

This is a self-archived version of an original article. This version may differ from the original in pagination and typographic details.

Author(s): Leontjev, Dmitri; deBoer, Mark

Title: Conceptualising Assessment and Learning in the CLIL Context. An Introduction

Year: 2020

Version: Accepted version (Final draft)

Copyright: © 2020 Springer

Rights: In Copyright

Rights url: <http://rightsstatements.org/page/InC/1.0/?language=en>

Please cite the original version:

Leontjev, D., & deBoer, M. (2020). Conceptualising Assessment and Learning in the CLIL Context. An Introduction. In M. deBoer, & D. Leontjev (Eds.), *Assessment and Learning in Content and Language Integrated Learning (CLIL) Classrooms : Approaches and Conceptualisations* (pp. 1-27). Springer International Publishing. https://doi.org/10.1007/978-3-030-54128-6_1

This is the author-accepted manuscript of the Chapter published as a part of the edited volume *Assessment and Learning in Content and Language Integrated Learning (CLIL) Classrooms: Approaches and Conceptualisations*.

Reference: Leontjev D., deBoer M. (2020) Conceptualising Assessment and Learning in the CLIL Context. An Introduction. In: deBoer M., Leontjev D. (eds) *Assessment and Learning in Content and Language Integrated Learning (CLIL) Classrooms*. Springer, Cham.
https://doi.org/10.1007/978-3-030-54128-6_1

Chapter 1

Conceptualising assessment and learning in the CLIL context. An introduction

Dmitri Leontjev and Mark deBoer

Multiple CLIL writers (e.g. Ball, Kelly, & Clegg 2015) have emphasised the significant role of assessment in promoting learning in CLIL classrooms, where there is a dual focus on learning content and language (Genesee & Hamayan, 2016). Because of this dual focus, the assessment process in CLIL becomes more complex. Assessment in CLIL should provide insights into learner content and linguistic knowledge, as well as strategies used to learn both content and language in order to identify student progress and needs. This should inform both teachers and students in how to enhance learning. Despite excellent overviews, guidelines, and practical activities in CLIL assessment (Lin 2016; Mehisto & Ting 2017; Quartapelle 2012), teachers express concerns about adopting new assessment practices, principles, and techniques and are underusing the potential to support learning (deLuca & Bellara 2013; Hill 2017a; Tsagari & Vogt 2017).

This chapter introduces (a) classroom-based assessment promoting learning, focusing on assessment *for* learning and learning-oriented assessment, (b) CLIL, and (c) teaching, learning, and assessment in CLIL. We will then synthesise these to inform our conceptualisation of assessment promoting teaching and learning of content and language in CLIL classrooms. A further role of this chapter is to introduce essential terms, notions, and conceptualisations used in the volume.

We will next discuss classroom-based assessment promoting learning in general without discussing CLIL. Our intention is to set the boundaries of how we conceptualise

assessment promoting learning based both on a solid theoretical foundation. We will also detail how the chapters align with this foundation.

1.1 Classroom-based assessment promoting learning

The field of educational assessment has seen a proliferation of terms such as formative assessment, assessment *for* learning, alternative assessment, classroom-based assessment, teacher-based assessment, learning-oriented assessment, and dynamic assessment. These terms all share one characteristic—they are used to refer to “context-based, classroom-embedded assessment practice, explicitly or implicitly defined in opposition to traditional externally set and assessed large scale formal examinations used primarily for selection and/or accountability purposes.” (Davison & Leung 2009, p. 395). While these conceptualisations are related, they are not the same and sometimes rest on different theoretical bases.

The issue is more complicated as at times, various scholars define the same terms differently. To give an example, Davies et al. (1999, p. 11) defined assessment as “often used interchangeably with testing.” However, Lynch (2001) insisted that assessment is a more general term and concept than testing. We side with Lynch’s (2001) understanding of assessment.

A classical definition of assessment adopted in education is *collecting information using clearly defined procedures based on a theory, methodology and practice* (Bachman 1990). However, in our view, this definition needs to be modified to accommodate unplanned assessments (Hill 2017b). We define assessment as encompassing *various instruments and approaches aiming at yielding insights into learner abilities*. It captures the essence of why we assess—to *obtain information about learner abilities*. However, this information itself bears little meaning if it is not *acted upon*. We argue that the purpose of assessment defines what information is obtained, how it is obtained, how it is *interpreted*, and more importantly, how it is *used*.

We further argue that the context where assessment happens informs why we assess. Ours, to repeat, is classroom-based assessment. Hill and McNamara (2012, p. 396), based on McNamara (2001), defined classroom-based assessment as

any reflection by teachers (and/or learners) on the qualities of a learner's (or group of learners') work and the use of that information by teachers (and/or learners) for teaching, learning (feedback), reporting, management or socialization purposes.

While all of these purposes are relevant in the classroom, the main purpose of classroom-based assessment, we argue, is to promote learning, which should take precedence over reporting and management. One model of assessment in the classroom which is largely congruent with our thinking is that by Davison (2008) discussed in detail by Davison and Leung (2009).

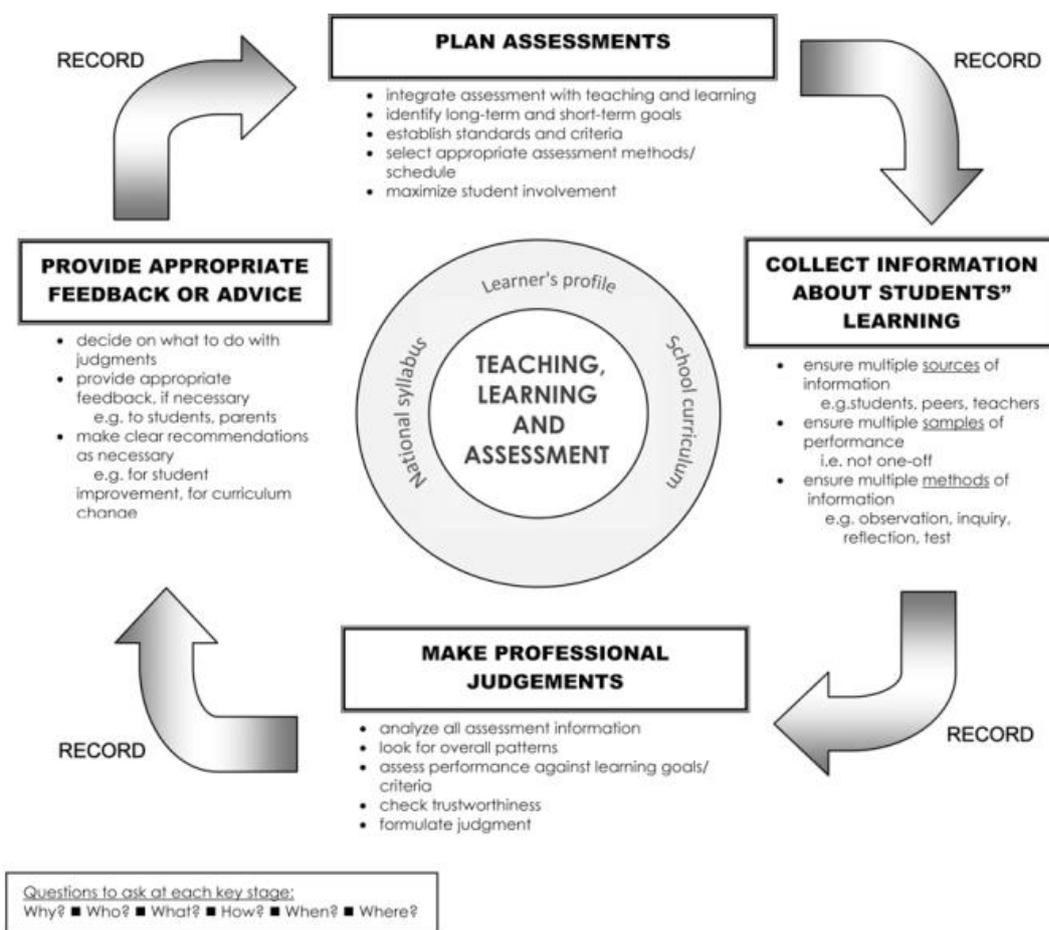


Fig. 1.1 Classroom-based assessment cycle (Davison 2008)

This model conceptualises classroom-based assessment as a cycle of linked stages, in which assessment is used to change teaching, learning, and subsequent assessment. Still, some modifications to the model should be made to adopt it for our purposes. To start with, the authors discussed teacher-based assessment, limiting the assessing agent to the teacher,

whereas classroom-based assessment also involves peer- and self-assessment. Second, assessment cycles can include unplanned assessments. Third, factors shaping the classroom-based assessment cycle other than syllabi and curricula should be recognised. These include learner and teacher identities shaped by various communities and institutions as well as beliefs, ideologies, and values, all contributing to learners' and teachers' individual and shared histories. Finally, feedback and advice in the model should be limited to those promoting learning. This is not to claim that feedback to parents on learner achievement is not needed. Indeed, feedback to parents can, too, influence learning, albeit indirectly (Mehisto, Marsh, & Frígols 2008, p. 30). We, however, will not elaborate much on such feedback (but see Chap. 6, this volume). Regardless, the model is useful for visualising how various parts of the classroom-based assessment cycle are emphasised in the contributions to the volume.

Most of the contributions cover several parts of the cycle. Chapter 6, for example, while discussing particular assessments practices (or lack thereof) and giving feedback in primary CLIL classrooms, discusses these with reference to more macro levels of the Finnish context, such as teacher beliefs and the role of curriculum. Chapters 2 and 7 emphasise planning assessments promoting learning. Chapter 2 specifically focuses on establishing assessment criteria and standards through the use of a scale which integrates language and content goals. Chapter 7 proposes a framework for planning assessment promoting learning of content and language. Chapter 10 focuses on making inferences based on learner-learner interaction, emphasising the lower part of Davison's (2008) model. Chapter 3, too, focuses on the lower part of the cycle, but the main agents making the judgements about their performance are learners, as they compare and discuss their evaluation of their writing with that of the teacher'. Chapters 8 and 9 concentrate on how teaching, learning, and assessment occur in interaction with learners. These chapters can be positioned as discussing collecting information, making judgments about learner performance, and giving learner feedback, all at the micro level of the activity of classroom teacher-learner interaction. Therefore, they concentrate rather on the centre for the model. Finally, Chap. 4 and 5 concern the whole cycle with reference to the framework of learning-oriented assessment (LOA), which we discuss later in this section.

Even though all chapters in this volume go beyond collecting information about learner abilities/performance, indicated on the right of Davison's (2008) cycle, we urge the reader not to misinterpret this as the contributors to the volume considering the whole cycle as assessment.

Feedback, for example, is not the same as the action of assessing learners. Rather it is about communicating to learners (and other agents) the interpretation of the information received during the assessment process. Yet, it is feedback to learners through which assessment realises its purpose—promoting learning. Teaching, learning, and assessment, are clearly, too, not the same processes. As Mehisto and Ting (2017, p. 263) stated, one cannot assume that learning and teaching progression are one and the same. Assessment helps teachers to infer what it is of what has been taught that their learners learned and how they can adjust their teaching to help learners learn what they have not yet. However, in the classroom-based assessment cycle, teaching, learning, and assessment are related. The exact way this connection is made varies depending on the information elicited by assessment approaches and the teaching/learning goals (see Sect. 1.7).

Considering the above, even when the emphasis is not on assessment proper in certain chapters, we deemed it necessary to include these to the present volume as it is important to consider the whole cycle, not just planning assessments, collecting information, and making inferences based on these.

In order to further conceptualise assessment in the volume, it is useful to differentiate between the function and purpose of classroom-based assessment. Following Wiliam (2017), we see ‘purpose’ at a higher level of abstraction (e.g. promoting learning) whereas ‘function’ referring to how this purpose is achieved in certain assessment activities (e.g. inferring which aspects need to be explained more).

In terms of their function, assessment activities are broadly classified into summative and formative (Scriven 1967). We met different understandings of concepts of ‘formative’ and ‘summative’. We, based on a solid theoretical/conceptual basis, define here and elsewhere, how these terms, and others, are used *in the present volume*.

The function of summative assessment is to provide evidence for learner achievement at the end of a learning period. Such assessments are meant to evaluate learners’ performance against a standard or a norm. The outcome is often giving a score or a grade. An assessment initially designed with the summative function in mind can also serve a formative function.

Assessment has formative function “to the extent that evidence about students’ achievement is elicited, interpreted, and used by teachers, learners, or their peers, to make decisions about the next steps in instruction that are likely to be better, or better founded, than the decisions that would have taken in the absence of the evidence that was elicited” (Black & Wiliam 2009, p. 9). Wiliam and Leahy (2015) list the following features of the formative function of assessment:

- teachers, learners themselves, or their peers can be agents in assessment;
- the focus is on decisions; the choice of assessment should be guided by the inferences to be made;
- the formative inferences improve the likelihood of learning to take place
- should the inferences from assessment deem it necessary, adjustments to teaching happen.

Following Wiliam (2017) and Wiliam and Leahy (2015), we do not consider formative or summative assessment a ‘thing’ but a *function*, so one and the same assessment tool can serve either of these functions or both. In other words, a test, for example, can be used both summatively—learner scores showing the group’s and individual learners’ achievement—and formatively—scores informing the teacher where additional support is needed (Wiliam 2017). An assessment activity has a formative function when the information obtained in this assessment *is used to bring together teaching and learning*. Certainly, though, there are assessments that serve either formative or summative function better. Furthermore, an assessment activity such as a test can serve a formative function to a teacher, but not to learners (see Black, Harrison, Lee, Marshall, & Wiliam 2003).

The above is just one interpretation of formative assessment. Numerous interpretations of formative assessment were the reason for the Assessment Reform Group to adopt a different term—‘assessment *for* learning’ (Broadfoot et al. 2002). Wiliam (2017) still noted that in collaboration with Black, they consistently used the term ‘formative’, but also, as emerges elsewhere in their publications, used ‘formative assessment’ and ‘assessment *for* learning’ interchangeably. Wiliam (2017, p. 400), following such voices as Bennet (2009; 2011), and as also noted by Baird et al. (2017), stated that “a shift in terminology just moves the definitional burden.”

Building on Black et al. (2004, p. 10), we define assessment *for* learning as any assessment for which the first priority in its design and practice is to promote students’ learning. To elaborate, the purpose of assessment as discussed in the present volume, reiterating Black and Wiliam (1998a) is to improve learning by yielding insights into learners’ abilities, with the intention to promote learners’ and assessors’ / teachers’ understanding of where learners need to go next, and how they can be directed in their development. In many ways, the definition bears many a similarity with that of formative assessment that we gave previously. The difference, however, is in that assessment *for* learning emphasises the purpose of the process of classroom-based assessment, with specific

assessment activities feeding into this process. Assessment *for* learning then becomes an iterative process where the previous assessment informs teaching and learning, which in turn, inform the following assessment, e.g. during a course, a semester, or a school year.

The question that arises with regard to assessment *for* learning is whether summative assessment can be *for* learning. Some voices, such as Broadfoot et al. (2002) argued for keeping formative and summative assessments apart, equating assessment *for* learning with formative assessment activities and not linking it in any way with summative. Black, Harisson, Lee, and Wiliam (2003) argued for the impossibility of this, as the reality of the classroom is that summative assessment is a part of it, arguing instead for using assessments whose function is initially summative for formative purposes. That is, summative and formative functions of assessments co-exist in the classroom, summative and formative functions of assessment activities not seen as a dichotomy but rather as a continuum. Considering that ‘summative’ is a function, strictly speaking, it cannot be *for* learning, but in chapters on LOA in the volume, a somewhat different orientation is to the summative-formative continuum is used, as in LOA, both summative and formative assessments are there to promote learning.

Rather than continuing our discussion with reference to the formative/summative divide, we draw on Davison and Leung (2009) argument and propose to think about classroom-based assessment as either assessment *of* learning (AoL) or assessment *for* learning (AfL) *culture*. In *assessment of learning culture* summative and formative assessments are seen as having both different *form* and *function*. The roles of the teacher and the assessor are, too, separate. In *assessment for learning culture*, regardless of their form (e.g. a test) and function (e.g. planned for grading), classroom-based assessment activities should give learners feedback that guides learning. Considering the prior argument that summative and formative are to be seen as functions, we, building on the understanding classroom-based assessment as a culture, take the stance that assessment activities in the classroom should rather have either only the formative or both formative *and* summative functions.

To summarise, our conceptualisation of assessment *for* learning in the volume is that of *assessment for learning culture*. We further argue that in AfL culture, the emphasis is not on the *product of learning*, e.g. for the purpose of classifying learners based on how well they performed in assessment against a criterion or against one another; it is on the *process of learning* with the learner placed at the heart of the assessment process. This underscores ongoing monitoring and guidance of learning (Brookhart & Nitko 2008, p. 93) by both

teachers and learners. We argue that it is the understanding that classroom-based assessment, regardless of its form, as contributing to the process of learning and teaching rather than overemphasising the completion, that makes it truly *for learning*.

Considering assessment *for learning* as both a process and a culture makes it more congruent with the classroom-based assessment cycle presented at the outset of the chapter, as it implies that any assessment in the classroom should be intrinsically linked to teaching and learning. One way this can be done is through feedback. Black and Wiliam (2010) argued that grades alone emphasise competition rather than learner development. For learning to occur, learners need feedback not just indicating what they are and are not able to do (where they are now), but also what needs to be done, and how (Alderson et al. 2015; Hattie & Timperley 2007; Wiliam & Leahy 2015; see Fig. 1.1). Hattie and Timperley (2007) discussed this with reference to feedback levels, arguing that whereas task feedback, telling learners how they are doing in relation to the task while is effective overall, does not help learners to transfer their knowledge to other tasks/contexts. Strategy level feedback, as termed by Alderson et al. (2015), who merged process and self-regulation feedback in Hattie and Timperley's (2007) model, is the most effective. Strategy feedback helps learners understand how they can advance in the direction to the goal. However, our stance is that effective feedback should simultaneously work on different levels, i.e. on task and strategy levels, but also should encourage learners (Hattie & Timperley 2007). Indeed, as Huhta et al. (in preparation) argued, used together with other feedback functions, it enhances opportunities for success that feedback to learners creates.

One issue with assessment *for learning*, as Christodoulou (2016) argued, is that it can be notoriously difficult to make formative inferences from some assessment activities initially designed to have a summative function (see Wiliam & Leahy, 2015). Another challenge is in making the process of assessing learners coherent, such that it leads to a desired outcome. Christodoulou (2016) argued that when the product, e.g. an essay, is to be graded, assessment *for learning* should not only be focused on the process of planning, drafting and revising of the essay. It can also elicit aspects amounting to writing this essay, e.g. writing topic sentences, presenting different points of view, or coherence. It is essential that a connection among these activities is made clear to learners. Only then can learners gradually develop towards the desired outcome. The reality of the classroom, however, is that the assessment focus often stays on learner performance on disconnected assessment activities.

It is due to the complexity of assessment *for* learning and the appearance of further conceptualisations such as assessment *as* learning, involving learners in monitoring and regulating their own learners (Dann 2002), a clear framework for classroom-based assessment—learning-oriented assessment—was suggested (Carless 2015a; Purpura 2014; Turner & Purpura 2016). The idea behind LOA is that all classroom-based assessments, be it formative or summative, should be about developing learning (Carless 2015b). The work on LOA resulted in the development of a framework for it, which is also not only compatible with Davison and Leung’s cycle but can inform its implementation, as it addresses all of its parts.

Chapters 4 and 5 of the volume explicitly build on the LOA framework. We refer the reader to these chapters for a detailed discussion of the framework and its applications. Next, we briefly elaborate on the interrelated dimensions of the framework (Turner & Purpura 2016, p. 261) with reference to the classroom-based assessment cycle:

- contextual dimension refers to factors, such as educational and political, shaping the context and promoting or hindering learning; in Fig. 1.1., it is the circle surrounding teaching, learning, and assessment in the middle;
- elicitation dimension refers to how learners’ knowledge and abilities are elicited; in the classroom-based assessment cycle, this dimension refers to the planning and collecting information about learning;
- proficiency dimension is both about standards and how learner knowledge and abilities change over time with reference to these standards; it informs the planning and making of judgements about learning parts of the cycle;
- learning dimension refers to the conceptualisation of learning and, therefore, belongs to the very centre of the cycle;
- instructional dimension is about arranging assessments and how the information is used in the following teaching, stretching thus across the classroom-based assessment cycle;
- interactional dimension was discussed by Turner and Purpura mainly with reference to feedback and interaction between the teacher and learners in the teaching/learning process; however, we suggest it can also refer to assessments happening during the interaction between the teacher and learners or among learners; therefore, it informs both the centre of Davison’s (2008) model and collecting information and providing feedback parts of the cycle;

- finally, affective dimension is the inferences emerging in assessment into affective aspects of the classroom teaching, learning, and assessment, such as learner beliefs and engagement.

We consider both assessment *for* learning and the LOA framework as possible and viable ways of informing the classroom-based assessment promoting learning. Both of these frameworks and conceptualisations are represented in the present volume and both align well with the classroom-based assessment cycle, informing it.

Ultimately, the use of assessment promoting learning is dependent on how clearly defined the goals are for the learners (what is learned) and the teacher (what is taught) (see Ball, Kelly, & Clegg 2015). Providing teachers with the skills to define these goals and to assess learning with reference to these goals in order to guide learners towards them should become the basis for planning assessments (the upper part of Davison's (2008) cycle). As learners need to possess an understanding of the goals aimed for (Sadler 1989), one aim of assessment promoting learning becomes making learners aware of the goals. A shared understanding of assessment criteria and goals becomes essential for the classroom-based assessment cycle, the more so in CLIL assessment. A further aim of assessment promoting learning is helping learners understand assessment as a part of the learning process, not just an opportunity to demonstrate their knowledge (Bransford, Brown, & Cocking 2000). As Mehisto and Ting (2017, p. 224) put it, assessment should help "students to become knowledgeable partners in the learning process." with a shared understanding of what achieving these goals entails (the 'how' question in Davison's model). It should also help learners understand what constitutes quality.

In CLIL education, determining learning outcomes required to achieve both content and language goals and assessing this achievement is oftentimes challenging. Assessment variety is a *sine qua non* in CLIL, because (1) CLIL lessons have to take into account the wide range of knowledge and skills and (2) students with different backgrounds need opportunities to demonstrate their abilities in multiple settings (Llinares, Morton, & Whittaker 2012). Above all, however, we argue that setting the goals should be guided by the recognition that CLIL, regardless of the specific approach it takes, is about *integration* of content and language. We will next elaborate on how we conceptualise CLIL in the present volume and what it means for assessment promoting learning.

1.2 Defining CLIL

Coyle, Hood, and Marsh succinctly defined CLIL as “a dual-focus educational approach in which an additional language is used for the learning and teaching of both content and language” (2010, p. 1). Similarly, Wolff (2007, p. 16) defined it as "any educational situation in which an additional language and therefore not the most widely used language of the environment is used for teaching and learning of subjects other than the language itself." In other words, CLIL is ‘a generic umbrella term which would encompass any activity in which ... both language and the subject have a joint curricular role’ (Marsh 2002, p. 58). CLIL is, then, a way of combining subject learning and learning a language that is not the mother tongue of the learners; ‘two for the price of one’ as Bonnet (2012) put it. That said, the goal of CLIL is to promote both content mastery and language proficiency by teaching a content subject, e.g. biology, through an additional language without hindering the first language. Yet, there is not always agreement about how CLIL is implemented (Clegg 2012) as teaching of content and language varies across contexts.

This is not to say that there is no common ground between the various approaches to CLIL. Nor should it be considered that CLIL is fundamentally different from other educational approaches where content and language are merged, such as immersion programmes. On the contrary, as Cenoz (2015) and Cenoz, Genesee, and Gorter (2014) argued, at its core, the pedagogical principles of various approaches to CLIL and other approaches to integrating content and language, are not that different. Their goal is to provide enhanced opportunities to study an additional language, to master the content, and to acquire social and cognitive skills for successfully operating in the multilingual and multicultural world.

Broadly defined, goals of CLIL are to promote (a) learners’ *academic competence*, (b) *proficiency in the L2* (second or foreign language; or additional language), and (c) *L1* (first and/or strongest language) *competence* (Mehisto, Marsh, & Frígols 2008; Mehisto & Ting 2017). A further goal of CLIL is also to promote the “understanding and appreciation of the *culture* of the L1 group, and of the L2 group(s)”, “capacity for and interest in *inter-cultural communication*”, and, as an overarching goal, “the *cognitive* and *social skills* and habits required for success in an ever-changing world” (Mehisto, Marsh, & Frígols 2008, p. 12; emphasis added). These general goals should, ideally, shape teaching, learning, and assessment in CLIL.

Cenoz, Genesee, and Gorter (2014) argued that it is best to conceptualise CLIL as an umbrella for all different approaches to integrating content and language at the same time

calling for a carefully constructed taxonomy of different approaches to CLIL. We follow their proposition for considering CLIL as an umbrella for a variety of classrooms where content and language are taught simultaneously, albeit (ideally) informed by the general goals of CLIL that we outlined above.

The contributors to this volume approach assessment promoting learning in CLIL from rather different angles and foci. However, what unites them is their focus on the *integrated nature* of content and language, which is the central premise of the volume. The instructional approaches discussed in the volume are not about suppressing other languages, i.e. for the most part, learners' mother tongues, but to enrich learner linguistic repertoire. More importantly, their premise is *simultaneous* teaching and learning (and assessment) of the language and the content or, *a fusion of content and language* (Nikula et al. 2016a).

Before discussing the integration in CLIL, we will outline the differences and similarities across the contexts discussed in the chapters of the present volume with reference to the geographical contexts they represent.

1.3 Geographical contexts

Educational policy, state curricula, as well as educational history, ideologies, and beliefs strongly shape teaching, learning, and assessment in CLIL classrooms. The role of covering the educational contexts in the volume from a broader geographical perspective is to give a general understanding of how these factors inform approaches to integrating content and language in teaching, learning, and assessment. This volume brings together contributors from different regions of the world: Finland (Chap. 6 and 9), Japan (Chap. 3, 4, 7, and 10), Portugal (Chap. 5), Spain (Chap. 8), Thailand (Chap. 3), and the UK/international¹ (Chap. 2). Two foci become important in discussing geographical contexts: (1) educational history, beliefs, and ideologies, manifested in curricula and (2) the outcome of these with relation to CLIL—the relative emphasis on content or language in various geographical contexts. Next, we visualised how the countries are positioned west to east, which coincidentally roughly matches the change of emphasis from content to language in CLIL instruction.

Spain has become one of the European leaders in developing CLIL education (Coyle 2010). There is a variability in how CLIL is organised, as each of the 17 autonomous regions

¹ As a matter of fact, the context in Chapter 2 is rather international (Cambridge Assessment International Education). However, as the contributor is based in the UK, we suggest that both of these contexts should be acknowledged.

in Spain regulates education independently. Over several decades, bilingual CLIL-style education has been implemented at a progressively increasing rate within Spanish Autonomous Communities. To try to improve foreign language competence, Spain launched language-learning initiatives in the 1990's focusing on English, the most commonly studied language in Europe (Eurydice 2017). In 1990, an educational reform act was passed (*Ley Orgánica de Ordenación General del Sistema Educativo*), requiring the introduction of a first foreign language by the age of eight (Gobierno de España, Ministerio de la Presidencia 1990). As a result, in 1996, the British Council in conjunction with the Ministry of Education and Science launched the Bilingual Project, implementing CLIL in schools in Madrid. The project has been successful in promoting its educational purpose and preparing the younger generation to enter the increasingly multilingual European workforce in the future (Reilly & Medrano 2009). Teachers trained in content areas have been required to impart their subjects in the target language, requiring teachers to undergo in-service training to improve their language skills. Many teachers—trained in subject area expertise rather than language teaching—see themselves as content experts and regard the changes to the system as challenging (Muñoz Lahoz & Navés 2007).

In *Portugal*, CLIL instruction is not widely spread. Still, it has been supported by the Ministry of Education through several projects and CLIL programmes implemented from the pre-primary through to higher education. While there are official guidelines for implementing CLIL there are still a variety of approaches to CLIL, with varying degrees of content and language integration. A process of curriculum redesign has been underway in Portugal since 2017/2018 (OECD 2018). This process has had implications in the launching of new curriculum documents aiming at providing students' profiles at the end of their compulsory schooling. This was done to enable deeper learning by identifying and developing core learning skills across different subject areas in the compulsory curriculum. This has significance for CLIL, as subject related content areas are being used for the purpose of promoting learning depth and developing higher levels of language proficiency. The pilot project (Bilingual Schools Project; BSP) and the programme were jointly implemented by the Directorate-General for Education of the Portuguese Ministry of Education and the British Council Portugal. The programme is aligned with the curriculum, setting out what should be learned and thus shaping teaching and assessment. In the programme, language education has been integrated with the content lessons to encourage literacy development that *stretches beyond* the everyday foreign language to that required to convey content meaning and ensure “ongoing language growth (being alert to plateauing)” (Bertaux et al. 2010, p. 8).

In *Finland*, CLIL has a long history, being used as an educational approach since early 1990s. It is now acknowledged in both the national and local curricula, though under the more general umbrella of bilingual education. At the same time, it is still rather loosely defined in the National Curriculum. CLIL instruction generally appears to be content-driven. However, locally, on the municipality and school level, there is variation in the ways in which CLIL is implemented. For example, there are a number of projects, applied for by municipalities, in which immersion and bilingual education programmes are developed (Peltoniemi et al. 2018; see City of Helsinki). We should add that in Finland, in general, teachers enjoy freedom in how they implement the curriculum, which adds to the variation. Chapter 6 provides an excellent overview of CLIL in the Finnish context and gives a detailed discussion of Finland's local educational policies and practices and their interrelationships.

In *Thailand*, CLIL is slowly gaining recognition at all levels of education. A pilot study in 2006-2007 was used to implement CLIL science courses at primary and secondary schools that followed the national curriculum (Keyuravong 2010; Marsh & Hood 2008). More recently, researchers have investigated the effectiveness of CLIL in the context of Thai universities (Lai & Aksornjarung 2017; Suwannoppharat & Chinokul 2015), arguing for moving away from the still ubiquitous grammar-translation method.

CLIL in *Japan* is still “a new-born” (Ikeda, Pinner, Mehisto, & Marsh 2013, p 1), and the emphasis is on language, but CLIL continues to develop there, attempting to fracture the constraints of the traditional norms (Clavel 2014). English as a Foreign Language (EFL) pedagogy is generally emphasised, low levels of English proficiency of students and teachers alike is prevalent, and the textbook often becomes the authority in the classroom. This limits activities where content and language can be taught, learned, and assessed. There is a growing argument for the necessity of bilingual education; yet, CLIL is not systematically represented in the national curriculum and is largely implemented at the grassroots level (Ito 2018). Many CLIL (similarly to EFL) classes are taught primarily using the L1 Japanese. Exacerbated by a typological distance between Japanese and English (Cenoz 2017; Jackson & Kaplan 1999), this prevents learners from reaching higher levels of linguistic proficiency. To compensate, Japan has created a modified version (CEFR-J) of the Common European Framework of Reference, to include sub-levels (pre-A1) (Negishi 2011). Globalisation (METI 2010) has played a part in impacting Japan's educational policy and practice at the tertiary level, which has contributed to the rise of some pioneering programs, especially in the sciences, and a rise in English as a Medium of Instruction (EMI) programs.

The complexity of what shapes a particular approach to CLIL is not limited by the local educational context. Grin, (2005), for example, stated that up to 216 forms of CLIL can be identified, geographical context playing but a small part in this differentiation.

1.4 Hard to soft

One difference with regard to various CLIL implementations is in their relative emphasis on content or language. It has been proposed to capture this varying emphasis of content-led to language led approaches is a continuum from hard (or strong) CLIL to soft (or weak) CLIL (Ball, Kelly, & Clegg 2015; Met 1999). Hard CLIL “refers to subject-based aims and objectives, where subjects from the conventional curriculum are taught in an additional or foreign language” (Ball, Kelly, & Clegg 2015, p. 27). Soft CLIL is “used to describe the broad linguistic aims that a language teacher brings to the classroom” (Ball, Kelly, & Clegg 2015, p. 27) and “content is a useful tool for furthering the aims of the language curriculum” (Met 1999, p. 5). The following Fig. 1.2 illustrates this continuum.

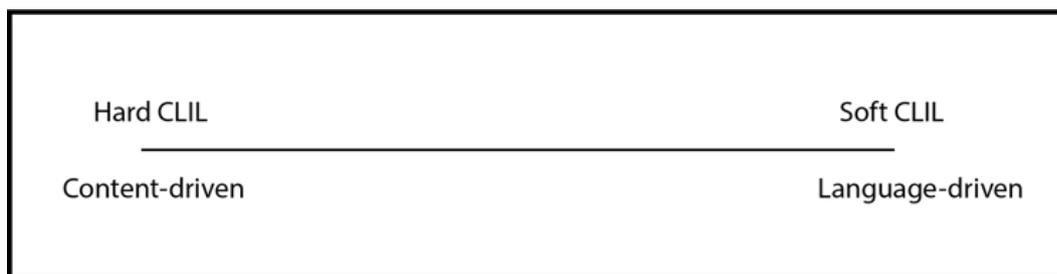


Fig. 1.2 The *hard* and *soft* CLIL continuum (adapted from Ball, Kelly, & Clegg 2015)

The definition of CLIL we adopt in the present volume sets boundaries to this continuum. English as a foreign language (EFL), while being language-driven, is outside the boundary of the soft-CLIL end of the continuum, as it does not perceive integration of content and language as a goal. However, Chap. 7, a Japanese context that is essentially EFL with some emphasis on the content, is a part of the present volume, as it builds the argument for the value of integrating content with language.

Defining CLIL as an educational approach and the relative emphasis on content or language contextualised based on a region of the world is a good starting point to identify how one 'fits' into the CLIL community. Yet, the emphasis on content or language in CLIL depends on the local educational culture and tradition, if and by what means CLIL is reflected

in the National Curricula, who teaches CLIL (the content or language teacher, or both), the starting age of CLIL instruction, and the subjects and number of hours taught in a foreign language. However, it also depends on teachers' understanding of the local educational policies and of their experience of and beliefs about teaching content and language simultaneously.

Based on the hard-to-soft continuum, CLIL approaches explored in the present volume can be divided into those studying and discussing contexts (not necessarily geographical) with a greater focus on the content (Chap. 6, 9, and 10), those focusing more on language (7 and 8), and those scattered across the continuum while not approaching the ends of it (Chap. 2, 3, 4, and 5). However, it does not help to fully understand what it is that is learned in CLIL and how to assess such that this learning is promoted. Assessment activities built on the principles of A/fL and/or following the LOA framework can be useful for understanding where learners are, where they are heading, and how they can be guided in their learning. However, this focus is not enough to fully inform the classroom-based assessment cycle. We argue that it is the understanding of *integration* of content and language as “mosaics of different pedagogies and learning practices” (Leung & Morton 2016, p. 248) which can truly help conceptualise teaching, learning, and assessment in CLIL. We will discuss the basis for the conceptualisation of integration of content in language in Sect. 1.7. However, connected to the discussion of the hard-to-soft continuum, we feel we need first to add a brief discussion of the role of language in CLIL.

1.5 The Role of Language in CLIL

CLIL is concerned with the development of learners' academic language alongside content knowledge. Cummins (1999) proposed two dimensions of academic proficiency: Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Linguistic Proficiency (CALP).

BICS is what people use in their everyday conversations. This kind of language is easier to use and acquire, as it is context embedded. In discussions involving BICS, we can see gestures, facial expressions, and other clues about the details of the conversation. CALP on the other hand is context-reduced. When learners see a page in a textbook, they are confronted with more abstract language and less clues to the meaning (Lin 2016). The natural progression for learning language is through the development of BICS, which occurs much

more quickly and easily. Even for L1 speakers, mastery of CALP requires explicit instruction.

Cognitive discourse functions (CDFs), e.g. classifying, defining, describing, evaluating, explaining, exploring, and reporting, is another way of looking at the role of language in CLIL (Dalton-Puffer 2007, 2016). Essentially, CDFs, based on Bloom's Taxonomy of Educational Objectives (Anderson et al. 2001; Bloom et al. 1956), provide a perspective that when teachers are "modelling/teaching how to verbalise subject-specific cognitive actions, they are not 'doing the language teachers' job', but actually teaching their subject in a very substantial way" (Dalton-Puffer 2016, p. 30).

Chapter 6 gives a detailed overview of the so far scarce existing research on language and language assessment in CLIL. Hence, we will not in this chapter provide these details. In the following section, we, rather, discuss how different ways content and language are integrated in CLIL change the conceptualisation of teaching, learning, and assessment and give examples of these.

1.6 The Integration Matrix

To understand what is learned, taught, and assessed in CLIL classrooms, integration of content and language should be considered. Our following discussion will be based on Leung and Morton's (2016) integration matrix, as their conceptualisation underscores the differences in teaching and learning across the four ways content and language integration can be understood.

Leung and Morton's (2016) discussion of learning from the perspective of *integration* in CLIL is informed above all by Bernstein's (2000) concepts of 'competence' and 'performance'. A competence approach refers to further developing learner's existing abilities. A performance approach is one where the learner is expected to demonstrate knowledge or skills based on some inventory of standards such as summative assessment criteria that can be used to share learner performance across contexts. (see Christodoulou 2016, p. 56).

To discuss what is learned in CLIL and how, Leung and Morton build on the concepts of *classification* and *framing*. *Classification* refers to the separation of language based on subjects such as history or math and *framing* refers to the path in which acquisition can occur within that classification, or how the content is selected and sequenced (Leung & Morton

2016). Bernstein (2000) talks about a *visible* pedagogy when it is performance oriented and strongly classified and framed. In *invisible* pedagogy, on the other hand, “rules of organisation and criteria (are) implicit” (p. 109) and classification is weak.

The second conceptualisation that Leung and Morton draw on is Bakhtin’s (1981) discussion of tensions between centripetal and centrifugal tendencies in language (and by extension, teaching and learning of content). Centripetal tendencies can be visualised as language development that takes ‘subject-literacies’, i.e. language of the subject is required to make meaning and the language of the classroom is a more unified language. These tendencies are more likely in visible pedagogy. Centrifugal tendencies on the other hand are a more diverse use of language in the classroom, where learners and the teacher could be discussing the same concepts using very different language.

Based on this conceptual understanding, Leung and Morton (2016) produced a matrix of four different orientations to integration in CLIL based on the degree of visible language pedagogy intersecting with the degrees of disciplinary orientations to language (Fig. 1.3).

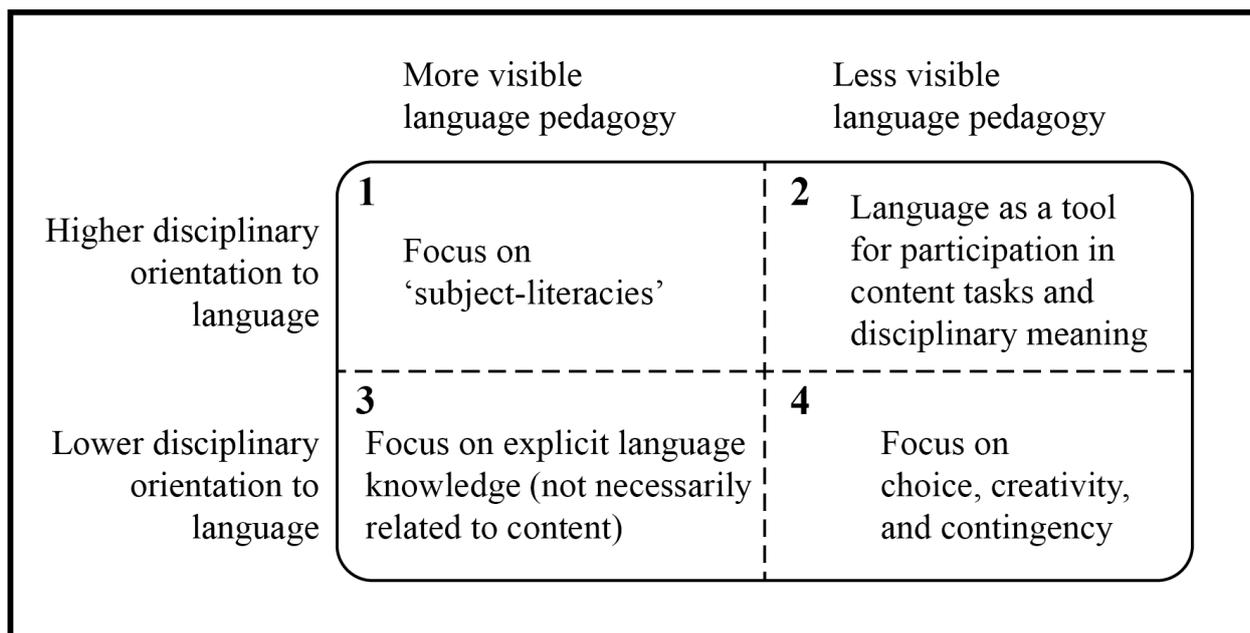


Fig. 1.3 Four different orientations to integration in CLIL (Leung & Morton, p. 237)

We will next propose the *kinds of learning* that could occur in each of the quadrants, keeping in mind that “the boundaries demarcating the four quadrants are leaky” (p. 237). That is, we will use Leung and Morton’s matrix as a lens to inform the understanding of conceptualise teaching, learning, and assessment in CLIL in terms of the integration of content and language in the chapters in the present volume.

The matrix can help make useful generalisations with regard to describing a CLIL context, i.e. to which quadrant a CLIL context—geographical, school, or classroom—‘belongs’. With this in mind, to help the reader navigate through the volume, we next tentatively ‘position’ each contribution on the matrix (Fig. 1.4).

1	Chapter 2 Chapter 3 Chapter 4 Chapter 5	2	(Chapter 6) (Chapter 9)
3	Chapter 7 Chapter 8	4	Chapter 9 Chapter 10

Fig. 1.4 Chapters placed on Leung and Morton’s (2016) integration matrix

Figure 1.4 served to help us organise the order of chapters in the volume. As we discussed previously, no chapter argues for the value of integration in Quadrant 2. Still, even though Chap. 6 argues for including systematic assessment of language to content-focussed CLIL, the picture of CLIL teacher practices that emerges in Chap. 6 refers to this type of integration (or lack of it). Hence, we positioned it in the volume to reflect this quadrant. We underscore it that at the micro level, content and language can be integrated in a variety of ways even within one and the same lesson, not to mention across assessment cycles. Hence more nuanced use of the matrix is needed, which we outline in the following section.

1.7 Teaching, learning and assessment in the matrix

We next elaborate on how we use the matrix to conceptualise teaching, learning, and assessment in CLIL. We will argue that different conceptualisations of integration in CLIL change how teaching, learning, and assessment are understood, as we elaborate next.

1.7.1 Quadrant 1: Visible language pedagogy and higher disciplinary

orientation to language

First and foremost, this quadrant represents the development of language competence that is specific to meanings associated with content (Leung & Morton 2016). In the learning of a specific subject, such as mathematics or history, a syllabus will have clear descriptions of what is to be acquired in language and content as strong classification criteria, and there will be strong framing, outlining clear stages of how the content and language are to be acquired. In this sense, linguistic competence is merged with the content competence—a visible pedagogy where learning is based on a performance orientation. CLIL is timetabled as content lessons in which the language of the subject is taught (Dalton-Puffer, Llinares, Lorenzo, & Nikula 2014).

In this Quadrant, the achievement of learning goals of CLIL can be visualised through the content and language developing in tandem in stages. Reaching the following stage presupposes that the preceding stage has been achieved. Learning is demonstrated through performance on content tasks with a clear understanding of linguistic constraints impeding learners' mastering of the content. Thus, explicitly addressing learners' linguistic needs is required, and language specific descriptors for different stages should be designed and integrated with content goals. A major instructional goal is then to create links between lexical items and the ability to appropriate them to understand and discuss the content-specific knowledge (Dalton-Puffer 2016). The language of the classroom is subject oriented, making that content language necessary and an integral part of the construct taught and learned.

At a higher level of abstraction, in approaches to CLIL belonging to Quadrant 1, learning can be conceptualised as happening when learners are developmentally ready for it. The aim of assessment then becomes to find out whether learners are ready to move to a higher stage. However, other conceptualisations of learning are, too, possible.

Classroom-based assessment that can be associated with this quadrant (e.g. those discussed in Chap. 2 and 3) is often informed by scales and descriptors such as those in the Common European Framework of Reference CEFR (Council of Europe 2001; 2018). These descriptors allow for establishing learner progression in broad terms, allowing for meaningfully establishing whether teaching and learning goals are reached.

The philosophy behind the CEFR is that of constructivism. Two main lines of conceptual inquiry characterise constructivism: the *cognitive constructivist* perspective and

the *social-cultural constructivist* perspective. The concept of *cognitive constructivism* is associated with Swiss developmental psychologist Jean Piaget (1977). The understanding behind it is that learners cannot simply be given information which they immediately understand and use, but rather must construct their knowledge. Thus, learning occurs by active construction of meaning. Still, development is characterised by what individuals can and cannot do at different stages. Learning lags behind development. Teaching should target that what the learner is developmentally ready to learn, and assessment yields insights into this.

However, the development of the CEFR has also been informed by *social constructivism*—a philosophy championed by Lev Vygotsky (1986) in which the social and collaborative nature of learning in the development is stressed. Learners are active agents in the construction of meaning—knowledge is socially constructed. The process of knowing, therefore, is influenced by other people and is mediated by culture. Vygotsky’s well-known concept of the *zone of proximal development (ZPD)* helps to understand how learning is conceptualised in social constructivist thinking. ZPD denotes the range of what a learner is currently able to internalise with the assistance of a more knowledgeable interlocutor, such as a teacher (the potential development). According to Vygotsky (1978, p. 57), “Every function in the child’s cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological).” Learning, therefore, shapes development, as what a learner is able to do now with the assistance from others, the learner will be able to do independently in future. Development, in turn, directs teaching and learning, as what is taught and learned should build on the learner’s development, teaching and learning happening in the learner’s ZPD. Chapters 2 and 9 provide a more detailed discussion of this.

In the volume, Chap. 2 and 3, and to a large extent, Chap. 4 and 5, discuss this type of integration.

1.7.2 Quadrant 2: Less visible language pedagogy and higher disciplinary orientation to language

In this quadrant, language is a semiotic tool to promote learning of “discipline-specific concepts and competences” (Leung & Morton 2016, p. 240), making the language not fully integrated but learned as a “side effect” (p. 240). Learners build their cognitive academic

linguistic proficiency (CALP) through discussing scientific concepts in a specific discourse community. That is, the language is acquired through reaching the content-specific goals attained through *using* the language, the language pedagogy being more or less invisible.

There are no contributions in this volume advocating for assessment that can be conceptualised with reference to this quadrant. This is understandable, as in this quadrant, language is the least integrated into the process of acquisition of discipline-specific knowledge and competences. It goes counter to the perspective that the contributors to this volume adopt. That said, several contributions (Chap. 6 and 9) observe how teachers struggle with integrating language into the content-specific knowledge, Wewer making it the focus of her Chap. 6. The authors use this as a starting point for their discussion and/or propose how assessment can be reconceptualised to make connections between the language and the content in assessment and teaching practices.

The goal of assessment in this quadrant is to collect information about learners' content knowledge. The language component in assessment is unsystematic at best, if present at all (Wewer 2014; see Chap. 6, this volume). Still, teachers scaffold language to make the content accessible to learners, but this scaffolding is based on implicit understanding of learner needs (see Lin, 2016, for examples of assessment activities where language is scaffolded). Indeed, as Mehisto and Ting (2017, pp. 220–222) argued, if the focus of assessment is on content, it is essential to make sure that language does not hinder learners' capacity to demonstrate their content knowledge. Regardless, content teachers can be concerned whether or not teaching and assessing language can be problematic, but at the same time fearing that they are not qualified to teach it or assess it (Skinnari & Bovellan 2016; Chap. 6 and 9, this volume).

1.7.3 Quadrant 3: More visible language pedagogy and lower disciplinary orientation to language

Next, there are CLIL approaches with a “highly visible language pedagogy without the linguistic elements being tightly linked to any specific discipline” (Leung & Morton 2016, p. 237). These approaches are usually performance- rather than competence-based, language being taught explicitly.

CLIL approaches in this quadrant are language-focused. There can be explicit emphasis on the four skills (listening, speaking, reading, and writing) and the focus can be on

the language of lower order thinking skills (LOTS, Anderson et al. 2001). At the grassroots level, teachers attempt to bring the language focus into the content areas, using authentic situations and building language learning around specific topics. Teachers, then, have to make an effort to systematically incorporate cognitive skills (e.g. integrating information) with language (e.g. functions, vocabulary as well as grammar), foregrounding higher order thinking skills (HOTS) (Anderson et al. 2001), e.g. explaining, synthesising, or discussing concepts. This approach to language is functional, CDFs informing the understanding of how knowledge is constructed in CLIL lessons. In addition to focusing on form, lessons can be speech events, with teachers or more capable peers mediating the performance of novices—“an implied situated learning perspective” (Leung & Morton 2016, p. 241).

The distinction between the two general ways language teaching and learning can happen in this quadrant is best understood with reference to centripetal and centrifugal tendencies in language (Leung & Morton 2016; Bakhtin 1981; see Sect. 1.6). When *centripetal tendencies* are more likely, learners learn to speak the language of the subject, the language of the content embedded in the concepts themselves, with little room for ‘saying it a different way’. *Centrifugal tendencies* in this quadrant have to do with the situatedness of the interaction, as learners’ “competence is developed through participation in social practices” (Leung & Morton 2016, p. 242). These social practices are still mediated by the teacher (a more capable other), having an explicit focus on language. However, teachers build on what emerges in the interaction.

In CLIL classrooms, learners can use language very differently from the teacher to discuss the same concept; e.g. ‘a round thing’ *versus* a ‘circle’; and the teacher can build on learners’ contributions in order to guide learners to using academic language equipped with conceptual understanding. With centripetal tendencies, the language of the genre is the language the student uses. In centrifugal tendencies, the learners are able to use their everyday language to discuss academic language. CLIL teachers, in turn, mediate the use of the language to verbalise content, through this, making the content alongside language accessible to the learners. To summarise, how exactly linguistic goals are achieved in this quadrant varies, but content knowledge is acquired through language instruction.

With regard to assessment, there is an emphasis on language, the purpose being to help learners become “socialised into rational academic discourse” (Dalton-Puffer 2016, p. 42) through promoting their linguistic knowledge. As mentioned previously, there is often strong framing, so progress can be measured through tests and with the help of scales. However, as Dalton-Puffer (2016) also mentioned, assessment of learners’ abilities can also

happen in dialogic interaction with more capable peers. Hence, teachers can use assessment as an inquiry (Birenbaum et al. 2009) during the interaction with their learners in order to guide the learners as a part of the interaction. In the present volume, assessment as a part of interaction in Quadrant 3 is discussed in Chap. 8. Chapter 7 discusses assessment as part of both centrifugal and centripetal teaching and learning processes.

1.7.4 Quadrant 4: Less visible language pedagogy and lower disciplinary orientation to language

In a less visible language pedagogy with weak classification and framing, the learner is often seen as “the author of the practice and even the authority” (Bernstein 2000, p. 110), eliciting centrifugal interaction, meaning that the dialogue between the teacher and the learners or among learners is “more open to contingent notions of communication” (Leung & Morton 2016, p. 236). This is a competence approach to learning, emphasising learner autonomy and agency in which the content and linguistic goals are more loosely defined. In this approach, learning is situated, meaning that it is a process of discovering content and language with learners co-constructing knowledge through dialogic interaction.

The underlying principle of assessment promoting learning in this quadrant is giving learners as much responsibility for their learning and development as possible, instruction becoming a dialogical learning-oriented process. Assistance from the teacher/assessor or peers emerges in unplanned assessment during the interaction. The availability of external support provides a fuller picture of learners’ abilities, as it uncovers what learners can do with external support, simultaneously promoting their abilities. In language education, this conceptualisation of assessment has been pursued in dynamic assessment (Poehner 2008; Poehner & Infante 2015) which considers assessment as inseparable from teaching and learning, all three forming one development-oriented process. Learners’ performance is not about what the learners can or cannot do but about what they can do when assistance from others is available.

At the level of the classroom-based assessment cycle, one can perceive these dialogical processes of teaching, learning, and assessment as one activity (‘collecting information about students’ learning’ part of Fig. 1.1). This allows for making inferences about where the learner is in relation to their goals and what the sources of their struggles are, and how much effort on the part of the teacher is required to help individual learners or

groups of learners develop. This serves as the basis for the subsequent feedback to learners and for adjusting the following teaching, learning, and assessment. Assessment activities in this quadrant can be both planned (e.g. a planned dynamic assessment activity) and unplanned (the teacher using opportunities for assessing as these are afforded in classroom interaction), but the way the assessment activity develops is always contingent on the interaction, assessment emerging in it. To summarise, in assessment promoting learning in this quadrant, performance is no longer individual but is co-constructed between the teacher and the learner (Chap. 8 and 9) or among learners (Chap. 10).

1.8 Pulling the threads together

The contributors to this volume come from different angles with regard to their approaches to assessment. Yet, they all perceive assessment as a part of the process whose goal is to promote learning, assessment mediating the teaching and learning relationship. We argue that the synthesis of the integration matrix and the classroom-based assessment cycle informs this relationship. The central question with regard to classroom-based assessment, i.e. *What can you learn about your learners and what can learners learn as a result of using different assessment tools and approaches?* can be guided by the assessment cycle. The matrix, too, informs the answer to this question with regard to CLIL classrooms.

To repeat, classroom-based assessment should promote learner autonomy and help teachers to adjust teaching to address learner needs in relation to the goals of learning (Black, et al. 2004). As Mehisto and Ting (2017, p. 224) put it, assessment should help “students to become knowledgeable partners in the learning process.” In other words, the aim of assessment promoting learning in CLIL, regardless of whether the principles of A/L inform it or a framework such as LOA is used, is to encourage learners to take greater control of their learning of both content and language. Setting the goals becomes essential in this process. Here, the matrix can inform the thinking about the goals at the macro and the micro level. The macro level is shaped by the institution, curriculum and policy guidelines, and the educational tradition. We roughly operationalised this level as the geographical context. The micro level refers to how these goals are realised in specific classrooms as adjustments are made to teaching and assessment across assessment cycles.

To give an example, Japan, as we discussed earlier, has a long history of form-focused instruction in language education determined by the curriculum set by the Ministry

of Education (MEXT 2015). Using the matrix lens, the macro CLIL context would be identified as Quadrant 3, the students and teachers focusing exclusively on the language. Likewise, the approach to CLIL in Spain, varies across the country, though one generalisation that can be made is that many teachers consider themselves as content teachers, prioritising content goals (Quadrant 2).

At the micro level, however, the classroom-based assessment can show a markedly different picture. Chapter 8 gives an excellent example of how, at the micro level, instances of dialoguing with learners are language-oriented and best understood through the lens of Quadrant 3. The quadrant boundaries are, indeed, leaky and even in the context of the CLIL classroom which is content oriented, instances of language focus occur.

A teacher can use, for example, a rubric based on a proficiency scale (similar to those discussed in Chap. 2, 3, and 4) to determine which problems learners have and gain an understanding of where learners are in terms of their content and language knowledge (Quadrant 1). Equipped with these insights, the teacher can then further probe and direct learners' development in the subsequent integration, using a more structured approach informed by the principles of A/fL and focussing more on the language which implies a more structured approach even if centrifugal tendencies too, are visible in interaction (Quadrant 3; see Chap. 8, this volume). Alternatively, more centrifugal approaches to interaction between a teacher and learners (Chap. 9) or among learners (Chap. 10) can be used to guide the focus of teaching, learning, and assessment (Quadrant 4). The insights obtained in these previous assessment cycles can then help teachers to interpret learners' performance on essays focusing on content (Quadrant 2), helping teachers to understand whether learners display their own knowledge or repeat somebody else's words or understand the reasons for problems in their writing (Chap. 9). This will direct the following teaching, learning, and assessment and the cycle will, thus, continue. A framework classifying various approaches to assessment promoting learning in CLIL classrooms, such as that discussed in Chap. 7, can inform the understanding of these assessments with reference to the matrix, the agents assessing and the functions of these assessments (summative and formative), and the goals that are to be achieved. In other words, at the macro level, the goals stay the same, but the way these goals are reached can vary based on the unique ways that assessment cycles in CLIL classrooms inform the trajectory of these classrooms.

We realise that the reader might want to read the contributions to the volume with the focus on specific geographical contexts, different stages of education (primary, secondary, or tertiary), a specific discipline, particular parts of the classroom-based assessment cycle, or

specific quadrants on Leung and Morton's (2016) integration matrix. However, as we elaborated, one of the main purposes of classroom-based assessment cycle is to elicit the relationship between teaching, learning, and assessment. Likewise, the matrix conceptualises more than the integration between content and language in CLIL classrooms. It also outlines how learning is conceptualised within each of the quadrants, informing the choice of assessment tools and approaches, what knowledge, understanding, and use are elicited, how learner performance is interpreted, and what feedback to learners is given. The two models together guide the understanding of how teaching, learning, and assessment change across assessment cycles. We hope that the reader goes through the volume with this understanding in mind.

References

- Alderson, J. C., Haapakangas, E.-L., Huhta, A., Nieminen, L., & Ullakonoja, R. (2015). *The diagnosis of reading in a second or foreign language*. Routledge.
- Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R. et al. (Eds.) (2001). *A taxonomy for learning, teaching and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Allyn Bacon Longman.
- Bachman, L. F. (1990). *Fundamental considerations in language testing*. Oxford: Oxford University Press.
- Baird, J., Andrich, D., Hopfenbeck, T. N., & Stobart, G. (2017). Assessment and learning: Fields apart? *Assessment in Education: Principles, Policy and Practice*, 24, 317–350.
- Bakhtin, M. M. (1981). *The dialogic imagination. Four essays*. Austin: University of Texas Press.
- Ball, P., Kelly, K., & Clegg, J. (2015). *Putting CLIL into practice*. Oxford, UK: Oxford University Press.
- Bennett, R. E. (2011). Formative assessment: A critical review. *Assessment in Education: Principles Policy and Practice*, 18(1), 5–25.
- Bernstein, B. B. (2000). *Pedagogy, symbolic control, and identity: Theory, research, critique* (2nd ed.). Lanham, MD: Rowman & Littlefield Publishers.

- Bertaux, P., Coonan, C.M., Frígols, M.J. & Mehisto, P. (2010) *The CLIL teachers' competence grid*. http://tplusm.net/CLIL_Competences_Grid_31.12.09.pdf. Accessed 5 November 2018.
- Birenbaum, M. (2014). Conceptualizing assessment culture in school. In C. Wyatt-Smith, V. Klenowski, & P. Colbert (Eds.), *Designing assessment for quality learning* (pp. 285–302). Dordrecht: Springer Science+Business Media.
- Black, P. J., & Wiliam, D. (1998a). Assessment and Classroom Learning. *Assessment in Education*, 5(1), 7–74. <https://doi.org/10.1080/0969595980050102>.
- Black, P. J., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, 21, 5–31. <https://doi.org/10.1007/s11092-008-9068-5>.
- Black, P. J., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2003). *Assessment for Learning: Putting It into Practice*. Berkshire, GBR: McGraw-Hill Education.
- Black, P., & Wiliam, D. (2010). Inside the Black Box: Raising Standards Through Classroom Assessment. *Phi Delta Kappan*, 92(1), 81–90. <https://doi.org/10.1177/003172171009200119>.
- Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2004). Working inside the black box: Assessment for learning in the classroom. *Phi Delta Kappan*, 86(1), 8–21.
- Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of educational objectives: Handbook I: The cognitive domain*. New York: David McKay Co., Inc.
- Bonnet, A. (2012). Towards an evidence base for CLIL: How to integrate qualitative and quantitative as well as process, product and participant perspectives in CLIL research. *International CLIL Research Journal*, 4(1), 66–78.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind, experience, and school* (Expanded Edition). Washington DC: National Academy Press.
- Broadfoot, P. M., Daugherty, R., Gardner, J., Harlen, W., James, M., & Stobart, G. (2002). *Assessment for learning: 10 principles*. Cambridge, UK: University of Cambridge School of Education.
- Brookhart, S. M., & Nitko, A. J. (2008). *Assessment and grading in classrooms*. Upper Saddle River, NJ: Pearson.

- Carless, D. (2015a, July). Learning-oriented assessment in practice. Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA).
- Carless, D. (2015b). Exploring learning-oriented assessment processes. *Higher Education*, 69(6), 963–976. <https://doi.org/10.1007/s10734-014-9816-z>. Accessed 8 December 2018.
- Cenoz, J. (2015). Content-based instruction and content and language integrated learning: the same or different? *Language, Culture and Curriculum*, 28(1), 8–24. <https://doi.org/10.1080/07908318.2014.1000922>.
- Cenoz, J. (2017). The target language, the sociolinguistic and the educational context in CLIL programs. In A. Llinares & T. Morton (Eds.), *Applied linguistics perspectives on CLIL* (pp. 239–249). Amsterdam: John Benjamins.
- Cenoz, J., Genesee, F. H., & Gorter, D. (2014). Critical analysis of CLIL: Taking stock and looking forward. *Applied Linguistics*, 35(3), 243–262. <https://doi.org/10.1093/applin/amt011>.
- Cenoz, J., Genesee, F., & Gorter, D. (2014). Critical analysis of CLIL: Taking stock and looking forward. *Applied Linguistics*, 35(3), 243–262. <https://doi.org/10.1093/applin/amt011>.
- Christodoulou, D. (2016) *Making good progress? The future of Assessment for Learning*. Oxford: Oxford University Press.
- City of Helsinki (2019). *Bilingual Education*. <https://www.hel.fi/helsinki/en/childhood-and-education/comprehensive/what-how/bilingual-education/>. Accessed May 8, 2020.
- Clavel, T. (2014, January 6). English fluency hopes rest on educational overhaul. *The Japan Times Online*. <https://www.japantimes.co.jp/community/2014/01/05/issues/english-fluency-hopes-rest-on-an-education-overhaul/#.WmWVokuYMkg>. Accessed September 4, 2019.
- Clegg, J. (2012). Preface. In Quartapelle, F. (Ed.), *Assessment and evaluation in CLIL* (pp. 5–7). Aeclil.altervista.org. Accessed 12 May 2018.
- Council of Europe (2001). *Common European framework of reference for languages: learning, teaching, assessment*. Strasbourg: Modern Languages Division, Council of Europe.
- Council of Europe. (2018). *Common European Framework of References for Languages: Learning, Teaching, Assessment*. Companion Volume with New Descriptors. Provisional Edition. Language Policy Programme. Education Policy Division.

- Education Department. Council of Europe. www.coe.int/lang-cefr. Accessed 19 March 2019.
- Coyle, D. (2010). Assessment Issues in CLIL. In D. Coyle, P. Hood, and D. Marsh (Eds.), *CLIL: Content and Language Integrated Learning*. Cambridge: Cambridge University Press.
- Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: content and language integrated learning*. Cambridge: Cambridge University Press.
- Cummins, J. (1999). *BICS and CALP: Clarifying the distinction*. Eric. <https://doi.org/ED419696>.
- Dalton-Puffer, C. (2007). *Discourse in content and language integrated learning (CLIL) classrooms*. Amsterdam: John Benjamins Publishing Company.
- Dalton-Puffer, C. (2016). Cognitive discourse functions: Specifying an integrative interdisciplinary construct. In T. Nikula, E. Dafouz, P. Moore, & U. Smit (Eds.), *Conceptualizing integration in CLIL in multilingual education* (pp. 29–54). Bristol, UK: Multilingual Matters.
- Dalton-Puffer, C., Llinares, A., Lorenzo, F., & Nikula, T. (2014). “You can stand under my umbrella”: Immersion, CLIL and bilingual education. A response to Cenoz, Genesee & Gorter (2013). *Applied Linguistics*, 35(2), 213–218. <https://doi.org/10.1093/applin/amu010>.
- Davies, A., Brown, A., Elder, C., Hill, K., Lumley, T., & McNamara, T. (1999). *Dictionary of Language Testing: Studies in Language Testing 7*. Cambridge: Cambridge University Press.
- Davison, C. (2008, March). *Assessment for learning: Building inquiry-oriented assessment communities*. Paper presented at 42nd Annual TESOL Convention and Exhibit, New York, NY.
- Davison, C., & Leung, C. (2009). Current issues in English language teacher-based assessment. *TESOL Quarterly*, 43(3), 393–415. <https://doi.org/10.1002/j.1545-7249.2009.tb00242.x>.
- DeLuca, C., & Bellara, A. (2013). The Current State of Assessment Education: Aligning policy, standards, and teacher education curriculum. *Journal of Teacher Education*, 64(4), 356–372. <https://doi.org/10.1177/0022487113488144>.
- Eguchi, M., & Eguchi, K. (2006). The limited effect of PBL on EFL learners: A case study of English magazine projects. In P. Robertson & J. Jung (Eds.), *The Asian EFL Journal*

- Conference Proceedings: Task-based Learning in the Asian Context* (Vol. 8, pp. 207–225). Tortola: Asian EFL Journal Press.
- European Commission/EACEA/Eurydice (2017). *Key Data on Teaching Languages at School in Europe – 2017 Edition*. Eurydice Report. Luxembourg: Publications Office of the European Union.
- Genesee, F., & Hamayan, E. (2016). *CLIL in context: Practical guide for educators*. Cambridge, UK: Cambridge University Press.
- Gobierno de España, Ministerio de la Presidencia (1990). Ley Orgánica de Ordenación General del Sistema Educativo. <http://www.boe.es/buscar/doc.php?id=BOE-A-1990-24172>. Accessed 29 June 2010.
- Grin, F. (2005). Added value of CLIL. In *Paper presented at the Conference The Changing European Classroom - The Potential for Plurilingual Education*. Luxembourg. March 9-11.
- Hattie, J., & Timperley, H. (2007). The Power of Feedback. *Review of Educational Research*, 77(1), 81–112. <https://doi.org/10.3102/003465430298487>.
- Hill, K. (2017a). Language teacher assessment literacy – scoping the territory. *Papers in Language Testing and Assessment*, 6(1), iv–vii. http://www.altanz.org/uploads/5/9/0/8/5908292/2.2017_1_introduction_final_final.pdf. Accessed May 14 2018.
- Hill, K. (2017b). Understanding classroom-based assessment practices: A precondition for teacher assessment literacy. *Papers in Language Testing and Assessment*, 6(1), 1–17. http://www.altanz.org/uploads/5/9/0/8/5908292/3.si1hill_final_formatted_proofed.pdf. Accessed 26 April 2018.
- Hill, K., & McNamara, T. (2012). Developing a comprehensive, empirically based research framework for classroom-based assessment. *Language Testing*, 29(3), 395–420. <https://doi.org/10.1177/0265532211428317>.
- Huhta, A., Harsch, C., Leontjev, D. & Nieminen, L. (monograph in preparation). *Diagnosing SFL writing*.
- Ikeda, M., Pinner, R., Mehisto, P., & Marsh, D. (2013). Editorial. *International CLIL Research Journal*, 2(1). <http://www.icrj.eu/21/editorial.html>. Accessed 25 October 2019.
- Ito, Y. (2018). CLIL in Practice in Japanese Elementary Classrooms: An Analysis of the Effectiveness of a CLIL Lesson in Japanese Traditional Crafts. *English Language Teaching*, 11(9), 59. <https://doi.org/10.5539/elt.v11n9p59>.

- Jackson, F. H., & Kaplan, M. A. (1999). Lessons learned from fifty years of theory and practice in government language teaching. *Georgetown University Round Table on Languages and Linguistics 1999*, 71–87.
- Keyuravong, S. (2010). Insights from Thailand. Learning through English: policies, challenges and prospects: *Insights from East Asia*, 69–95.
- Lai, Y., & Aksornjarung, P. (2017). The effects of content-based instruction on listening and speaking abilities of Thai EFL university students. *Journal of Creative Practices in Language Learning and Teaching*, 5(2), 1–20.
- Leung, C. & Morton, T. (2016). Conclusion: language competence, learning and pedagogy in CLIL – Deepening and broadening integration. In T. Nikula, E. Dafouz, P. Moore & U. Smit (Eds.), *Conceptualising integration in CLIL and multilingual education* (pp. 235–248). Bristol/Buffalo: Multilingual Matters.
- Lin, A. M. Y. (2016). *Language across the curriculum & CLIL in English as an additional language (EAL) contexts: Theory and practice*. Springer.
- Lynch, B. K. (2001). Rethinking assessment from a critical perspective. *Language Testing*, 18(4), 351–372. <https://doi.org/10.1177/026553220101800403>.
- Marsh, D. (2002). *CLIL/EMILE--The European Dimension: Actions, Trends and Foresight Potential*. Brussels: European Commission.
- Marsh, D., & Hood, P. (2008). *Content and language integrated learning in primary East Asia contexts* (CLIL PEAC). In The proceeding of primary innovations regional seminar (pp. 43–50).
- Masashi, N. (2011). The development of the CEFR-J: Where we are, where we are going. In *New Prospects for Foreign Language Teaching in Higher Education* (pp. 105–116). World Language and Society Education Centre.
- McNamara, T. (2001). Language assessment as social practice: Challenges for research. *Language Testing*, 18(4), 333–350.
- Mehisto, P., & Ting, T. Y. L. (2017). *CLIL essentials for secondary school teachers*. Cambridge, UK: Cambridge University Press.
- Mehisto, P., Marsh, D., & Frígols, M. J. (2008). *Uncovering CLIL: content and language integrated learning in bilingual and multilingual education*. Oxford: Macmillan.
- Met. M. (1999, January). Content-based instruction: Defining terms, making decisions. NFLC Reports. Washington, DC: The National Foreign Language Center.

- METI. (2010). *Release of report by global human resource development committee of the industry-academia partnership for human resource development*. Tokyo: Ministry of Economy, Trade and Industry.
- MEXT. (2015). *Seito no eigoryoku koujou suishin pulan (The plans on the promotion of improvement of students' English abilities)*. Tokyo, Japan.
http://www.mext.go.jp/en/news/topics/detail/_icsFiles/afiedfile/2016/10/19/1378469001.pdf. Accessed 16 March 2019.
- Muñoz, C. & Navés, T. (2007). CLIL in Spain. In D. Marsh, & D. Wolff (Eds.), *Windows on CLIL. Content and Language Integrated Learning in the European Spotlight* (pp. 160–165). European Centre for Modern Languages.
- Nikula, T., Dalton-Puffer, C., Llinares, A., & Lorenzo, F. (2016a). More than content and language: The complexity of integration in CLIL and bilingual education. In T. Nikula, E. Dafouz, P. Moore & U. Smit (Eds.), *Conceptualising integration in CLIL and multilingual education* (pp. 1–25). Bristol/Buffalo: Multilingual Matters.
- Peltoniemi, A., Skinnari, K., Mård-Miettinen, K. & Sjöberg, S. (2018). *Monella kielellä Suomen kunnissa 2017. Selvitys muun laajamittaisen ja suppeamman kaksikielisen varhaiskasvatuksen, esiopetuksen ja perusopetuksen tilanteesta (Many languages in Finnish municipalities 2017. A report of other large-scale and small-scale bilingual ECEC, preschool and basic education)*. Jyväskylä: University of Jyväskylä.
<https://jyx.jyu.fi/bitstream/handle/123456789/57577/978-951-39-7391-9.pdf?sequence=5&isAllowed=y>. Accessed 16 March 2019.
- Piaget J. (1977). *The development of thought: Equilibration of cognitive structures*. (A. Rosin, Trans). New York: The Viking Press.
- Poehner, M. E. (2008). *Dynamic assessment: A Vygotskian approach to understanding and promoting L2 development*. Norwell, MA: Springer.
- Poehner, M. E., & Infante, P. (2015). Mediated development: Inter-psychological activity for L2 education. *Language and Sociocultural Theory*, 2(2), 161–183.
<https://doi.org/10.1558/lst.v2i2.26982>.
- Purpura, J (2004). Learning-oriented assessments of grammatical ability. In *Assessing Grammar* (pp. 212–250). Cambridge: Cambridge University Press.
- Quartapelle, F (Ed.). (2012). *Assessment and evaluation in CLIL*. Ibis.
<http://aeclil.altervista.org>. Accessed 28 March 2019.
- Reilly, T., & Medrano, P. (2009). MEC/ British Council Bilingual Project: Twelve years of education and a smooth transition to secondary. In E. Dafouz and M. C. Guerrini

- (Eds.), *CLIL Across Educational Levels* (pp. 59–70). Madrid: Santillana Education, S.L./ Richmond Publishing.
- Sadler, D. R. (1989). Formative assessment and the design of instructional systems. *Instructional Science*, 18, 119–144. <https://doi.org/10.1007/BF00117714>.
- Scriven, M. (1967). The methodology of evaluation. In R. W. Tyler, R. M. Gagné & M. Scriven (Eds.), *Perspectives of curriculum evaluation* (pp. 39-83). Chicago, IL: Rand McNally.
- Skinnari, K., & Bovellan, E. (2016). CLIL teachers' beliefs about integration and about their professional roles: Perspectives from a European context. In T. Nikula, E. Dafouz, P. Moore & U. Smit (Eds.), *Conceptualising integration in CLIL and multilingual education* (pp. 145-167). Bristol/Buffalo: Multilingual Matters.
- Suwannoppharat, K., & Chinokul, S. (2015). English communication ability development through the CLIL course. *NIDA Journal of Language and Communication*, 20(25), 63–97.
- Thomas, J. W. (2000). *A review of research on project-based learning*. The Autodesk Foundation.
- Tsagari, D., & Vogt, K. (2017). Assessment literacy of foreign language teachers around Europe: Research, challenges and future prospects. *Papers in Language Testing and Assessment*, 6(1), 41–63. http://www.altanz.org/uploads/5/9/0/8/5908292/5.si3tsagarivogt_final_formatted_proofed.pdf. Accessed 27 April 2018.
- Turner, C. E., & Purpura, J. E. (2016). Learning-oriented assessment in second and foreign language classrooms. In D. Tsagari & J. Banerjee (Eds.), *Handbook of Second Language Assessment* (pp. 255–274). Berlin, Boston: De Gruyter. <https://doi.org/10.1515/9781614513827-018>.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1986) *Thought and language*. Cambridge (Massachusetts): MIT press.
- Wewer, T. (2014). *Assessment of young learners' English proficiency in bilingual content instruction CLIL* (Doctoral dissertation). University of Turku. <http://urn.fi/URN:ISBN:978-951-29-5754-5>. Accessed 12 May 2018.
- William, D. (2017). Assessment and learning: some reflections. *Assessment in Education: Principles, Policy & Practice*, 24(3), 394–403. <https://doi.org/10.1080/0969594X.2017.1318108>.

- William, D., & Leahy, S. (2015). *Embedding Formative Assessment: Practical Techniques for K-12 Classrooms*. Learning Sciences International.
- Wolff, D. (2007). CLIL: bridging the gap between school and working life. In D. Marsh, & D. Wolff (Eds.), *Diverse contexts- converging goals. CLIL in Europe* (pp. 15–25). Frankfurt: Peter Lang.