own learning process. The following questions could help to accomplish this: Does the textbook require any supplementary resources to support learning? Are authentic materials or *realia* needed to help learners to understand non-linguistic concepts? To what extent does the use of hand-made materials made by teachers or the students motivate learners in a CLIL classroom? (See Figure 2 and the example below).

Cells can obtain and use nutrients, respire and release their waste.

- Cells that use **autotrophic nutrition** make their own nutrients by combining water, carbon dioxide and solar energy. Cells that use **heterotrophic nutrition** take nutrients from other living beings.
- Most cells use oxygen from their environment to respire.
- Cells use nutrients and oxygen to obtain energy, to grow and to regenerate. While doing this, they produce waste material.
- Cells release waste material to the exterior of the cells through the cell membrane.[5]

Figure 2. Cells and vital functions. (Source: *Natural Science 6. In Focus* (Spencer 5))

In this particular example, CLIL teachers could transform the "cells and the nutrition function" paragraph into easily accessible tasks for students. According to Ting and Martínez, this needs to be done in order for learners to nurture the concept of ownership of their own learning. For instance, in a consolidation stage, learners in groups could be asked to create a concept map or drawing with the functions and key concepts, or, again in groups, a live representation of the two possibilities of nutrition: autotrophic (self-nutrition) and heterotrophic (learners representing other living things).

Tip 4. Always consider checking the National Curriculum's guidelines on the TLU and how the textbook supports this learning. Be prepared to adapt materials and tasks accordingly.

2.5. *Code-Switching and Translanguaging in CLIL Settings*

Despite previous debate on whether using the L1 in CLIL lessons would be counterproductive or not, research has proved that CLIL may benefit from a certain coexistence of both languages (Méndez García & Pavón Vázquez). The use of the L1 can provide communicative support in the CLIL classroom. Besides, "studies seem to confirm that L1 use decreases at the same time as L2 proficiency increases" (Lasagabaster 4). Contrary to the idea that L1 usage is due to poor language proficiency, the appearance of both languages in students' and CLIL teachers' speech may point to a deeper understanding of both languages. In this discussion, the concept of 'translanguaging' has become a key element to support the use of the L1 in the CLIL classroom. On the contrary, in the foreign language classroom the trend has been to avoid the use of the L1 as a reaction against traditional methodologies. Nevertheless, other researchers acknowledge that "in the 1990s there was a shift in the pendulum and more importance was once again attached to the mother tongue in the foreign language classroom" and that current "practices such as codeswitching and translanguaging are still controversial" (Lasagabaster 3). On the one hand, the use of the L1 may help students to feel confident in a foreign language learning environment; but on the other, there is still a fear that the L1 might interfere with the L2.

In CLIL, with a dual focus on content and language, the use of the L1 is not such a controversial topic. Codeswitching practices, broadly defined as "the use of two or more linguistic varieties within the same conversation" (Myers-Scotton) have actually proven to be effective both for teachers and students. Studies carried out in bilingual and multilingual communities have shown that codeswitching is a highly structured practice. In fact, its effectiveness in the classroom can also be proved because "Bilingual and multilingual children learn the rules of codeswitching from a very young age, and are capable of assessing the appropriate language choice of the situation, the topic and the language preference of the listener" (Wei 399).

The use of the L1 in the CLIL classroom becomes relevant as a scaffolding strategy to support complex issues. Research such as that conducted by Lasagabaster reports that it is important that teachers become aware of learners' codeswitching practices "to reflect on the reasons for their choices" (17). But in order to be effective, it must be pedagogically planned and "if judicious, can serve to scaffold language and content learning in CLIL contexts, as long as learning is maintained primarily through the L2" (Lasagabaster 18). Nevertheless, teachers should not use the L1 when it is not strictly needed. In Figure 3 below, a large number of cognates can be found, e.g.: algae, protozoa, unicellular, etc. If learners are aware of these terms in L1, (which is the case), those cognates make the text clear enough to be understood in the L2 without the L1 interfering.

The **Protoctista** Kingdom contains **unicellular** and **multicellular organisms** that can live in water or in **humid** earth. They can also live inside **other** living beings. **Protozoa** belong to this kingdom and so do **algae**.

Protozoa

Protozoa are **unicellular**, have got a **nucleus** and are **heterotrophic** (they feed on **other** living beings). Some **protozoa** can cause **serious** diseases.[6]

Figure 3. The Protoctista Kingdom. (Source: *Natural Science 6. In Focus* (Spencer 9))

Tip 5. Do not be afraid to use the L1, but do so strategically.

2.6. *CLIL & Classroom Management*

According to (Kelly et al.), classroom management can be defined as the "management of learners' behaviour and activities to help structure relationships that support learning" (117). It is important for CLIL teachers to help to develop and be able to control students' behaviour. This involves negotiating codes of conduct and emotional issues which are not usually learnt or taught on teacher training programmes. Advice regarding these issues is therefore necessary.

How to organise space, manage the classroom as well as select the modality to give CLIL lessons is very important particularly for group work involving problem-solving tasks which are a feature of CLIL lessons. Regarding classroom management, case study methodology whereby teachers analyse what has happened in particular scenarios can be very useful to learn how to react. Imagine this situation arising from the textbook section on: "How cells are organised". Learners have to explain in their own words how unicellular living beings are organised, but they shout and use their L1.

Living beings have different levels of complexity. Their complexity depends on the number of cells they are made up of and how organised their cells are. There are unicellular living beings and multicellular living beings.[7]

Figure 4. How cells are organised. (Source: *Natural Science 6.* In Focus (Spencer 6))

How can you as a CLIL teacher manage this situation? What can you do or say in order to revert to the learning process? How can you get the learners to speak in the L2? For novice teachers, in our opinion, it is very important to start building up your own "CLIL Problem Solving Toolkit" in which you include enough resources and strategies to manage (un)expected difficulties and consolidate your teaching styles for the future.

We suggest recording reflections on practice using the following question prompts: What happened to trigger the incident? How did students react? What did *I* do? Did my actions work or not? Why? How can this be avoided in the future? Teachers can share different incidents with

other CLIL teachers, thus building up a repertoire of tried and tested techniques and strategies for their Toolkit.

Tip 6. Prevention is better than cure, but be prepared by building up your own "CLIL Problem Solving Toolkit".

2.7. *Fostering 21st Century Learning and Innovations Skills in the CLIL Classroom*

Apart from the 4Cs mentioned in previous sections, there is another set of 4Cs which must undoubtedly be considered by CLIL teachers. These are: Creativity, Critical Thinking, Communication and Collaboration which are synonymous with learning and innovation skills recognised as those that make the difference between students who are prepared for their life and work environments in the 21st century and those who are not. According to the research team involved in the P21 – the Partnership for the 21st Century Learning[8], it is a crucial to empower our learners with a focus on these 4Cs for the future. It is important to point out that all of them are key concepts to be developed in CLIL settings for the teaching and learning process to be successful. A clear example based on the textbook and TLU selected for this purpose follows Figure 5 below:

The Monera Kingdom contains mainly bacteria. Bacteria are unicellular and they haven´t got a nucleus. Bacteria can be found on land, in water, air and inside other living organisms. There are about a million bacterial cells in just one millilitre of fresh water! You need a microscope to see bacteria because they are so tiny.[9]

Figure 5. The Monera Kingdom. (Source: *Natural Science 6. In Focus* (Spencer 8))

Think about the importance of using the P21 4Cs: Creativity, Critical Thinking, Communication and Collaboration to present the Monera Kingdom in an active, hands-on way. Consider creativity as a tool to help learners to understand concepts (bacteria, nucleus, etc.) or language learning (write a definition of the meaning of bacteria). How can we promote critical

thinking throughout this activity? Is it possible for students to collaborate with each other to find creative explanations for the different shapes of bacteria cells? And finally, how can learners communicate their findings, not only in the classroom, but to the whole teaching and learning community? A possible answer to all of these questions is Project Based Learning (PBL), so learners could learn the Monera Kingdom by doing a project in which creativity, critical thinking, collaboration and communication are included.

Tip 7. There are no limits when exploring and promoting 21st century skills in CLIL settings.

2.8. *CLIL & Online Resources for Novice Teachers*

Despite the efforts made by publishers to design CLIL textbooks for many content subjects, teachers still feel that not enough resources are provided for them. On the one hand, these textbooks, regardless of their pedagogic quality, are not intended for the needs of any single group of students, which is also true for non-CLIL textbooks. On the other hand, as previously mentioned, the CLIL approach fosters interdisciplinary learning through the implementation of cooperative learning practices. CLIL textbooks mainly focus on just one particular subject, although some cross-curricular topics might be introduced. In order to compensate for the lack of resources, many websites offer a great number of activities and other materials adapted for use in CLIL classrooms (see for example, the British Council links, Isabelperez.com and CLIL4teachers site) and there are also online resources from English medium schools around the world.[10]

The Internet also provides an inexhaustible supply of authentic materials or *realia,* from news stories, You Tube videos to Ted Talks. Coyle, Hood and Marsh suggest teachers consider the following questions before using real texts from the Internet that might fit the purpose of a particular topic. Regarding the “message” – Is that what the teacher wants? Is it expressed in an accessible way? The mix of textual styles for presentation – Does it have visuals, graphics? Can it be read or heard? The level of subject-specific vocabulary – Does it provide the right amount of content vocabulary? The level of general vocabulary – Are there many complex words? The

level of grammatical/syntactical complexity – Are the sentences too complicated? The clarity of the line of thinking – Is the text overt? (93).

Furthermore, the Internet is useful for teachers to become part of CLIL networks. CLIL teachers all over the world should use the Internet as a platform to share and discuss experiences and challenges in their practices as Ellison suggests:

> Engaging in dialogue about new pedagogic interventions is an essential part of professional practice. Where there are other similar institutions within the same local/national context, coordinators should actively engage in sharing experience of practice, ideas and materials. Not only will this provide an important supporting network, but also potentially help to save time spent on materials production where materials are produced with national curricula in mind. (51)

Educators should search and find the network which better suits their teaching needs or research interests according to their socio-geographical contexts.[11]

Tip 8. Share your own resources and ideas with the CLIL teaching community.

2.9. *Criteria and Items for Assessment in CLIL Lessons*

Assessment for teachers is one of the most difficult elements in the CLIL planning process. What to assess becomes challenging when both language and content are introduced. According to Ellison, the answer to the question relies on the aim of the activity, task or project: "What to assess – content, language or both and how to do this will depend on the aims of the project. If these are mainly language-oriented, then there will necessarily be a firm focus on this. Both language and content teachers should be jointly involved in assessing learners in CLIL" (46).

Insofar as assessment is concerned, CLIL teachers and language teachers should, as much as possible, work in collaboration. If possible, language should be also addressed and assessed in the EFL classroom. However, the linguistic input in the CLIL classroom is very often higher than students' expected output and is frequently not included in the EFL curriculum. Language in the CLIL classroom can be assessed using a number of means, for example,

matching information, labelling diagrams, creating graphics or drawings. The CLIL teacher must bear in mind that it is not only about assessing productive skills – Speaking and Writing – but also receptive skills – Reading and Listening. If a text is understood, students should be able to organise key words in a graphic, or do a drawing about a specific topic.

Another key issue related to assessment is the acknowledgement that it is also a part of the learning process itself. Within the context of cooperative learning, assessment should be understood as something other than a set of tools used to gather information to give final grades. Assessment becomes a topic of conversation between students and teachers, as well as among classmates. In that sense, peer and self-assessment become crucial elements in the CLIL teaching and learning process as in non-CLIL subjects:

> Peer-assessment which refers to specific criteria and is carried out in discussion between two partners in class is valuable, because it centres a process where each student puts into words -and therefore rehearses- their individual understanding of the topic material. Self-assessment and self-evaluation are both likely to be better informed if they follow peer-assessment. (Coyle, Hood and Marsh 129)

In conclusion, what to assess in the CLIL classroom must be defined by the aims of a particular TLU in order to decide how to assess both content and language appropriately. Furthermore, it should be emphasised that peer and self-assessment play a highly relevant role in CLIL settings. Particular attention should be paid to the use of portfolios which are very useful for fostering autonomous learning and allowing space for creative thinking (Palacios). Depending on what methods are regularly used to teach, it is important to use diverse assessment tools such as rubrics, tests or systematic classroom observations.

Tip 9. Plan CLIL assessment according to the CLIL approach implemented.

2.10. *Cooperative Learning, Projects and CLIL*

From all of the well-known methodologies which may be considered when implementing a CLIL approach Cooperative Learning (CL) is, in our opinion, most worthy of consideration. The benefits

of CL have already been proven and this methodology seems ideal to help learners to work in CLIL settings in keeping with all the elements mentioned above including the 4Cs and P21 4Cs. CL is also strongly related to another possible means of learning which is based on the concept of "learning by doing" or a section that textbooks include at the end of each unit called "Projects".

Projects are being included more and more in textbooks so that students can benefit from more active methodologies instead of the traditional ways often perceived as 'boring' by students (listening to the teacher say: "Open your textbook and do exercises 1, 2 and 3 on page 49"). As we have previously mentioned, it is now common to find the so-called "project" at the end of the TLU. If we stop for a second and analyse these types of project, we may find that sometimes they are not "real" projects but reading comprehension activities, such as the one included in the following example in Figure 6 below. In this sense, teachers should ask if it really is a project, and if so, if it is useful for learners.

Project. Are viruses living beings?

Viruses are considered to be somewhere between living and non-living material. This is because they cannot perform vital functions on their own.
When they invade (or enter) the cell of a living being, they begin to multiply and produce more viruses. This destroys the healthy cell.
Because of this process, viruses cause many illnesses such as the flu, measles, polio and hepatitis.
Viruses are tiny and were only discovered long after the illnesses they caused. They can only be seen though a powerful electronic microscope.
On examination, it was found that they were not made up of cells, but are composed of a capsule, which contains geometric forms and genetic material with the information necessary for viruses to reproduce.

1) What is the difference between a bacteria and a virus?
2) Create a Hypothesis explaining why viruses are always harmful to cells they invade.
3) Some scientists call viruses 'obligate parasites'. Why do you think they are called this?[12]

Figure 6. Project. Are viruses living beings? (Source: *Natural Science.* (Spencer 12))

Projects are worth devoting a considerable amount of time to. A well-chosen, well--organised project can really motivate and engage both the teacher and learners. Teachers should consider planning real hands-on projects which involve learners working together throughout the process, making decisions, negotiating roles and 'owning' both the process and the product which may be presented to other groups. For this to be successful, the project has to be relevant, realistic and achievable. Should the project included in the textbook not meet your expectations, our suggestion is to elaborate your own instead so that learners actively participate, and you may use it as an alternative means of assessment.[13]

Tip 10. Consider using CL and PBL to get learners involved in working collaboratively in your CLIL lessons.

3. Conclusions

Being a "good" CLIL teacher requires more than being competent in a foreign language. Even though teachers are expected to be competent in the L2, if there is no appropriate training in the CLIL approach, they will not be prepared to present content through language effectively. The teaching profession is one of lifelong learning, so the CLIL teacher should never stop learning, through teacher training courses, from other teachers and from their own experiences.

Bearing this in mind, we have provided ten suggestions to become an effective CLIL teacher accompanied by contextualised examples. Our intention has been to present them in a practical way, making them easily understandable to those who are new to the approach. In doing so we have discussed a wide range of relevant topics, from CLIL basics, to dealing with the teacher's roles, resources and materials, classroom management, assessment, projects and cooperative learning.

We understand the teaching profession as a lifelong learning journey. Teachers in general should always try to improve their own practice, not only by learning about it through self-reflection, but also sharing their experiences and knowledge with the teaching community through active

participation in networks. Research in the field is also an important component in teachers' learning process since much can be gained from keeping up-to-date with the latest studies in the field. It is for that purpose that all of the works cited in this article are also intended to be a useful bibliographical selection for CLIL teachers.

Notes

[1] A previous article published by these authors (2017) has actually discussed the need to review teacher-training programmes at universities in order to introduce a compulsory CLIL subject.

[2] Teaching and Learning Unit (TLU) is the concept coined by one of the authors of this article, because it defines exactly the countable parts in which the teaching and learning process can be divided to elaborate learning sequences.

[3] Spencer, Deborah. "Unit 1", *Natural Science 6. In Focus*, edited by Denise Suárez, Anaya, 2015, www.blinklearning.com/coursePlayer/librodigital_html.php?idclase=22082240&idcurso=497510. Accessed 4 March 2018.

[4] In this article, L1 is used as the learner's Mother Tongue or Initial Language, while L2 refers to the Foreign Language.

[5] See note 3.

[6] See note 3. Bold is ours.

[7] See note 3.

[8] P21 The Partnership for 21st Century Learning (formerly the Partnership for 21st Century Skills) "was founded in 2002 as a coalition bringing together the business community, education leaders, and policymakers to position 21st century readiness at the center of US K-12 education and to kick-start a national conversation on the importance of 21st century skills for all students". For more information access: http://www.p21.org/about-us/our-history.

[9] See note 3.

[10] The British Council links: "Learn English", "Learn English Teens" and "Learn English Kids" offers learners and teachers a great variety of free-of-charge activities which can be both used for the EFL, as well as the CLIL classroom. Among the ones specialised in CLIL, the "CLIL4teachers" site includes a very comprehensive resource bank with planning tools and templates, general resources as well as subject specific ones (Art, Design & Technology, Drama, Geography, History, Maths, Music, Science and Sports). Particular attention should also be paid to the CLIL section on the website "Isabelperez.com", where CLIL teachers can not only find guidelines and steps to design a CLIL lesson, but also a whole section of resources classified in three groups: 1. CLIL worksheets, texts, activities in PDF or Power Point format; 2. CLIL online projects; and 3. a selection of materials for plurilingual institutions in Spanish Schools.

[11] The following networks are suggested as an example: "CLIL network – CETAPS", "MLTAV- CLIL Language Teachers' Network", "UP2Europe - CLIL Cascade Network", "Playing CLIL".

[12] See note 3.

[13] Some criteria for a "good" CLIL Project: it must be active, follow the 4Cs, follow P21 4Cs, fulfil targets and be assessed according to objectives and methodology.

Works Cited

Anderson, Laureen, and David, Krathwohl. *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. Pearson, Allyn & Bacon, 2001.

Arnaiz Castro, Patricia. "An Insight into CLIL in the Canary Islands Autonomous Community: Key Aspects and Students' Profiles". *Bilingual Education: Educational Trends and Key Concepts. Educación Bilingüe: Tendencias Educativas y Conceptos Clave,* edited by Mª Elena Gómez Parra and Richard Johnstone, Catálogo de publicaciones del Ministerio de Educación, Cultura y Deporte, 2017, pp. 235-48.

Bloom, Benjamin, et al., editors *Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain*, David McKay Co Inc., 1956.

Bobadilla-Pérez, María, and Pilar Couto-Cantero. "Teaching CLIL in a Post-Graduate Programme: Survey Conclusions on Teacher's Training Needs." *New Trends in Foreign Language Teaching: Methods, Evaluation, Innovation*, edited by António Lopes and Raúl Ruiz Cecilia, Cambridge Scholars Publishing, 2018, pp. 6-19.

Cenoz, Jasone, et al. "Critical Analysis of CLIL: Taking Stock and Looking Forward." *Applied Linguistics*, vol. 35, no. 3, 2014, pp. 243-62.

Council of Europe. *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*. CUP, 2001.

Couto-Cantero, Pilar, and María Bobadilla-Pérez. "Top Ten Key Words to Become an Impact Teacher". *New Trends in Foreign Language Teaching: Methods, Evaluation, Innovation*, edited by António Lopes and Raúl Ruiz Cecilia, Cambridge Scholars Publishing, 2018, pp. 157-74.

Coyle, Do. "Content and Language Integrated Learning: Motivating Learners and Teachers", in *The CLIL Teachers Toolkit: A Classroom Guide*, The University of Nottingham, 2007.

Coyle, Do, et al. *CLIL: Content and Language Integrated Learning*. Cambridge UP, 2010.

Ellison, Maria. "Implementing CLIL in Schools: The Case of the GoCLIL Project in Portugal." *e--TEALS: An e-Journal of Teacher Education and Applied Language Studies*, vol. 7, 2017, pp. 43-72.

Gámez Fernández, Cristina M. "On the Art of the Mindful Teacher, or Learning Mindfulness from Our Students." *Nuevas perspectivas en educación bilingüe: Investigación e innovación.* EUG, 2018, pp. 281-85.

Huertas Abril, Cristina A., and M. Elena Gómez Parra. *Inglés para fines sociales y de cooperación. Guía para la elaboración de materiales*. GRAÓ, 2018.

Kelly, Michael, et al. *European Profile for Language Teacher Education – A Frame of Reference*, A Report to the European Commission Directorate General for Education and Culture, 2004, www.researchgate.net/publication/235937694_European_Profile_for_Language_Teacher_Education_-_A_Frame_of_Reference. Accessed 15 Nov. 2018.

Lasagabaster, David. "The Use of the L1 in CLIL Classes: The Teachers' Perspective." *Latin American Journal of Content and Language Integrated Learning*, vol. 6, no. 2, 2013, pp. 1-21.

Massler, Ute, et al. "Effective CLIL Teaching Techniques." *Guidelines for CLIL Implementation in Primary and Pre-Primary Education*, edited by Sophie Ioannou-Georgiou and Pavlos Pavlou, European Commission, 2011, pp. 66-97.

Méndez García, María del Carmen, and Víctor Pavón. "Investigating the Coexistence of the Mother Tongue and the Foreign Language through Teacher Collaboration in CLIL Contexts: Perceptions and Practice of the Teachers Involved in the Plurilingual Programme in Andalusia." *International Journal of Bilingual Education and Bilingualism*, vol. 15, no. 5, 2012, pp. 573-92.

Meyer, Oliver. "Towards Quality-CLIL: Successful Planning and Teaching Strategies." *Pulso*, 2010, vol. 33, pp. 11-29.

Meyer, Oliver, et al. "A Pluriliteracies Approach to Content and Language Integrated Learning – Mapping Learner Progressions in Knowledge Construction and Meaning-Making." *Language, Culture and Curriculum*, 2015, vol. 28, no. 1, pp. 41-57.

Myers-Scotton, Carol. *Social Motivations for Codeswitching. Evidence from Africa*. Clarendon Press, 1993.

Nunan, David. *The Learner-Centred Curriculum: A Study in Second Language Teaching*. Cambridge UP, 1988.

P21 Framework for 21st Century Learning. *The Partnership for 21st Century Learning.* Pearson, 2015, http://www.p21.org/about-us/our-mission. Accessed 6 March 2018.

Palacios Hidalgo, Francisco J. "Evaluación educativa e inglés para fines sociales y de cooperación." *Inglés para fines sociales y de cooperación. Guía para la elaboración de materiales*, edited by Cristina A. Huertas Abril and M. Elena Gómez Parra, GRAÓ, 2018, pp. 87-104.

Pavón, Victor, and Maria Ellison. "Examining Teacher Roles and Competences in Content and Language Integrated Learning (CLIL)." *Linguarum Arena*, vol. 4, 2013, pp. 65-78.

Pavón, Víctor, and Fernando Rubio. "Teachers' Concerns and Uncertainties about the Introduction of CLIL Programmes." *Porta Linguarum,* 2010, vol. 14, pp. 45-58.

Pérez Cañado, María Luisa. "Are Teachers ready for CLIL? Evidence from a European Study." *European Journal of Teacher Education*, 2016, vol. 39, no. 2, pp. 202-21.

Spencer, Deborah. "Unit 1 Digital e-Book." *Natural Science 6. In Focus*, edited by Denise Suárez, Anaya, 2015, https://www.blinklearning.com/coursePlayer/librodigital_html.php?idclase=22082240&idcurso=497510. Accessed 4 March 2018.

Ting, Teresa, and Leonor, Martínez Serrano. *En el corazón de AICLE. Materiales y métodos. Manual para profesorado de Educación Secundaria*. UCO Press.

Vygotsky, Lev S. *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, Harvard UP, 1978.

Wei, Li. "The Nature of Linguistic Norms and their Relevance to Multilingual Development." *Multilingual Norms*, edited by Madalena Cruz-Ferreira, Peter Lang, 2010, pp. 397-404.

sciendo

e-TEALS no. 9 | 2018
Special Edition
An e-journal of Teacher Education and Applied Language Studies

CLIL4CHILDREN: Teaching Materials for CLIL Lessons in Maths, Geography and Science for Primary School[1]

Margarida MORGADO
| Polytechnic Institute of Castelo Branco (ESE/ CILCE)

Abstract | This article describes the didactic principles underlying the creation of a ready-made fifteen lesson plan package for primary CLIL (for Maths, Geography and Science) for pupils aged 5 to 12, developed through the collaboration of an international group of English and primary teachers, teacher educators, researchers and teaching materials developers across four European countries in the framework of the CLIL for Children (C4C) project (2015-2018) on educating teachers for CLIL teaching environments. These principles are presented in the framework of a brief state-of-the art discussion on the lack of ready-made teaching materials for CLIL, their importance for teacher development and quality teaching and learning in CLIL classrooms, and criteria they should conform to. The article proceeds by summarising the findings of two C4C surveys, one on best CLIL teaching practice through national reports of four European countries (Italy, Portugal, Poland and Romania) and the other on Open Educational Resources (OER) available for CLIL Maths, Science and Geography, as well as by drawing on C4C Guidelines. The article then demonstrates these principles in practice through a module of a three lesson plan sequence for CLIL Science on the topic "The World of Plants" by showing how language (vocabulary or content-specific terminology and language functions), specific communication skills, content and culture are integrated and developed through a child-centred, holistic (Brooks and Brooks), constructivist approach. Digital technologies are included as everyday learning processes for access to knowledge and playfulness in learning. Methodologies for active, experiential, discovery, problem solving and cooperative learning are foregrounded. The article further highlights how teacher cooperation and teacher identities (English and primary education teachers) as individuals with multilingual repertoires, expectations, and expertise are crucial for producing quality CLIL materials and resources.

Key words | CLIL, CLIL4CHILDREN, teaching materials, primary education

---

Citation: Margarida Morgado, "CLIL4CHILDREN: Teaching Materials for CLIL Lessons in Maths, Geography and Science for Primary School." *e-TEALS: An e-journal of Teacher Education and Applied Language Studies* 9 Special Edition (2018): 132-152. ISSN 1647-712X

10.2478/eteals-2018-0016

1. Context: Teaching Materials for CLIL

Voicing the concerns of many teachers involved with the CLIL approach in Europe, both primary specialist teachers and EFL teachers, Catenaccio and Giglioni (207) claim that the availability of suitable ready-made materials and lesson plans is critical for teachers who want to engage with the CLIL approach because there is a lack of materials (lesson plans, visual aids, worksheets, tutorials) available that focus on content and language. This lack of materials renders CLIL time-consuming for teachers as they will need to create teaching materials from scratch. Additionally, suitable ready-made teaching materials are particularly relevant for quality teaching since primary specialist teachers may lack confidence in their language competence and/or EFL teachers may be retraining for primary CLIL and may not yet be confident on how to develop suitable classroom materials that simultaneously address content, communication, cognition and culture in an integrated way.

Practice has shown, through the BEP – Bilingual Education Project Spain, the BEI-IBI – Bilingual Education Italy – Insegnamento Bilingue Italia (Cavalieri and Stermieri) and through the EBP – Early Bilingual Education Portugal, that teachers who were involved in these national British Council sponsored programmes either developed their own original teaching resources and materials, relied on regional/national project groups who produced the materials, or sometimes also adapted existing resources to their needs. Gómez (14) reports a similar concern for the Educational Administration of the Southern European Region of Andalusia, in Spain, in order to respond to a general complaint of teachers about lack of materials and about the concomitant time-consuming task of designing brand new materials. The author, however, warns against the a-critical use of CLIL materials from other countries, which led to several maladjustments, inconsistencies and inaccuracies (20).

Cavalieri and Stermieri (221) also document, in relation to the Italian experience, that teachers were unwilling to share their original materials online for two reasons: they either felt exploited by others who would use their materials without sharing anything in return or they experienced problems with the webpage to share materials, due to technical issues or the

teachers' own limitations. This may be true for other teachers involved in these projects as well and thus points to a sensitive area of CLIL teaching: materials that are or have been developed by CLIL teachers are not reaching the CLIL teaching community, or are being inadequately used by them, thus rendering the production and use of teaching materials parts of the same critical issue.

Nonetheless, training programmes for teachers have tended to focus on developing the CLIL methodology on a par with introducing teachers to online resources suitable for CLIL lesson plan development (Catenaccio and Giglioni 197). These resources are presented as leading to better teaching, but also to teacher's language improvement and should be selected, claim the above authors, through 4 Rs, namely materials need to be **r**eliable, **r**eady-made (such as audio tracks that can be used immediately), "**r**eadable-through", as teachers are very busy and prefer hands-on learning, and, as a consequence, **r**ewarding both for teachers and pupils (Catenaccio and Giglioni 205). Suitable ready-made materials may also counteract the "sense of incapacity in handling the challenge" (201) of quality CLIL practice.

While these criteria are important from the point of view of teacher use and their support for quality CLIL practice, in an article on CLIL learning materials and criteria for their production in order to ensure quality teaching, Mehisto combines general principles with CLIL specificities with a focus on the learners. The general principles for learning material production are that they help learners build relationships between what they already know, the community and what the study programme intends them to learn. Their quality is high if students feel motivated and engaged, while being accorded the space to reflect on what and how they are learning. Furthermore, materials are stereotype-free and inclusive of diversity and promote media awareness and responsible citizenship (Mehisto 16-17).

As to the specific criteria of CLIL learning materials, Mehisto defines ten criteria, which are very briefly summarised below: (1) making the learning intentions of the teaching materials visible for students, as the latter will need to understand a learning goal in order to work towards achieving it; (2) promoting the learner's academic subject-specific language by contrast to everyday language through suitable activities and learning situations; (3) supporting students in

becoming autonomous learners through activities that will enable them to self-scaffold their learning; (4) including self, peer and other types of formative assessment activities, so learners can use feedback for learning; (5) helping create a safe learning environment that promotes positive learning without stress; (6) fostering cooperative learning through activities that seek learner engagement with peers, groups and interaction with others; (7) incorporating authentic language and authentic (context and subject-specific); (8) promoting critical thinking through focusing on applying, analysing, evaluating and creating something; (9) fostering "cognitive fluency through scaffolding a) content, b) language, c) learning skills development helping students to reach well beyond what they could do on their own" (*ibid* 24); and (10) making learning meaningful by, for example, organising the curriculum in topics or using cross-curricular approaches so that learners can make connections.

Although principles for organising teaching materials are valuable, teachers will probably respond better to practical examples of what teaching materials could look like, since they will have their own ideas about what works in teaching and may be struggling with specific features of the CLIL approach, such as cross-curricular topic integration, integrated learning of content and language, or bilingual student-centred learning (besides interactive pedagogies and student--centred learning approaches when these are not part of their educational contexts). Catenaccio and Giglioni, for example, claim that teachers need more "hands-on, task-based lessons" to increase student talk and collaboration (419). Bailey argues that teachers need "clear, practical indications of brief activities that they carry out daily in their classrooms in the various subject areas", while also pointing out that teachers need to become familiar "with the resources that exist" (420).

The C4C (2015-2018) consortium thus sought to explore how best to support primary school teachers to improve and broaden their educational (CLIL) offer, while acknowledging their expectations regarding practices and intended outcomes of their new CLIL practice. It thus produced a ready-made fifteen lesson plan package for primary CLIL (for Maths, Geography and Science) for pupils aged 5 to 12, developed through the collaboration of an international group of

English and specialist primary education teachers, teacher educators, researchers and teaching materials developers across four European countries.

These materials respond to situated needs of primary school teachers in several national contexts. Teaching materials and the associated teacher education programme resulted from the interpretation and negotiation of a 'community of practice' of these specialist primary education teachers, EFL teachers, teacher educators, researchers, educational material developers and other stakeholders and were tested by them and other teachers in their own contexts.

In this article a sequence of three interrelated lessons on "The world of plants" will be foregrounded and commented on in connection with the principles for CLIL practice in primary education that this community of practice developed over the 2015-2018 period.

2. C4C: What Makes Good CLIL Practice: Methodology and Materials

It is difficult to acknowledge expectations of teachers regarding a new practice such as CLIL, especially when CLIL may be used to refer to a varied amount of exposure to L2. Teacher provision and education for CLIL may rely on specialist primary education teachers with an EFL competence from B2 to C2 or EFL teachers that may have had little training in primary education or lack an understanding of how children at an early age learn.

The C4C community of CLIL practice (11 researchers and over 80 teachers and teacher educators, among whom were educational materials developers) thus explored CLIL in primary education over a 3-year period through a mixed-method approach that involved online questionnaires to teachers, face-to-face-meetings, surveys, collaborative intensive sessions for materials development, pilots of materials, training programmes followed by teacher feedback collection and short dissemination actions with feedback collection. Through these methods, C4C developed a series of products that are used to describe principles for creating quality CLIL teaching materials: a C4C national state-of-the-art report was followed by a census on Open Educational Resources that led to a Concept Note on the main principles for CLIL. Two sets of Guidelines were produced, one on *How to Develop CLIL Materials and Lesson Plans in Primary*

Schools and the second set on *How to Use CLIL in Primary Schools*. These gave rise to the main C4C publication, a *Teacher's Guide on CLIL Methodology in Primary Schools*, with a first volume with a practical introduction to CLIL on how to develop CLIL materials for primary school use and a second volume with 15 lesson plans with teacher notes.

These will be briefly described as to their contribution to the development of C4C teaching materials.

2.1. *C4C State of the Art Report*

In 2016 the state of the art survey conducted by the partners of the C4C project highlighted a sample of successful examples of CLIL good practice in terms of pedagogic principles. Among these, it emerged that good CLIL practice is basically good teaching practice that is capable of integrating content and language learning, promoting communication and developing cultural awareness about using several languages in order to learn.

It was further recognised that CLIL practice worked best by aiding pupils to build their knowledge based on their own (local and social, school-related) funds of knowledge through experiential activities and cooperative work in cognitively rich learning environments. These findings are in line with Bailey (418) who argues that good CLIL practices are socio-constructivist teaching and learning methods, which promote interactive teaching and learning approaches.

The state of the art survey also highlighted the need for teachers (specialist primary education teachers and EFL teachers) to take a positive, critically reflexive stance towards emerging learning frameworks, such as CLIL, and cooperatively decide on how to appraise their strengths and weaknesses as teachers, as well as proceed with the necessary re-adjustments to teaching language and content in an integrated way.

2.2. *Guide to OER (Open Educational Resources) on CLIL for Primary Schools*

Through its initial survey into available quality Open Educational Resources on CLIL for Primary Maths, Geography and Science across a sample of European countries (the Czech Republic,

Italy, Germany, Poland, Portugal, Romania, and Spain), available online, the C4C consortium sought to identify available shareable lesson plans, materials and resources both for using with pupils directly in the classroom and to plan CLIL courses and lessons, as well as for the education and professional development of teachers for CLIL practice in schools.

In order to identify these OERs, the consortium pre-defined criteria that had to be met, namely that the OER takes the pupil's developmental stage, cognitive development and language competence into account; that it integrates content and language and demonstrates a good balance between them; that it encompasses a variety of learning activities that can engage pupils; that it combines mother tongue and English in the response expected of pupils; and that it includes suggestions on how to assess learning activities.

Furthermore, the selected OERs followed the criteria proposed by Ute Massler on relevance for primary school pupils, easiness of integration within the primary school curricula of the C4C countries (Italy, Poland, Portugal, and Romania), adaptability to the needs of primary pupils in those settings, visual attractiveness of materials, appropriate cognitive load of resources, accessibility, as well as potential for engaging and motivating pupils to learn.

This initial focus on OERs in their many diverse forms (course materials, streaming videos, multimedia apps, podcasts, and teacher-created resources) already highlighted the C4C consortium's focus on the need for teachers to use and adapt available online resources for their own practice. This is also an encouragement for teachers to innovate in their practice through incorporating digital content. Besides, OERs are cost-effective as teachers will not need to create materials from scratch, but just adapt existing materials to their classes' needs. One further advantage recognised in OERs is that they have been equally produced by specialist content teachers as well as by English as a Foreign Language (EFL) teachers, for contexts where English may be the mother tongue, L2 or FL, giving teachers opportunities to gain a better insight into each other's' perspectives on the subject matter to be taught and thus take advantage of cross curricular perspectives.

2.3. Guidelines on How to Develop CLIL Materials and Lesson Plans in Primary Schools

The *Guidelines on How to Develop CLIL Materials and Lesson Plans in Primary Schools* make it clear that the C4C consortium considers that the steps to be followed in CLIL class are basically the same as for any EFL class. There is a welcoming routine, an introduction to the lesson aim, including revision, presentation of new content; then there will be individual, pair or group work, supervised by the teacher. Added to this, there is some kind of formative assessment, such as checking if pupils have achieved the learning objectives, are aware of what and how they have learned, or have enjoyed learning or certain activities. At the end there will be a goodbye routine.

However, in order for planned integration of quality teaching materials, teachers will have to consider how specialist content may intersect with the A1 and A2 CEFR linguistic descriptors for primary, the learning interests of children, their suppositions and their learning needs.

Rather than focusing on lessons, teaching materials should be built around a topic and a learning sequence. The structure of a learning sequence includes lessons that grow from the more general to the more specific and eventually to a project the pupils will develop autonomously.

However, linguistic and content objectives need to be planned together for the sequence. Thus, for each lesson the intended learning should be made clear: the vocabulary needed, linguistic and learning skills to be acquired, and linguistic functions pupils will learn, practice and recycle.

In the case to be described in this article, for Science CLIL and a module on “The World of Plants”, designed for Primary grades 2 or 3; Lesson 1, which is more general, is on the “Physical Size of Plants”; Lesson 2, already more specific, is on “Plant Parts and Life Cycle”; and Lesson 3 is on the topic “The Growth of a Plant” where pupils are expected to grow a plant, record its growth, and write/speak about it.

Table 1 below summarises the linguistic, content, communication, and cognition objectives for each of the lessons in the learning sequence, as is found in volume 2 of the *Teacher’s Guide on CLIL Methodology in Primary*.

Lesson 1 Physical size of plants	Lesson 2 Plant parts and life cycle	Lesson 3 The growth of a plant
Linguistic objective	**Linguistic objective**	**Linguistic objective**
Vocabulary: physical size: big/small, medium, short/tall; plant, tree (oak; orange tree; apple tree; pine; palm tree; olive tree), shrub (rosemary; lemon grass; grapevine; green peas; juniper; lavender) herb (lily; tulip; daisy; daffodil; grass; mint)	Vocabulary: students name anatomical parts of plants (seed, roots, stem, leaves, flower bud, flower) and learn verbs connected with the life cycle of a plant (drop, grow, the sun shines, the rain falls, the flower opens).	Vocabulary: soil, pot, make a hole, drop a seed, cover with soil, pour water, sunlight.
Skills: students understand simple information about size of plants (listening); students pick up words (tree, shrub, herb) from authentic source (video) (listening and speaking); students create short texts (writing) and read them (reading).	Skills: students understand simple information from the authentic video and from the story told by the teacher.	Skills: Students follow instructions for an experiment.
Functions: students name and describe selected plants according to physical size, e.g. This is an oak. It is big.	Functions: students label parts of plants and order the stages of a life cycle.	Functions: students create text for pictures (source: picture book by Helen Nicoll & Jan Pieńkowski: *Meg's Veg* – online version animation film).
Content objective	**Content objective**	**Content objective**
Students recognise and name a series of plants and take note of their physical size: trees, shrubs and herbs.	Students name parts of plants and understand the life cycle of a plant.	Students hypothesise about how a plant will grow; Students plant and record growth of a plant through observation.
Communication	**Communication**	**Communication**
Students talk about plants and students contribute to class plant clipbook.	Students talk about parts of a plant and the life cycle of a plant.	Students talk about the life cycle of plants.
Cognition	**Cognition**	**Cognition**
Students classify according to categories (physical size of plants).	Reasoning – Students put the stages of a plant life cycle in a logical sequence.	Perception: Students prepare a zigzag book to record the changes observed in a growing plant; they hypothesize about the growth of a plant.

Table 1. Linguistic, content, communication, and cognition objectives for each of the lessons in the learning sequence "The World of Plants"

2.4. *Guidelines on How to Use CLIL in Primary School*

One key point made in the *Guidelines on How to Use CLIL in Primary School* in relation to teaching materials, from the point of the view of the learner, is visualisation as a means to support pupil understanding of a written or oral text and also to increase pupil motivation. Visuals they will need to perform will be clearer than if there were only written or oral instructions.

Visual elements in CLIL teaching materials may also support teachers while preparing lessons, as few will boast of a similar competence in both content and EFL and thus their linguistic or subject content planning is supported by visual elements. Additionally, not many teachers have the technical expertise required to produce some online graphics and animations as the ones to be found in some OERs and thus teachers have the opportunity to use learning materials of high visual impact.

However, since pupils' needs may be very diverse in terms of EFL competence, content mastery, learning style and personal interests, while making use of ready-made visuals, it is crucial to learn how to select (or adapt) those that are best adapted to various students' needs.

Additionally, it is important to use auditory teaching resources, such as videos and songs from YouTube or other online sources; kinaesthetic activities and tactile complementary learning materials; as well as make extensive use of digital technologies to develop media literacy in children.

In sum, the main advice for materials development in this publication is to integrate the verbal medium with visual aids, media and technology.

2.5. *Teacher's Guide on CLIL Methodology in Primary Schools*

In chapter 3, "Some principles and language for CLIL lesson planning" (section 3.2.) of the *Teacher's Guide on CLIL Methodology in Primary Schools* some practical principles for developing teaching materials are laid out, namely integrating the 4C's of CLIL (content, cognition, communication and culture), linking them with the prior knowledge of pupils, while also fostering pupils' experiences in connection to the new knowledge to be learned.

Visual, aural, and authentic materials are shown be to highly relevant for the CLIL approach because they contain unknown vocabulary for learners and thus can be used to teach them how to overcome fear of unknown linguistic structures by focusing on what they already know. While it is important for pupils to learn new lexical items before they can actually use them, it is equally important for them to infer meaning from context. Visual and illustrative elements will help with the development of this strategy.

However, it is also highly relevant that each learning sequence contains activities that address the diverse learning styles of children (Bandler and Grinder), so all can be actively involved in learning. Thus, learning activities presented either invite pupils to watch a movie, memorise one or two words or phrases, perform parts of the lyrics a song by using gestures, draw objects, use diagrams and charts, solve a problem or to guess answers for a quiz. The excerpt below gives a concrete example of a learning sequence on a module on Science on "The World of Animals".

> In Volume 2 in the Module on Science: The World of Animals – Lesson 2, on the Anatomical Parts of Animals, there is a selection of activities that address diverse learning styles. In the Introduction, students select an animal from a bag and talk about it; in Activity 1 drawings are used to learn and practise speaking about body parts of animals; in Activity 2 students stand in a circle, listen to a melody and mime action in a TPR exercise; in Activity 3, students in groups have cards with riddles and pictures and get involved in a guessing game; in Activity 4 students match body coverings of animals with animals on flashcards; in Activity 5, students complete a grid with body parts, coverings and animals by ticking boxes; for fast finishers there is a memory game with cards to be played in pairs.(31)

Another principle for developing teaching materials is to devise real communication and task-based learning. A suggestion is offered to make extensive use of learning activities with an information gap so that pupils will need to collaborate to complete missing information.

One last point made in this section is to support and challenge pupils in terms of language and cognition by creating extra options for fast finishers or more competent learners in terms of

language (or even older learners). Planning for extra activities will keep faster or more advanced learners interested in the learning process. For example, at the end of Lesson 1 of the learning sequence "The World of Plants", the whole class is involved in typing information to create an online class flipbook and individually each pupil is working on the cover competition for the flipbook. For fast finishers, it is advisable to plan an extra activity, such as reading the flipbook texts aloud in English and recording them for the class clipbook, which thus will be enriched with an audio version.

3. A Step by Step Description of a Learning Sequence

As mentioned above, the learning sequence that will be described is called "The World of Plants", available from volume 2 of the *Teacher's Guide on CLIL Methodology in Primary Schools* (8-21). As with all 15-lesson plans, this learning sequence was jointly created by a mixed group of specialist primary education teachers, EFL teachers, teacher educators and researchers. It was then piloted and implemented across several schools in Europe during 2017 by EFL teachers or specialist primary education teachers using a CLIL approach and English as the language of instruction. Their feedback was used to test what worked and did not work in all these different classrooms according to the principles agreed on and described above. These classrooms were both EFL and CLIL, taught by either EFL teachers in EFL classes in primary, specialist primary education teachers in CLIL primary classrooms, or by EFL and specialist primary education teachers in tandem in so-called bilingual or CLIL classrooms.

3.1. *Lesson 1: "Physical Size of Plants"*

The first lesson topic, "Physical size of plants", addresses a difficult scientific concept for EFL teachers, who will categorise plants according to several "common language" concepts and not necessarily as "trees, shrubs, herbs", as is commonly learnt in the primary science curriculum. For example, they may find it hard to categorise a flower, such as a daisy, as 'herb'. Thus, quality teaching materials prepared through the collaboration of specialist primary education teachers

and EFL teachers will significantly aid integration of content and language and guarantee specialist terminology and concepts.

For the lead-in activity, the teacher prepares six-piece puzzles of photographs of plants in the three categories (with an English label), which children will assemble and read out to the rest of the class. The teacher then tells them what they are going to learn about in the lesson.

For increased motivation and pupil engagement, these puzzles may be prepared based on photos taken by the children themselves from their school garden or community on a previous occasion.

There are 3 interconnected learning activities:

Activity 1

In the first activity the teacher asks pupils to categorise the plants they have assembled in these categories: TREES / SHRUBS / HERBS. Then pupils watch a video online about these categories. The teacher then uses flashcards with additional plants for pupils to categorise; plays a guessing and a TPR game with those flashcards for pupils to have the opportunity to read the name of a plant, pronounce it and classify it in one of the three categories.

Activity 2

The teacher models a series of very simple descriptive sentences for students to use with the plants on other flashcards, first orally and then writes it down:

- *I like tulips.*
- *Tulips are herbs. They are small plants.*
- *Tulips are red or yellow.*

Activity 3

The teacher and pupils prepare an online flipbook together, after showing an example (such as "The Life Cycle of a Butterfly" on *Storyjumper*[2]). The teacher also announces a competition for the best cover. When ready, this flipbook will be shared with the school community, including

parents, as it will be online. During the school year additions can be made to it on a regular basis either through pair or group work.

For this lesson there is an online public *Kahoot* quiz through which pupils, in a fun way, in pairs or individually, can assess their learning by participating with their mobile devices. They can also do so with their parents at home. Being allowed to bring their own digital device to school (BYOD) may be part of a digital learning strategy to encourage pupils to use mobile devices responsibly.

3.2. *Lesson 2: "Plant Parts and Life Cycle"*

The topic of the second lesson in this learning sequence is "Plant Parts and Life Cycle". The teacher starts by drawing a schematic picture of a plant on the board with *seed, roots, stem, leaves, flower buds* and *flowers* and tells the pupils what they are. Pupils learn the names of the parts. The teacher then numbers these parts 1 to 6, removes the names of the parts from the board and when a number is called, the name of the part has to be guessed by students. Several guessing games can be played with these parts and numbers, by focusing on either the number or the name of the plant part.

Activity 1

After watching a video about the life cycle of a plant,[3] a Total Physical Response (TPR) game follows, of which a suggestion is transcribed below. Note that each teacher may create their own gesture code.

Children show parts of the plant using their bodies: seed - they sit on the floor with arms around their knees; roots – they stretch their legs and feet; stem – they stand up; leaves – they open their arms and hands; flower buds – make fists; flower – they shake heads. While doing these movements, children drill the vocabulary. (15)

After this game, pupils engage in a whole class activity with cards with parts of a plant facing down. In turn, each pupil takes one card and mimes the part of the plant using the gesture-

-part association they learned before. If the guessing pupil gets the name of the part of the plant right, s/he wins the card.

Activity 2

The teacher tells a brief story, using gestures for children to copy, about how a bird drops a seed, roots grow out of it, the sun shines, then rain falls and a flower opens. The bird comes back and looks down at it.

Activity 3

Using a worksheet with drawings from the story, pupils put the story in order as the teacher reads it out again, after which pupils work in pairs to match jumbled sentences from the texts with the ordered pictures from the story.

Activity 4

The teacher distributes roles to pupils (bird, sun, rain, plants) and reads the story while pupils act it out.

At the end of this lesson there is another public online *Kahoot* quiz for pupils to use to assess their learning in a fun, interactive, and digital way.[4]

3.3. *Lesson 3: "Plant Parts and Life Cycle"*

In this project-based third lesson of the learning sequence about 'The World of Plants", the lead-in is again a short video available on YouTube on "The Parts of a Plant".[5] Only part of it is watched by the pupils, who are invited to associate certain body actions to the parts of the plant. This is followed by a matching game of words, pictures and sentences (for more detail see volume 2 of the *Teacher's Guide on CLIL Methodology in Primary*).

Activity 1

The teacher shows pupils and issues instructions on how to grow a plant on a PowerPoint slide show and while doing so, elicits what the pupils already know and pre-teaches new lexical items such as *pot, soil, seed, water, sunlight*.

In order to prepare for writing up their experiment on the growth of a plant, the pupils follow instructions and a demonstration on how to make a zigzag book divided into six parts. Pupils are invited to make observations every three days and write them on each page of their zigzag books with the following data: date, drawings of the parts of the plant they can see, and labels for those parts.

Pupils make predictions about the growth of their plants following prompts from the teacher such as: *How long will it take to grow a stem? How long will it take to grow leaves? etc.*

Activity 2

In groups, pupils label the pictures downloaded from an animation movie based on Helen Nicoll & Jan Piéncowski's *Meg's Veg* – online version.

Activity 3

Pupils watch the animation video *Meg and Mog's Veg*[6] and compare it with the stories they have created. Each group has to describe a difference between the story they watched and their own story (in their mother tongue or English).

Since the animation movie includes witchy spells for plant growth, pupils practise saying the spells (from the animation movie) aloud and next, in groups, create their own spell for their own plants, which they will use when watering them.

For assessing pupil learning there is a third online public *Kahoot* quiz.[7]

4. Conclusions

As shown from the brief descriptions of all C4C publications and a sample of a learning sequence on "The World of Plants", C4C teaching materials are clear, practical, hands-on resources created on the principles of holistic learning and constructivist theory. As they are resources that can be easily adapted by teachers to their contexts, these teaching materials also familiarise teachers with available online resources and how they can be used productively as part of a learning sequence developed around a cross-curricular topic.

The general underlying principle for the learning sequence described is to structure content, language, communication, culture and cognition around big ideas and not small pieces of information (Taylor and MacKenney 144). This means that pupils can see the point in learning the particular elements of the bigger picture and do not have to do it by separating reality into disciplinary areas.

Learning activities address the learner as a whole, their bodies, their motivations, interests and experiences creating opportunities for social interaction and communication. Furthermore, the learning sequence suggests how to link learning about "The World of Plants" to pupils' lives and experiences through, for example, collecting photos of plants around them or growing a plant themselves.

These teaching materials also enable cognitively-rich learning environments for pupils to be formed, in which the English language and content are systematically integrated. Content, linguistic, communication, and cognition objectives are made explicit for each lesson, which renders the integration of them easier to understand for teachers. Teacher notes that describe learning activities in detail and offer suggestions for fast finishers also make these materials teacher-friendly in the sense of easy to adapt (as appendices contain downloadable and printable resources) and covering a variety of pupils' needs.

New and recycled lexical items introduced depend on the learning activities developed by the children in the sense that children construct their own learning gradually and from what they already know. Sufficient time is allowed in each learning activity for pupils to interact with one another or to produce an end product of their own. Thus, the learning sequence fosters

meaningful, integrated child-centred learning and supports pupils in acquiring the language and the knowledge they will need to describe, analyse and communicate with others.

Learning activities, which are task-based and child-centred, build on each other, are cognitively challenging, playful, and account for several learning styles (visual, auditory, kinaesthetic) and methods, such as exploration, discovery, experimentation, TPR, and interaction, which keep pupils interested in learning.

Visuals are used to introduce new topics and are used throughout each lesson as aids to memory and learning, as well as ways of organising knowledge (through graphs and drawings).

Each lesson introduces several opportunities for pupil interaction in pairs and groups, elements of playfulness, and authentic resources found on the Internet (videos, songs, etc.). Thus, digital integration in learning and teaching is enhanced in a natural way.

Formative assessment of learning is promoted through an online quiz that involves elements of competition and fun although each learning activity described can also be used for self- or peer assessment or by the teacher. Assessment occurs in the context of daily classroom learning and not as a separate event. Pupils' developing competence can be observed along with the task they are trying to complete. Therefore, their performance should be assessed as the sum of effort made during the whole process rather than on the basis of a singular test.

Notes

[1] The C4C-CLIL for Children project is funded by the Erasmus+ EU programme and was developed during 2015-2018 – number 2015-1-IT02-KA201-015017. All resources and materials mentioned are available on the project's website at www.clil4children.eu. The resources developed for the project are copyright of the whole C4C consortium and the author would like to acknowledge the contributions of all colleagues involved. Disclaimer: The views expressed in this article are the responsibility of its author.

[2] Storyjumper can be found at https://www.storyjumper.com/book/index/18764938/The-Life-Cycle-of-a-Butterfly#page/14

[3] The video is available at https://www.youtube.com/watch?v=dJjNh2pMSB8

[4] The Kahoot quiz can be found at https://create.kahoot.it/#quiz/c43ca08a-c0ee-408b-900b-d378309be7fc

[5] This video can be found at https://www.youtube.com/watch?v=ql6OL7_qFgU

[6] The video can be found at https://www.youtube.com/watch?v=wnJiS3paaOk

[7] The Kahoot quiz is available at https://create.kahoot.it/?_ga=1.45826407.252536295.1460483479&deviceId=d76388bf-f389-4f92-a5e6-e679917b95b7#quiz/c26629ee-b1f1-452a-85b6-ab73b75758ae

Works Cited

Bailey, Nancy. "Attaining Content and Language Integrated Learning (CLIL) in the Primary School Classroom." *American Journal of Educational Research*, vol.3, no. 4, 2015, pp. 418-26.

Bandler, Richard, and John Grinder. *Frogs into Princes. Neuro Linguistic Programming*. Real People Press, 1979.

Brooks, Jacqueline Grennon, and Martin G. Brooks. *In Search of Understanding: The Case of Constructivist Classrooms*. Association for Supervision and Curriculum Development, 1999.

Catenaccio, Paola, and Cinzia Giglioni. "CLIL Teaching at Primary School Level and the Academia/Practice Interface: Some Preliminary Considerations." *Focus on ESP Teaching: Developments and Issues*, edited by G. Garzone, et al., LED, 2016, pp. 191-210, doi: 10.7359/ 791-2016-cate.

Cavalieri, Silvia, and Anna Stermieri. "The BEI-IBI Project: A Study on the Best Practices in Integrating Language and Content Learning in Primary Schools." *Focus on ESP Teaching: Developments and Issues*, edited by G. Garzone, et al., LED, 2016, pp. 211-34, doi: 10.7359/791-2016-cava

CLIL for Children (C4C). *State of the Art Report about Use of CLIL Methodology in Primary Schools*. C4C, 2016, www.clil4children.eu/documents-and-media/state-of-art-report-about-use-of-clil-methodology -in-primary-schools/. Accessed 1 Jan. 2019.

CLIL for Children (C4C). *Guide to OERs for CLIL in Primary Schools*. C4C, 2016, www.clil4children. eu/documents-and-media/1-2guide-to-the-oer-open-educational-resources-for-clil-in-primaryschools/. Accessed 1 Jan. 2019.

CLIL for Children (C4C). *Guidelines on How to Develop CLIL Materials and Lesson Plans in Primary Schools*. C4C, 2017, www.clil4children.eu/guidelines-on-how-to-develop-clil-materials-and-lesson-plans-in-primary-schools/. Accessed 1 Jan. 2019.

CLIL for Children (C4C). *Guidelines on How to Use CLIL in Primary Schools.* C4C, 2017, www.clil4children.eu/guidelines-on-how-to-use-clil-in-primary-schools/. Accessed 1 Jan. 2019.

CLIL for Children (C4C). *Teacher's Guide on CLIL Methodology in Primary Schools*, vol.1, C4C, 2018, www.clil4children.eu/documents-and-media/guide-addressed-to-teachers-on-how-to-use-clil-methodology-in-primary-schools/. Accessed 1 Jan. 2019.

CLIL for Children (C4C). *Teacher's Guide on CLIL Methodology in Primary Schools*, vol.2. *C4C 15 Lesson Plan Package*. C4C, 2018 http://www.clil4children.eu/documents-and-media/guide-addressed-to-teachers-on-how-to-use-clil-methodology-in-primary-schools/.Accessed 1 Jan. 2019.

Gómez, Domingo Ruiz. "A Practical Approach to CLIL in L2 Content-Based Courses: Methodological Guidelines for the Andalusian Bilingual Classroom." *CLIL in Action*, edited by David Marsh et al., Cambridge Scholars Publishing, 2015, pp. 14-30.

Massler, Ute. "Assessment in CLIL Learning." *Guidelines for CLIL Implementation in Primary and Pre--Primary Education*, edited by Sophie Ioannou-Georgiou and Pavlos Pavlou, PROCLIL, 2011, pp.114-36,www.schools.ac.cy/klimakio/Themata/Anglika/teaching_material/clil/guidelinesforclilimplementation 1. pdf. Accessed on 1 Jan. 2019.

Mehisto, Peeter. "Criteria for Producing CLIL Learning Material." *Encuentro*, vol. 21, 2012, pp. 15-23.

Taylor, George R., and Loretta MacKenney. *Improving Human Learning in the Classroom. Theories and Teaching Practices*. Rowman & Littlefield Education, 2008.

sciendo

e-TEALS no. 9 | 2018
Special Edition
An e-journal of Teacher Education and Applied Language Studies

Digital Competence and CLIL: The Use of WebQuests in Bilingual Education

Plácido E. Bazo MARTÍNEZ & Sergio D. Francisco DÉNIZ
| La Laguna University (Faculty of Education)

Abstract | This paper discusses the use of WebQuests as an activity to combine competency-based learning and digitalization in a CLIL context through social tasks. In the 21st century, people need to use the knowledge they acquire in multiple scenarios. Thus, the educational system must provide learning contexts where students develop competences so that they are able to apply the knowledge they need in a culturally heterogeneous world. Integrated learning advocates the use of social tasks in bilingual scenarios. In order to solve a problem or explore an issue while creating a specific learning product, students connect different types of knowledge and thus acquire a more contextualized perspective of learning as a socially relevant activity. This kind of learning can be perceived as a *bridge* between the students' educational context and daily lives. The digitalization of education is crucial for understanding how society advances and works as many of the jobs that appear in the future will require digital literacy. In this paper, an example of a WebQuest in a CLIL class in Spain is presented as a model for competency-based learning and digitalization through a social task.

Key words | key competences, competency-based learning, social task, digitalization, CLIL and WebQuests

---

Citation: Plácido E. Bazo Martínez and Sergio D. Francisco Déniz, "Digital Competence and CLIL: The Use of WebQuests Bilingual Education." *e-TEALS: An e-journal of Teacher Education and Applied Language Studies* 9 Special Edition (2018): 153-172. ISSN 1647-712X

10.2478/eteals-2018-0017

1. Introduction

Today it is known that people learn better when their minds, emotions and bodies interact in the learning process. Knowledge is constructed "in society" and therefore learning becomes a long social process. It is also believed that a competent person must analyze and diagnose complex situations, must act in sensible, flexible and creative ways, and judge the situations they encounter in order to make the right decisions.

In the digital era, students must have capacities that allow them to construct their own future. They have to communicate what they know and use their knowledge in a critical and creative way. This perspective calls for teaching and learning processes with more curricular integration. Subjects cannot be taught as isolated chunks of a curriculum. Learning must be contextualized and related with the outside world. Content and Language Integrated Learning must be more purposeful so that students can use what they learn at school in their daily lives. According to the European goals set (ET2020), the Key Competences do not only represent a *radical* change of the concepts of knowledge and the learning process, but also a way to justify a new approach to the learning needs that our current society demands this century.

If CLIL is to be related to key competences and digitalization, CLIL curricula must move towards situation-based learning (Pérez Gómez; Schank). Teaching a subject in English must provide students with the right strategies, conceptual maps and schema which lead to successful learning. Nowadays, this cannot be done without the use of ICT, because it is part of students' lives outside the school, and a curricular system cannot be created without taking into account the instruments students use on a daily basis. It cannot be forgotten that the majority of current jobs necessitate pragmatic digital competence. Therefore, it is the responsibility of the school system to provide digital education.

In relation to the above, the following elements must be highlighted:

- Students construct their own knowledge. They must make it real with coherent and practical activities;

- They have to participate actively;
- They have to learn with authentic tasks (of psychological and logical significance);
- They must learn by cooperating with each other. Cooperative learning is an essential part of classroom practice;
- They must develop and use digital competences as much as possible.

In practical terms, CLIL methodology needs authentic tasks that can be done in a cooperative way by using ICT purposefully. For this reason, a social task with a WebQuest meets all the requirements for carrying out competency-based learning.

2. Competency-Based Learning and Digitalization

According to the Europe 2020 strategy (ET2020), there are two main aims in the methodology of 21st century education: competence learning and digitalization. For the development of the first, the implementation of the key competences through new educational approaches has been essential. In the case of digitalization, a change of concept has occurred which implies the transition from a general use of ICT to a specific use of the new IT technologies applied to educational goals. Digitalization thus implies the use of ICT within an educational goal related to competency-based learning. It does not only mean using hardware, but also using software for specific learning situations. Those simulated learning situations will become real in students' present and future lives. In section 2.2., a clear example of how teachers and learners can take advantage of specific tools that foster learning will be shown. The integrated nature of this learning procedure also makes it useful for extra-curricular goals.

2.1. *Key Competences: Social Tasks*

According to D'Angelo, Luengo and Bazo, a social task consists of solving a situation or a problem that can be real, fictional or imagined. A social task generally implies a dilemma that must be

dealt with through work on a sequence of activities. The level of difficulty increases as the task progresses, which makes it challenging and interesting for learners.

It is difficult to develop the key competences without the use of contextualized activities, and that is an aspect that acquires even more relevance when a teacher's objective is to design, plan and implement a social task. The latter can be understood as a project that is carried out at the end of a didactic unit or learning sequence where the learners put into practice what they have learned in prior sessions.

One of the advantages of social tasks is that in some cases what is originally planned as a fictional situation can actually be used in real-life problem solving. For example, students may be asked to create a tourist guide that contains information about the most interesting places in a city. Once the guides are finished, learners can choose the best three which may then be sent to the City Council.

Tasks of this type allow learners to go beyond what is traditionally taught and the means by which it is done so. According to D'Angelo, Luengo and Bazo (20), decontextualized exercises were the core of didactic programs for a long time. For many learners, the absence of any real aim or connection with their motivations or contexts means boredom, lack of interest, and most importantly, no meaningful learning. But, by using social tasks in the classroom, the learning process is more fully developed because, apart from the content and language, learners acquire strategies and skills so they develop essential competences for their present and future lives as students, professionals and citizens. The versatility of this learning process is beneficial for learners and can be used in any subject. Moreover, integrated social tasks can be designed to foster collaboration among teachers of different subjects and to encourage more meaningful competency-based learning.

Another basic characteristic of a social task is its level of adaptability. Three types of curricula can be taken into consideration and worked upon. According to D'Angelo, Luengo and Bazo (53), it has been proved that the integration of schools, families and community in the

teaching-learning process guarantees academic success. For this reason, the combination of formal and informal learning is really necessary. Without work on the informal *curriculum* learners cannot have complete learning experiences as formal learning only represents part of the use of linguistic functions (D'Angelo and Rusinek 48). As members of the educational community, families should be present and participate in the learning process of their children. The same can be said of the wider community. The number of possibilities are unlimited; for example, students can create final products that could contribute to social welfare, and members of the community can enrich the learning experiences by participating in different activities which make the "outside world" more accessible for learners as will be illustrated in the task below.

With regard to the acquisition and development of the key competences, linguistic communication as well as social and civic competences are an intrinsic part of any social task. This is because the final product made by learners has a clear social significance. Moreover, during the creation process, group dynamics are required, which is where cooperative work acquires more relevance. Teamwork is vital for the achievement of objectives that can be put into practice either in learning situations or in real life.

The training and improvement of social abilities requires constant work and teacher planning. The use of different social tasks in a didactic program helps to systematize cooperative work and account for the comprehension of different group roles in relation to the type of work, the fulfilment of common goals, and the development of other key competences according to learner needs and characteristics. Tasks which foster this type of cooperation between learners enable them to work together and support each other. When students explain parts of the task to each other, they enter the Zone of Proximal Development (Vygotsky, 1978) which makes them less reliant on the teacher and affords them more autonomy. This in turn contributes to the development of a sense of initiative and entrepreneurship as learners make their own decisions about the work and learn how to apply self-regulation to their learning process by following the guidelines and objectives proposed by the teacher.

D'Angelo, Luengo and Bazo (104) highlight what teachers should do when planning a social task:

- Check if what is planned really constitutes an authentic task;
- Identify linguistic objectives and content objectives included in the solution of each task;
- Create a sequence of activities in the task;
- Encourage the use of different contexts, registers, etc.
- Check if the linguistic activities that lead to the final solution of the task are varied;
- Check if the linguistic exercises are used to reinforce specific aspects that can be considered necessary;
- Ensure each learner plays interactive roles (among peers; with the teacher and with the rest of the class) during the process of implementing the task;
- Ensure there is teamwork.

2.2. *Social Tasks and Digitalization: WebQuests*

The relationship between competences and digitalization is considered important in many educational contexts. First of all, digital competence deals with the digital *world*, which implies the acquisition and development of digital skills, procedures and knowledge. Secondly, sources of information nowadays are diverse and many come from the Web. Thirdly, the appropriate use of the Web is considered as *an instrument* to obtain and apply knowledge and competences at the same time (Francisco Déniz 135).

Smart technologies cannot only be considered as vehicles that transport information. Not only do they do this, but they also represent a challenge for human beings in how to process and express information. Pérez Gómez states that "human beings elaborate the software, the platforms and the networks that finally program and set their own lives" (34). That is why the use of WebQuests as a final social task in CLIL units is proposed here.

WebQuest creator Bernie Dodge defines a WebQuest as a *guided search on the Internet*. In other words, it is a set of teaching-learning activities based on the use of the Internet. It is a resource that encourages students to investigate, compile, analyse and transform information obtained from the Web (Area Moreira 7). In addition, WebQuests promote cooperative learning and self and group organization.

Three types of WebQuests can be identified – Mini Webquest, Treasure Hunt and WebQuest:

- Mini WebQuest: This is a reduced version of a WebQuest (see below). It is very simple and has the advantage that students can normally solve it in a one-hour class.
- Treasure hunt: This type of WebQuest includes a series of questions and a list of webpages where the students find information to answer the questions. It also includes the final “big question” where the students incorporate all the knowledge they have acquired during the learning process.
- WebQuest: This is the most common type and the one that is proposed in this paper. It has the following parts:

a) Introduction: This contains elements that encourage students to reflect on the topic and the information that should be found.
b) Task: This includes a clear explanation of what students should present at the end. The information to be gathered must be clearly explained, as well as the structure that must be followed in order to achieve the final goal.
c) Process: This is what students have to do, the activities they should carry out and the webpage links they should visit.

d) Resources: Several webpages students need to consult are included, as well as a useful bibliography for the search, etc.

e) Assessment: This states how students will be assessed (instruments, criteria, standards, etc.).

f) Conclusion: This is where students reflect on the work done.

The benefits of using WebQuests are numerous (Domingo Coscollola 24). They may develop intercultural knowledge and understanding, as well as intercultural communication skills when contexts for the social tasks are taken from different cultures and parts of the world. They may also improve language competence and oral communication skills, multilingual interests, and attitudes such as when students encounter situations where they have to use their linguistic repertoires to explain to others the information they have found on the Web. Moreover, they can provide opportunities for students to study content through different perspectives they find in the Webpages they explore. In addition, students will have more contact with the target language of the WebQuest. WebQuests do not require extra teaching hours because they can be done using the Internet outside the classroom. They diversify methods and forms of classroom practice and increase learners' motivation and confidence in both the foreign language and the subject being taught through the personalisation of the guided search on the Internet.

3. A CLIL Social Task with WebQuest – *Back in Time*

The following didactic unit has been created for the subject of CLIL Social Sciences for upper levels of primary and lower levels of secondary education. This is due to the fact that the level of difficulty and the number of possibilities that the social task offers can vary depending on the group of learners that participate in it.

Below is a complete description of the sections that constitute the social task. It follows the model proposed by the Faculty of Education of the University of La Laguna in relation to the

recommendations suggested by the current Law for Education in Spain (LOMCE). It is important to highlight that this CLIL social task has been developed through the design of a WebQuest having in mind the development of learners' digital competence. This is explained in the following section.

3.1. *Introducing the Social Task*

Here, students will have their first contact with the CLIL social task. They will be introduced to the topic and become familiarised with one of the characters that will guide them in the teaching--learning process. The first activity is a Warm-Up about the Middle Ages. Students watch a video that includes a review about important facts that happened in this historical period and then in groups discuss the chart on the right (see Fig. 1 below).

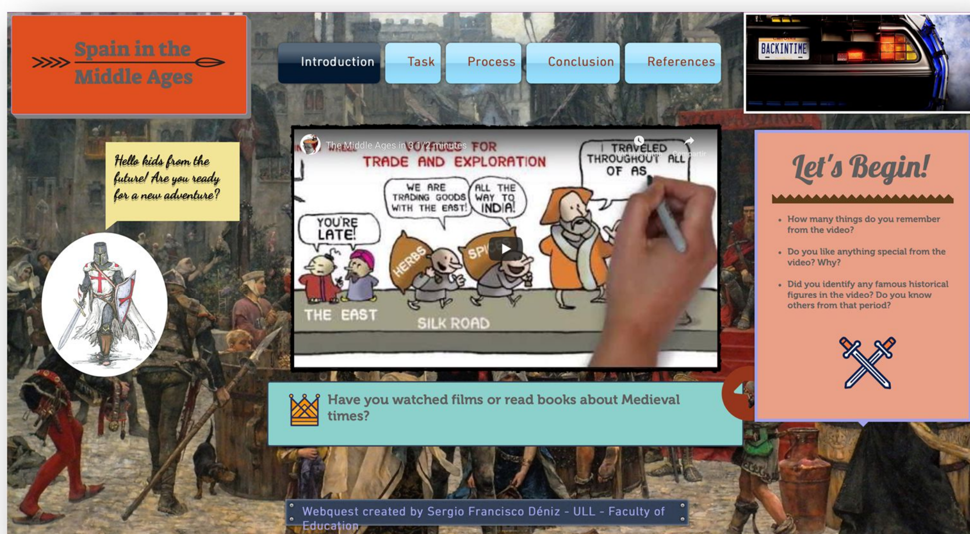


Figure 1. Home Page of the Social Task[1]

3.2. *Objectives*

Three main objectives were planned (see Fig. 2 below).

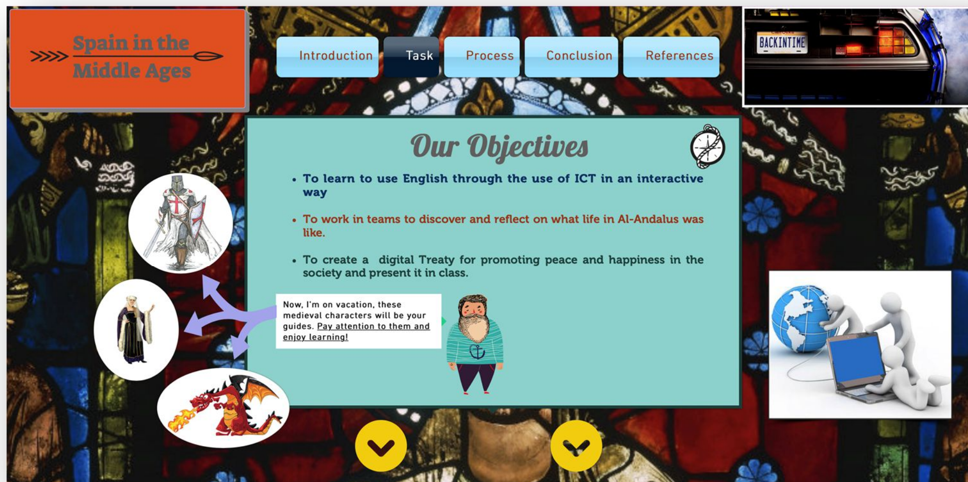


Figure 2. Objectives included in the Task

- To learn to use English in an interactive way through the use of ICT. Here contextualised learning of English is fostered which is why it is connected to one of the main challenges of our current society, that is, the correct management of the new technologies by young people. Through the WebQuest students receive guidance and learn how to search for reliable information. In this case, the choice was the use of videos that contribute to developing audio-visual skills.

- To work in teams to discover and reflect on what the life in Al-Andalus was like. Cooperative groups are an essential factor for achieving any goal proposed in a social task. Thus, it is important that groups understand that each individual will have a specific role to play. It is known that while implementing cooperative learning, some students will tend to work individually without having the group's interest in mind. Thus, instructions have to be clear about how the task must be carried out. Students may experience some difficulties in the learning process because the topic or the activities themselves are very challenging, but as a group they should be encouraged to find the best solutions.

- To create a digital treaty for promoting peace and happiness in society and present it in class. Through the projection of the several videos and completion of the activities related to them, students learn about life in Spain in the Middle Ages. And to conclude, the final product of the social task consists of creating a current treaty or agreement to promote social and civic attitudes. Before the final activity, the groups will reflect on how real medieval agreements worked for the society of that time and establish some conclusions.

- To learn to use English in an interactive way through the use of ICT. Here contextualised learning of English is fostered which is why it is connected to one of the main challenges of our current society, that is, the correct management of the new technologies by young people. Through the WebQuest students receive guidance and learn how to search for reliable information. In this case, the choice was the use of videos that contribute to developing audio-visual skills.

- To work in teams to discover and reflect on what the life in Al-Andalus was like. Cooperative groups are an essential factor for achieving any goal proposed in a social task. Thus, it is important that groups understand that each individual will have a specific role to play. It is known that while implementing cooperative learning, some students will tend to work individually without having the group's interest in mind. Thus, instructions have to be clear about how the task must be carried out. Students may experience some difficulties in the learning process because the topic or the activities themselves are very challenging, but as a group they should be encouraged to find the best solutions.

- To create a digital treaty for promoting peace and happiness in society and present it in class. Through the projection of the several videos and completion of the activities related to them, students learn about life in Spain in the Middle Ages. And to conclude, the final product of the social task consists of creating a current treaty or agreement to promote

social and civic attitudes. Before the final activity, the groups will reflect on how real medieval agreements worked for the society of that time and establish some conclusions.

- To learn to use English in an interactive way through the use of ICT. Here contextualised learning of English is fostered which is why it is connected to one of the main challenges of our current society, that is, the correct management of the new technologies by young people. Through the WebQuest students receive guidance and learn how to search for reliable information. In this case, the choice was the use of videos that contribute to developing audio-visual skills.

- To work in teams to discover and reflect on what the life in Al-Andalus was like. Cooperative groups are an essential factor for achieving any goal proposed in a social task. Thus, it is important that groups understand that each individual will have a specific role to play. It is known that while implementing cooperative learning, some students will tend to work individually without having the group's interest in mind. Thus, instructions have to be clear about how the task must be carried out. Students may experience some difficulties in the learning process because the topic or the activities themselves are very challenging, but as a group they should be encouraged to find the best solutions.

3.3 *Description*

This CLIL social task is divided into 5 sessions that are explained in detail below:

- **1st Session**: As explained in the introduction, students do a *warm-up activity* before being presented with the objectives and steps to create the final product. Later, a presentation will be made by the teacher. Here, the main objective is to guarantee that the groups understand the objectives and know exactly what to do in each session (see Fig. 3 below).

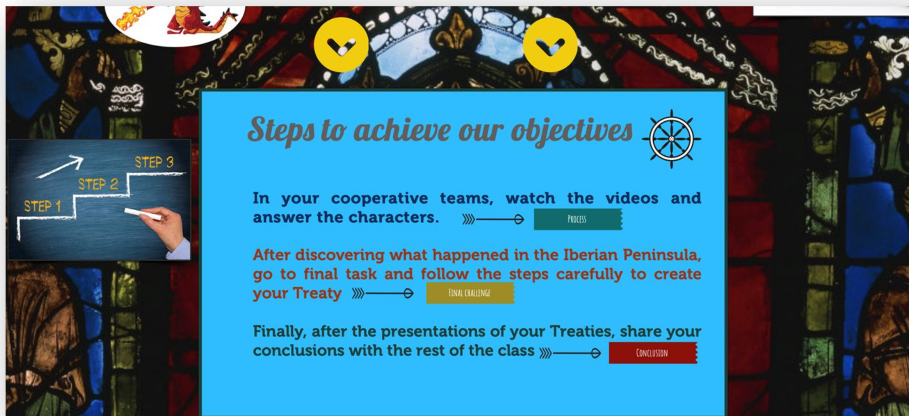


Figure 3. Steps to follow

In this first session, the members of the groups will have to answer the questions they find in the chart (see Fig. 1 above). However, to do it successfully, they will have to share their own conclusions and reach an agreement about which answers are most suitable for each of the questions (see Fig. 4 below).

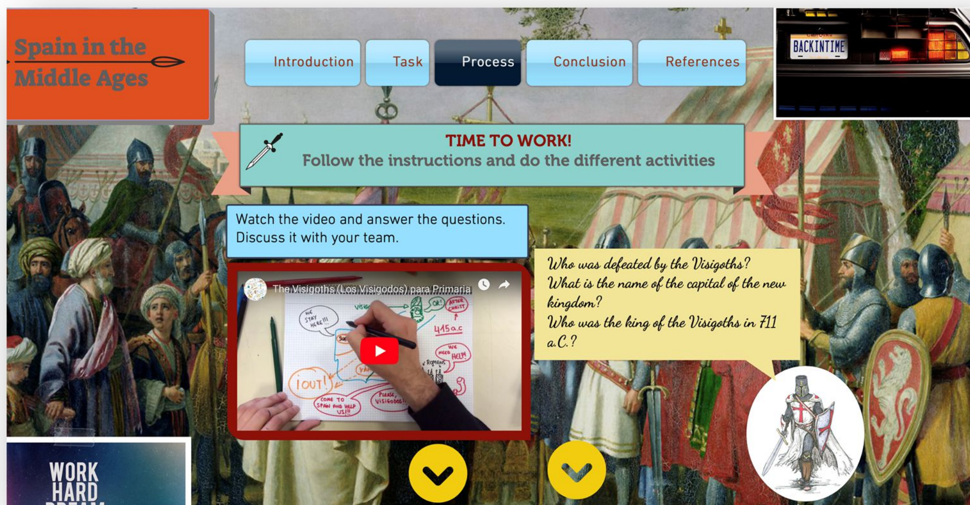


Figure 4. First activity

- **2nd Session**: To start, the groups will watch a second video and then each of the members will focus on a specific question. If students have doubts or problems, they can ask for help from members of other groups who share the same role. Later, they will share their conclusions within their own group (see Fig. 5 below).

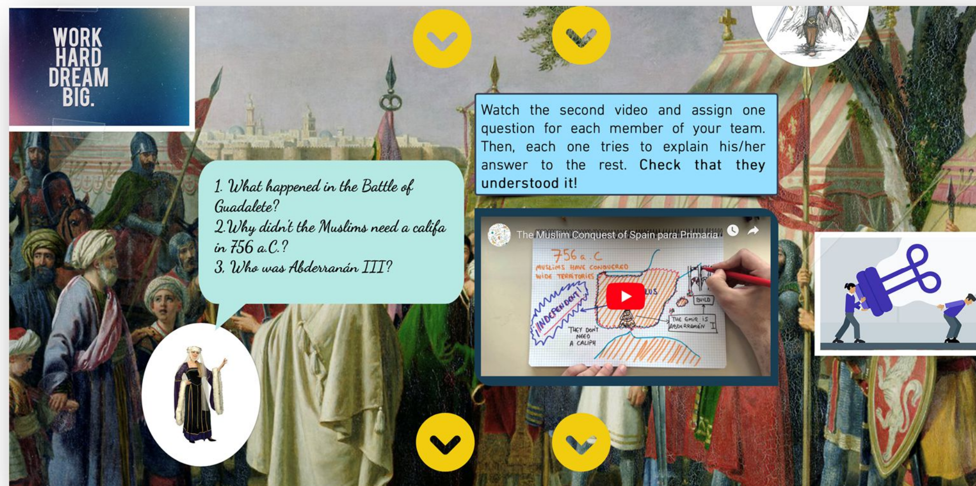


Figure 5. Second activity

After the first activity of the second session, the groups start working on the creation of the final product. In the first step, groups reflect on the society of the Al Andalus. Then, they have to contrast it with their own society. Finally, in step 2 they identify a problem that may have affected this society. This last activity helps to prepare students for the last step (see Fig. 6 below).

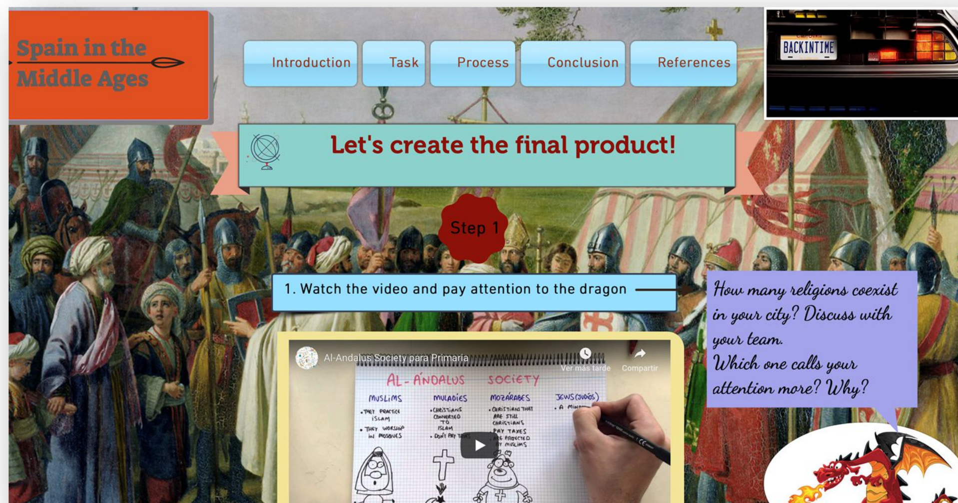


Figure 6. Step 1 for the final product

- **3rd Session**: the whole session is dedicated to the last step of the social task which is the creation of the digital treaty. Students are reminded of the treaty and the requirements they have to meet. They can use PowerPoint to design a slide that

includes the digital treaty. Once they have finished, they prepare the oral presentations for the following session (see Fig. 7 below).

Figure 7. Last step

- **4th Session**: In turn, groups present their digital treaties to the rest of the class.

- **5th Session**: To complete the social task, the groups work on the section called conclusions. This last activity is divided into three parts. At the beginning students reflect on the whole learning process individually. Then, they share their conclusions with all the members of their group. And finally, the general conclusions will be shared with the whole class (see Fig. 8 below).

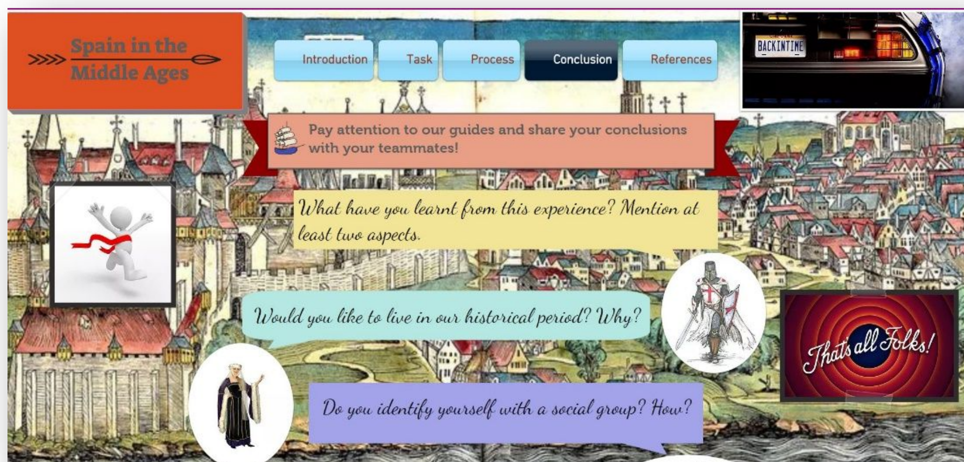


Figure 8. Conclusions

3.4. *Content*

A selection of content was necessary in order to design the CLIL social task successfully. In relation to Social Sciences, the following content objectives can be easily identified in the different activities students have to accomplish:

- Introduction to scientific knowledge and its application in Social Sciences.
- Selection of information from different sources.
- Use of ICT for searching, selecting, organizing and presenting conclusions.
- Development of strategies for the comprehension, memorization and critical treatment of information.
- Use of strategies for the encouragement of group cohesion and cooperative work.
- Correct use of different material and work resources.
- Planning and execution of actions, tasks and projects.
- Development of entrepreneurship (making decisions, self-confidence, critical thinking, personal initiative, curiosity, interest, creativity and innovation).
- Creation and fulfilment of different roles for the coexistence of the people in the group.
- Development and application of strategies for the resolution of conflicts through dialogue.

3.5. *Context*

It is important to mention that one of the benefits of including CLIL social tasks in bilingual didactic programmes is the possibility of using different learning contexts, thus enriching the teaching--learning experiences of the students. Regarding this specific case, students work in the formal context because all the work is carried out at school. Moreover, only students participate in the social task. Neither families (informal context) nor people of the community (non-formal) intervene. However, the non-formal context is partially present because the digital treaties will be posted on the social media of the school. Thus, anyone with access to the Internet can see and learn about the digital treaties produced by the students.

3.6. *Contribution to the Key Competences (Spain)*

This CLIL social task contributes to the acquisition and development of linguistic, digital, social and civic, learning to learn, initiative and entrepreneurship, and artistic and cultural awareness competences in the following ways:

- **Linguistic competence**. The main input students receive during the social task is through videos, so there is a special emphasis on the development of audiovisual skills. As they need to understand the instructions, tips and examples to carry out the whole process successfully, reading skills are also developed. Furthermore, students practice spoken interaction in all the activities because they discuss and reach agreements with the rest of their cooperative groups. Concerning the final product, as groups write a digital treaty and then present it, both writing and speaking skills are also practiced and developed.

- **Digital Competence**. This is one of the key elements of this CLIL social task. The WebQuest was created to guide students through the whole learning process and to show them how to look for reliable information through the inclusion of several videos. The

second part of the task is focused on the creation of a digital final product. Thus, students learn how to use ICT in different ways for real (class) purposes.

- **Social and civic competence**. Cooperative learning in all the activities is fostered by attributing different roles within the groups and highlighting their importance in achieving the different goals. Moreover, from the beginning, students reflect on medieval society in Spain. The work on this competence can be appreciated in the final product because the cooperative groups have to create a treaty that promotes peace and good relations.

- **Learning to learn**. This CLIL social task is focused on the learning of two different processes. As previously mentioned, the guided search indirectly contributes to showing students how to look for information on the Internet and distinguishing what is reliable information from what is not. In addition, students learn how to create a specific digital product. Some tips are included in the WebQuest and example.

- **Initiative and entrepreneurship**. Cooperative roles are beneficial for the development of autonomy and leadership in students. They make different decisions throughout the process and the teacher adopts the role of a guide and facilitator of learning.

- **Artistic and cultural awareness**. The integration of this competence in the task is not difficult because of the subject chosen, Social Sciences. The topic, society in medieval times in Spain is a pretext to encourage students to discover how society has evolved or not over the centuries until today. Thus, students learn to distinguish between the characteristics of medieval and modern Spain.

3.7. *Resources*

Finally, it is relevant to mention the last section of the WebQuest. Here, students can consult all the sources of information provided and other resources that could be helpful to complete the CLIL social task.

4. Conclusions

The new of a 'competent citizen' includes the development of different skills such as analyzing information sources, autonomous search for information, problem solving, communicating information correctly and meaningfully, and so on. This paper has shown that it is possible to integrate foreign language learning with the content of Social Sciences and the development of digital literacy through WebQuests. These can be powerful learning tools in the *hands* of teachers in bilingual education/schools, provided some ground rules for their use are observed.

From our experience of using WebQuests in different subjects, especially in Social Sciences, some issues can be proved efficient in the teaching-learning process. Cooperative learning, ICT use, problem solving, among others, have been mentioned as key elements in the design and development of CLIL social tasks.

Competency-based learning can be considered crucial for the development of CLIL methodology as it contributes to the activation of content, which is presented in a contextualized and integrated way. It is worth mentioning that the CLIL WebQuest presented in this paper supports the development of digital competence, Social Science content and linguistic competence. In this sense, language use is contextualized and pragmatic. Students can become aware of the linguistic needs and discourse to be used in the WebQuest.

Note

[1] See the complete Social Task at sfrancis121.wixsite.com/backintimedu

Works Cited

Area Moreira, Manuel. "Webquest. Una Estrategia de Aprendizaje por Descubrimiento Basada en el Uso de Internet." *Quaderns Digitals,* vol. 33, 2004, p. 7.

D'Angelo, Estela, et al. *El Desarrollo Curricular de la Competencia en Comunicación Lingüística.* Proyecto Atlántida, 2011.

D'Angelo, Estela, and Gabriel Rusinek. *Proyecto Combas: Informe de Evaluación Externa.* Ministerio de Educación y Ciencia de España, 2011.

Dodge, Bernie. "WebQuests: A Technique for Internet-Based Learning." *Distance Education,* vol. 1, no. 2, 1995, pp. 10-13.

Domingo Coscollola, María. "WebQuests en Educación y en Pedagogía de la Educación Superior." *Primeras Noticias: Comunicación y Pedagogía,* vol. 253, 2011, pp. 23-26.

European Commission. Europe 2020 (ET2020). *Strategies for Smart Sustainable and Inclusive Growth,* 2010.

Francisco Déniz, Sergio David. *La Tarea Social y el Aprendizaje Competencial del Inglés en la ESO. Un Modelo Innovador para la Programación por Competencias Clave.* Editorial Académica Española, 2018.

LOMCE. Ley Orgánica 8/2013, de 9 de diciembre, para la mejora de la calidad educativa. BOE nº 295, 2013.

Pérez Gómez, Ángel. *Educarse en la Era Digital*. Morata, 2012.

Schank, Roger Carl. *Lessons in Learning, e-Learning, and Training. Perspectives and Guidance for the Enlightened Trainer.* Pfeiffer, 2005.

Vygotsky, Lev. *Mind in Society: The Development of Higher Psychological Processes*. Harvard UP, 1978.