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Towards quality-CLIL: successful planning and teaching strategies¹

Hacia un CLIL/AICLE de calidad: estrategias efectivas de planificación y enseñanza

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Abstract

Content and Language Integrated Learning (CLIL) is currently gaining considerable momentum and it is being integrated into curricula all across Europe. However, there is still a lack of appropriate teaching materials and a comprehensive and integrative CLIL methodology has yet to be developed. Legitimate concerns have been raised that practitioners may fail to reach the inherent potential of the CLIL approach unless they embrace the specific CLIL mindset and are provided with the methodological competences needed to bring this innovative approach to life and to ensure quality teaching and learning. This article intends to address this problem by establishing quality criteria for successful and sustainable CLIL teaching and learning and by introducing a flexible planning tool that enables teachers to develop innovative materials based on the 4Cs-Framework (Coyle).

Keywords:

CLIL, planning, methodology, criteria, teaching.

Resumen

El aprendizaje integrado de contenidos y lengua extranjera (AICLE/CLIL) está tomando un impulso considerable, prueba de ello es que está siendo integrado en los programas académicos de toda Europa. Sin embargo, hay todavía una falta de materiales didácticos adecuados para su práctica, y queda todavía por desarrollar un enfoque CLIL integral e integrador. Existe la legítima preocupación de que los educadores no lleguen a alcanzar el potencial inherente del enfoque AICLE sino adoptan una mentalidad AICLE y unas competencias metodológicas idóneas para hacer que este enfoque innovador cobre vida y asegurar un proceso de enseñanza y aprendizaje de calidad. Este artículo intenta referirse a este problema estableciendo criterios de calidad que ayuden a conseguir una enseñanza y aprendizaje CLIL exitoso y sostenible, e introduciendo una herramienta de planificación flexible, que permite a los docentes desarrollar materiales innovadores basados en el marco de las 4 Cs (Coyle).

Palabras clave:

CLIL, planificación, metodología, criterio, enseñanza.

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1. Insights from CLIL-Research

CLIL has been a tremendous success story and its influence on practice is currently expanding quickly across Europe and beyond. Recent research has confirmed that CLIL has positive effects on the language skills of EFL learners, placing them well ahead of their non-CLIL counterparts (DESI, 2006; Zydariß, 2007a; and Lasagabaster, 2008). At the same time, studies also indicate that the learning of content does not suffer in this process, in some cases CLIL students even outperformed their non-CLIL counterparts (Badertscher, 2009 and Heine, 2008). Taken together, there is much evidence to suggest that CLIL students are equally, if not more successful, at learning a subject than students learning content subjects in L1. This means that CLIL may be considered as an approach that is mutually beneficial for both content and language subjects.

Despite CLIL's documented potential, there are still limited methodological resources and practical guidance to enable teachers to plan and teach with a multiple focus that is vital to the successful integration of content and language. The 4Cs-Framework (Coyle, 1999, 2006) offers a sound theoretical and methodological foundation for planning CLIL lessons and constructing materials because of its integrative nature. It is built on the following principles:

- Content: Content matter is not only about acquiring knowledge and skills, it is about the learners creating their own knowledge and understanding and developing skills (personalized learning);
- Cognition: Content is related to learning and thinking (cognition). To enable the learners to create their own interpretation of content, it must be analysed for its linguistic demands; thinking processes (cognition) need to be analysed in terms of their linguistic demands;
- Communication: language needs to be learned which is related to the learning context, learning through that language, reconstructing the content and its related cognitive processes. This language needs to be transparent and accessible; interaction in the learning context is fundamental to learning. This has implications when the learning context operates through the medium of a foreign language;
- Culture: the relationship between cultures and languages is complex. Intercultural awareness is fundamental to CLIL. Its rightful place is at the core of CLIL (see Coyle, 2006: 9-10).

In order to succeed, CLIL teachers and textbook writers need flexible tools and recommendations on how to develop quality materials based on the 4Cs-Framework. The call for quality and accountability (Coyle, 2007) must be answered because recent

studies also show that there are many unresolved issues in CLIL classrooms: Dalton-Puffer's research revealed that productive language skills, especially speaking, are not promoted in many CLIL-classrooms. Also, she observed a lack of academic discourse functions (Dalton-Puffer, 2007). One of the results of Vollmer's comparative study was that many CLIL students show very poor academic writing skills, even at the age of 16. More often than not, they failed to verbalize subject-specific issues in an appropriate way (Vollmer, 2008). Viebrock's analysis of recurring patterns of argumentation in the teachers' mind-sets shows that the CLIL approach runs a risk of being «misused» as a justification of out-dated teaching habits and methodological monotony (Viebrock, 2006).

In sum, embracing the CLIL approach does not automatically lead to successful teaching and learning. To truly realize 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.

The CLIL-Pyramid is based on the 4Cs-Framework and was developed as an integrative planning tool for material writers and lesson planners. It has been successfully used in both pre- and in-service teacher training courses in Germany and across Europe.²

The following quality principles and strategies are based on the latest insights from CLIL research, second language acquisition (SLA), teaching methodology, cognitive psychology, extensive classroom observation in several countries, as well as a critical reflection of the author's personal experience as a CLIL teacher, teacher trainer and materials writer.

2. Strategy No. 1: rich Input

Meaningful, challenging and authentic. Those should be the main criteria for selecting appropriate classroom materials. SLA studies have shown that meaningful and challenging input is one of the main pillars of foreign language acquisition. Classroom content should be meaningful in a sense that it focuses on global problems mankind faces (Klafki's «epochaltypische Schlüsselprobleme») while connecting with the daily lives of our students and their areas of interest. Krashen's monitor hypothesis and recent insights gained from neurolinguistic studies stress the importance of motivation and its effect on (language-) learning (Dörnyei, 2006; Liuliene/Metiuniene, 2006). Put simply, subject learning through a foreign language works best when new topics are presented

² These findings are based on the written evaluation of several Comenius Courses.

in such a way that the affective filters of the students remain wide open and when students can link new input to prior knowledge, experiences and attitudes.

Video clips, flash-animations, web-quests, pod-casts or other interactive materials on English websites combine motivating and illustrative materials with authentic language input. They constitute a rich source for designing challenging tasks that foster creative thinking and create opportunities for meaningful language output. Such websites also provide ample opportunities for self-directed and differentiated learning, a chance for students to autonomously prepare for the next lesson, to review issues dealt with in class using a different medium/mode of presentation, or for individual portfolio work; or all of the above.

However, the struggle for authenticity can be misleading. It may lead us to assume that we can dispense with one of the key functions of every CLIL teacher: that of acting as a language role-model who actively shows and teaches students how to perform language operations such as analyzing or interpreting pictures, maps, satellite images, video clips, or verbalizing complex higher order thinking processes.

The role of the teacher in the teaching and learning process needs to be reevaluated. What is needed for successful learning is an appropriate balance of teacher-directed and learner-directed activities; thus enabling teachers to provide the necessary, modeling scaffolding and motivation (Gudjons, 2007). Especially in CLIL classrooms, teacher feedback, systematic and professional error treatment, is crucial for successful learning (Meyer, 2010).

One of the key concepts for selecting materials is that of «multi-modal input» («Wechsel der Darstellungsformen») (Leisen, 2005). The various ways of presenting subject specific matters visually (through maps, diagrams, etc.) not only allow for diversified teaching and promote visual literacy, they also enable a deeper understanding of the specific subject content and serve to illustrate and clarify complex matters presented in a foreign language.

Converting information from one mode of representation (a text) into another (map, chart, graph, etc.), and from one mode of representation in L1 into one in L2 fosters both language and content learning and it also takes into account the individual needs of students' different learning styles and their multiple intelligences. To successfully deal with multi-modal input, students need to have a wide variety of study skills at their disposal which makes the scaffolding of language and learning a key component of successful CLIL teaching.

3. Strategy No. 2: Scaffolding Learning

To make sure that students successfully deal with authentic materials and that as much *input* as possible can become *intake*, it is essential for students to receive ample support. They need scaffolding³ to help them cope with language input of all sorts. The quantity and intensity of scaffolding can be reduced as students' language skills advance.

Scaffolding serves several purposes:

1. It reduces the cognitive and linguistic load of the content/input (= *input-scaffolding*) which means that scaffolding helps students understand the content and language of any given material.
2. It enables students to accomplish a given task through appropriate, supportive structuring.
3. Scaffolding also supports language production (= *pushed output*) by providing phrases, subject-specific vocabulary and collocations needed to complete assignments. It helps students to verbalize their thoughts appropriate to the subject matter. In other words, scaffolding done right will boost students' cognitive academic language proficiency (*CALP*).

With the scarcity of good teaching materials/textbooks in most countries, CLIL teachers depend on authentic materials. Since these materials are not created with the needs of foreign language learners in mind, these materials contain more lexical items than the students are familiar with, certainly more so than contemporary EFL textbooks.

That does not mean, however, that each of those words has to be introduced to the class or that texts containing unfamiliar words are not suitable for CLIL classrooms. Clearly, this is not the case: the skill to infer the meaning of new words from the context or to find out which passages of a text are relevant for a specific task is of great practical importance and needs to be well-honed. Students need to lose their fear of unknown words and structures.

Questions and tasks have to be designed in such a way that students can easily understand the gist of what is being said even though they do not have complete understanding of the text. Nothing succeeds like success! We need to focus on what

³ See Walqui (2006) for a comprehensive overview on scaffolding and for a conceptual pedagogic framework. For concrete examples on how to scaffold videos, pictures, graphs, texts etc. see Böttger/Meyer (2008).

students can understand, help them express their thoughts appropriately, and give them reasons to be proud of their progress instead of discouraging their natural curiosity and their desire to learn.

In order to help our learners construct their own learning, they need to be taught how to learn efficiently. Learning skills and strategies, and that especially goes for subject-specific study skills like working with maps, diagrams or pictures, must be practised continually and become an integral part of every CLIL lesson. They are the pillars of CLIL learning and their potential for promoting language as well as higher order and critical thinking skills has long been neglected.

Cognitive Psychology, e.g. Anderson's Adaptive Control of Thought (ACT) Model (Anderson, 1983), views skill learning as the proceduralization of rule-bound declarative knowledge through practice and feedback. Declarative knowledge refers to knowledge about facts and figures whereas procedural knowledge refers to knowledge about how to perform various cognitive activities. The main tenets of ACT are:

- Declarative knowledge is encoded directly from observation and instruction.
- Skill development depends on transforming this knowledge into production rules that represent procedural knowledge.
- Production rules can only be acquired through practice.

(taken from Ranta/Lyster, 2007)

In order to facilitate skill learning, instructional activities should «set up contexts in which these skills can be displayed, monitored, and appropriate feedback given to the shape of their acquisition» (Lyster, 2007: 149). It is clear that a high degree of automaticity, that is fast, accurate and spontaneous effortless use of knowledge, however hard it may be to achieve, is the ultimate goal for most learners. That is both because of the impact on the quality of linguistic output and because how it frees up resources for processing message content instead of language (Segalowitz, 2003). It follows that meaningful and systematic practice, which in other fields of studies is simply called training, clearly is of great importance in the CLIL-classroom.

In our studies, experience has shown that students who are not as gifted in language learning as other students greatly benefit from scaffolding. Their motivation for language learning often increases once they understand how and in which order to proceed, and which phrases to use when describing pictures, analyzing charts, or interpreting cartoons for instance.

4. Strategy No. 3: rich interaction and pushed output

Long's Interaction Hypothesis proposes that language acquisition is strongly facilitated by the use of the target language in interaction. Long suggests that feedback obtained during conversational interaction promotes interlanguage development because interaction «connects input, internal learner capacities, particularly selective attention, and output in productive ways» (Long 1996: 451-2). Swain has claimed that modified output benefits L2 development because «learners need to be pushed to make use of their resources; they need to have their linguistic abilities stretched to their fullest, they need to reflect on their output and consider ways of modifying it to enhance comprehensibility, appropriateness and accuracy.» (Swain, 1993: 160f.). Student interaction and output is triggered by tasks which is why task design is at the heart of every CLIL lesson and one of the key competences for every CLIL teacher.

Sample Task #1:

You've applied for one of the 10 Most Exciting Summer Jobs Program's highlights: working as a hurricane co-pilot/tornado hunter. In order to get the job you have to hand in a short video of yourself, you will be interviewed, you will have to show that you know how to read and interpret climate charts and satellite images, and that you know your natural hazards inside out.

Team A will prepare for the interview conducted by team B. The interviews will be recorded and analysed. Then you will switch roles.

Sample Task #2:

Prepare your appearance in a Talk Show about Australia's minorities based on the materials you've been handed out and the movie we've watched (Rabbit Proof Fence). Each team will be assigned different roles. Choose a suitable talk show host. The show will be recorded.

The above examples show that Task-Based Language Teaching (TBLT) offers a wide range of methodological opportunities for EFL teaching and, in addition, they illustrate why this approach should be an integral part of CLIL teaching. TBLT focuses on bringing authentic communication into the classroom because – according to TBLT advocates – languages are acquired most successfully when they are learned for communicative purposes in meaningful and significant social situations. The various task parameters and -variables (i.e. *pre-planning time, interaction patterns, pressure on language production, task-structure* etc.) can be adjusted to foster and improve fluency, accuracy, and complexity of language production.

One of the core-features of TBLT is the so-called *gap-principle*. It states that authentic communication will occur when there are certain communication gaps (*information gap*:

transferring information from a text to a table or from pupil to another; *reasoning gap*: deducing a teacher's timetable from a set of class timetables or working out an optimum course of action given different variables and *opinion gaps*: completing a story and comparing endings) which need to be bridged by the students.

Teachers can make use of that principle and create authentic communicative situations by providing such gaps and asking the students to fill them through cooperative interaction. Task-repetition is another very efficient way to promote communication skills. Even though the effects of task-repetition on fluency have been documented in several studies (Bygate, 2001), they have hardly been integrated in cooperative classroom activities so far. The innovative *multiple-performance-task* was developed in one of our CLIL-seminars and combines the communicative benefits of the gap principle with those of task-repetition (cf. figure 1).

- A group of four students is asked to read four different texts (jigsaw reading activity).
- They are then asked to share that information with one of their group members in a way that each student gets to talk to three group members who are not familiar with the content of this text.
- By giving each student the opportunity to repeat their performance twice, students not only get a huge amount of authentic talking time, one can also expect increases in the fluency of the performance because they will feel more and more confident with each repetition.
- If students are allowed to check dictionaries between turns, the complexity of their output can also be expected to rise.

Giving students pre-planning time is likely to increase accuracy and complexity, while reduced planning time is likely to result in more fluency but less accuracy and complexity (Ellis, 2003).

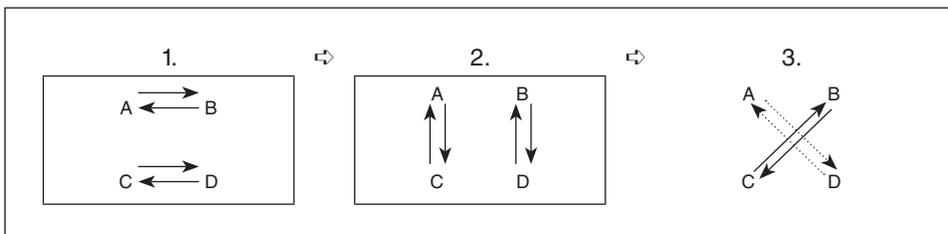


Figure 1: multiple-performance task. This sequence was specifically developed to maximize both output production and the retention rate of subject content in CLIL classrooms operating under real-life conditions.

The relationship between CLIL and TBLT is symbiotic: authentic and meaningful content is used to create motivating and challenging tasks. Authentic communication in different cooperative formats (like think-pair-share activities) triggered by those tasks and the frequent negotiation of meaning necessary to complete them enables a greater depth and bandwidth of content learning.

Research into the complex relationship between language and thinking and its effect on language learning/acquisition has led Swain to formulate the idea of «linguaging» which she defines as «the process of making meaning and shaping knowledge and experience through language» (Swain, 2006: 89). Linguaging completes our thoughts/cognition/ideas and transforms them into artifacts that allow for further contemplation, which, in turn, transforms thought. While speaking (or writing), a new or deeper understanding may be achieved (O'Connell cited in Swain, 2009: 5).

There is no need for tasks to be as comprehensive and time-consuming as the ones listed above. Authentic communication can be achieved in short periods of valuable teaching time when:

- students draw a graph based on sharing information.
- students sit back to back and are asked to spot mistakes in pictures handed to them without showing them to each other.
- students create L2 subtitles or an audio track for an L1 video clip or vice versa using software like Microsoft Moviemaker or similar freeware.

5. Strategy No. 4: Adding the (Inter-)cultural Dimension

Grimalda recently examined the degree of interaction among individuals in the process of globalization (Grimalda, 2006). Preliminary results indicate that people's willingness to cooperate significantly increases the better they know each other. This means that students need to learn about other countries. However, 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.

If we want to prepare our students to succeed in a globalized world, enable them to work in teams across national and cultural borders, intercultural communicative competence (Camerer, 2007) needs to be the ultimate educational goal and at the

heart of our teaching. CLIL can offer a significant contribution to that goal. Students do not only have to learn how to talk about key issues in the lingua franca. They also need to become aware of the hidden cultural codes and the appropriate linguistic and non-linguistic means and strategies to address them and they need to be taught how to keep the flow of communication going without offending the partner.

Looking at various topics from different cultural angles, realizing that other cultures tend to see things differently, have different values and beliefs, is one of the most valuable experiences that CLIL may offer. Studies comparing various CLIL-textbooks have shown that the cultural dimension has not been properly exploited yet.

6. Strategy No. 5: Make it H.O.T.

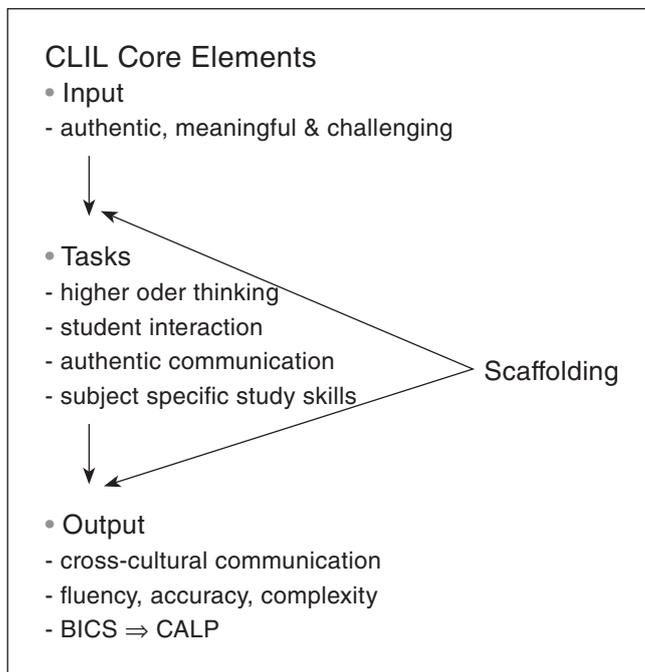


Figure 2: CLIL Core Elements ©Oliver Meyer

A word to the wise: of the approximately 80,000 questions asked on average annually by teachers, 80 per cent are at the lowest level of thinking – factual knowledge. (Gall 1984; Watson/Young 1986 in Mehisto *et al.* 2008)

Indeed, thinking skills (H.O.T.s) are the key to success in the Information Age. The citation above shows how far away we are from this goal regarding the teaching of thinking skills in class. Vollmer's comparative study of CLIL classrooms reaches a similar conclusion:

Another important result is that both groups of learners show considerable deficits in their academic language use, in the knowledge and mastery of academic forms of communication and of writing in particular: the specific competences in handling the language dimension adequately and in expressing their thoughts and findings appropriately or functionally according to the genre(s) demanded are equally low, they show a serious lack of command over or sensitivity for the requirements of academic language use, both in L2 and in L1. (Vollmer, 2008: 272)

This is a very inconvenient truth. Academic discourse functions, the intersection of content, cognition and language, the ability to express complex thought processes appropriately, do not appear automatically but need systematic instruction, both in L1 and L2. This has several consequences for an effective CLIL teaching methodology:

1. The core elements of CLIL (cf. figure 2) i.e. *input*, *tasks*, *output*, and *scaffolding* have to be balanced in such a way that various cognitive activities are triggered. Effective teaching means creating environments in which students are engaged, challenged, and saturated with various types of thinking – without being overwhelmed (Zwiers, 2006). Michael Pohl and others have shown how the revised Bloom taxonomy can be put to use in order to level tasks according to cognitive demand and how it can be turned into a powerful tool for planning truly differentiated units by combining it with Gardner's concept of multiple intelligences.⁴ It is important to keep in mind, however, that the learning process is probably more concurrent than sequential and that students may not have to go through all the less complex thinking stages like *remember* or *understand* in order to successfully synthesize, evaluate or create (Zwiers, 2006).
2. Systematic language work is of paramount importance when teaching thinking. Students need to be shown how to express their thoughts in an increasingly complex manner: «Every learning involves language learning or is language learning at the same time and (that) communication, therefore is of overriding importance also in subject learning» (Vollmer 2008: 273). Zwiers (2006) demonstrates how academic thinking skills can easily be incorporated into one's teaching routine and how the

⁴ Sample grids that show how to combine Bloom's taxonomy and Gardner's concept of multiple intelligences for different age groups are available online: http://www.cap.nsw.edu.au/teachers/tech_based_resources/mi_pages/index.htm

verbalization of these thinking skills can be fostered through various activities and with the use of writing scripts/scaffolding frames.

7. Strategy No. 6: sustainable learning

«*Julia, could you please sum up the main points of last week's lesson?*»

«*No, I can't. You see, first we were doing stuff on the internet and then there were only presentations and we didn't write anything down. So there was nothing to start with to prepare for today's lesson.*»

Such encounters are not uncommon and this example serves to illustrate what is meant by sustainable learning: we have to make sure that what we teach in class is taught in a way that new knowledge becomes deeply rooted in our students' long-term memory. Passive knowledge has to be turned into active knowledge. Competent learners are those who can deliberately retrieve knowledge and apply it to solve problems or complete tasks. Ideally, many of their sub-skills have become highly automatized through meaningful practice and they are able to display the accurate and spontaneous use of their knowledge.

In CLIL, sustainable teaching and learning is of great importance since teachers have to facilitate both the learning of the specific content and the learning/acquisition of a foreign language. In addition to that, they have to find ways of making sure that the students can talk about the respective topics in both their L1 and their L2.

To make learning more sustainable in the CLIL classroom teachers should:

- create connections with students' attitudes, experience and knowledge.
- make the learning process transparent and provide clear structuring (e.g. by using advance organizers).
- make sure that results of group work are shared with all students of the class (through posters, blogs, learning diaries, websites etc.). Effective methodology needs to encompass both the sender and recipient of a message/presentation and strike a balance between teacher-centered communication and cooperative student-centered activities.
- promote autonomous learning and introduce (digital) portfolio work.
- adopt a *translanguaging* approach (Creese/Blackledge 2010) to multilingualism by making strategic use of the L1 to support the learning process. Paraphrasing games like *Taboo* where students are asked to sum up the main objectives of a lesson without

- using the words written on the blackboard in L1 or L2 have proven very effective ways to deepen both content and language learning. *Transmediation* activities (where key contents, i.e. a newspaper article, a website, a video etc., have to be transferred from one language to another) are also ideally suited for CLIL classes and maybe the right move to go beyond «squandering our bilingual resources» (Cummins 2005: 585), to move away from multilingualism conceptualized as parallel monolingualisms towards a flexible bilingualism where the boundaries between languages become permeable.
- embrace a lexical approach to teaching and move away from isolated words and word lists and focus on collocations and chunks instead. Lewis (2002) provides excellent examples on how to introduce, organize and practice lexis according to the lexical approach. His ten principles of organizing lexis are ideally suited for CLIL classrooms but are not widely used.
 - promote spiral learning and put great emphasis on learning and study skills.

8. Introducing the CLIL-Pyramid

The CLIL-Pyramid was designed to visually represent the idea that quality CLIL based on the tenets of the 4Cs-Framework can only be achieved when all of the four Cs are considered in lesson planning and materials construction. The four Cs are the cornerstones of the base area of the CLIL-Pyramid which comes into existence when one tries to find the point where lines originating from each corners meet (cf. figure 3). It is meant to be a tool for lesson planning and materials construction/adaptation, and tries to incorporate all the principles and strategies mentioned in this article.

It is important to understand, however, that all the quality principles introduced in this article can hardly ever be incorporated in one single lesson. Therefore, the unit (a sequence of several lessons on one topic) must become the focal point for teachers and material writers. The CLIL-Pyramid suggests a systematical, tried and tested sequence for planning CLIL units and materials, starting with topic selection and ending with a review of key content and language elements that we have come to call the CLIL workout.

1. Planning a CLIL unit starts with content selection. The specific needs of the content subject are at the heart of every CLIL lesson and the starting point for material construction.
2. Providing multimodal input and distributing it evenly across the new CLIL unit produces highly differentiated materials which accommodate different learning styles and activate various language skills. Multimodal input also facilitates the development of new literacies.

3. The nature of the selected input (i.e. texts, charts, maps, video clips, etc.) determines how much and what kind of input-scaffolding is needed. It also indicates which subject specific study skills need to be practiced with the students so they can successfully cope with that input.
4. Tasks need to be designed to trigger both higher order thinking skills and lead to authentic communication/interaction in different interactive formats (solo work, pair work, group work, etc.).
5. The nature of the desired output (poster, interview, presentation, map, etc.) determines how much and what kind of output-scaffolding is necessary.

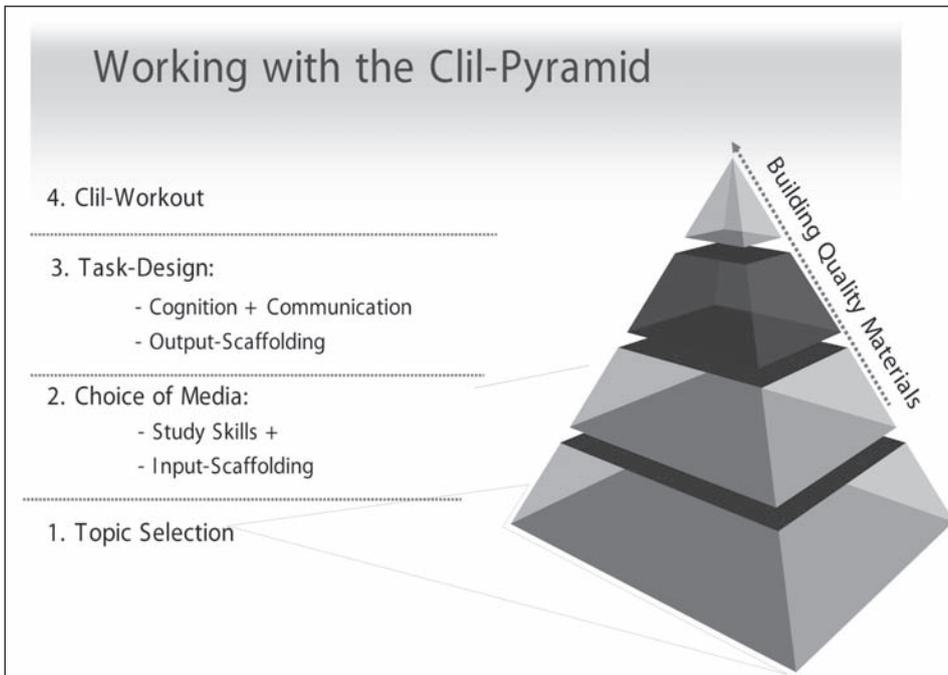


Figure 3: The CLIL Pyramid © Oliver Meyer

To help students and teachers plan their lessons with the CLIL-Pyramid, we have developed a template for CLIL units (cf. figure 4):

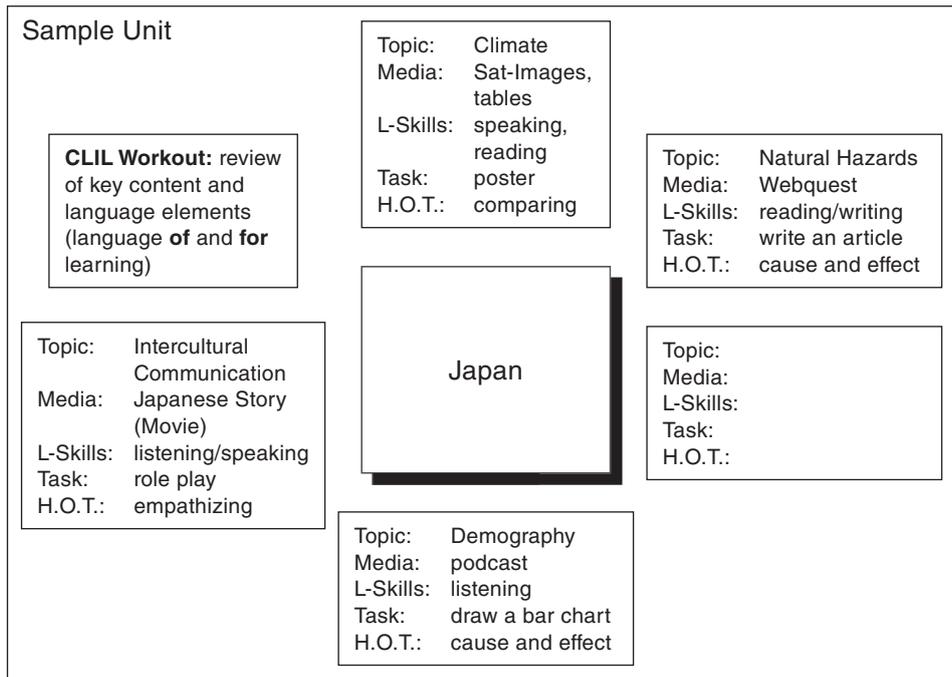


Figure 4: CLIL-Pyramid Unit Template © Oliver Meyer

Using the CLIL-Pyramid and the template offers several advantages:

- The model enables multifocal lesson planning: content, communication, cognition and culture are inextricably linked.
- Higher order thinking skills become an integral part of CLIL lessons.
- Scaffolding, study skills, and learning strategies are essential parts of the planning and teaching process.
- The model raises awareness for multi-modal input. It accommodates individual learning styles, multiple intelligences and leads to highly differentiated lessons and materials.
- It is very flexible regarding various models of interaction/cooperation (individual/pair/group work)
- Intercultural communication is taken seriously.

One of the biggest advantages of using the CLIL-Pyramid as a planning tool is that it makes it possible for teachers/material writers to create an interdisciplinary progression of study skills which can be spread across different units, different age groups or even

different content subjects: academic writing focusing on the academic thinking skill «comparing» introduced in a unit on Japan might be continued and elaborated on in a later unit on Australia or Africa but this skill may also be honed in a history or science lesson, etc. That way, the CLIL-Pyramid can be used to create the kind of cyclical syllabus that Shehan (1998) envisions.

9. Conclusion

To unlock the inherent potential of CLIL, a holistic methodology is needed that transcends the traditional dualism between content and language teaching. The shift from knowledge transmission to knowledge creation in multilingual settings requires students to be skilled in not only assimilating and understanding new knowledge in their first language, but also in using other languages to construct meaning (Coyle/Hood/Marsh, 2010, 153). To realize 'life-shaping' potential and to prepare their students for the challenges of a globalized world, teachers should focus on:

developing the values... of young people's character; emphasizing emotional as well as cognitive learning; building commitments to group life... not just short-term teamwork; cultivating a cosmopolitan identity which shows tolerance of race and gender differences, genuine curiosity towards and willingness to learn from other cultures, and responsibility towards excluded groups. (Hargreaves, 2003, xix)

The 4Cs-Framework offers a sound pedagogical and methodological base for truly sustainable CLIL teaching and learning. The quality principles and introduced in this article are intended to help CLIL-teachers enrich their lessons and materials while the CLIL-Pyramid offers a proven sequence to incorporate those principles in their CLIL-units. The true potential of the CLIL-Pyramid, however, is in the support it provides to establish and maintain connections between different subjects/topics/units and by making explicit the study skills and literacies which might drastically change the way we think about curriculum planning and the way we structure classroom learning in the future.

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