

Insights into CLIL methodology

Wgląd w metodologię Zintegrowanego Kształcenia Przedmiotowo-Językowego (CLIL)

Key words: CLIL, bilingual education, methodology, content, communication, cognition, culture.

Abstract. The following article analyses the true nature of CLIL on a practical level. It begins with stating the CLIL pedagogic framework and explains the mutual relation between language and content in CLIL settings. All these facts have been presented in order to fully account for CLIL methodology which is deeply rooted in the dual focus nature of CLIL. The features of CLIL methodology have been consecutively listed and thoroughly discussed in the paper. Each of the points analysed is followed by some practical considerations.

Słowa kluczowe: CLIL, edukacja dwujęzyczna, metodologia, treści przedmiotowe, komunikacja, poznanie, kultura.

Streszczenie. Poniższy artykuł stanowi analizę prawdziwej natury CLIL na poziomie praktycznym. Początkowe akapity artykułu omawiają ramy pedagogiczne CLIL i wyjaśniają wzajemne relacje między językiem a treścią w trakcie zajęć realizowanych tą metodą. Wszystkie te aspekty zostały poruszone w celu pełnego zrozumienia metodologii CLIL, która jest głęboko zakorzeniona w podwójnej naturze tej metody nauczania. Cechy metodologii CLIL zostały kolejno wymienione i szczegółowo omówione. Po każdym z analizowanych punktów zaproponowano także praktyczne rozwiązania możliwe do zastosowania w trakcie lekcji.

Introduction. Content and Language Integrated Learning (CLIL) has been undoubtedly successful and its influence on teaching practice has been continuously expanding across Europe and beyond. One of the available definitions describes CLIL as: “a dual- focused educational approach in which an additional language is used for the learning and teaching of both content and language” (Mehisto / Marsh / Frigols 2008: 9). More generally, we could say that it is the integration of learning a foreign language with learning some other content.

Moreover, students are expected to focus on the content or information rather than on a linguistic syllabus (Larsen-Freeman 2000: 137). This is why this approach is also referred to as content-based teaching (CBT), since teaching a foreign language

is organized around the content or information that students are to acquire (Richards / Rodgers 2001: 204).

The 4 Cs pedagogic framework for CLIL. The framework underpinning CLIL is based on four key “building blocks” (Coyle 2008: 9), referred to as the 4Cs Framework:

1. Content: The subject matter, theme, and topic forming the basis for the program, defined by domain or discipline according to knowledge, concepts, and skills (e.g. Science, History, Arts);
2. Communication: The language to create and communicate meaning about the knowledge, concepts, and skills being learned (e.g. stating facts about the dissociation process, giving instructions on using software, describing emotions in response to music);
3. Cognition: The ways that we think and make sense of knowledge, experience, and the world around us (e.g. remembering, understanding, evaluating, analysing, reflecting, creating);
4. Culture: The ways that we interact and engage with knowledge, experience, and the world around us; socially (e.g. social conventions for expressing oneself in the target language), pedagogically (e.g. classroom conventions for learning and classroom interaction), and/or according to discipline (e.g. scientific conventions for preparing reports to disseminate knowledge).

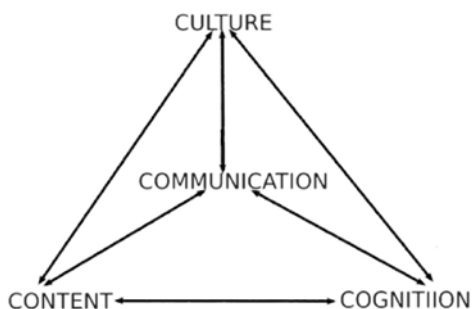


Fig. 1. The CLIL 4Cs Framework (Coyle 2007: 551)

It is vital to mention that while methodology relies heavily on specific conditions for successful implementation (e.g. see Baker 2006, for a list of “core” and “variable” features of immersion), CLIL is instead guided by six relational (and therefore more contextually sensitive and flexible) pedagogical principles that work across different contexts and settings, in order to integrate language and content (Coyle 2007: 551). At the same time, all four key elements underlying the 4Cs framework are incorporated:

1. Subject matter means much more than acquiring knowledge and skills. It is about the learner constructing his/her own knowledge and developing skills which are relevant and appropriate (Lantolf 2000: 17; Vygotsky 1978: 61).

2. Acquisition of content, skills and understanding involves learning and thinking processes. In order to enable the learner to construct an understanding of the subject matter, the linguistic demands of its content as the “conduit for learning” must be analysed and made accessible (Met 1998: 44).
3. Cognition requires analysis in terms of its linguistic demands to facilitate development (Bloom 1984: 11).
4. Language needs to be learned in context (i.e. learning through the language), which requires reconstructing the subject matter and its related cognitive processes through a foreign language e.g. language intake/output (Krashen 1985: 10; Swain 2000: 101).
5. Interaction in the learning context is fundamental to learning. “If teachers can provide more opportunities for exploratory talk and writing, students would have the chance to think through materials and make it their own” (Mohan 1986: 13). This seems to be essential when the learning context operates through L2.
6. The interrelationship between cultures and languages is complex (Byram 2009: 7). The framework views culture as the core while intercultural understanding pushes the boundaries towards alternative ideas such as transformative pedagogies, global citizenship, student voice and “identity investment” (Cummins 1998: 2).

Core features of CLIL methodology. First of all, it is important to realize that CLIL should not be treated separately from some other “standard” forms in education. Its task is simply to enrich the learning environment and it can easily complete the parameters established by the regional curriculum (Mehisto / Marsh / Frigols 2008: 27). During a CLIL lesson a teacher can apply his or her favourite strategies. The fundamental difference is, however, for the teacher to have a three way focus on content, language and thinking skills. Thus, the teacher is responsible for giving the students the proper language, the language dictated by the subject (Deller / Price 2007: 9).

In the subsequent chapters of their book, Mehisto, Marsh and Frigols (2008: 29) enumerate the core features of CLIL methodology: multiple focus, safe and enriching learning environment, authenticity, active learning, scaffolding and co-operation.

Multiple focus. In relation to the first of the features mentioned, there are many aspects which contribute to the multiple focus nature of content and language integrated learning.

Firstly, we might enumerate here supporting language learning in content classes as well as supporting content learning in language classes. As for supporting language learning in content classes, this can be done in various ways. One of the crucial techniques would be creating a psychologically safe environment. In addition, the students should be encouraged to deal with their issues through discussion and to analyse their commentary.

As the subject dictates language demands, we have to analyse the language demands of a given lesson and give the learners the language support which they need. Learners

will need help in the areas of lexis, cognitive functions and study skills (Deller / Price 2007: 11).

Another characteristic feature of CLIL is using the target language systematically. However, it does not mean that the students are expected to use it right from the first classes. The learners should be initially allowed to summarize or simply give the answer in their native language. A good example would be group work in which students could discuss a problem in their mother tongue as a way to accomplish the given task in English. In reality, a lot of code-switching will take place and that is perfectly natural, particularly in the lower grades.

It has also been remarked by the researchers that there is a strong need for repetition and consolidation in the CLIL classroom, which directly contributes to better memorisation of new vocabulary items (Deller / Price 2007: 12).

Furthermore, there is an expectation that CLIL will involve maximum interaction in the target language within and beyond the classroom (Coyle / Holmes / King 2009: 61).

Finally, teachers should be able to set high but realistic expectations. This implies that CLIL classes should provide content which challenges learners' thinking, stimulating the desire to interact with and through language at an appropriate level of cognitive demand (Coyle / Holmes / King 2009: 61).

When it comes to the second important aspect with relation to multiple focus of CLIL, supporting content learning in language classes, there is a strong need for language and content teachers to cooperate. Teachers should discuss topics being studied and the linguistic units which are necessary to study the topics. Teaming up with fellow teachers is beneficial for both students and teachers. It helps the teachers to lower stress, to be more precise in setting their aims and to work in a more efficient way.

All of the suggestions enumerated so far can be briefly presented in the form of the following diagram.

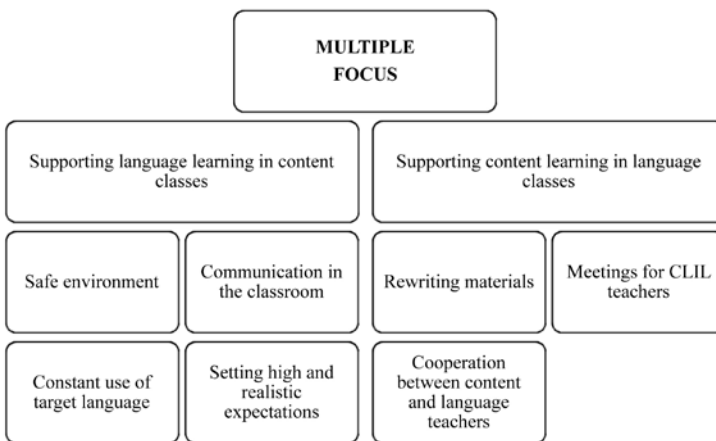


Fig. 2. The multiple focus nature of CLIL (Mehisto / Marsh / Frigols 2008: 109)

Assessment. Having considered multiple focus as an important part of CLIL methodology, we may focus on the role of assessment and reflection on learning. Assessment is an integral part of every lesson. The particular challenge for teachers in CLIL contexts is engaging with assessment in two fields: subject and language. And teachers have to do it in the context of innovative practice: for many teachers where CLIL is new, there is little local situated knowledge of how this can be done (Kiely 2009: 6).

Deller and Price (2007: 19) maintain that the decision whether to assess content or language and what that ratio should be may depend on the age and level of the learners. In some cases it may be more appropriate to evaluate language and content separately. In this case the assessment of the content could be in the mother tongue.

According to Mehisto / Marsh / Frigols (2008: 122), the teacher should discuss all the aspects of evaluation at the beginning of the school year with the learners. If the school curriculum focuses mainly on content, it is important to determine the ways and standards of assessment. If the learners' main task is to memorise and understand information concerning a particular subject (e.g. chemistry) their marks should not be lowered as a consequence of some language errors, as long as the teacher is convinced that the learners have mastered the content. As far as lesson evaluation is concerned, one of the ideas would be for a teacher to prepare a classroom survey on the pupils' opinion about the lessons.

Also, students' ability to reflect on their learning processes seems to be of great importance. One example of such a reflection would be using a portfolio. A learning portfolio is a personal document of a learner. In this document learners of all ages can record their language and content learning and cultural experiences at school or outside school

Safe and enriching learning environment. In relation to safe and enriching learning environment, it is clear that in CLIL we have to include more strategies to support understanding and learning. One strategy would be to use visuals such as pictures, charts and diagrams. If a teacher believes that there is a need for a specific language to be available to students one of the ideas would be to present it in the form of e.g. a chart or a poster in the classroom. Such solutions may encourage learners to use the language displayed and, consequently, to actively participate in the lesson.

Another strategy is to plan lessons to support the language and learning needs, for example, providing a chart to fill in to accompany a reading text, or a framework for a writing activity, identifying key vocabulary, and varying the activities to include whole-class, small-group, pair and individual work (Deller / Price, 2007: 21).

It is speculated that teacher support may act as a buffer from the negative effects of language anxiety experienced in the foreign language learning process (Piechurska-Kuciel 2011: 94). The results of the study by Piechurska-Kuciel indicate that students with higher levels of teacher support experience lower levels of language anxiety in comparison to their peers with lower level of teacher support. Furthermore, the author

points out that learners who receive advice, assistance and help manage the learning process more effectively, evaluate their language abilities highly and receive better final grades. Consequently, Piechurska-Kuciel (2011: 96) enumerates some recommendations to be introduced in foreign language classrooms, such as: sensitivity and responsiveness to the entire class's understanding of the material, showing interest in an individual student's progress, using diverse teaching strategies, offering emotional support to students and providing evaluative feedback. All these practical solutions should be observed in CLIL classrooms on a regular basis.

Another strategy applied in CLIL classes revolves around the notion of authenticity. Providing access to authentic materials refers to learners' interests and improves the quality of the lessons (Mehisto / Marsh / Frigols 2008: 29).

Authenticity. The term authenticity is used frequently within the burgeoning literature on CLIL practice and research, often described as a central component of CLIL methodology (Pinner 2013: 46). Although the importance of authenticity can be established as an integral and in many ways defining aspect of CLIL methodology, the definition of authenticity itself remains elusive. Authenticity may refer to either the texts or materials being used for learning, the tasks set by the teacher to facilitate interactions, or the language used by the actual target language (TL) community (Pinner 2013: 46). The following diagram presents how these three domains of authenticity overlap:

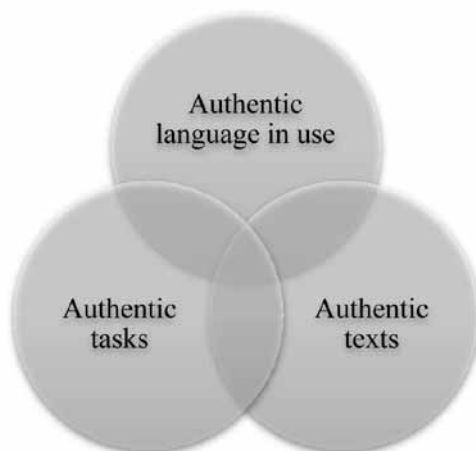


Fig. 3. The domains of authenticity (Pinner 2013: 49)

The “native speaker” definition, i.e. that authenticity reflects how L1 speakers use the language, has also lost a lot of ground under the influence of the ‘World Englishes’ movement, with now more L2 speakers than L1 speakers (Graddol 1997: 20). According to Pinner (2013: 47), these “native speaker” definitions are problematic for CLIL methodology, not just because many of the teachers are L2 speakers (De Graaff

et al. 2007: 609) but also due to the nature of CLIL instruction (content learnt through a foreign language is likely universal, not bound to any culture).

Gilmore (2007: 98) has identified eight inter-related definitions of authenticity from the last three decades of language teaching literature. These are:

1. The language produced by native speakers for native speakers in a particular language community.
2. The language produced by a real speaker/writer for a real audience, conveying a real message.
3. The qualities bestowed on a text by the receiver, in that it is not seen as something inherent in a text itself, but is imparted on it by the reader/listener.
4. The interaction between students and teachers and is a “personal process of engagement.”
5. The types of task chosen.
6. The social situation of the classroom.
7. Assessment [how related the assessment is to the target language use domain].
8. Culture, and the ability to behave or think like a target language group in order to be recognized and validated by them.

Gilmore suggests that the term ought to be abandoned completely as it faces the danger of being “too elusive to be useful” (2007: 98); however, ultimately, he decides to limit the definition to “objectifiable criteria.” Therefore, the author adopts Morrow’s definition, which states that authenticity is “real language produced by a real speaker or writer for a real audience and designed to convey a real message” (1977: 13).

The word “content” in CLIL is almost synonymous with “authenticity” (Coyle et al. 2010: 12; Pinner, 2013: 45; Mehisto / Marsh / Frigols 2008: 11; Dalton-Puffer 2008: 141). Within the CLIL literature, it seems clear that authenticity asserts itself as not just an important feature of CLIL practice, but rather as a defining aspect of the entire approach and one of its greatest strengths over other foreign language instruction pedagogies such as CLT or TBL. For CLIL teachers and students, it seems that the nature of authenticity does not predominately lie in the source of the text or in the richness of the language. Authenticity within CLIL is more directly associated with purpose, with reasons for engagement (Pinner 2013: 48).

As Dalton-Puffer and Smit (2007: 13) notice, it is true that learning about geography, chemistry or history in the CLIL classroom gives the use of the foreign language a purpose over and beyond learning the language itself. In this way, learning about subject content is construed as possessing a kind of meaningfulness that is believed to be absent from typical language instruction (e.g. Brinton et al. 1989, Snow et al. 1989, Crandall 1987). The crucial importance of meaningful communication in language teaching has also been a central dogma of the communicative approach (e.g. Finocchiaro / Brumfit 1983). This implies that CLIL classrooms “might even be regarded as the implementation of the principles of the communicative approach on a grand scale” (Dalton-Puffer / Smit 2007: 8).

Mehisto, Marsh and Frigols (2008: 29) suggest at least five methods of introducing it into the classroom. The diagram below briefly presents the ideas.

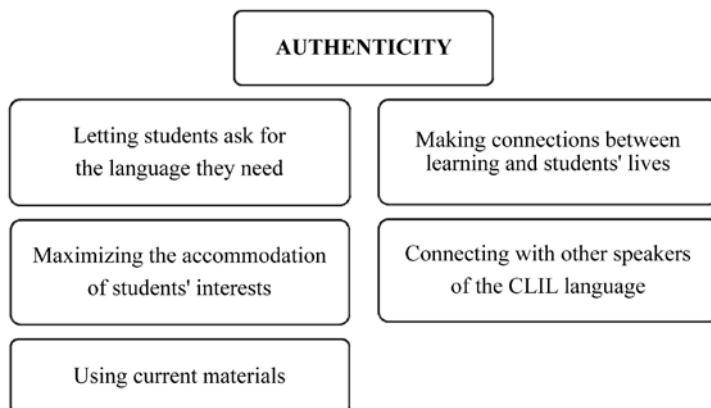


Fig. 4. Authenticity in the CLIL classroom (Mehisto / Marsh / Frigols 2008: 29)

Scaffolding. Scaffolding is also thought to be one of the components of CLIL methodology. The term is based on Vygotsky’s concept of the zone of proximal development (ZPD) and the emphasis is on providing assistance to enable a learner to reach beyond what they are able to achieve alone. As Vygotsky puts it, ZPD is „the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky 1978: 86). The common conception of the zone of proximal development presupposes an interaction between a more competent person and a less competent person on a task. As a result of the interaction, the less competent person becomes independently proficient at what was initially a jointly accomplished task. Within this general conception, three main aspects are often highlighted or emphasized. The first aspect revolves around the idea that a person is able to perform a certain number of tasks alone, while in collaboration, it is possible to perform a greater number of tasks. The second aspect emphasizes how an adult/teacher/more competent person should interact with a child/student. The third aspect focuses on “properties of the learner”, including a learner’s potential and/or readiness to learn (Kozulin et.al 2003: 19).

The ZPD has become synonymous in the literature with the term scaffolding. However, it is relevant to mention that Vygotsky never used this term in his writing, and it was introduced by Wood et al. (1976). Wood et al. (1976: 90) provide the following definition of scaffolding: “Those elements of the task that are initially beyond the learner’s capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence”. The researchers clarify that the assistance may be provided through six different means: by stimulating interest, by simplifying task requirements, by keeping the learner motivated and focused, by relieving stress and by

modelling solutions. While this concept may be applied to almost all learning situations, it poses a two-fold challenge in the pathway classroom where a supportive environment needs to be created to provide deep engagement with the subject as well as interaction and communication to foster students' language skills (Strigel 2014: 21). How teachers use their language is of crucial importance as it is through language that knowledge is mediated and learning opportunities are created. This requires a high level of skills and language awareness on the part of the teacher. Some research has been undertaken in this area. Dalton-Puffer (2008: 141) for instance highlights the importance of initiation-response-feedback (IRF) patterns and Lyster (2007: 10) focuses on feedback and reformulations in CLIL.

The diagram below indicates some of the practical guidelines concerning building scaffolding in the CLIL classroom.

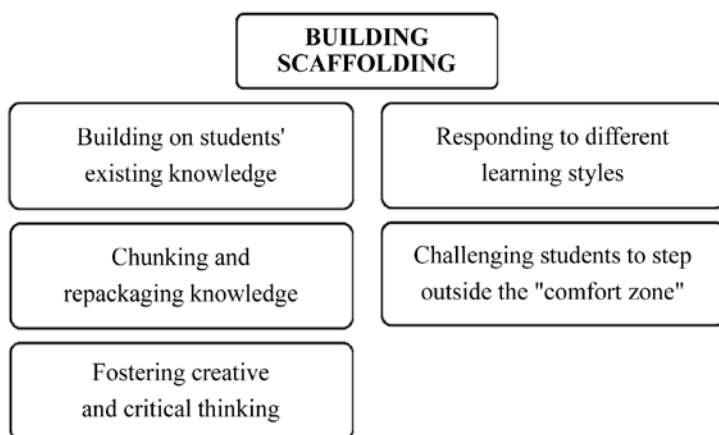


Fig. 5. Building scaffolding (Mehisto / Marsh / Frigols 2008: 29)

As the first method of applying scaffolding in a CLIL classroom, the authors enumerate building on students' existing knowledge, attitudes, skills, interests and experience. "To make progress in understanding means linking to prior learning" (Mehisto / Marsh / Frigols 2008: 141). In other words, it is not enough to reproduce something in order to prove understanding. Our existing knowledge is a strong foundation for new learning, hence additional effort should be made in order to fix learning in memory. Some of the techniques of rooting in previous learning would be asking students to recall language they feel might be useful for the lesson, brainstorming (free associations) or using graphic organizers. Some learners can be asked why they feel the topic is relevant or how to make it more relevant to them.

Chunking and repackaging knowledge is another useful strategy in CLIL settings. It is commonly assumed that an average person cannot hold more than seven pieces of information in his or her working memory (Mehisto / Marsh / Frigols 2008: 146). Therefore, it is also highly advisable for teachers to introduce new material in chunks.

When learners are given some new material presented in chunks, they feel emotionally safe. Their short-term memory is able to process it and consequently they are able to focus on the task for a longer time. Chunking seems to be an excellent way of using scaffolding with students. Mehisto, Marsh and Frigols (2008: 147) suggest numerous tools for chunking: tables, charts, diagrams, mind maps, webs or pictures. Moreover, teachers may use mnemonic devices, analogies or grouping words and numbers.

Fostering creative and critical thinking is also an example of scaffolding strategy. It has been proven that the overall learning process is improved when we improve our thinking skills. In addition, critical thinking has a positive effect on our planning. The crucial thing about critical thinking is the fact that it is strongly connected to social processes. Our understandings must come into contact, sooner or later, with the understandings of others. The authors are convinced that greater levels of understanding may be fostered by introducing certain strategies. Among such strategies they enumerate: applying one's own new knowledge and understanding, analysing the effectiveness of the application of new knowledge and understanding, evaluating progress in task completion and learning and creating something new.

One of the most widely known models of critical thinking is Bloom's taxonomy (Bloom / Krathwohl 1956: 12). which is a set of three hierarchical models used to classify educational learning objectives into levels of complexity and specificity. The three lists cover the learning objectives in affective, cognitive and sensory domains. The cognitive domain list has been the primary focus of most traditional education and is frequently used to structure curriculum learning objectives, assessments and activities. Bloom's taxonomy is an important framework for teachers. Their attention needs to be directed to higher order thinking skills. This taxonomy may be a useful tool in designing tasks, forming questions and providing feedback on students' work (Bloom / Krathwohl 1956: 12).

There are six levels in the taxonomy (cognitive domain), starting from the lowest in the order of thinking skills: knowledge, comprehension, application, analysis, synthesis and evaluation. Bloom believes that learners should develop both lower and higher thinking skills while traditional education tends to emphasize the lower- order objectives (Bloom / Krathwohl 1956: 12).

Anderson and Krathwohl (2001: 19) suggested a modified version of Bloom's taxonomy.

The authors regard the three lowest levels as hierarchically ordered, but the three higher levels as parallel. They have also replaced the word "knowledge" in Bloom's version with the word "remember". Still, they do not question the existence of the six categories. According to Mehisto, Marsh and Frigols (2008: 155) if the majority of lessons are based on tasks associated with these categories, this may lead to "greater levels of learning and greater recall of facts". The following table presents some of the techniques and examples of the tasks that could be used by the CLIL teachers.

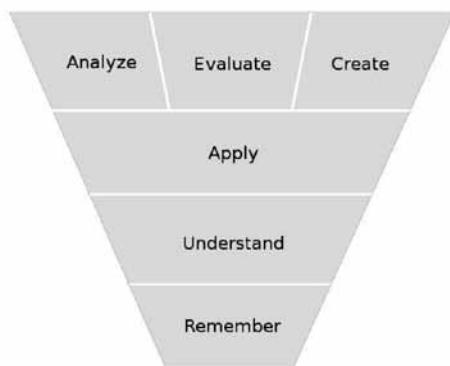


Fig. 6. Categories in the cognitive domain of Bloom's Taxonomy (Anderson / Krathwohl 2005: 32)

Table 1. Fostering creative and critical thinking (Mehisto / Marsh / Frigols 2008: 156)

	Techniques	Example tasks
1.	CLASSIFYING	Students sort vocabulary into "difficult words" and "easy words"
2.	COMBINING	Students combine seemingly disjointed words into a sentence
3.	CONDENSING	Students condense a definition into one word
4.	CONVERTING	A student's oral description of a science experiment is to be written up as a scientific report (changing register)
5.	DEFINING	Students develop their own definitions for terms
6.	DESCRIBING	During a chemistry lesson one student describes the location of an element in the periodic table, the class is to guess the name of the element
7.	EXTENDING	Students give an extended explanation of definitions
8.	VERIFYING	Students give a correct or incorrect hypothesis, such as for the boiling point of water, and measure for accuracy

The valuable skill of building scaffolding in the classroom is also integrated with the skill of responding to different learning styles. Most of us are probably familiar with the three general categories in which people learn: visual, auditory and kinaesthetic learners. Still, one of the most famous theories in relation to human potential belongs to Howard Gardner. In his Theory of Multiple Intelligences (Gardner 1998: 7) initially suggested six intelligences. Today there are nine intelligences and each of them strongly relates to one's unique set of capabilities and ways they might choose to demonstrate their intellectual abilities (Gardner 1998: 9):

1. Verbal-linguistic intelligence
2. Logical-mathematical intelligence
3. Spatial-visual intelligence
4. Bodily-kinaesthetic intelligence
5. Musical intelligence

6. Interpersonal intelligence
7. Intrapersonal intelligence
8. Naturalist intelligence
9. Existential intelligence.

It is an unquestionable fact that individual learning preferences do exist. Furthermore, raising awareness about the differences serves as a motivational factor in taking greater control over our learning. Consequently, it may help teachers to adjust their teaching to learners' learning.

The final example of building scaffolding during classes is challenging students to take another step forward and stepping outside "the comfort zone". In the case of content teachers, it would be advisable to focus on form. Improved accuracy will surely lead to more precision in expressing and working with content. Language teachers, on the other hand, might work more with the materials from content subjects, which acts as a motivational factor for learners.

Another strategy helpful in challenging students to „move“ forward is recasting. Recasts are especially useful at the beginning of CLIL classes, when very often students lack the language needed to discuss content. Teachers may for instance vocally stress the required change or write the words on the board. Still, it is vital to remember not to overuse the strategy and recast only the key parts of the learners' response.

Active learning. The aspect of active learning in the classroom is also worth considering. Mehisto, Marsh and Frigols (2008: 29) enumerate it as another core feature of content and language integrated learning methodology. Among different strategies that may be applied by teachers, the authors mention the need for the students to communicate more than the teacher. Moreover, the students should be actively engaged in setting content, language and learning skills outcomes (Marenzi / Zerr 2012: 340). Later on learners should be given a possibility of evaluating progress in achieving these learning outcomes. It is also advisable for a teacher to favour peer co-operative work and negotiate the meaning of language and content with students (Mehisto / Marsh / Frigols 2008: 29).

Till this point, we have analysed the core features of CLIL methodology. The article mentions some of the practical solutions used by CLIL teachers in the classroom which can be successfully applied in traditional teaching as well. With careful planning, monitoring and evaluation, over time CLIL can lead to the development of literacies across languages, metacognitive awareness and intercultural understanding (Coyle / Hood / Marsh 2010: 49).

Bibliography

1. Anderson W., Krathwohl D. (2001), *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*, Addison Wesley Longman, New York.

2. Baker C. (2006), *Foundations of bilingual education and bilingualism*, Multilingual Matters, Clevedon.
3. Bloom B. (1984), *The 2 Sigma Problem: The Search of Methods of Group Instruction as Effective as One-to-One Tutoring*, „Educational Researcher”, 13 (6), 4–16.
4. Bloom B., Krathwohl D. (1956), *Taxonomy of educational objectives: The classification of educational goals, by a committee of college and university examiners. Handbook 1: Cognitive domain*, Longmans, New York.
5. Brinton D., Snow M.A., Wesche M.B. (1989), *Content-based second language instruction*, Newbury House, New York.
6. Byram M. (2009), *Multicultural Societies, Pluricultural People and the Project of Intercultural Education*, <https://tinyurl.com/we44x2m> (dostęp: 22.01.2020).
7. Coyle D. (2007), *Content and language integrated learning: Towards a connected research agenda for CLIL pedagogies*, „International Journal of Bilingual Education and Bilingualism”, 10 (5), 543–562.
8. Coyle D. (2008), *Content and language integrated learning. Motivating learners and teachers*, <https://tinyurl.com/sunnafd> (dostęp 22.01.2020).
9. Coyle D., Holmes B., King L. (2009), *Towards an integrated curriculum – CLIL National Statement and Guidelines*, The Languages Company, London.
10. Coyle D., Hood P., Marsh D. (2010), *CLIL Content and Language Integrated Learning*, Cambridge University Press, Cambridge.
11. Crandall J. (1987), *ESL through content-area instruction: Mathematics, Science, Social Studies*, Prentice Hall, New Jersey.
12. Cummins J. (1998), *Immersion Education for the Millennium: What We Have Learned from 30 Years of Second Language Immersion?*, <https://tinyurl.com/rmhhtyt> (dostęp: 22.01.2020).
13. Dalton-Puffer C. (2008), *Outcomes and processes in content and language integrated learning (CLIL): Current research from Europe*, [w:] Delanoy W., Volkmann L. (red.) *Future Perspectives for English Language Teaching*, Carl Winter, Heidelberg, 139–157.
14. Dalton-Puffer C., Smit U. (2007), *Empirical Perspectives on CLIL Classroom Discourse*, Peter Lang Verlag, Frankfurt/Wien.
15. De Graaff, R., Koopman G., Anikina Y., Westhoff G. (2007), *An observation tool for effective L2 pedagogy in content and language integrated learning (CLIL)*, „International Journal of Bilingual Education and Bilingualism”, 10 (5), 603–624.
16. Deller S., Price C. (2007), *Teaching other subjects through English*, Oxford University Press, Oxford.
17. Finocchiaro M., Brumfit C. (1983), *The functional notional approach. From theory to practice*, Oxford University Press, Oxford.
18. Gardner H. (1998), *A multiplicity of intelligences*, „Scientific American”, 11, 5–17.
19. Gilmore A. (2007), *Authentic materials and authenticity in foreign language learning*, „Language Teaching”, 40, 97–118.
20. Graddol D. (1997), *The Future of English? A guide to forecasting the popularity of the English language in the 21st century*, British Council, London.
21. Kiely R. (2009), *CLIL – The question of assessment*, <https://tinyurl.com/tgyg664> (dostęp: 22.01.2020.).

22. Kozulin A., Gindis B., Ageyev V., Miller S. (2003), *Vygotsky's educational theory and practice in cultural context*, Cambridge University Press, Cambridge.
23. Krashen S. D. (1985), *The Input Hypothesis: Issues and Implications*, Longman, London.
24. Lantolf P. J. (2000), *Socio-cultural theory and second language learning*, Oxford University Press, Oxford.
25. Larsen-Freeman D. (2000), *Techniques and Principles in Language Teaching*, Oxford University Press, Oxford.
26. Lyster R. (2007), *Learning and Teaching Languages Through Content. A counterbalanced approach*, John Benjamins Publishing Company, Philadelphia.
27. Marenzi I., Zerr S. (2012), *Multiliteracies and active learning in CLIL – The Development of LearnWeb 2.0.*, „IEEE Transactions on Learning Technologies”, 5 (4), 336–348.
28. Mehisto P., Marsh D., Frigols M. (2008), *Uncovering CLIL*, Macmillan Books for Teachers, London.
29. Met M. (1998), *Curriculum Decision-Making in Content-Based Second Language Teaching*, [w:] Cenoz J., Genesee F. (red.), *Beyond Bilingualism: Multilingualism and Multilingual Education*, Multilingual Matters, Clevedon, 35–63.
30. Mohan B. A. (1986), *Language and content*, Addison-Wesley, Michigan.
31. Piechurska-Kuciel E. (2011), *Perceived teacher support and language anxiety in Polish secondary school EFL learners*, „Studies in Second Language Learning and Teaching”, 1 (1), 83–100.
32. Pinner R. (2013), *Authenticity and CLIL: Examining Authenticity from an International CLIL Perspective*, „International CLIL Research Journal”, 2 (1), 44–54.
33. Richards J., Rodgers T. (2001), *Approaches and Methods in Language Teaching*, Cambridge University Press, Cambridge.
34. Snow M.A., Met M., Genesee F. (1989), *A conceptual framework for the integration of language and content in second/foreign language instruction*, „TESOL Quarterly”, 23 (2), 201–217.
35. Strigel S. (2014), *Optimising classroom communication: Verbal scaffolding in CLIL*, „International Students Experience Journal”, 2 (1), 20–25.
36. Swain M. (2000), *The output hypothesis and beyond: mediating acquisition through collaborative dialogue*, [w:] Lantolf J. P. (red.), *Sociocultural theory and second language learning*, Oxford University Press, Oxford, 97–114.
37. Vygotsky L.S. (1978), *Mind in society: The development of higher psychological processes*, Harvard University Press, Massachusetts.
38. Wood D., Bruner J., Ross G. (1976), *The role of tutoring in problem solving*, „Journal of Child Psychology and Child Psychiatry”, 17, 89–100.

dr inż. Beata NAWROT-LIS – Katedra Neofilologii, Uniwersytet Technologiczno-Humanistyczny im. Kazimierza Pułaskiego w Radomiu, b.nawrot-lis@uthrad.pl