

CONCEPTUAL REVIEW ARTICLE

Fostering and Assessing Creativity in Content and Language Integrated Learning (CLIL): A Conceptual Overview

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RESUMEN

Esta revisión conceptual examina cómo se comprende, se fomenta y se evalúa la creatividad en los contextos de Aprendizaje Integrado de Contenidos y Lenguas Extranjeras (AICLE). A partir de estudios publicados entre 2010 y 2025, sintetiza investigaciones que exploran el papel del pensamiento creativo. Si bien el AICLE ofrece un entorno prometedor para la creatividad gracias a la integración de contenido, comunicación, cognición y cultura, la creatividad suele tratarse como un resultado indirecto y no como un objetivo pedagógico central. Basándose en las teorías de la creatividad (por ejemplo, Sawyer, 2012; Beghetto, 2013), la revisión sostiene que la creatividad no es un acto repentino de inspiración reservado a unos pocos estudiantes, sino un proceso susceptible de aprenderse apoyado en el andamiaje y la reflexión, que se alinea con los enfoques centrados en el alumnado. Integrar la creatividad de forma más explícita en las prácticas AICLE puede potenciar el desarrollo lingüístico y cognitivo. No obstante, la escasa atención a la evaluación de la creatividad, así como la falta de materiales sobre cómo fomentarla dentro y fuera del aula, representan desafíos que aún deben explorarse en mayor profundidad.

PALABRAS CLAVE

AICLE;
Brecha de creatividad;
Evaluación de la
creatividad;
Pedagogía;
Pensamiento crítico y
creativo

ABSTRACT

This conceptual review examines how creativity is understood, fostered, and assessed within Content and Language Integrated Learning (CLIL) contexts. Drawing on studies published between 2010 and 2025, it synthesizes research which explores the role of creative thinking. While CLIL provides a promising environment for creativity through its integration of content, communication, cognition and culture, creativity is often treated as an indirect outcome rather than a central pedagogical aim. Building on creativity theories (e.g., Sawyer, 2012; Beghetto 2013), the review argues that creativity is not a sudden act of inspiration that is special to a handful of students but a learnable process supported by scaffolding and reflection that aligns with learner-centered approaches. Integrating it more explicitly into CLIL practices can enhance linguistic and cognitive development. However, limited attention to assessment of creativity as well as materials on how it can be fostered in and out of classrooms are some of the challenges that are yet to be further discovered.

KEYWORDS

CLL;
Creativity assessment;
Creativity gap;
Critical and Creative
Thinking;
Pedagogy;

1. Introduction

CLIL (Content and Language Integrated Learning) has emerged over the past few decades as a dynamic approach to language education, combining the simultaneous development of subject knowledge and language proficiency. As CLIL gains more attention, the area of research also grows. While much research focuses on language acquisition and subject-area learning, there is a lot to be discovered when it comes to the potential of fostering creativity within the classroom. Often defined as the ability to create new ideas, creativity is increasingly recognized as a crucial skill in the 21st-century educational landscapes. In recent decades, there is a growing interest in creativity within the scope of education (Craft, 2005; Huang et al., 2019; Smith & Smith, 2010). Creativity proves itself to be important due to the empirical evidence which shows the positive contribution of creativity to academic and social outputs (Gajda, Karwowski, & Beghetto, 2017; Hansenne & Legrand, 2012).

Creativity has always been a growing field, even in psychology, as the research concerning creativity alone has been very little compared to the rest of the research on psychology (Sternberg, 1999, p. 4). There are several definitions of creativity, one of the most common definitions of creativity appears in the 1950s. According to Guilford (1950), creativity is divided into two criteria: originality and appropriateness. Creativity is commonly related to words such as “imagination” and “originality”. However, as we keep diving deeper into creativity, it gets increasingly difficult to further define what it truly is, especially in the context of education. It is often thought that creativity is a talent that one either has or not. With its close relation to the arts, creativity is often related to the prodigies of the arts. According to a very common belief between educators and psychologists, learning and creativity should be kept together as “knowledge and creativity are two sides of the same coin, not opposing forces” (Boden, 1990, p. 99).

The present work aims to present a conceptual review of the literature on the intersection of CLIL and creativity. The aim is not to measure effects but to identify theoretical trends, pedagogical practices, and research gaps within this ever-growing field. The works used in this review were chosen between 2010 and 2024. Foundational works published prior to 2010 (e.g., Guilford, 1950; Torrance, 1974) were included selectively for theoretical grounding. The search terms were: CLIL AND creativity, CLIL AND higher-order thinking skills, creativity AND emotion AND learning, creativity AND education, CLIL AND creativity AND assessment. Additional parameters included that the sources would be in English. The analytical process followed thematic synthesis (Thomas & Harden, 2008), which involved three iterative stages: (1) familiarization with the material and extraction of key arguments, (2) categorization of findings under thematic areas (conceptualization, pedagogy, and assessment), and (3) synthesis of emerging insights into a cohesive framework highlighting consistencies, tensions, and underexplored directions.

The research questions include:

1. How has creativity been conceptualized and addressed within existing CLIL research and practice?
2. What pedagogical strategies and assessment approaches have been proposed or implemented to nurture creativity in the classroom?

2. Conceptual Review and Findings

2.1 Defining CLIL and the Theoretical Underpinnings

CLIL has become an influential approach to bilingual and plurilingual education in Europe and beyond over the past few decades. Unlike conventional subject teaching in L2, where language tends to be a secondary consideration, CLIL pursues both objectives of simultaneously developing the subject knowledge and language proficiency (Coyle, Hood, & Marsh, 2010, p. 1). Unlike the traditional language education in EFL and ESL settings where the focus is on grammatical progression, CLIL places language learning within content-driven contexts, enabling students to use language for critical thinking and problem-solving (Dalton-Puffer, 2011).

There are different conceptualizations of what CLIL is and what it involves. As Coyle claims, “there is a lack of cohesion around CLIL pedagogies. There is neither one CLIL approach nor one theory of CLIL” (2008, p. 101). This flexibility of CLIL has made it particularly attractive for European contexts, as there was a need for enhancing second language education (Marsh 2002, p. 11). However, the lack of cohesion also brings counter arguments that, due to its lack of precision, it is difficult for CLIL to evolve in a pedagogically coherent fashion (Cenoz, Genesee, and Gorter 2014, p. 5). At the same time, this plurality is frequently described as a source of pedagogical creativity and innovation, encouraging teachers and curriculum designers to experiment with different task types, scaffolding strategies, and assessment approaches (Banegas, 2021, p. 4). This also opens CLIL as a ground for embedding skills such as creativity, collaboration and critical thinking since it supports a context-sensitive design. As Dooly mentions, “the two common axes to all of these 21st-century competences (creative and critical thinking, collaborative skills, problem-solving abilities, social skills and communicative skills) are language and knowledge” (2018, p. 4).

CLIL often follows the 4Cs framework, which comprises Content, Communication, Cognition and Culture (Coyle, 1999) and aims to offer teachers a guide to better plan and implement their lesson plans (Meyer, 2010, p. 12). However, this is where we might consider some difficulties in CLIL as finding or creating materials that focus on all 4Cs at the same time proves to be a difficult task for teachers. Different research that focuses on student skills show that some CLIL students possess poorer writing skills (Vollmer, 2008). Other studies have shown that productive language skills such as speaking are not promoted in many CLIL lessons (Dalton-Puffer, 2007). This brings about one of the biggest issues that CLIL faces today, the lack of available materials that can support both students and teachers. Coyle

points to this issue of materials by also bringing a focus to the "very few ready-made CLIL materials available" (Coyle et al., 2010, p. 228).

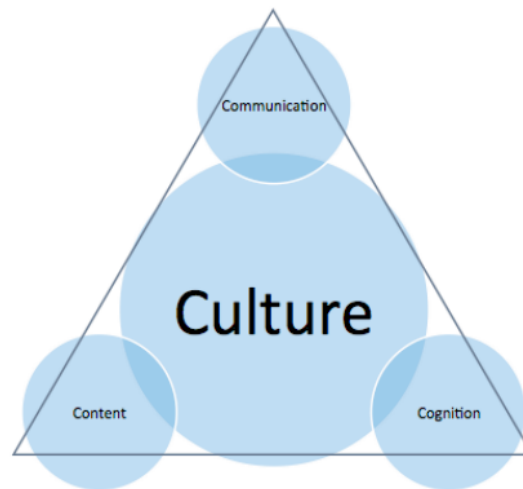


Figure 1. The 4Cs of CLIL. Coyle et al. (20...)

According to Meyer (2010), appropriate classroom materials should follow three main criteria: meaningful, challenging, and authentic (p. 13). As for curriculum design, one of the most influential and most cited frameworks in CLIL is Bloom's Taxonomy (Bloom, 1956), which offers a hierarchical classification that categorizes cognitive processes from low-order thinking skills (LOTS) to high-order thinking skills (HOTS). The six initial categories were later revised by Anderson and Krathwohl (2001) as follows: remember, understand, apply, analyze, evaluate, and create. The first three (remember, understand and apply) are LOTS, while the remaining three (analyze, evaluate and create) are HOTS. Most often, the tasks found in textbooks follow a progression from LOTS to HOTS as they start on a simpler level of understanding and gradually move towards more challenging tasks. In other words, incorporating Bloom's Taxonomy into the design of CLIL textbooks involves creating tasks that require students to apply this knowledge in new contexts, analyze the information, evaluate different approaches and create original ideas or solutions.

Although Bloom's Taxonomy seems to be the desirable framework for the content of CLIL textbooks, it may not always be effectively integrated. Research on CLIL materials has shown that there is an imbalance between the integration of LOTS and HOTS (González, 2011; Czura, 2017; Banegas, 2014). According to these, there was a higher promotion of LOTS in most textbooks used in CLIL teaching. Research conducted by Romeu Peyró et al. (2020) highlights that there is often a focus on lower-order thinking skills, but not on higher-order thinking skills. In other words, the results display the insufficient development of creative and critical

thinking in CLIL classrooms.

2.2 Unpacking Creativity

Creativity has been the subject of different research across various disciplines, including psychology, sociology, education and cognitive science. Creativity has recently gained more popularity both in psychology and especially in education. Creativity is defined as originality and appropriateness (Kaufman 2016, p. 5). This definition has been universally accepted, although research has added other determiners. Thus, Boden (2004) and Perkins (2000) suggest *surprise* as the third criterion, whereas Sternberg (2002, p. 6) suggests *quality* to be part of the other two components. Although there might be different ideas of what creativity should be, they all meet under the same conclusion that it leads to something new being produced.

Other discussions on creativity suggest different conceptualizations. Kozbelt et al. (2010) group creativity theories into ten categories: developmental, psychometric, economic, stage and component process, cognitive, problem-solving and expertise, problem-finding, evolutionary, typological, and system theories. Another way of looking at creativity is to focus on the level of its expression. Beghetto and Kaufman (2014) proposed the Four C Model, defined as Big-C, Pro-c, Little-c and mini-c. Big-C refers to genius-level creativity, only available to special people who have a significant impact (e.g., Mozart). Pro-c refers to professional creativity, those who are experts in their field. Little-c is everyday creativity where the average person might think the product is new. In mini-c, the emphasis is placed on the individual and the personal meaning of the creative idea (Kaufman, 2016, p. 18). It is most often used in educational contexts. The product created might not be something completely new and original, but it is still useful and meaningful to the student.

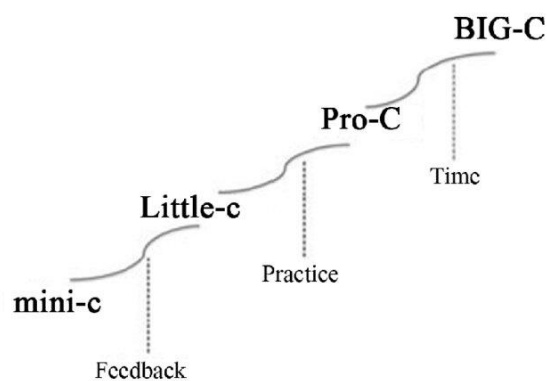


Figure 2. *The Developmental Trajectory of Creativity (Beghetto & Kaufman, 2014)*

A common challenge when it comes to creativity, whether in psychology or education, arises from the fact that it is subjective. The different definitions of creativity make space for different instruments in order to measure it accordingly (Said-Metwaly et al., 2017, p. 243). One widely known measuring tool of creativity is the Torrance Test of Creative Thinking (TTCT; Torrance, 1966, 2008). These tests assess various aspects of creativity including frequency, flexibility, originality, and elaboration. Fluency refers to the ability to produce numerous ideas, flexibility to the variety of ideas, originality to the uniqueness of the ideas, and elaboration to the level of detail in the ideas. In an educational setting, the assessment of creativity lags behind the assessment of “hard skills” like reading and mathematics (Long et al., 2022, p. 288). Nonetheless, there is a growing recognition of the importance of nurturing creativity in students. Different organizations and education systems have started to implement programs and assessments of creativity (Chu et al., 2017). Furthermore, “The Partnership for 21st Century Skills” (P21) also includes creativity as one of the “Four Cs” alongside critical thinking, communication, and collaboration.

2.3 Creativity in CLIL and Educational Practice

As already mentioned, creativity is a unique concept that is highlighted in multiple fields. Creativity in the teaching context is multi-dimensional and therefore involves a range of factors which may be pedagogical, social and affective, as well as purely cognitive (Hafner et al., 2017). However, creativity is often related to the Arts. There is a distinct hierarchy between subjects that are taught at schools: at the top are Mathematics, Languages, and Sciences; then comes the Humanities, such as History and Geography; and at the bottom are the Arts (Robinson, 2011, p. 60). This hierarchy causes the Arts, and in turn creativity, to be overlooked. The Australian Curriculum, for example, confined the Arts to a specific area of the curriculum, and then not as a focus until the second phase of development (ACARA 2010; Cross, 2012). This feeds into the common misconception that creativity is only for “special” people or prodigies. Yet, as Carter observes, creativity can be understood in its broadest, most democratic sense “not as a capacity of special people, but as a special capacity of all people” (2004, p. 13).

In recent decades, interest in creativity within the field of education has expanded exponentially (Craft, 2005; Huang et al., 2019; Smith & Smith, 2010). This growth is not accidental. The accumulated empirical evidence points to the wide range of benefits thanks to creativity across academic and social domains. Studies show that creativity positively influences scholastic performance (Fanchini, Jongbloed, & Dirani, 2019; Freund & Holling,

2008; Gajda, Karwowski, & Beghetto, 2017; Hansenne & Legrand, 2012), and is associated with broader indicators of life success (Sternberg, 2002). Various other research has also shown positive relations between bilingualism and creativity. According to some research, there is an advantage among bilingual learners over monolingual learners when it comes to their creativity levels (Bialystok, 2005). Another research has shown better mathematical creativity in bilingual groups (Leikin, 2012).

Cross (2012, p. 431) argues that CLIL can provide “a space for creative pedagogical engagement” where learners can make meaningful choices about which language(s) to use, how to use them, and how to engage with content. CLIL’s dual focus on language and content naturally creates situations of cognitive challenge and linguistic flexibility, both of which are core conditions for creative thinking. Dooly (2012) further highlights that, if designed intentionally, CLIL lessons can nurture critical and creative thinking by encouraging learners to recognize and develop their own reasoning processes, seek and articulate evidence, and arrive at coherent, well-argued conclusions. This resonates with the broader literature on critical thinking and creativity. As Scoot et al. (2004) claim, creative thinking is highly dependent on cognitive processes such as a working memory, the ability to create new mental categories, and mentally manipulating objects.

Several authors have attempted to capture the features of creativity in educational contexts. Maley (2017, p. 87–89), for instance, identifies elements such as *newness* (novelty, originality, surprise), *experiment* (curiosity, exploration, problem-solving), *seeing relationships* (connections, synthesis, metaphor), *constraints* (working within rules and conventions), and *flow* (intense engagement, timelessness). Within the CLIL classroom, these insights take on a particular significance. Because the learners must work between the intersection of language and content, creative tasks often emerge through the application of HOTS. Producing results for these cognitively more challenging tasks in the target language not only requires content knowledge and linguistic competence but also imagination, flexibility, and the ability to make connections. Communicative competence itself — the ultimate goal of language education (Bachman & Palmer, 2010) — is not achieved through the rote teaching of forms but through **creative acts of** meaning-making.

One of the most controversial challenges in education, whether it is standard or CLIL-mediated bilingual education, is the topic of assessment. When thinking of assessment in education, one of the first ideas that comes to mind is standardized testing, such as exams with multiple choice or essay-like questions. The main challenge in CLIL assessment arises

in the attempt to identify what the purpose of assessment is to begin with (Coyle et al., 2010) – in other words, whether the priority should be to assess language or content. A study by Otto and Estrada (2019) shows that most CLIL teachers place content knowledge above language when assessing students' performance in CLIL settings.

Similarly, assessment proves to be a difficult topic in the field of creativity. Despite the common agreement on the importance of creativity in education, assessment of creativity in education (CIE) has lagged behind assessments of "hard skills" such as reading and mathematics (Long et al. 2022). Additionally, creativity assessment is often avoided in classrooms due to the belief that it is too subjective (Lucas et al., 2013). Another study by Runco shows that students exhibited more creativity outside of the school (Runco et al., 2017). Although there are certain tools for measuring creativity such as TTCT, there seems to be a major gap in CLIL pedagogy on how to assess creativity in the classroom.

2.4 The Emotional Dimension of Creative Learning

One of the recurrent themes in CLIL pedagogy is the role of personalization in the learning process. As Coyle et al. (2010) explain, personalization allows learners not only to access content knowledge, but also to "make sense of it through their own perspectives" (p. 129), thereby transforming learning into a process of creating meaning rather than merely receiving information. As Ball, Kelly, and Clegg argue, "CLIL is most effective when it positions learners as co-constructors of knowledge rather than passive recipients" (2015, p. 42), and personalization is central to that shift. Marsh (2002) also highlights this learner-centered orientation, noting that CLIL emphasizes making content personally relevant, meaningful, and motivating as a way to sustain engagement.

Personalization, however, is not only a cognitive matter, but it is also deeply tied to emotion. Neuroscientific research indicates that memory is selective: the brain tends to discard information perceived as irrelevant or incomprehensible (Wolfe, 2006, p. 36). As Immordino-Yang and Damasio (2007, p. 3) explain, the high-level cognitive skills taught in schools are grounded in emotional functions. Educational studies confirm this: positive emotions have been found to increase mental effort, motivation, and satisfaction, while also enhancing learners' perception of instructional material (Um, Plass, Hayward, & Homer, 2012, p. 485). Phelps confirms that "events that elicit emotional responses are more readily remembered" (2004, p. 199), highlighting the importance of designing emotionally engaging learning environments.

The connection between **emotion and creativity** is particularly significant. Fredrickson's

(2001, p. 220) broaden-and-build theory argues that positive emotions broaden the momentary thought-action repertoire, expanding the range of ideas and actions that come to mind. However, creativity is not only fueled by positive emotions. As Eisner (2003, p. 343) emphasizes, art allows human beings to express meanings that are otherwise inexpressible, it creates opportunities to use and develop our mind in distinctive ways through different mediums, and it creates the quality of experience called *aesthetic*, which makes things even more memorable.

This intersection between creativity, emotion and learning highlights why opening up spaces for creativity across the curriculum is so crucial. Thus, artistic and creative engagement should not be confined to traditionally “creative” disciplines. As Sawyer (2012, p. 5) argues, creativity is not confined to the arts but is a core skill of learning itself, essential for problem-solving, effective leadership and teaching more efficiently. The difficulty here arises not from asking “why” but from asking “how”. The belief that creativity is only for those who are talented enough is one of the biggest reasons why we, essentially, fear trying to be creative. This can be evidently seen in schools. As Robinson puts it, “young children enter pre-school alive with creative confidence; by the time they leave high school many have lost that confidence entirely” (2011, p. 49). Sawyer (2012) shares a list of “beliefs” when it comes to creativity and the first of the list states “creative people get their great ideas in a flash of insight” (p. 12). As Sawyer also emphasizes, other research has shown that creativity is a process that can be nurtured through deliberate practice and learning experience (Baer & Kaufman, 2005; Beghetto, 2013). Thus, if creativity is teachable, it should not be treated as an incidental by-product of content and language integration, but as a deliberate pedagogical goal. Sternberg argues that “creativity is a habit, and the best creativity is the result of good work habits” (2010, p. 225), highlighting that structured opportunities for practice are key. As Cross indicates, CLIL can provide “a space for creative pedagogical engagement” (2012, p. 431) in which learners can have opportunities to make creative choices on how to learn and how to use the content. However, it is essential to create the said opportunities for the students through carefully designed tasks, scaffolding, and teacher support. Without intentional planning, the potential for creativity may remain untapped, as learners might fall back on rote memorization.

2.5 Fostering Creativity in the Classroom

Developing creativity in the CLIL classroom requires more than the occasional imaginative

tasks. It should be incorporated into everyday learning activities (Beghetto, 2013) instead. It must be an essential part of the classroom practices rather than being an isolated element. This idea essentially works very well with the nature of CLIL pedagogies, which aim to promote deeper cognitive engagement, as different learning tasks such as reading, writing, or painting can provide students with opportunities for developing creativity (Pang, 2015). However, it is much easier said than done, as creativity does not arise from nothing. Anderson and Krathwohl (2001) define the “create” stage of learning as “putting elements together to form a novel, coherent whole or make an original product” (p. 30). This presupposes that learners must first remember, understand, apply and analyze before they can create, echoing Bloom’s hierarchical model. As Pang (2015) exemplifies, “when students learn a new word, they remember its pronunciation, understand its meaning, compare it with its synonyms, and finally they can use it to create a novel sentence” (p. 124).

Research suggests that creativity is an essential part of learning and emphasizes its importance. Thus, Henriksen (2021) advocates for the exploration of creative risk-taking in educational settings, suggesting that such practices can lead to deeper learning experiences. Creativity in CLIL also supports students in sense-making where the aim of CLIL is not only acquiring knowledge, but also the learner creating their own knowledge and understanding through personalized learning (Coyle, et al. 2010, p. 129). This idea is further supported by Cross (2012), who argues that learning should be understood not merely as being taught, but as actively “creating and refashioning tools based on one’s own foundation for sense-making” (p. 442).

As emphasized by Coyle, Hood and Marsh (2010), CLIL classrooms should foster cognitive engagement through challenge, as higher-order thinking skills naturally support creative outcomes. CLIL’s dual focus on language and content can also promote creative outcomes by encouraging learners to think about how they are thinking (Dooly, 2018), thereby fostering metacognition, which is a key driver of creative reasoning (Kozbelt, Beghetto, & Runco, 2010). It is also important to understand that in order for creativity to flourish, the classroom atmosphere must be allowing (Renzulli, 2002). The environment is crucial for risk-taking and imaginative engagement, as one of the issues with the lack of creativity in classrooms is related to unsupportive school atmospheres (Hennessey, 2004) as well as misconceptions on what it means to be a creative student (Plucker, Beghetto, & Dow, 2004).

Fostering creativity in CLIL involves both linguistic and conceptual creation shaped by the learner’s personal, cultural, and emotional context. In order to recognize this potential, we

must be intentional with our approach towards the integration of this skill. Creativity flourishes not only isolated within a classroom, but within ecosystems that value innovation, experimentation and collaboration (Sawyer, 2012). According to Sternberg (2016, p. 355), creativity is a habit and, as any other habit, it can be encouraged or discouraged. If the goal is to foster creativity in CLIL classrooms, we need to embrace it as one of its core aims.

3. Results and Implications

The existing literature on CLIL has expanded significantly over the past two decades. The wide range of available studies address the effects on language acquisition, cognitive development, and subject specific literacies. The relationship between CLIL and critical thinking has also seen major growth and creativity often receives some attention within the same topic. Although the relation between CLIL and creativity has received less systematic attention (Cross, 2012), this does not necessarily imply an absence of interest but rather that creativity is often treated as a secondary or indirect benefit.

This conceptual review has analyzed the works published between the years 2010 and 2025, taking into account the seminal theories of learning and creativity, CLIL pedagogical frameworks, and studies that explore their intersections. The above conceptual review conducted can be categorized into three main thematic strands: (1) conceptualizations of creativity in CLIL settings, (2) fostering creativity in CLIL, and (3) assessment of creativity in CLIL.

Author(s)	Year	Title	Type	Publisher / Journal
ACARA	2010	The shape of the Australian curriculum: The arts	Report	ACARA
Bachman & Palmer	2010	Language assessment in practice	Book	Oxford University Press
Ball, Kelly & Clegg	2015	Putting CLIL into practice	Book	Oxford University Press
Banegas	2014	Integrating content and language...	Journal Article	Studies in Second Language Learning and Teaching
Banegas	2021	Content and language integrated learning in Latin America	Book	Routledge
Beghetto	2013	Nurturing creativity in the classroom	Book	Cambridge University Press

Beghetto & Kaufman	2014	Classroom contexts for creativity	Journal Article	High Ability Studies
Cenoz, Genesee & Gorter	2014	Critical analysis of CLIL	Journal Article	Applied Linguistics
Chu et al.	2017	21st-century skills development through inquiry-based learning	Book	Springer
Coyle, Hood & Marsh	2010	CLIL: Content and language integrated learning	Book	Cambridge University Press
Cross	2012	Creative pedagogies and the contemporary CLIL classroom	Journal Article	International Journal of Bilingual Education and Bilingualism
Czura	2017	Higher-order thinking skills in CLIL classrooms	Journal Article	Theory and Practice of Second Language Acquisition
Dalton-Puffer	2011	Content-and-language integrated learning...	Journal Article	Annual Review of Applied Linguistics
Dooly	2012	Promoting critical thinking and creativity in CLIL classrooms	Journal Article	CLIL Journal of Innovation in Language Teaching and Learning
Dooly	2018	Telecollaboration and sustainability...	Book	Peter Lang
Fanchini, Jongbloed & Dirani	2019	Creativity and academic performance: A systematic review	Journal Article	Thinking Skills and Creativity
Gajda, Karwowski & Beghetto	2017	Creativity and academic achievement: A meta-analysis	Journal Article	Journal of Educational Psychology
González	2011	Higher order thinking skills in CLIL and non-CLIL settings	Journal Article	Revista Española de Lingüística Aplicada
Hansenne & Legrand	2012	Creativity, emotional intelligence, and school performance	Journal Article	Psychology of Aesthetics, Creativity, and the Arts
Huang et al.	2019	Domain knowledge and creative performance	Journal Article	Educational Psychology
Kozbelt, Beghetto & Runco	2010	Theories of creativity	Book Chapter	Cambridge University Press

Leikin	2012	The effect of bilingualism on creativity	Journal Article	International Journal of Bilingualism
Long, Lucas, Hanson & Beghetto	2022	Assessment of creativity in K-12 education	Journal Article	Thinking Skills and Creativity
Maley	2017	Creativity and English language teaching	Book	Palgrave Macmillan
Meyer	2010	Towards quality-CLIL	Article	PASE Papers in Language Studies
Otto & Estrada	2019	Assessment in CLIL	Journal Article	International Journal of Bilingual Education and Bilingualism
Pang	2015	Promoting creativity in the classroom	Article	Journal of Chinese Education Research and Development
Robinson	2011	Out of our minds	Book	Capstone
Romeu Peyró, Lorenzo & Dalton-Puffer	2020	Cognitive demands in CLIL materials	Journal Article	International Journal of Bilingual Education and Bilingualism
Runco, Acar & Cayirdag	2017	Creativity in and outside school	Journal Article	Thinking Skills and Creativity
Said-Metwaly, Fernández-Castro & Barbot	2017	Measuring creativity	Journal Article	Frontiers in Psychology
Sawyer	2012	Explaining creativity	Book	Oxford University Press
Smith & Smith	2010	Educational creativity	Book Chapter	Cambridge University Press
Sternberg	2010	Teaching for creativity in the common core classroom	Book	Corwin Press
Sternberg	2016	The nature of creativity and its development in education	Journal Article	Creativity Research Journal
Um, Plass, Hayward & Homer	2012	Emotional design in multimedia learning	Journal Article	Journal of Educational Psychology

Table 1. *The list of analyzed works between the years 2010-2025*

3.1 Conceptualizations of Creativity in CLIL

The reviewed literature indicated that creativity, though often valued, remains underrepresented as a central focus in CLIL research. CLIL frameworks such as the 4Cs model (Coyle, 1999; Meyer, 2010) and Bloom’s revised taxonomy (Anderson & Krathwohl, 2001) are widely cited as supporting higher-order thinking skills (HOTS), which include creativity. However, empirical studies reveal that many CLIL classrooms still prioritize lower-order thinking skills (LOTS), emphasizing factual recall and comprehension over analysis, evaluation, and creation (Romeu Peyró et al., 2020; Czura, 2017; Banegas, 2014). Thus, it could be understood that creativity is recognized as valuable within CLIL, yet not much operationalized in curriculum design or research frameworks.

3.2 Pedagogical Practices that Support Creativity

There is a consistent emphasis on the role of student-autonomy, open-ended tasks, and collaborative exploration as essential to nurturing creative engagement (Beghetto, 2013; Sawyer, 2012; Sternberg, 2010; Dooly, 2018). Generative learning activities such as reading, writing, debating, or composing (Pang, 2015) may also be effective as they require students to integrate language and content meaningfully. Several barriers to classroom creativity are also acknowledged such as unsupportive school climates (Hennessey, 2004), and teachers’ misconceptions about creative learners (Plucker, Beghetto, & Dow, 2004). It is widely agreed that creativity is a skill that can be learned through deliberate practice (Sternberg, 2016; Cross, 2012; Beghetto, 2013). Creativity in CLIL thus emerges as a multifaceted process— involving cognitive challenge (Coyle et al., 2010), metacognition (Dooly, 2018), and emotional engagement (Um, Plass, Hayward, & Homer, 2012).

3.3 Assessment of Creativity in CLIL

A consistent theme found across the research on CLIL and creativity is the lack of available assessment tools and the scarcity of research on creativity assessment in CLIL. However, creativity has been explored in general education and psychology through instruments such as the Torrance Test of Creative Thinking (TTCT) (Torrance, 1966, 2008). Some studies discuss assessment directly (e.g., Otto & Estrada, 2019; Coyle et al., 2010) and they primarily focus on evaluating content knowledge or language performance rather than specifically focusing on creative thinking. Thus, the review identifies this as a gap in CLIL research which is yet to

be further discovered.

4. Conclusions

This conceptual review aimed to highlight the relationship between CLIL and creativity. Through the analysis of the mentioned works, it is evident that CLIL offers a unique environment for fostering both language proficiency and higher-order thinking skills. The integration of 4Cs framework as well as cognitive models such as Bloom's Taxonomy, provides a structure and flexibility in which learners can develop critical and creative competencies.

Creativity does not emerge out of nothing, it is a skill that is learnable that benefits from intentional pedagogical design, scaffolding, and supportive classroom environment. CLIL classrooms inherently create this space for students by combining content knowledge with language use. Moreover, personalization, emotional engagement, and metacognitive awareness play significant roles in enabling learners to express originality meaningfully, while the incorporation of HOTS tasks ensures cognitive challenge and promotes imaginative problem-solving.

The review also underscores certain challenges within CLIL and creativity. These challenges particularly highlight the lack of materials, specific assessment tools to help teachers, and other risks of under-developing certain skills, especially higher-order thinking skills. These gaps highlight the need for careful curriculum design, teacher training and assessment practices. With this in mind, when creativity is seen as an intentional goal within CLIL pedagogy, it can enhance learner engagement, support cognitive and linguistic growth, and equip students with necessary skills to navigate real-world challenges.

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