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Chapter 11

Conclusion: Dialectics in CLIL classrooms

Mark deBoer and Dmitri Leontjev

Based on the insights that emerged in the chapters to this volume, in this chapter, we revisit the following: (a) relationship between teaching, learning, and assessment in the classroom-based assessment cycle (Davison 2008) and (b) integration in assessment in CLIL (Leung & Morton 2016). Two guiding questions will mediate our discussion: *What is assessment promoting learning in CLIL?* and *How can assessment promoting learning in CLIL help to conceptualise assessment promoting learning in general?*

We will then sketch directions that future research could address in order to further conceptualise assessment promoting learning in CLIL classrooms.

11.1 Reconstructing the models

The conceptual discussions of assessment that the contributors to the present volume engaged in, building on our joint understanding of assessment in CLIL with reference to Davison's (2008) assessment cycle and Leung and Morton's (2016) integration matrix, served as our starting point. Every chapter approaches assessment in CLIL from a different angle. However, what unites them is that they discuss connections both among teaching, learning, and assessment and between content and language. This serves an important basis for

forming a coherent understanding of assessment promoting learning in CLIL classrooms that brings two central models in the volume together.

11.1.1 Teaching, learning, and assessment in classroom-based assessment cycle

William and Leahy (2015) discuss classroom-based assessment as an interface between teaching and learning in the classroom. We can further understand this relationship if we critically engage with the central part of Davison's model of classroom-based assessment cycle (Fig. 1.1 in Chap. 1, this volume). That is, Davison (2008) placed teaching, learning, and assessment at the centre of the figure, which implies that all three are equal and contingent on one another and all three change within and across assessment cycles. We note that this idea of interaction of teaching, learning, and assessment is not new, and has been proposed and discussed previously both in the field of CLIL (Mehisto & Ting 2017) and elsewhere (Turner & Purpura 2016).

We, however, argue for the usefulness of viewing the relationships among teaching, learning, and assessment in the classroom as *dialectical* (see Lantolf & Poehner 2014). Such understanding, we propose, allows for seeing teaching, learning, and assessment in the classroom as a coherent whole, without losing the importance of the role of each of these three.

Cause and effect is an example of a non-dialectical relationship: if you flip a switch, lights go on. Dialectics, on the other hand, is a way of seeing separate, or even conflicting, phenomena or processes as forming a unity. For example, a dialectical relationship between a pencil and an eraser during a writing process (see Lantolf & Poehner 2014) can be understood from how they are *both* used as a way of writing something on a piece of paper. To be clear, writing and erasing *are* different. However, they have a quality that allows for considering them as a unity qualitatively different from the sum of its parts. The pencil is a tool that provides the writer with the means to write his/her ideas down. The eraser serves as a negation tool. The pencil and the eraser do not direct the writing process separately, as using one cannot be considered without using the other. The writer knows about what both the pencil and the eraser afford.

We can take the above example and with the same thinking, conceptualise the relationships among teaching, learning, and assessment in the classroom. The following Fig. 11.1 helps to conceptualise these dialectical relationships.

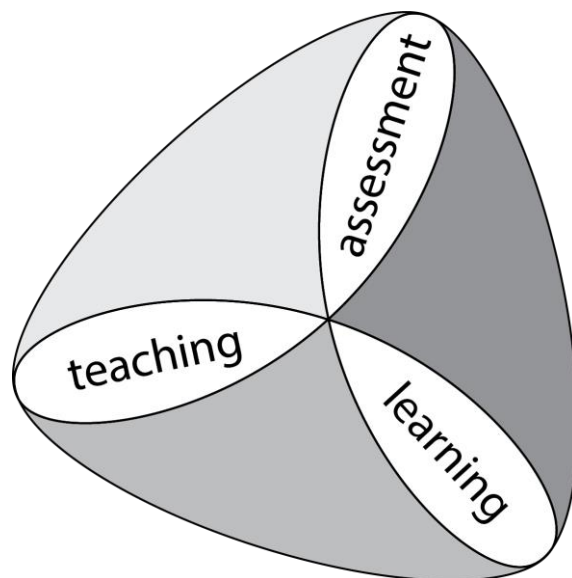


Fig. 11.1 Dialectical relationships between teaching, learning, and assessment

Fig. 11.1 helps to visualise teaching, learning, and assessment as three dialectical unities (the oval shapes marked by different shades of grey), (a) teaching-learning, (b) teaching-assessment, and (c) learning-assessment. As one examines one of the unities, for example teaching-learning, one can think about how the remaining third element impacts and is simultaneously impacted by this unity.

Teachers' instruction is never fully followed by learners (see Chap. 1, this volume) but is taken up and used differently by the individual learners. It is through this realisation the dialectical unity of teaching and learning emerges. We propose that assessment whose purpose is to guide the development of learners' content *and* language knowledge mediates the dialectical unity of teaching and learning in CLIL.

The teaching and assessment relationship is not cause-and-effect either. Assessment informs teaching, and as teaching changes, so does assessment. A teacher's interaction with learners can be analysed both as assessment and as teaching, though in reality, one cannot be considered without the other (see Poehner & Infante 2015, for a detailed discussion of this relationship). As learners react differently to teachers' turns in interaction, so do the ways that teachers assess and instruct learners. Learning, thus, impacts on the teaching-assessment unity, which, in turn, shapes and directs learning.

The final dialectical unity is learning-assessment. Through assessment (teacher-, peer-, or self-assessment), learners gain understanding of their learning. In turn, learners' interpretation of the assessment, the way they perform during the assessment, and how they assess themselves and their peers, shapes their learning. Their learning in turn also guides their self- and peer- assessment, their understanding of teacher's assessment in the classroom, and their performance during the assessment. Teaching impacts on changes in the unity of learning-assessment simultaneously being impacted by this unity.

The key point to understand from this is that each dialectical unity teaching-learning, teaching-assessment, and learning-assessment cannot be considered as separate. Chapters 8, 9, and 10 can serve as an illustration of these relationships at the level of classroom interaction. In Chap. 8 and 9, the teacher's on-going assessment needed teaching. Likewise, teaching required assessment of the learners' reactions to the guidance/instruction. One could not happen without the other. The interaction in Chap. 10 of this volume was among learners. However, the same understanding can be applied there. In order to progress, learners were required to constantly assess themselves and their peers and guide their own and other's performance as a result. The interpretation of this process, too, changed as the learner interaction unfolded.

The same dialectical understanding can also be extended across assessment cycles. One may argue that such tools as scoring rubrics or the CEFR descriptors (see Chap. 2, 3, 4, and 5, this volume) are fixed and, therefore, are difficult to understand as a part of the dialectical assessment/teaching/learning process. We, however, argue that they can be integrated into this process, as learners' and teachers' interpretation and utilisation of these tools changes, too, as the process unfolds.

To come back to our initial argument, we suggest there is no cause-and-effect relationship between assessment, teaching, and learning (be it on the level of single activities or across assessment cycles). For practical purposes, one can focus on any one element in Fig. 11.1. However, the dialectical relationships among teaching, learning, and assessment in the classroom should not be lost sight of.

11.1.2 Revisiting integration of content and language in CLIL

Even though it sounds evident, we would like to underscore once again that CLIL stands for content-and-language *integrated* learning. Leung and Morton's (2016) matrix is a useful way of introducing different approaches to how content and language could be assessed in CLIL.

Perceiving content and language in CLIL as a dialectical unity helps to see the development of learner content and language knowledge *not* as two separate processes but as developing together. Thinking of content and language as the two sides of the same coin (the same construct) allows to see how content mediates the use of language while language mediates the understanding and knowledge of the content in learners' performance. It also helps to understand how content can *be used* to mediate learners' acquisition of language and language *be used* to mediate their content knowledge in the instruction following assessment which aims at promoting the learning of this integrated construct.

Thinking dialectically helps to perceive more clearly how the relationship between content and language is realised in different chapters to this volume. We next give brief examples from chapters in the volume to help the reader further understand this relationship.

In Chap. 9, once the learner verbalised that to save energy in the home, insulation is needed because it 'keeps out the cold', the teacher directed the learner to using scientific language, i.e. insulation is something that keeps in the heat, which guided the learner to understanding of how energy can be saved in a house. By eliciting a scientific term to explain the same phenomenon, the teacher simultaneously promoted the learner's linguistic knowledge ('heat' as a scientific term) and conceptual understanding. The outcome was more than simply one or the other—these were parts constituting the same development, one not possible without the other.

In Chap. 8 (pp. 267–268), on the surface, the teacher has done the reverse. Once a learner produced an academically and linguistically correct response 'bones can fracture', the teacher provided the learner with a non-academic synonym 'break'. While the intention was to give learners a strategy to mediate their language use, a connection between the words 'fracture' and 'break' was made more salient, thus promoting the learners' conceptual understanding of the word 'fracture'. In Lin's (2016, p. 12) words, CALP does not come naturally and requires instruction; therefore, teachers need to help learners move comfortably between BICS and CALP. The two examples show how this can be done.

The scales discussed in Chap. 2 and 3 are yet another illustration of how the dialectical relationship between content and language can be realised in CLIL. Using the scales allows for systematically assessing where learner problems lie in the use of language and conceptual understanding. More importantly, they allow for establishing how content

knowledge always plays a role in learners' linguistic performance and their linguistic knowledge impacts the development of their content knowledge. This process is facilitated if the scale includes an explicit component of mediation, as discussed in Chap. 2. It is namely the dialectical thinking that helps to understand how such scales can be used systematically for building on learners' strengths in content to address their weaknesses in language and vice versa.

The integration matrix, therefore, informs the understanding of how specific assessment processes unfold. The dialectical understanding of the relationship between content and language in CLIL deepens this understanding. It compels CLIL researchers and educators to explore how content and language develop together. A metaphor we propose for this construct is that of a sphere (Poehner, personal correspondence). One can turn this sphere and focus on one side of it (content) and then turn it again and focus on the other side (language). However, without thinking about the other (language or content), one cannot comprehend the whole—it is still one and the same sphere, regardless of the part of this sphere one chooses to focus on for practical or empirical purposes.

The power of using Leung and Morton's (2016) matrix lies in that it informs what can be learned from various assessment activities and in which way this information can promote learning. However, in order to conceptualise classroom-based assessment as a continuous process, the unities that we discussed so far, teaching-learning-assessment and content-language, should be considered together.

11.2 Assessment in CLIL as a coherent whole

In this section, we bring the two central conceptualisations in the volume—the classroom-based assessment cycle (Davison 2008; Davison & Leung 2009) and the integration matrix (Leung & Morton 2016)—together.

Different assessment activities can be perceived as either focusing on the language, on the content, or oscillating between the two. The understanding of content and language as entering into a dialectical relationship changes the way that the inferences are made from learners' assessment performance, how the information is delivered to learners, and which adjustments to teaching are made. Thinking of content and language as impacting on one another is different from thinking in terms of the focus of the assessment on either or both of them. The teacher will always think about how content mediates the language in learners'

performance and vice versa regardless of the focus of the assessment activity. The concept of classroom-based assessment cycle, in turn, allows for adjustments in teaching, learning, and assessment to be informed by the previous assessment cycles, shaping the planning of assessment activities and further shaping the inferences that are made about learner performance. It should not be forgotten that these adjustments are still made with reference to the goals of the course and the curriculum (Mehisto & Ting 2017). However, the understanding of how the path towards these goals goes becomes more systematic as a fuller picture of learner performance emerges due to using both the integration matrix and the classroom-based assessment cycle.

To better illustrate how the two models reimagined from the perspective of dialectics inform classroom-based assessment in CLIL, we next show how the assessment activities and approaches discussed in different chapters of this volume can be used together keeping the two models (classroom-based assessment cycle and integration matrix) in mind.

Referring back to Sect. 1.8 of Chap. 1, a rubric (see Chap. 2 and 3, this volume) can inform the teacher what the learner can and cannot do with regard to a particular benchmark. This information mediates the teaching-learning process in that the teacher in a performance-oriented, more visible language pedagogy, then directs the learner's performance depending on whether the identified gaps refer to the language or the content or both. In the subsequent assessment cycle, assessment as a part of dialogic interaction can be used (Chap. 8 and 9). This assessment, building on the previous cycle, mediates the teaching-learning process differently. Now it is a part of centrifugal interaction, allowing the teacher to see how much external assistance the learner needs in order to develop. The teacher can also probe how the learner's strengths in conceptual knowledge identified in the previous cycle can be used to mediate the learner's linguistic knowledge and vice versa.

We argue that whichever of the two central frameworks of assessment promoting learning CLIL educators subscribe to, assessment *for* learning or the more detailed learning-oriented assessment (or any other framework), changes in teaching, learning, and assessment should be systematically traced *together*. The assessment *for* learning conceptualisation elicits that assessments should be designed with the purpose to promote learning. Hence assessment should give information on how learning should be promoted. This implies that assessment should itself change as more information about learners is gained and as learning happens. The LOA framework (see Chap. 4 and 5, this volume) compels teachers to understand assessment as happening at all of the different dimensions it entails as well as to consider how these dimensions interact in the classroom-based assessment cycles.

The classroom assessment cycle and the integration matrix models make assessment in CLIL classrooms systematic. Using a framework/model as the one discussed in Chap. 7, can add to this systematicity, helping teachers trace how different assessment activities promote learning.

11.3 What can assessment in CLIL offer to other educational contexts?

Throughout the process of creating this volume, the contributors, us included, asked the question of the role of CLIL in assessment promoting learning. The latter was one of the themes of the symposium in Tokyo in which several contributors to the present volume participated (Leontjev & deBoer 2018). The symposium's round-table discussion provided ideas as to what CLIL can offer to A₂L. Hence, the following is a product of a collective thinking. Above all, we owe the following discussion to our contributors and to the participants in the symposium in Tokyo.

As discussed during the symposium, CLIL is both a way to teach language alongside content and a way to understand what happens in the classroom. Rich insights into learner abilities are possible because CLIL teachers are both content- and language-aware. The outcome of our discussion during the symposium was that we expanded the oftentimes used statement 'every teacher is a language teacher' (FNBA 2014; Gottlieb & Ernst-Slavit 2014; Zwiers 2008; Walqui & van Lier 2010) to *every content teacher is a language teacher and every language teacher is a content teacher*. This statement brings language awareness to content lessons and content awareness to language lessons, which should lead to teaching, learning, and assessing of language and content as an integrated construct.

The underlying theoretical principles of CLIL can inform other educational contexts. These include (a) the sociocultural understanding of development as mediated and knowledge as co-constructed, (b) a necessary increase in both linguistic and cognitive demands placed on learners as their development happens (Bloom's Taxonomy) (Anderson et al. 2001), and (c) contextualisation of language use (Long's (1996) Interaction Hypothesis). (See also Chap. 2, 5, and 6, this volume; Wewer [2014a] for discussions.) These principles of CLIL are hopefully shared by CLIL teachers around the world. It is due to these principles that pedagogical processes in the classroom that relate to the development of content and language knowledge together become visible in CLIL classrooms.

One useful way that content teachers can think of the development of learners' conceptual knowledge is with reference to the development of disciplinary language. Vygotsky (1978, p. 148) stated that in the developmental process, scientific concepts approach concrete phenomena whereas everyday concepts move towards scientific generalisations. As learners acquire ways of talking about concepts (using their first language or any additional languages), their conceptual knowledge develops, too. We argue that using academic language has a central role in this development, as learners acquire ways they talk and write to various communities of practice.

Recognising uncertainty that content teachers may have with regard to language and language teachers, with regard to content, we suggest collaboration between content teachers and language teachers (see also Zappa-Hollman 2018). One goal of such collaboration can be developing assessment criteria and scales (see Chap. 2, 3, and 6, this volume) for content and language lessons. We suggest that such collaboration can be especially fruitful in higher education. Oftentimes, writing courses in higher education convey a lack of collaboration between academic language and content instructors, the outcome being that the language instructors are not fully aware of what it means to write to specific academic communities. The expectation is that learners are to transfer what they learned in academic writing courses to writing in their respective subjects. Jointly developing a scale having language and content criteria can become a starting point for collaboration between language and content instructors.

A way of being aware how content mediates language and vice versa and use this information to systematically direct learning is at the micro level of classroom interaction (Chap. 8, 9, and 10, this volume). Content teachers, through being conscious towards the learners' use of language as they discuss academic concepts, can start consciously developing learners' disciplinary language alongside conceptual knowledge. Language teachers can start appreciating learners expressing their conceptual understanding on certain topics, and consciously mediating their conceptual understanding rather than using these topics to introduce grammatical and linguistics categories.

Chapter 4 brings in language awareness in a different way—on the level of program development. The gradual move from EAP (English for Academic Purposes; emphasis on language) to EMI (English-Medium Instruction; emphasis on content) works well at the macro level of the overall progression and the growing demands, as learners are socialised into the respective academic communities.

Our main argument here is, to repeat, that richer insights into learners' abilities that CLIL contexts allow are possible to obtain in other educational contexts. We emphasise that CLIL lessons are not the same as content lessons or language lessons. Differently from language lessons, in CLIL, the language the learners are expected to learn is disciplinary. In content lessons, the emphasis is rarely on the language, disciplinary or otherwise, even if it is expected that learners should socialise into the academic community, learning to talk and write scientifically. That said, the understanding of content and language as two sides of the same coin, acquired simultaneously can inform teaching, learning, and assessment in content and language lessons alike. The outcome should be that content ceases to be but a context for introducing linguistic and grammatical categories in language lessons (as argued in Chap. 7), and disciplinary language and writing conventions are consciously and systematically paid attention to in content lessons. Language teachers, as a result, should become content-aware and content teachers, language-aware and start eliciting both in their lessons, paying attention to how one mediates the other and consciously using both content and language to direct learning.

11.4 Ways forward

We have not given the reader a one-size-fits-all answer to the question of what and how to assess in CLIL but attempted to conceptualise classroom-based assessment in a way that gives teachers a range of possibilities to implement it. The power of this approach is in that it, in Coyle, Hood, and Marsh's (2010, p. 69) words, allows teachers for "sharing their own understanding of what it is to be taught and learned, transforming ideas into 'teachable' and 'learnable' activities, connecting these with decisions about the optimal organisation of the learning environment, followed by evaluation, reflection and new understandings for classroom teaching and learning."

With regard to research, further work in both conceptualising assessment promoting learning in CLIL and developing assessment tools and approaches is needed. We suggest three main directions that the future research on assessment in CLIL can aim: (a) curriculum and pedagogy planning, (b) participant perspectives, perceptions, and beliefs, and (c) classroom practices (see Nikula et al. 2016b).

The conceptualisation of integrating content and language and assessment in curricula is essential for understanding how teaching, learning, and assessment are organised at

different levels of education. This should create a stronger basis for truly integrated curricula, which, as Nikula et al. (2016b) rightfully note, are a rare find. Educational policy research with the focus on assessment in CLIL is, therefore, much needed. The move from educational policy to classroom practices requires also looking into stakeholders' (above all teachers and learners) perspectives, perceptions, and beliefs with regard to integration of content and language and its assessment. Understanding teachers' beliefs and perceptions of content and language in CLIL and the relationships among teaching, learning, and assessment is crucial for understanding their teaching, learning, and assessment practices as well as for changing these same beliefs and perceptions and for developing these practices. CLIL teachers' perceptions and beliefs can range from considering language learning as 'a side effect' and not assessing it systematically (Quadrant 2), to seeing content more as context for teaching and assessing language (Quadrant 3), to placing equal importance to both content and language (Quadrant 1), to letting the focus of assessing and teaching emerge in interaction (Quadrant 4). These beliefs and perceptions can also change as teachers gain new perspectives and understandings of teaching, learning, and assessment in CLIL classrooms, shaping, in turn, teachers' practices. Finally, classroom-based research in teaching, learning, and assessment in CLIL and beyond can allow insights which are invaluable for conceptualising and developing practices in assessment in CLIL. This implies that further research should be more fruitful to continue with an interdisciplinary orientation, bringing together researchers in applied language studies, researchers in assessment, educational policy researchers, and educational researchers in various CLIL contexts and in various content disciplines.

We suggest that for developments in CLIL research and practice to be the most impactful, research and practice should enter into a dialectical relationship—praxis (Lantolf & Poehner 2014; Lantolf & Poehner with Swain 2018). The dialectical understanding of research-practice relationship changes collaborations between teachers and researchers. Researchers enter the contexts with a view of developing teacher practices rather than only observing them, using their theoretical and conceptual understandings. Teachers, in turn, through their practices, validate and develop researchers' theoretical and conceptual understandings, building on their expertise as educational professionals. To the best of our knowledge, there have been but a few recent examples of researchers collaborating in a similar way with CLIL teachers (Banegas 2013; Lo 2019)

11.5 Teacher collaboration

We would like to end this volume by explicitly addressing the part of our prospective readership who are educators. There are many excellent examples of practical teaching and assessment activities and ideas that help educators bring CLIL into their classrooms (see Ball, Kelly, & Clegg 2015; Lin 2016; Mehisto & Ting 2017). Lin's (2016) Chap. 5 is particularly useful with regard to assessment activities that CLIL teachers can adapt for their classes. We propose that CLIL teachers could use these activities alongside those discussed in the chapters of this volume with the view of bringing assessment, teaching, and learning together in their classroom practices.

Finally, we would like to expand on our argument in Sect. 11.3 for collaboration among teachers. We envision three general ways collaboration can happen. First of all, at the school level, CLIL teachers can collaborate with other teachers, e.g. a CLIL teacher having more of a content teacher identity working together with a language teacher. On the national level, CLIL teachers can share their teaching and assessment practices through CLIL teacher associations, such as *J-CLIL* in Japan and *Suvikyky r.y.* in Finland. CLIL teacher identity discussed in Nikula et al. (2016a) underscores the importance of yet another level of collaboration—internationally. CLIL teachers in Japan often identify themselves as language teachers, whereas in European countries, the identity of CLIL teachers is oftentimes that of content teachers, as has also been illustrated in the present volume. International CLIL teacher collaboration, therefore, implies sharing markedly different perspectives on what CLIL and assessment in CLIL are in classrooms around the world. These understandings, perspectives, and practices can then be brought back to the research community for the development to continue.

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