Scaffolding Guidebook

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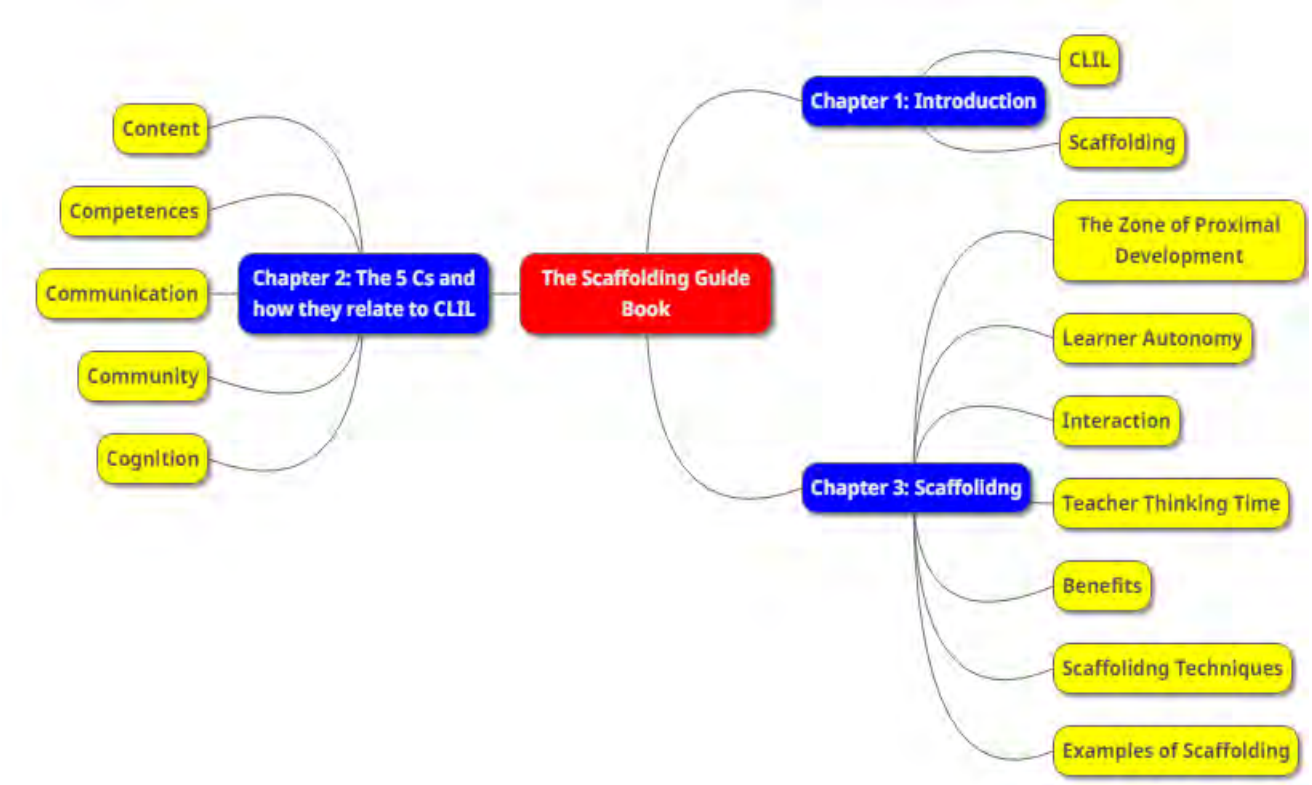
Project: Safety4El
Improved Safety for Electricians

Scaffolding Guide Book

Terminology

Throughout the manual, we have found it necessary to refer to the language that is usually used in the school/classroom, and the language being targeted in the CLIL Lesson.
In the last 10 years, Europe has broken down its borders and has added many more member states. Mobility and trans-border migration is now commonplace. In addition, influxes of refugees and immigrants have resulted in the typical European classroom being a multi-national environment consisting of students with plurilingual abilities.
Traditionally, linguists and language teachers used to refer to the native or mother language as being L1, and any foreign language studied as being L2. In the wake of EU mobilities and immigration, these terms are becoming obsolete.
Referring to the language spoken in the host country as native or mother language ignores any migrants, ethnic minorities or nationalists and their own mother tongues. Consider, for example, the case of an Ethiopian in Rome, a Bosnian in Malta, a Turk in Germany, or a homebred Catalan in Barcelona, a Welshman in Wales, or a Scotsman or Irishman speaking their own version of Gaelic. Using the term L1 ignores their heritage language or even perhaps their first language. And what about bilingual learners, as found in Malta or parts of Switzerland? The targeted language could even be an official language in their country.
To compound difficulties, the use of English as a global language has resulted in many countries teaching English as part of the curriculum. English has now become mandatory in most European countries, and is therefore not always considered a 'foreign language', but a second language.
After careful thought, we have decided to dispatch the terms L1 (for mother tongue/ native language) and L2 (foreign language), and throughout the manual we will use the following terms:
For the language that is typically and usually used in the classroom, the 'norm' so to speak, we will use the term School Lingua Franca (SLF) as the language in which the class learns, operates and communicates.
For the language which is being targeted to learn together with content, we will use the term Targeted Language (TL) or Additional Language (AL). These terms will be used synonymously.

Structure of Guide Book



Chapter 1

1.1. An introduction to CLIL

The term Content and Language Integrated Learning (CLIL) was launched during 1994 in conjunction with the European Commission. This followed a Europe-wide discussion led by expertise in Finland and the Netherlands on how to bring language learning excellence, found in certain types of school, into mainstream government-funded schools and colleges.

At the time, the launch of CLIL was both political and educational. 'The political driver was based on a vision that mobility across the European Union required higher levels of language competence in designated languages than was found to be the case at that point in time. The educational driver, influenced by major bilingual initiatives such as in Canada, was to design and otherwise adapt existing language teaching approaches so as to provide a wide range of students with higher levels of competence' Marsh (2012). Now some twenty years later the concept of CLIL has emerged as not only a way of improving access to additional languages, but also bringing innovative practices into the curriculum as a whole.

CLIL as an approach has slowly been gaining acceptance in European countries. In fact, in some countries, teachers are now required to use CLIL in their classrooms. The trend seems to be that CLIL will be used more and more in the future in most of the countries of Europe.

1.2. An introduction to Scaffolding

The first to have referred to Scaffolding as an instruction method was Lev Vygotsky, whose concept (ZPD) the zone of proximal development, has an immediate relation if not being the basis of scaffolding. "The zone of proximal development is the distance between what children can do by themselves and the next learning that they can be helped to achieve with competent assistance" (Raymond, 2000, p.176). However more about the ZPD you can find in section 3.2.

The scaffolds facilitate the learners' ability to build on prior-existing knowledge and therefore internalise new information. What is the most important of all though is the fact that these scaffolds are removed when is obvious that the learner can stand on his/her own two feet and continue his/her learning from that point onwards.

Chapter 2

The 5 Cs in brief and how they relate to CLIL

When teachers are planning a CLIL lesson, there are five things to think about - Content, Communication, Competences, Community and Cognition.

2.1. Content

In traditional teaching, teachers prepare a lesson around a logical development of the area the students have been working on. It's just the same with CLIL. Teachers develop lessons around what the students already know. In this way, students build their content knowledge like building a wall, one course of bricks on top of the next.

2.2. Communication

In the past, students learned a lot of lesson content while they were listening to the teacher talk. With CLIL, teachers talk much less, because the students don't have enough of the new language to learn in this way. Instead, students study together and work in groups, talking to each other as well as to the teacher, using as much of the new language as they can.

A CLIL teacher needs to ask herself/himself a series of questions:

What sort of communication will the students be involved in?

What language will be useful for that communication?

What key content words will they need?

What scaffolding (see Chapter 3) can she/he provide?

2.3. Competences

'Can-do' statements describe the outcomes of a lesson, for example, 'I can calculate the area of a triangle'. CLIL teachers think about the can-do statements they want their students to be able to make after the lesson, either about lesson content and skills - or about new language.

2.4. Community

CLIL teachers help students to relate what they learn to the world around them.

Students see that what they learn is not just a school subject, but something that relates to 'the real world'.

The CLIL teacher therefore needs to think about:

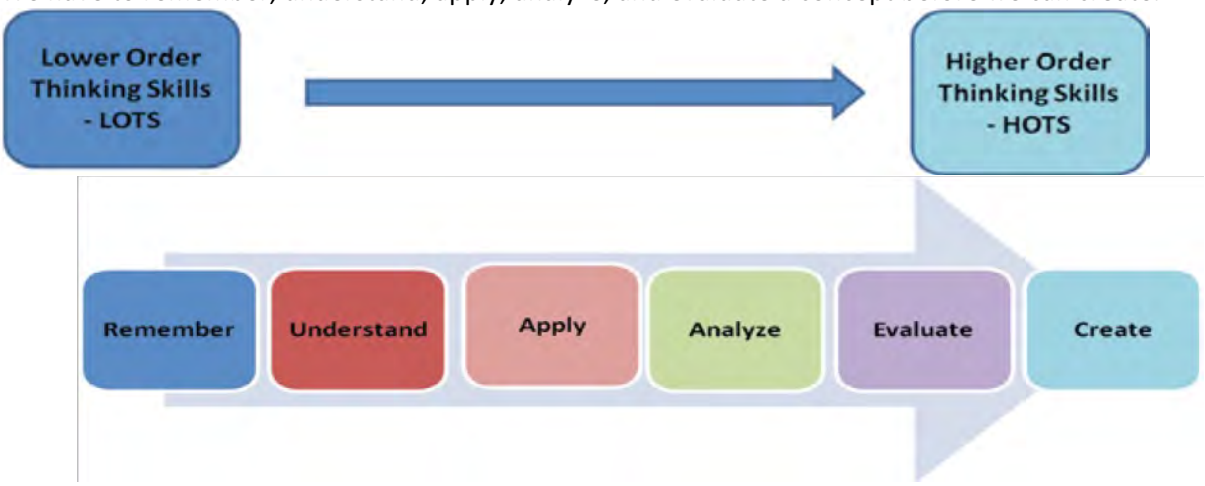
What is the relevance of this lesson to the student's daily life and surroundings?

How does it link to the Community or Culture surrounding the students? Does it also link to other cultures?

2.5. Cognition

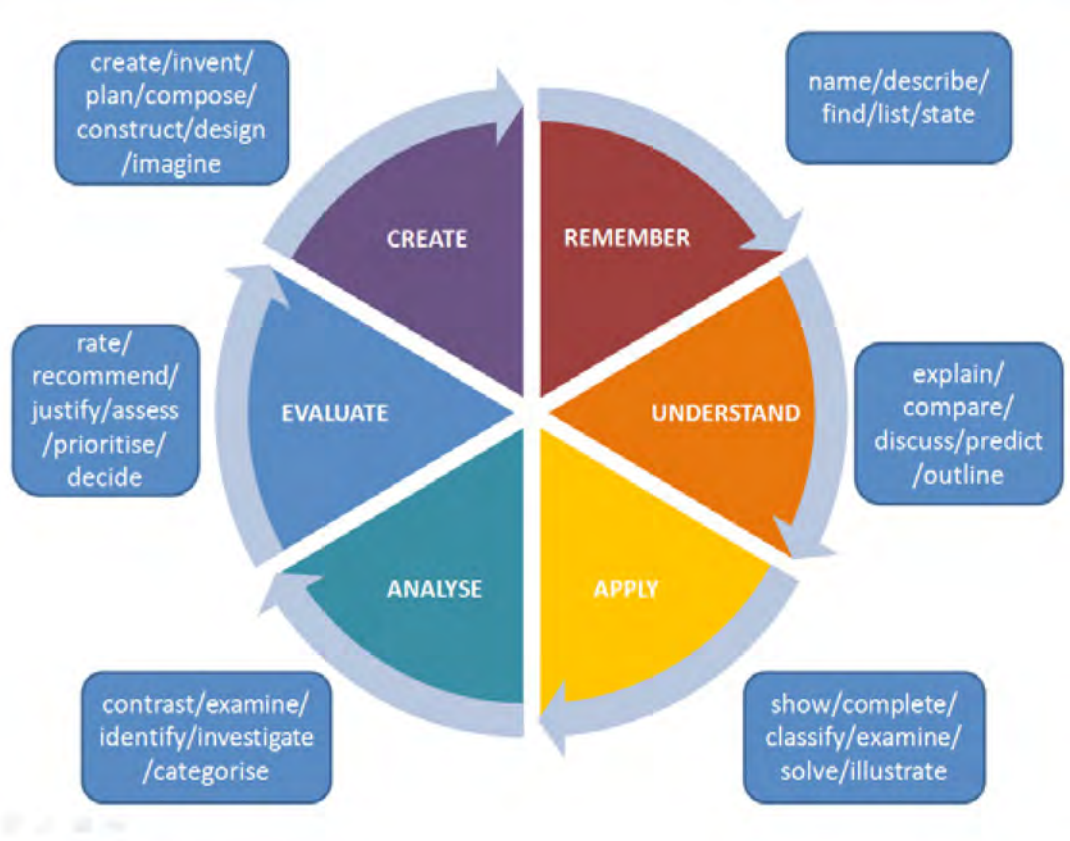
Of course, teachers were helping students learn to think long before the CLIL approach was introduced. They have always asked their students 'when?', 'where?', 'which?', 'how many?' and

'who?'. These questions focus on real, specific and concrete answers. Students who learn to answer them correctly develop the thinking skills of recalling, repeating and listing, and of understanding.
Thinking skills such as these were categorised in Bloom's Taxonomy as Lower Order
Thinking Skills (LOTS) as early as 1956 (the Taxonomy was revised in more recent years by Anderson and Krathwohl). According to the Taxonomy, students practising LOTS, as in the questions above, learn to remember and understand information, and to explain it. They also learn to apply new information in a different situation.
The CLIL approach has attempted to add to these concrete thinking skills by adopting more abstract, complex and analytical questioning. This is not just for older or more able students, but in all lessons. A student following a CLIL course will soon have learned to think about such probing questions as 'why?', 'how?' and 'what evidence is there?', and so will have practised some of the thinking skills categorised by Bloom as Higher Order Thinking Skills (HOTS). Using HOTS encourages students to investigate and evaluate new information and to use it to develop something new.
It can be useful to think of Bloom's taxonomy in terms of Learning Behaviours:
We have to remember a concept before we can understand it.
We have to understand a concept before we can apply it.
We have to be able to apply a concept before we can analyze it.
We have to analyze a concept before we can evaluate it.
We have to remember, understand, apply, analyze, and evaluate a concept before we can create.



2.6. Bloom's Wheel & Choosing the Right Task Words

Bloom's Wheel: The diagram below exemplifies the words we can use when asking questions and setting tasks in order to encourage different thinking skills. It displays a taxonomy of thinking skills, questions words and tasks which are aimed at eliciting HOTS as well as LOTS.
For example, using question words such as 'name, list, state' will help students remember facts. Using question words such as 'contrast, identify and categorise' will encourage students to develop the Higher Order Thinking Skill of Analysis.



Chapter 3

3.1. Scaffolding

There is no specific methodology that relates to CLIL. However, according to Pavesi et al (2001) some common features are used in different countries, and "CLIL requires active methods, co-operative classroom management, and emphasis on all types of communication (linguistic, visual, and kinaesthetic)".

- In CLIL, it is important to use audio-visual aids and multimedia in order to overcome problems caused by the use of a new language.
- Pavesi et al emphasize the importance of using holistic ways of learning as well as learning from practical, hands-on experiences.
- Pavesi et al also suggest the use of the targeted language (TL) for authentic communication without paying attention to language mistakes.
- The teaching of a second language and content at the same time should include language scaffolding such as reformulation, simplification and exemplification.
- Code switching (switching to the students' school lingua franca (SLF) instead of the target language) should normally be the last option for communication purposes.
- The use of the school lingua franca (SLF) by the CLIL teacher should be kept to a minimum and should be avoided except when appropriate. Ioannou Georgiou, S and Pavlou, P (2011)
- However, Butzkamm (1998) suggests that 'students, especially at the early stages of CLIL, can be allowed to code-switch, that is to use SLF or TL/AL alternatively, or a mixture of both languages, in order to get their message across more effectively or to carry on with the conversation'. For example, in the Istituto Comprensivo Statale "Monte Grappa" (a member of the CLIL4U EU project), in order to overcome students' reluctance, they are allowed to use

Italian (the SLF) and are not forced to speak the additional language (TL/AL) publicly in class to avoid potential initial embarrassment.

- Where possible, any content and/or language problems should be overcome in the planning stage through the cooperation of both content and language teachers.
- Teamwork skills are needed by CLIL teachers when preparing the curriculum as well as while teaching.
- When planning the lessons, teachers should take into account the AL/TL language level of the students.
- Pavesi et al suggest that as part of their methodology, primary school pupils could be given 10-20 minute "language showers" each day, or could spend up to 50% of all lessons using the TL/AL, focusing mainly on the oral language skills of speaking and listening.
- Both Pavesi et al (2001) and Ioannou Georgiou, S and Pavlou, P (2011) mention that when planning the CLIL curriculum, it is important to take into account:
  - ages, needs, interests and general linguistic competence
  - the teacher's competences, training and expertise in CLIL and command of the second language
  - administrative support in the school, resources and materials
  - local community resources
  - the motivation of students and the interest of parents
  - outcomes and objectives

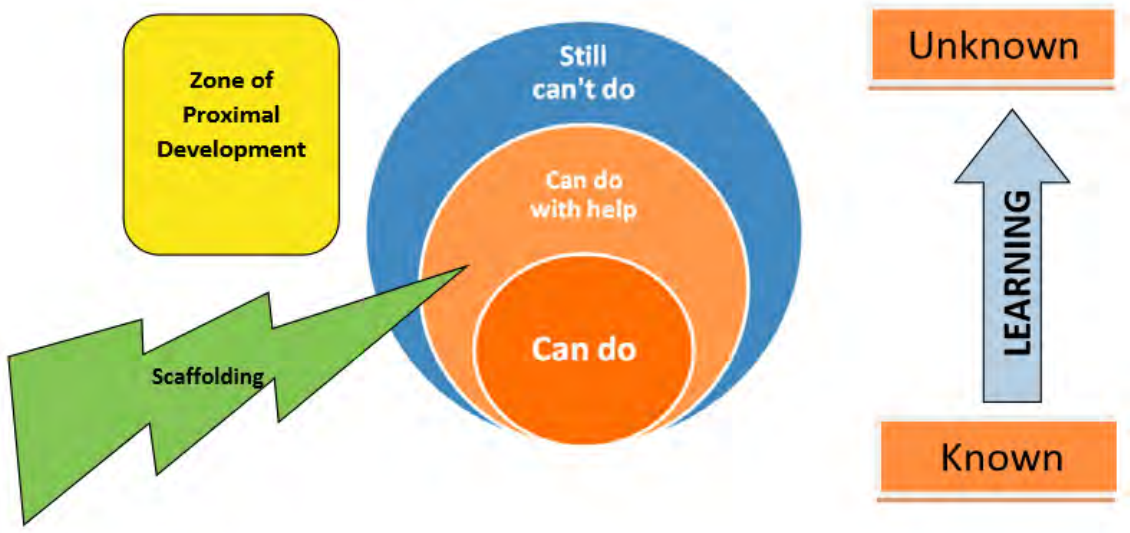
In practice, the CLIL approach to teaching takes many forms, from teaching of the whole curriculum in the new language (total immersion) to adapting language courses to include a focus on subject content.

3.2. The Zone of Proximal Development (ZPD)

CLIL learning is a process of construction of knowledge and of language at the same time.
Students almost always begin with some basic knowledge of the content and of the language that they will learn. In geography, for example, most learners will know that Antarctica is an icy land far away, where penguins live - but they might need to be taught that Antarctica is a continent at the South Pole, covered by ice over 1.6 Km deep. In the same way, they might know how to say that Antarctica is big and cold and far away - but they might need to be taught how to say that it is bigger than Europe, is the southernmost continent on earth, and is where the coldest ever temperature was recorded. In each CLIL lesson, new content and new language are introduced to build on the foundation the students already have. Through interaction with classmates, with the teacher, and with multimedia resources, each student constructs new knowledge at his own pace, moving from simple awareness, to real understanding and proficiency.
Between the two states of raised awareness and thorough competence, the student is developing some new knowledge or skill, but cannot yet use it independently and confidently. This intermediate stage of the development of learning is often described by Vygotsky's metaphor of 'the Zone of Proximal Development' (ZPD).
During this intermediate stage of learning, the student can be helped to progress to complete and independent proficiency by support from someone with a higher level of knowledge or skill than he has himself.
The temporary support given is described by the metaphor of 'scaffolding', because it provides a platform from which learners can construct the next level of understanding and knowledge.
Scaffolding is a modular system of metal pipes which provides temporary support for people constructing buildings. It enables them to build much higher than they could reach from the ground.

Scaffolding as a metaphor is used to describe how learners can be helped to achieve things which they are not yet ready to do on their own. It is a useful description because it highlights that this help is only temporary. The help is removed gradually as the learner gains the necessary knowledge and experience to be independent, just as scaffolding is removed once a building is complete.
Scaffolding describes support for learning of both content and language. It provides an image of how new learning is built on what is already known, as in the example of geography teaching (above). Although scaffolding is often provided by a teacher, it can also be provided by a more proficient peer, or group of peers.
Once the learner is confident of how to say what they want in a situation, they will be able to use their linguistic knowledge in other situations, without scaffolding. The knowledge/skill/understanding needed will have been internalised, and can now be utilised without external support.
Scaffolding takes many forms. For example, when scaffolding the skill of listening, we might help a learner grasp meaning by focussing their attention on the form of a particular tense used; in reading, the questions the teacher asks about a particular text can guide the reader to a clear understanding; writing skills can be developed through model texts, or the use of graphic organisers to help organise ideas.

Scaffolding, Support, & Internalisation



In time, with scaffolding, LLs internalise what they are learning, and scaffolding is decreased. The Can Do area grows and the learner's Zone of Proximal Development develops a new focus.

This scaffolding is a dynamic element of teaching and learning, not a static or permanent feature. One example of how teachers can scaffold learning is the use of graphic organisers. Tools like tables and grids, flow charts and mind maps enable data processing, and develop thinking skills such as comparing and contrasting, sequencing, recognising relationships and classifying.

3.3. Learner autonomy

A major aim of CLIL teaching is to help students to work independently to solve problems and to develop their own knowledge and skills. How can CLIL teachers achieve this?
When we think of our own school days, we probably remember being told exactly what to do, step by step. Teachers were expected to control when, where and how learning took place.
With CLIL, we have to try to change our approach, to consider letting go of the reins in class, and to face losing our central role. We need to pass some control over to our learners.
Here are some things to think about:

- Try connecting with students' lives, and their needs and interests
- Practise encouraging (and enjoying) student-to-student communication
- Allow students to help decide on content and language assessment criteria
- Agree to adopt student-generated rules on acceptable classroom behaviour
- Decide to let students ask for new language when they need it, rather than teaching in advance the words you think they will need
- Stop expecting all students to work in the same way: advise them to recognise and develop their own learning styles and strategies
- Put yourself in their shoes, and imagine learning in different and exciting ways
- Vary your approach
- Respond to immediate needs
- Go on believing that instilling learner autonomy will result in better learning!

CLIL teachers can expect to feel vulnerable at first in their new role. It is difficult to begin working in a less traditional way, not only for the teacher, but also for the students - they will resist changing their classroom lifestyle unless they have the opportunity to adapt gradually to working independently. Remembering to take responsibility for their own learning, and to take the initiative in tackling problems, can be very hard. Sometimes, they will prefer to sit back, listen to the teacher and be told what to do next!

One of the most important, and most difficult, roles of the CLIL teacher is to train learners how to be independent.

3.4. Interaction

Communication is one of the five "C"s of CLIL. It refers not only to how the teacher and learners communicate with each other in a new language – but also how students can learn. The CLIL approach recognises that learning is not a purely internal and cognitive process, but instead results from interaction in which knowledge and understanding are shared.

Through interaction, learners build on their existing knowledge as they compare it with, and discuss, new content and new language. At the same time, they become aware of what they still need to do. For language learning especially, interaction provides an opportunity to both learn and improve.

How do CLIL teachers increase interaction between students?

Pair work

When the teacher asks a HOTS question, or outlines a problem to solve, or sets a creative task, some students will search for ways to avoid speaking in front of the whole class, especially in the TL! If the teacher can see that this is going to be a problem, she can use 'think, pair, share' to help.

- First of all, the students are given some silent thinking time, so that they can rehearse the answer in their own mind.

- Then, each student is asked to tell their ideas to a partner, so that they can both find out if their ideas make sense, and if the language they use is understandable.

- By this stage, the students will have had an opportunity to try out what they want to say, and will be much more confident of sharing their ideas with the whole class.

Group work

While students are interacting in pairs, they will be getting to know one another better and building new relationships. This is likely to be especially useful for project work, in which interaction between members of a group is essential for cooperation.

- Interacting in groups, students can relax, work creatively, and take more risks with their language skills.
- They can work to their strengths and can take control of their own learning.
- By the time the project is successfully completed, students will have had numerous opportunities to speak together and to construct together the learning of content and of new language.

Pair and group work are nothing new, but they are a focus of the CLIL approach.

3.5. Teacher thinking time

The European Framework for CLIL Teacher Education would be a good resource for teachers (and schools) to reflect on and design teacher training opportunities:
http://clil-cd.ecml.at/EuropeanFrameworkforCLILTeacherEducation/tabid/2254/language/en-GB/Default .aspx

Once a school decides to adopt CLIL, any teacher involved needs time to review and reflect on their teaching and to decide what adaptations will be needed. Spending time becoming familiar with this student-centred and interactive way of learning will allow the teacher to say with confidence 'tomorrow is the first day of term, and I'm teaching CLIL!'

3.6. Benefits

One of the primary benefits of scaffolding instruction is that it engages the learner. The learner does not passively listen to information presented instead through teacher prompting the learner builds on prior knowledge and forms new knowledge. In working with students who have low self-esteem and learning disabilities, it provides an opportunity to give positive feedback to the students by saying

things like "…look what you have just figured out!" This gives them more of a can do versus a "this is too hard" attitude. This leads into another advantage of scaffolding in that if done properly, scaffolding instruction motivates the student so that they want to learn.
Another benefit of this type of instruction is that it can minimize the level of frustration of the learner. This is extremely important with many special needs students, who can become frustrated very easily then shut down and refuse to participate in further learning during that particular setting. (https://link.springer.com/article/10.1007/s10648-010-9127-6)
The scaffolds are nothing but simple activities and tasks that:

- Motivate or enlist the student's interest related to the task
- Simplify the task to make it more manageable and achievable for a student
- Provide some direction in order to help the student focus on achieving the goal
- Clearly indicate differences between the student's work and the standard or desired solution
- Reduce frustration and risk
- Model and clearly define the expectations of the activity to be performed (Bransford, Brown, and Cocking, 2000). Scaffolding as a Teaching Strategy by Rachel R. Van Der Stuyf

In addition, McKenzie says that scaffolding:

- Provides clear direction and reduces students' confusion – Educators anticipate problems that students might encounter and then develop step by step instructions, which explain what a student must do to meet expectations.
- Clarifies purpose – Scaffolding helps students understand why they are doing the work and why it is important.
- Keeps students on task – By providing structure, the scaffolded lesson or research project, provides pathways for the learners. The student can make decisions about which path to choose or what things to explore along the path but they cannot wander off the path, which is the designated task.
- Clarifies expectations and incorporates assessment and feedback – Expectations are clear from the beginning of the activity since examples of exemplary work, rubrics, and standards of excellence are shown to the students.
- Points students to worthy sources – Educators provide sources to reduce confusion, frustration, and time. The students may then decide which of these sources to use.
- Reduces uncertainty, surprise, and disappointment – Educators test their lessons to determine possible problem areas and then refine the lesson to eliminate difficulties so that learning is maximized (McKenzie, 1999).

3.7. Scaffolding techniques

According to Vogt & Short the scaffolding techniques can be separated into three main categories as the table below shows. First are the techniques that can be applied when using the language verbally, secondly the techniques that involve procedures and thirdly are the techniques that involve instructions.

Scaffolding Techniques in CBI Classrooms

Building on ideas presented in Echevarria, Vogt & Short, 2004, pp. 86-87 Fortune, T. (March, 2004) with input from immersion teachers

Verbal Scaffolding (Language-development focused)	Procedural Scaffolding (Grouping techniques and activity structures and frames)	Instructional Scaffolding (tools that support learning)
• Paraphrasing • Using "think-alouds" • Reinforcing contextual definitions • Developing questions with Bloom's taxonomy in mind • Writing prompts • Follow oral text with written text • Elaboration and expansion of student response • Use of cognates • Purposefully using synonyms and antonyms • Effective use of wait time • Teaching familiar chunks "May I go to the restroom? "Excuse me," etc. • Clear enunciation and articulation by teacher, slow when appropriate • Corrective feedback techniques, especially elicitation, clarification requests, and metalinguistic clues • Songs, jazz chants, rhythm and rhyme	• Using an instructional framework that includes explicit teaching (T)-modeling (T)-practicing (St)-applying (St) • 1-1 teaching, coaching, modeling • Pairing and grouping of students so that less experienced/knowledgeable students work with more experienced/knowledgeable students • Activating prior knowledge • Think-Pair-Share • Met's Expanded Think-Pair-Share • Personalize info (relate to your own life) • Jigsaw • Dictogloss • Cooperative group techniques • Joint writing project • Use of routines • TPR/TPRS • Gibbons' Activity Cycle (oral-informal, oral-formal, written-informal, written-formal)	• Graphic organizers • Manipulatives • Using visuals and imagery • Word wall • Making a variety of resources available in the classroom, dictionary, thesaurus, etc. • Posting schedules • Labeled visuals • Pictographs as a success supporting strategy for dictogloss with young learners

• Language task for graphic organizer • Building circumlocution skills	• Lyster's register variation activity • Scored discussion • Role play, simulations • Process writing • SQP2RS	

Echevarria, J., Vogt, M. & Short, D.J. (2004). Making content comprehensible for English learners: The SIOP Model (2nd ed.). Boston, MA: Pearson Education, Inc.

3.8. Examples of Scaffolding

3.8.1. Questions/True-False

When learners need to understand some kind of context the following true or false exercise can help them comprehend the text by initialing questions that will help understanding. For instance, when an educator needs to provide his/her students with new vocabulary, and especially he/she wants to elicit answers, he/she might give some questions to the learners before a reading comprehension exercise to boost understanding, like the one that follows. E.g. what are some of the dangers of working on the job? What are some things electricians can wear to stay safe?

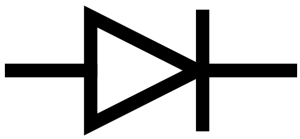
Taken from the Career Paths book 'Electrician', Express Publishing by Evans. V, Dooley. J, and O'Dell. T, chapter 6, pg14.

The T (true) or F (false) exercise that can follow the above text comprehension may look as follows:

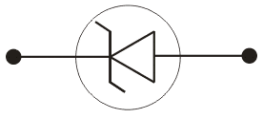
1. ___ Safety glasses should be worn if needed.
2. ___ Arc flash clothing helps if there is an explosion.
3. ___ Hold a hot stick when working with dead wires.

3.8.2. Matching

The following is an example of a matching activity taken from the CLIL lesson 'The Semiconductor Diode', created by colleagues from MCast within the boundaries of the European Project named Clil4U, in Malta and can be downloaded free from http://languages.dk/clil4u/scenarios/sc84/



Zener Diode



Diode in Forward Bias

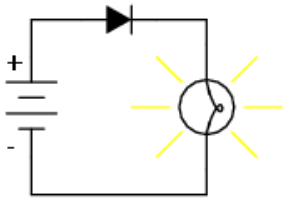
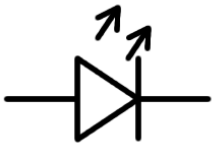
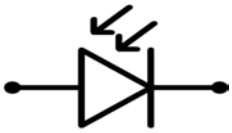


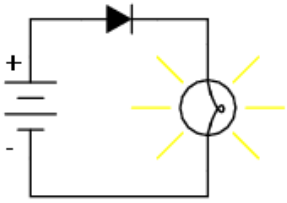
Photo-diode



Rectifier diode



Diode in Reverse Bias



Light Emitting Diode

3.8.3. Power Point Presentation

Another scaffolding activity for enhancing comprehension is also a power point presentation. In order for it however to serve its purpose the power point presentation should follow certain helpful features such as wording (either as a text or bulleted list) accompanied by a picture, icon, graph and the like. Colours play a particular role of course in a power point presentation that should be readable, understandable and as clear as possible, especially when it comes to graphs that involve numbers and/or statistics. An example of such a presentation following the above matching exercise can be found in the link: http://www.safety4el.net/docs/ppt_diode.pptx

3.8.4. Videos/Video clips

Furthermore, knowledge can be even more scaffolded when a demonstrative video precedes a certain activity. As it is generally known, visual aids can be a great help and it is more than welcome to any kind of classroom. An example of such a video that relates to the new or not so new concept of the diode, can be seen at the following link: https://www.youtube.com/watch?v=MVy_MG0X2h4

3.8.5. Roleplay/Simulation

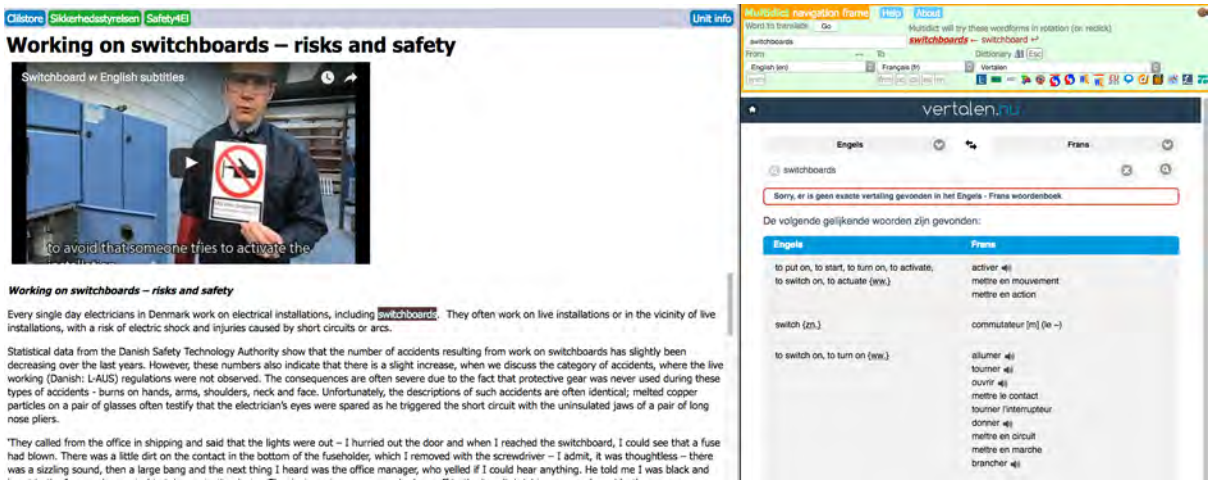
As stated above in 3.7. one procedural scaffolding technique is the roleplay/simulation. Through this kind of exercise, learners can act out roles in order to make use of specific language through context. For example, the educators can give utterances or helpful phrases as useful language for the learners in order to use new vocabulary. E.g. two students may act out electricians and create a dialogue where, when in pairs, one can pretend the electrician who will tell another electrician, most probably less experienced, about being careful, the possible dangers of cutting live wires and what safety equipment to use. The less experienced electrician will have to talk to the experienced electrician and ask him what he needs to do in order to stay safe. A sample of such an activity may look as follows:

A: Hey! Stop right there!
B: What's the matter?
A: You were going to touch that wire.
B: I know. I need to move it.
A: But that's a live wire. And you're not wearing electrical hot gloves!
B: I don't really need them, do I?
A: Yes! Otherwise, you might get an electric shock.

3.8.6. Following Oral Text with Written Text

This particular technique can be used in several ways. For example, it can be used when listening activities are needed. Learners may need to follow oral instructions or even acquire language through an oral text that needs to be written down. It can also be of a *fill in the blanks activity* when vocabulary or even grammar is introduced.

3.8.7 Linking text so all words are linked to dictionaries in 118 languages



A useful tool for scaffolding is called Clilstore. In Clilstore teachers and students can find thousands of units that can be used in CLIL. A Clilstore unit can have video, sound, graphics, and text where all words are automatically linked to a plethora of online dictionaries covering 118 languages. Try the above example from: http://multidict.net/cs/4711

Both teachers and students can create Clilstore units for free, the units are automatically online from the Clilstore database. Learn how to create a Clilstore unit: http://multidict.net/clilstore/help.html the instructions are supported by video and text in many languages.

REFERENCES

Alberich, J ***English through Science*** (2009), as seen in CLIL – Coyle, Hood, Marsh (2010).

Anderson, L.W., & Krathwohl, D.R.(Eds.). (2001). ***A Taxonomy for learning, teaching and assessing: A revision of Bloom's Taxonomy of Educational Objectives:*** Complete edition. New York: Longman.

Asikainen, T. et al. (2010) ***Talking the Future 2010 – 2020: CCN Foresight Think Tank Report. Languages in Education.*** CCN: University of Jyväskylä.

Butzkamm, W. (1998). ***"Code-Switching in a Bilingual History Lesson"***.
In: International Journal of Bilingual Education and Bilingualism, 1(2), 81-92.

Christ, H. 2000. ***"Zweimal hinschauen – Geschichte bilingual lernen"***.
In Bredella, L. & F.J. Meißner (eds.). Wie ist Fremdverstehen lehr- und lernbar? Tübingen: Gunter Narr, 43-83.

Coyle, D., Marsh, D. & P. Hood. (2010) ***Content and Language Integrated Learning***. Cambridge: Cambridge University Press.

Cummins, J. (1979) ***Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters.*** Working Papers on Bilingualism, No. 19, 121-129.

Doiz, A., Lasagabaster, D. & and Sierra, J. (2013)
English-medium instruction at universities: global challenges. Bristol: Multilingual Matters.

Echevarria, J., Vogt, M. & Short, D.J. (2004). ***Making content comprehensible for English learners: The SIOP Model*** (2nd ed.). Boston, MA: Pearson Education, Inc.

Evans, V., Doolley, J., O' Dell, T. 2015, ***Career Paths: Electrician*** by Express Publishing, ISBN: 978-1-4715-0524-9

Ioannou Georgiou, S. and Pavlou, P. ***Guidelines for CLIL Implementation in Primary and Pre-primary Education,*** 2011.
http://www.schools.ac.cy/klimakio/Themata/Anglika/teaching_material/clil/guidelinesforclilimplementation1.pdf

Janneke van de Pol & Monique Volman & Jos Beishuizen, ***Scaffolding in Teacher–Student Interaction: A Decade of Research,*** Published online: 29 April 2010 # The Author(s) 2010. This article is published with open access at Springerlink.com

Lamsfuß-Schenk. 2002. "***Geschichte und Sprache – Ist der bilinguale Geschichtsunterricht der Königsweg zum Geschichtsbewusstsein?".***
In Breidbach, S., G. Bach & D. Wolff (eds.). Bilingualer Sachfachunterricht: Didaktik, Lehrer-/Lernerforschung und Bildungspolitik zwischen Theorie und Empirie. Frankfurt: Lang, 191-206.

Marsh, D. (2012) ***Content and Language Integrated Learning (CLIL) A Development Trajectory,*** University of Córdoba. © Edita: Servicio de Publicaciones de la Universidad de Córdoba. Campus de Rabanales Ctra. Nacional IV, Km. 396 A 14071 Córdoba.

Marsh, D. Frigols, M. Mehisto, P. & Wolff, D. (2010) ***The European Framework for CLIL Teacher Education,*** Graz: European Centre for Modern Languages, Council of Europe.

Marsh, D., Vázquez, V. & Frigols Martin, M. (2013) ***The Higher Education Languages Landscape: Ensuring Quality in English Language Degree Programmes Valencia***: VIU.

Marsh D. (2000) ***Using Languages to Learn and Learning to Use Languages***, Jyväskylä, University of Jyväskylä, Langé G. (ed.).

Massler et al, 2011, ***'Effective CLIL Teaching Techniques'*** in Guidelines for CLIL Implementation in Primary and Pre-Primary Education, eds S Ioannou-Georgiou & P Pavlou.

Mehisto, P., Genesee (eds) (in press) ***Building Bilingual Education System: Forces, Mechanisms and Counterweights.*** Cambridge: Cambridge University Press.

Mehisto, P., Marsh, D., Frigols, M. (2008) ***Uncovering CLIL: Content and Language Integrated Learning in Bilingual and Multilingual Education.*** Macmillan: Oxford.

Mehisto, P. (2012). ***Excellence in Bilingual Education: A Guide for School Principals.*** Cambridge: Cambridge University Press.

Pavesi, M. Bertoccchi, D. Hofamannova M. & Kazianka, M. (2001) ***CLIL Guidelines for Teachers,*** TIE CLIL, Milan.

Rachel R. Van Der Stuyf, ***Scaffolding as a Teaching Strategy***, Adolescent Learning and Development, Section 0500A - Fall 2002, November 17, 2002.

The International CLIL Research Journal "***Coping with CLIL: Dropouts from CLIL Streams in Germany***" Article 5 of Volume 1 (4).

Vygotsky, L.S. (1978). ***Mind in Society: The Development of Higher Psychological Processes.*** Cambridge, Massachusetts: Harvard University Press.

Wolff, D. (2004): ***"Integrating language and content in the language classroom: Are transfer of knowledge and of language ensured?"*** Proceedings of the GERAS, Paris, GERAS.

Eurydice report. CLIL at School in Europe (2006): http://languages.dk/clil4u/Eurydice.pdf

TIE-CLIL Project Publications

- Marsh D. - Langé G. (eds.), Using Languages to Learn and Learning to Use Languages, Jyväskylä, University of Jyväskylä , 2000, Langé G. (ed.), Website: available from: http://archive.ecml.at/mtp2/CLILmatrix/pdf/1UK.pdf {1 September, 2014}

• Pavesi M. et al, Teaching through a foreign language. Website: available from: www.ub.edu/filoan/CLIL/teachers.pdf {2 September, 2014}