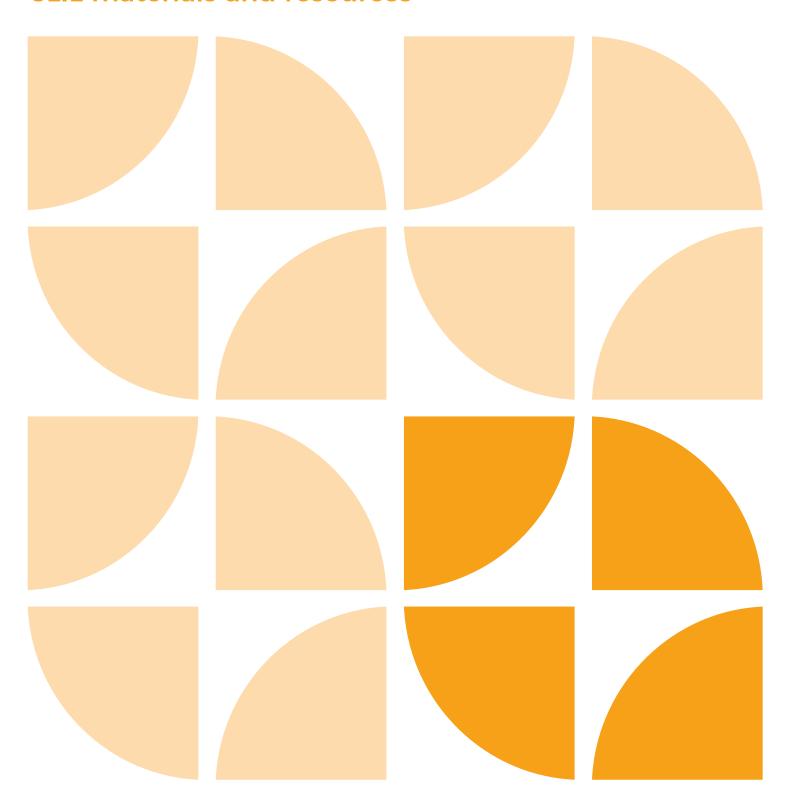


CLIL materials and resources





Outcomes

- 1. Reflecting on the criteria for creating, selecting or adapting CLIL materials.
- 2. Designing teaching and learning material and tools adapted to students' linguistic needs.
- 3. Knowing and applying language learning ICT resources within a CLIL environment.
- 4. Knowing the importance of space organisation and furniture arrangement in language teaching.

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1. Introduction

Teachers starting a CLIL programme often comment on the shortage of ready-made resources, such as textbooks, and the workload it supposes to find and adapt existing learning materials. This perception is changing little by little, as an increasing number of websites are devoted to the exchange of CLIL material and because of the attempts made by some publishers to create textbooks with a CLIL approach.

The starting point of this unit is the fact that materials, places and spaces come third in importance after students and educators in the learning process. When designing a lesson plan, teachers should count with a varied tool-kit and with a very broad palette of resources. Throughout the unit, all sizes and shapes will be analysed: paid and free, textbooks and realia, pen-and-paper and ICT. Such a wide material catalogue should enable instructors to meet the differentiated needs of students, learning styles, education stages, thinking order skills and intelligence types.

This unit will also devote a point to rethinking the way furniture, fixtures and equipment are arranged in our classrooms. The model designed by the Future Classroom Lab will be presented as a possible template to combine in time and space methodological approaches and ICT tools.

To sum up, with the ultimate aim of helping educators make the best CLIL teaching decisions, the unit intends to promote a critical and creative vision towards resources and environments.

2. Materials for CLIL lessons

The quality of the learning process is greatly conditioned by the adaptability of teaching materials to different students' characteristics and to the content level that they are supposed to fit. When deciding which ones to choose, teachers should also include reinforcement and extension activities. The former are addressed to special needs students. The latter, to students who are exceptionally gifted or fast-finishers.

On the CCN (CLIL Consortium Network) website, Peter Mehisto presents a list of ten criteria for creating CLIL-specific learning materials and also provides examples of how to apply each proposed criterion.

The ten criteria are:

- 1. Making the learning intentions (language, content, learning skills) and process visible.
- 2. Systematically fostering academic language proficiency.
- 3. Fostering learning skills development and learner autonomy.
- 4. Including self, peer and other types of formative assessment.
- 5. Helping create a safe learning environment.
- 6. Fostering cooperative learning.
- 7. Seeking ways of incorporating authentic language and authentic language use.
- 8. Fostering critical thinking.
- 9. Fostering cognitive fluency through scaffolding of a) content, b) language, c) learning skills development.
- 10. Helping to make learning meaningful.

In fact, to truly realise the added value of CLIL, teachers need to embrace a new paradigm of teaching and learning and they need tools and templates that help them plan their lessons and create/adapt their materials.



2.1 Textbooks

Typically, they are presented as a commercially available package containing components such as a student's book, a teacher's book, tests, extra reading material, audio CDs, computer-assisted activities, etc. Let us get deeper into the pros and cons of using them.

On the one hand, textbooks make teachers' life easier because they are addressed to homogeneous groups of students (age, language level and emotional development). Besides, learners might feel very motivated and engaged by their visual richness (illustrations, audiovisual materials, games, etc.).

On the other hand, the fact that they are commercial products with a vast international or national target market hurdles their capability to address the different student profiles and learning styles that have already been dealt with in Unit 3 (Gardner, Howard 1983). Applying different methodological approaches is, indeed, quite difficult if teachers rely only on textbooks.

2.2 Authentic materials and realia

Authentic materials are a good asset to introduce the target culture to foreign language students. Examples of them are print-outs, audios and visuals. As they are products conceived for mother tongue speakers, teachers should be aware of the extra work their adaptation might require.

Realia is a wider concept that refers to real objects from the target culture which can be easily introduced in class. They are materials that are highly visual, contextualised and culturally authentic. This concept includes: posters, advertisements, labels, schedules, tickets, place mats and more.

Among the great variety of texts which have been introduced in the teaching world, we should highlight the following ones:

- Journalistic materials were the first ones to make the leap from reality into teaching. All textual typologies have been used: reporting, opinion, analysis.
- Advertising allows us to work, along with textual aspects, iconic elements.
- Personal texts such as letters, notes, emails, etc.
- Administrative texts.

According to Harlen, Wynne and Qualter, Anne (2009) authentic materials link the school to the real world, giving authentic cultural values and features of the foreign language, which results in a more reality-based lesson.

However, there are some disadvantages, such as the fact that they use a lot of unnecessary grammar and vocabulary, which might be sometimes difficult to decode and understand, especially in low levels. Therefore, using them could become demotivating.

To sum up, it is fair to say that we should set some limits to the use of authentic materials in our lessons. As we have previously stated, it would be better to use them in specific situations such as: restaurant menus, comics, supermarket advertisements or brochures. All these materials should be used in meaningful contexts such as a role-play or a short dialogue following a model.







2.3 ICTs (Information and Communication Technologies)

Our students have grown up with new technologies and many readily make use of ICT as part of their normal experiences, but this does not mean that they always learn what teachers may want them to learn, which leads us to the conclusion that a clear purpose for their activities is needed.

We assume there is a widespread use of computers and web technologies in schools, which is one of the main reasons why we should discuss the issue of digital teaching and learning materials. We should take into account that some teachers may show some doubts on how digital learning resources can help their daily tasks. But the fact is that most educators are likely to use digital lessons they find on the web, and get students' attention throughout games, videos published on the Internet, and with educational apps. Then, the irruption of ICTs into school life has gradually changed the role of teachers from instructors into coaches, as instruction is being taken over by digital media.

2.4 Collaborative material for practising routines with scaffolding

Using Vygotsky's scaffolding resources in the classroom, analysed in Unit 3, students have a say when designing and creating their own teaching material. Let us have a look at the following ones, mainly addressed to Primary Education:

Weather charts in order to create routines. Every morning, students observe the weather. They will have to stick a sun, a cloud or other weather symbols.

News boards are another tool used by students and teachers in order to write important announcements such as: events, festivities, etc.



Classroom rules have to be established at the beginning of the year.



Language for interaction refers to some common sentences that students need to use every day.



Calendars with the students' birthdays to celebrate them in the classroom.



Classroom monitor charts used by teachers to provide students with different tasks.



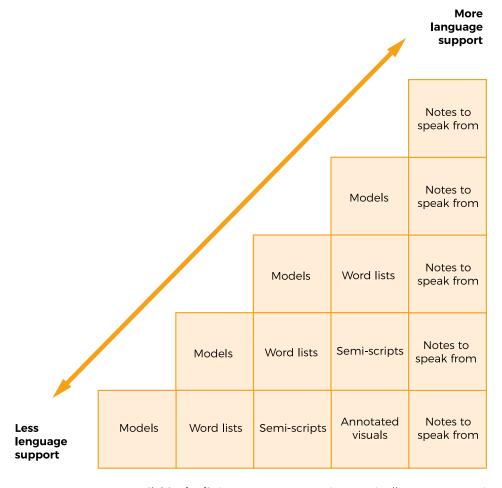


2.5 Scaffolding and input materials

Scaffolding and input materials are necessary through the different stages of a didactic sequence. Some good examples of these materials are:

- Real objects (realia), instruments and manipulatives.
- Vocabulary presentation through multisensorial media: videos, songs, picture flashcards, models, word lists, semi-scripts, annotated visuals, etc.
- Kinaesthetic activities or Total Physical Response (TPR) to teach vocabulary, expressions or procedures,
- Slideshow presentations with demonstrations, pictures, diagrams, etc.
- Interactive Digital Board (IDB) presentations¹.

Image 1. Range of language support



Individual talk (PPT presentations, show and tell, giving a report)

Source: Ball, Phil., Kelly, Keith., Clegg, John. (2015: 215).

^{1.} Most IDB firms have ready made lessons and images for mathematics, science, art, etc. in many different languages. The CLIL teacher's task is to adapt them and use those that are helpful for the unit development. There are also some tutorials for the use of tools in the IDB Link to a page of Smart Exchange where there are lots of IDB lessons. http://exchange.smarttech.com/



2.6 Scaffolding and problem-solving materials

Manipulatives are objects used in mathematics and other subjects. They can be any object applied to solving a problem or accomplishing a task. They can be adapted to all learning styles (spatial, kinaesthetic, interpersonal and intrapersonal intelligences, auditory and logical reasoning). Besides, they give students a realistic understanding of concepts, making it easier for them to communicate and interact with their classmates, their teacher or their parents.

Besides manipulative materials, we can use: graphic organisers, thinking games such as <u>Thinker's Key</u>, online games for thinking skills, strategies of problem-solving challenges. On the whole, the equipment and resources used in Primary School classrooms are not complicated. Children learn best from first-hand experience when they explore things around them.

Table 2. Materials that can be used

RESOURCES FOR PROJECTS					
Everyday objects	Consumables	Specialist equipment	Support resources		
Boxes, plastic, bottles, string, scissors, rules, elastic bands, straws, pieces of fabric, marbles, plant pots	Flour, bicarbonate of soda, soap powder, mirror card, batteries, aluminium foil, seeds for planting	Torches, hand lenses, measuring cylinders, data loggers, pulleys, bathroom scales, magnets, bulbs, thermometers, stop clocks and watches, springs	Models such us a 3D eye, posters, CD ROMs, DVDs, websites showing events, books and other paper resources		

Source: "The teaching of Science in Primary Schools" by Harlen, Wynne and Qualter, Anne (2009).

2.7 Materials to develop cultural awareness

In multicultural contexts there are many differences in the way people approach daily situations. Consequently, there are many problems in terms of communication among language users who do not share the rules of other cultures. In this sense, a great solution for these problems is to help language students to learn the target culture while they learn the syllabus.

According to Pulverness (2003), one way of approaching the cultural awareness in students is throughout literary texts which clearly represent experiences from a specific cultural background. Besides, these texts should be approached bearing in mind elements such us: connotation, idioms, the construction of style and tone, rhetorical structure and critical language awareness.

Furthermore, there are plenty of materials on the web that can be used to develop cultural awareness across the curriculum. The main role of CLIL teachers is to select and adapt those resources through each didactic sequence. These are some websites which can help us develop this issue:

- 60 activities to learn and assess transversal attitudes, skills and knowledge: https://goo.gl/uJYc3w
- Teacher's Toolbox: https://goo.gl/h9AEqQ
- Awareness Activities: https://goo.gl/YQv1pr



- Multiculturalism and Diversity: https://goo.gl/hcllvm
- Kinder Art: https://goo.gl/zqgUiy

3. Evaluating the materials

3.1 How to evaluate materials

In the 21st century, textbooks and alternative resources should be considered. The chart below lists some categories that will inform teachers' decision-making when choosing the materials that best meet their pedagogical model and their students' needs.

Table 2. How to evaluate materials?

Student's role	Teaching approach	Underlying pedagogical model	Didactic strategy
passive student	teacher-centred task	positivist/technical approach	systematic activities for students
active student	teacher-facilitated task	practical approach	significant activities for students
peer-to-peer teaching	teacher/student- facilitated task	critical-dialogical approach	open activities for students

Source: CEFIRE Plurilingüisme (2017) based on Martinez Bonafé (1995) and Tadeu Da Silva (2001).

Passive students are those who repeat, memorise their teacher's orders and tend to do fill-in-the-gaps and pen-and-paper exercises. Active students, instead, do exercises outside the book and embark on analysing and expressing strategies. Finally, when pupils learn from their peers, they have a say on what materials to use. They search for extra information in resource books and go online in order to solve challenging problems.

As for teachers, there is quite a difference between an educator who directs the activity from start to finish with the sole help of the textbook, the one who doubles as a guide and a facilitator or the one who, side by side with his/her students, learns along with them as they progress in their research.

A final factor to be borne in mind is the underlying pedagogical model. If the so-called positivist/technical has the upper hand, the focus is on textbook-to-student instruction. In the practical one, instead, learning becomes active and hands-on. The critical/dialogical approach, however, is, by far, the most interesting. Students are encouraged to understand what they research and to show it to their classmates in different formats: slideshows, collective books, posters... This collaborative philosophy privileges teamwork and Project-Based Learning. It also has the added value of enriching the cognitive capacities of materials with affective and social aspects, such as motivation, self-image, group relationship, etc.

Whoever wishes to get further insight into this topic can consult the handbook by Richards, Jack and Rodgers, Theodore (1986), which is a broad catalogue of activities classified according to the methodological approach preferred by the teacher.



4. Rethinking spaces and ICT use in the CLIL classroom

Image 2. Future Classroom Lab



Source: Future Classroom Lab. Creative Commons.

As a final section in this unit, we have considered convenient to rethink how we organise the spaces where teaching takes place and which ICT resources are the ones that best suit different learning moments. Our main guideline will be the research on learning zones conducted by Schoolnet (2016). Six are proposed. They are, somehow, just another way of labelling the cycle present > analyse > synthesise > re-present that has already been commented in Unit 4.

Needless to say, this is just a state-of-the-art design by a think-tank. Its principles and proposals should be interpreted as the upper top of a continuum to be downsized to the reality of different schools and teachers. Anyway, in our opinion, the underlying philosophy is so attractive, innovative and thought-provoking that it is worth knowing and adapting. Besides, the sequence that it suggests (teacher-presentation, individual work, teamwork, student-presentation) enables better inclusive teaching, as more and less gifted students are combined to collaborate with each other when receiving, sharing and creating content. We have also been inspired by the article by López-Cómez, S. and Rodríguez-Rodríguez, J. (2017).

Let us, therefore, see the different learning areas.



A. Interact

- Key points:

Rather than witnessing a mere presentation of facts and figures, students should be engaged and get actively involved. Another important point is considering other furniture settings beyond the traditional row paradigm: horseshoe shape and small groups.

- ICT Equipment:

- Interactive whiteboard to present and interact with media-rich contents.
- 1:1 computer-equipped classroom.
- Bring Your Own Device (BYOD): Laptops, tablets, smartphones.
- Presentations + polling. Platforms such as <u>Socrative</u> and <u>Zeeting</u>, to name just a couple of them, enable teachers with built-in questionnaires that let them get instantaneous feedback from students as they are presenting a new topic.
- Learning Management Systems (LMS) like the ones commented in Unit 4.



Source: Kathy Cassidy (2006) Classroom Tour 3. CC 2.0.

B. Develop

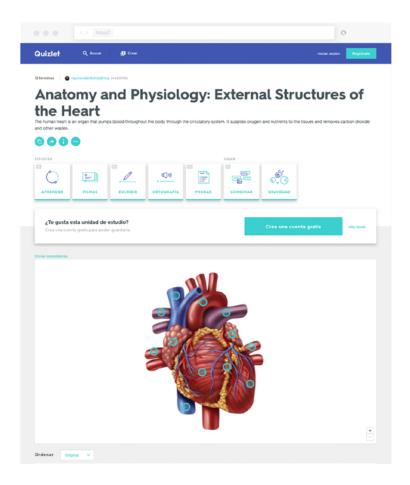
- Key points:

This is the individual stage. Great emphasis is given to fostering informal learning and self-reflection on the part of the students. They should be allowed to conduct school classwork at their own pace, with very loose teacher-monitoring. The furniture arrangement should be casual and home-like. This is also the space where methodological approaches such the compilation and selection of materials for portfolios can take place. Differentiated learning corners such as the classroom library or the listening area should be previewed.



- ICT Equipment:

- BYOD or mobile devices provided by the school.
- Audio devices and headphones for individual listening.
- E-book and media library.
- Online games such as Quizlet Diagrams.



Source: CEFIRE Específic de Plurilingüisme (2018). Quizlet Diagrams screenshot.

C. Investigate

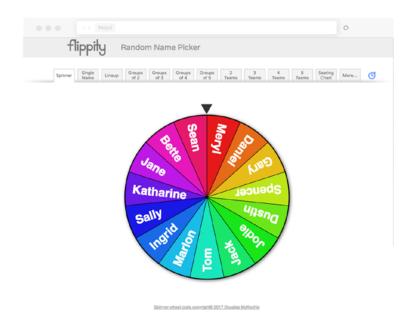
- Key points:

Teachers should promote teamwork so that students can solve real-life challenges. Project-based learning is the methodological approach that best suits this learning stage. The furniture arrangement has to be as flexible as possible. If we do not have a different space, the desk and chair rows of the interact stage should be reorganised to create groups. The investigation can be carried out by reading, watching videos, conducting experiments or surveys, interviewing...



- ICT Equipment.

- Classroom mapping randomisers such as Flippity to create groups.
- Google Forms to design questionnaires and conduct surveys.
- Smartphone audio-recorders.
- Smartphone built-in cameras for filming.
- Video conference apps such as Skype or Hangouts



Source: CEFIRE Específic de Plurilingüisme (2018). Flippity screenshot.

D. Exchange

- Key points:

The ability to collaborate is essential throughout the paradigm proposed by the learning zones of the Future Classroom Lab. Skills such as shared responsibility, decision making and project ownership are developed at this stage. Thanks to ICT resources, collaboration is no longer bound to the brick-and-mortar limits of the classroom or to the subject timetable. Now, it can be ubiquitous and asynchronous.

- ICT Equipment:

- Interactive whiteboards for discussion and brainstorming.
- Cloud computing such as <u>Google Docs</u>. Let us remember that add-ons such as Doctopus enable teachers to replicate assignments from a template.



E. Create

Key points:

When projects have been assigned, investigated, and facts and figures have been exchanged, students should get down to the job of creating a final product that can take the shape of a presentation, a lecture, a film, a radio programme, a written project, a portfolio or any other conceivable format. Simple repetition of knowledge is not enough. Students should build on what they have seen and shared to be able to show it with a twist. In Unit 4, we have already mentioned that students add pleasure and passion to knowledge if they are allowed to recreate it.

- ICT Equipment:

- High definition video camera.
- Smartphone camera and audio recorder.
- Video editing software such as Movie-Maker or iMovie.
- Audio editing such as Audacity.
- Audio hosting services such as <u>Ivoox</u> or <u>SoundCloud</u>.

F. Present

- Key points:

All final products have to be presented, both in class and to the wider world. The classroom should accommodate a miniauditorium-like space where this final staging takes place. Speaking in public and orality are, after all, the very essence of language and subject-based CLIL teaching. Besides, getting familiar with the different ways information can be shared and shown in the 21st century is, by itself, a key competence to be acquired at school.

Presenting the final products provides teachers, pupils and classmates with a learning opportunity to assess how far knowledge and skill acquisition have gone. In addition, peer-reviewing is another competence equally important in today's society.

Besides, what students have done should be accessible online, be it on a video platform, a podcast provider, a blog or a website.

- ICT Equipment:

- · Chroma key.
- Projector.
- Interactive whiteboard.
- · High quality speakers.
- Tools to conduct an online quiz: Google Forms, Socrative, Zeetings.
- Blogging platforms: Blogger, Wordpress.
- School website.



Source: Picture Youth (2013). *Girl in front of a green background*. CC 2.0.



5. Conclusion

Times have changed and teaching techniques should change along with them. As has been shown, educators should explore the pros and cons of all the resources at their disposal (textbooks, realia, online, etc.) when implementing their syllabus. They should also consider striking a balance between the time-demanding cost and effectiveness of creating their own materials. All of it with the ultimate goal of responding to the needs of student differentiation and their methodological approach.

As for ICT resources, they have been placed in the physical context of the classroom. Furniture arrangement and e-tool adoption should go hand in hand with the different stages of the learning process, from the very first moment, when the contents are shown by the teacher, to the very end, when they are revisited by students.

In conclusion, as has been stated at the beginning of the unit, materials, spaces and places are the third most important factor in the teaching-learning process. It should also be borne in mind that the 21st century has its own ways of sharing and showing knowledge. The more schools adopt them when planning and delivering lessons, the higher their quality will be.

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