

INTEGRATING EVERYDAY LANGUAGE WITH CONCEPTUAL DEVELOPMENT ACROSS THE CLIL PATHWAY

Tema

Einer der Schlüsselprozesse beim CLIL besteht darin, die Fortschritte der Lernenden zu unterstützen, wenn sie sich auf einem Kontinuum von konkreten, einfacheren Formen des Alltagsdenkens und -sprechens zu formelleren und abstrahierteren Formen der Wissensvermittlung bewegen. Dieser Beitrag befasst sich mit der Rolle der Alltagssprache bei der konzeptuellen Entwicklung im CLIL-Unterricht und bei der Sozialisierung der Schülerinnen und Schüler zu fachspezifischen Verwendungsarten der Sprache. Er bedient sich des Begriffs des Bildungspaths um herauszustreichen wie Alltagssprache und Bildungssprache eng miteinander verbunden sind. Beispiele aus der Primar- und der Sekundarstufe zeigen auf, wie die Rolle der Gebrauchssprache sich verändert von eher formelhafter Verwendung hin zur Funktion als Vermittler von abstrakterem Denken bei älteren Lernenden.

Introduction

Content and language integrated learning (CLIL), an educational approach involving the use of foreign/additional language as a tool for instruction, keeps gaining ground in different countries and across educational levels. CLIL has been shown to have potential especially from the language-learning perspective because it creates a space for learners to become engaged in meaningful language use. Recently there have been calls to focus on the very concept of integration and what the process of simultaneous language development and content knowledge and skills requires from teaching. It has also been emphasised that the notion of integration requires a reorientation towards language skills specific to different content areas and disciplines (e.g. Meyer *et al.*, 2015; Nikula *et al.*, 2016). This requires progression from everyday language to what can be called academic language which, in general terms, means education involving gradual movement on a continuum from more everyday, concrete and commonsense to more technical and abstract uses of language (see Forey &

Polias, 2017: 148-147). In this process, furthermore, subject and disciplinary areas involve learners being socialised into content-specific ways of constructing knowledge and using language (Nikula, 2017). This challenges those learning through L1 and L2 alike (see Llinares & Whittaker, 2010). This progression, however, should not be seen as a matter of everyday language being entirely replaced by academic language. Rather, as Barwell (2016: 113) notes, informal and academic language are inextricably linked and both are necessary. For this reason, we want to call attention to the role of everyday language in content and language integration and in conceptual development and to CLIL as an ongoing process along the educational path. Using examples from primary and secondary school CLIL classrooms, we illustrate fundamental ways in which language and content integrate with one another at different points along the educational pathway.

Conceptualising integration

While CLIL as a term is simple enough, what exactly is meant by its core con-

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cept 'integration' is a more complicated issue. One attempt at concretising this is a heuristic approach introduced by Nikula *et al.* (2016) which argues for three key perspectives on integration to be taken into account whenever a CLIL approach is chosen. The first one, *curriculum and pedagogical planning*, invites those implementing CLIL to set clear goals and share understanding of CLIL, and to plan curricula and pedagogical practices accordingly. The second perspective calls attention to the importance of *stakeholder beliefs and perceptions*. Teacher perceptions are especially crucial because how a pedagogical approach is viewed and valued by practitioners obviously has an impact on practices. However, student opinions and attitudes also matter, and in fact one of the contested questions around CLIL is to what extent the positive outcomes reported might be due to participating students having favourable attitudes to CLIL from the outset. Finally, the perspective of *classroom practices* is important as it is here that integration is carried out and where, in an ideal situation, practices are informed by sound pedagogical plans with awareness of the values attached to CLIL in a given context. It is also at the level of classroom practices that the interplay between everyday and academic language happens as part of conceptual development.

While clearer conceptualisations of integration are helpful for recognising the key conditions for integrated learning, practitioners also need practical tools to prevent simultaneous engagement with language and content from becoming an act of 'stabbing in the dark' as Cammarata & Tedick (2012: 257) put it. Some tools outlining the role of language in content learning in general terms have been developed (e.g. Coyle, 2008; Llinares, 2015). These tools need to be complemented

with considerations on how language and socialisation in disciplinary thinking develop across the educational pathway, and on the relationship between everyday and academic language in this process.

Educational pathway

The notion of an educational pathway usefully highlights the way in which pupils progress through different levels in formal education. From the outset of the educational pathway, language is an important tool for teaching and learning as pupils journey towards subject-specificity/academic language and develop understanding. Whilst younger children use experiences of everyday life and linguistic encounters to experiment with different roles and voices (Drury, 2007), older pupils use everyday experiences and language as ways into subject learning (Lwin & Silver, 2014). The transformation from everyday understanding to disciplinary knowledge, however, requires pedagogical sensitivity to support pupils as they explore new ideas and construct their own understanding using established and emerging language repertoires (Barwell, 2016).

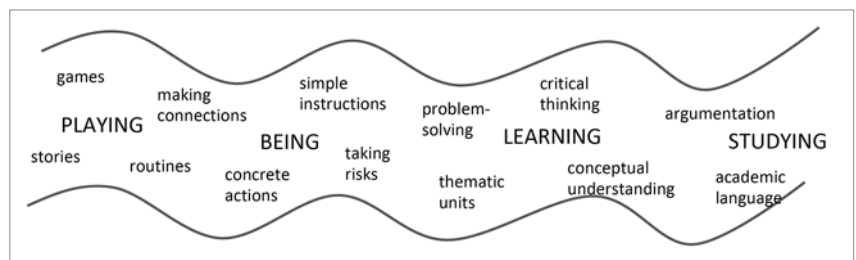
The complexity of this development underlines the value of a CLIL pathway that recognises the way in which language use changes across different stages of education. A pathway usefully highlights the way in which earlier steps provide the basis for future development. A teacher community working in the Finnish CLIL context have developed the concept of a pathway from pre-primary to upper-secondary education (Moate, 2014, 2017) that begins with pupils playfully engaging with English as a foreign language through, for example, daily routines, games, songs and stories. As pupils enter formal school, the pathway continues with English being a natural part of the everyday learning environment. English is used, for example, to manage lessons and is integrated into thematic units of work. In the early stages of the pathway the aim is to build pupils' confidence in using the language, develop their everyday English language and to encourage thinking through English, albeit a foreign language. As pupils move forward through the grade levels, the disciplinary content increases in depth and breadth. In the later grades, pupils need to

learn new content through English, and by high school, students should take on the responsibility for effectively studying through a foreign language.

In this paper, we use two vignettes to illustrate the way in which the integration between language and content changes in relation to different levels of schooling. The first vignette comes from a second grade classroom and the second from a seventh grade physics lesson. Vignette One is from the first lesson of the day. The teacher has greeted the pupils and moves into the morning routine asking the 'Robots' (the pupils are grouped as 'Robots', 'Satellites', 'Planets' and 'Aliens') to prepare the space where the class will sit together for the morning circle. The space is quickly prepared and the teacher and pupils sit in a circle in the far corner of the classroom.

On the wall next to the teacher is a fish pond with a number of little fish in it. The teacher begins by asking, "Whose turn is it to put the fish in the pond?" In response, one of the pupils comes, takes a fish from the box and adds a fish to the pond. The teacher says, "I think we should count the little ones." And together the children and teacher count, "One, two, three, four, five, six, seven, eight, nine, ten" with the teacher pointing at each fish in turn. There are now ten little fish in the pond and the pupils have observed the addition of each fish and have rehearsed counting from one to ten. This is only part of the activity, however, for the bigger pedagogical aim is to develop the children's understanding of the relationship between tens and units, and ultimately 100s. As there are now ten little fish in the pond, the teacher asks the pupils, "What will happen on Monday?" And the teacher and pupils agree together that a mama fish will come and gather the little fish together.

The teacher and pupils have carried out this routine on a daily basis and they are working towards the 100th day. Each time 10 little fish have been added to the pond, a mama fish comes. The mama fish is much bigger and represents ten little fish, that is ten units. The mama fish stays in the pond and the routine continues with another little fish being added each day. When ten more little fish have been added to the pond, another big fish comes. Step-by-step the bigger

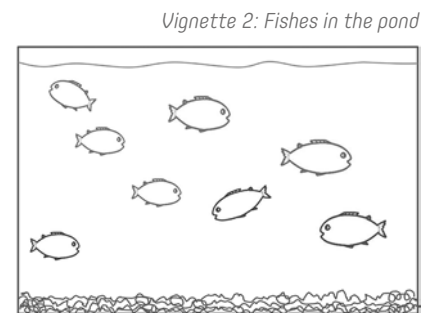


picture is built with the children: the little fish concretely represent units and the big fish represents tens. When 100 fish have been added to the pond, this will be a day of celebration in the school as the other first and second grade classes also hold this ritual. The pupils might well celebrate by bringing in different objects that they can use to count to 100 – such as lego blocks, wooden beads, seconds and popcorn (See an example from a teacher <http://openideat.blogspot.fi/2014/01/100-paivaa-viisaampi.html>).

In this simple vignette, the Finnish-speaking teacher and children are using English as the language of their morning routine. As the routine is established with the pupils, they demonstrate their understanding through words and actions in response to teacher prompts and questions. The routine becomes a habitual part of the classroom environment, and by establishing this routine the space and conditions are created for conceptual development. In terms of language, the choice of vocabulary, phrases and instructions remains concrete and are part of everyday language, but the activity is grounded in mathematical thinking. Step-by-step, pupils engage with increasingly sophisticated mathematical concepts: units, tens, hundreds. Further along the educational pathway, pupils will be increasingly able to work with abstract concepts. However, as the second vignette illustrates, everyday language is still an important part of this process.

The second vignette illustrates the interplay between everyday and academic language in the process of conceptual development during a 7th grade CLIL physics lesson, taught in English for Finnish speaking 13-year-olds. The extract is from a situation where the teacher has just introduced a new term in physics, Hooke's law, and explained that it "means that extension is proportional to the force". Later on during the lesson, the law will be exemplified by a string

Vignette 1: CLIL Pathway



Vignette 2: Fishes in the pond

experiment whereby pupils extend a spring by attaching different weights to it, but at this stage, the meaning of the key concepts in this definition is negotiated by the pupils with the teacher. As the extract shows, the negotiations involve both everyday language, academic language as well as meaning-making in both learners L1 Finnish and L2 English:

- 1 Maria what does that proportional mean?
- 2 T you mean in Finnish?
- 3 Maria yeah
- 4 T it's suoraan verrannollinen ['directly proportional']
- 5 Maria suoraan ['directly']
- 6 Liisa verrannollinen ['proportional']
- 7 Maria emmä ymmärrä mitää ['I don't understand anything']
- 8 Liisa ei ['no'] (unclear) extension
- 9 T well, well basically proportional means the straight line
- 10 relationship so
- 11 Maria okay
- 12 Leena straight line, in a straight line
- 13 T yeah but I, actually we've had similar ideas before, for instance
- 14 Maria wait, I have it somewhere the word li-linear
- 15 T linear, erm, we've had this proportion before, for instance with
- 16 force and acceleration we also noticed that, force is proportional
- 17 to acceleration, and weight is proportional to mass
- 18 Saara so it all depends on the (unclear)
- 19 T yeah and it depends on such a way that when you double one
- 20 then the other is also doubled, or if you triple then it will be
- 21 tripled
- 22 Saara what do you mean, in (unclear) like extension is
- 23 T extension is well how much it is stretched
- 24 Saara oh okay

In the beginning of the vignette, Maria wants to know the Finnish equivalent of the word 'proportional' but as line 7 shows, the teacher's provision of the Finnish version of the word has not been helpful because Maria explicitly claims non-understanding. The difficulty seems to lie in her not understanding the concept rather than in the language. The teacher attempts to solve the non-understanding by using everyday language to explain proportional as 'a straight line relationship' (lines 9-10) and concretising it even further in lines 19-21 by referring to the similarity of the relationship between 'one' and 'other' (e.g. force and acceleration or weight and mass as explained in lines 15-17) regardless of whether they are doubled or tripled. Saara's question on line 22, for its part, shows that the meaning of the word 'extension' in the teacher's original definition of Hooke's Law is not clear, either, and the teacher again provides an explanation through the use of a corresponding everyday language word 'stretching' in line 23.

The second vignette illustrates the crucial role that the constant weaving of everyday language into academic language has in helping students grasp the very abstract subject-specific definition 'extension is proportional to force', both key terms of which were at first unclear to pupils. It also shows that the often heard contentions by CLIL teachers that they are not language teachers need to be reconsidered in the light of the constant language work to support learning such as the one evident in the extract above. It may not be a case of the teacher 'teaching English' in the way L2 teaching is usually understood, but certainly a case of the teacher supporting the pupils' socialisation into the subject-specific ways of using language when talking physics.

Discussion

We have shown how throughout the educational CLIL pathway, language is a key tool for mediating engagement with different forms of knowledge and the development of understanding. What is more, whilst subject-specific language is a key part of academic learning and disciplinary knowledge, everyday language plays a key role in the development of understanding, providing space for concrete engagement, questions and queries as pupils get used to the feel of new words and notions. In the first vignette, routines provide an important space for cognitive engagement with new ideas, new ways in seeing the world. The second vignette shows how everyday language functions as a mediator aiming towards academic language and thinking, in this case grasping the abstract concepts of physics. Recognising the way in which language

is present in different forms along the educational pathway will hopefully help teachers and teacher educators carefully consider how they are using language, what kind of language they are using and how the use of language creates spaces and resources for building understanding. Moreover, by depicting CLIL education as a pathway, teachers and teacher educators are better able to recognise the way in which activities in the earlier years of education prepare the way for increasingly more demanding language use and abstract understanding in the later years. Playing with and being in a foreign language provide vital resources for learning and studying through a foreign language. To rephrase Frodo Baggins, "It's an exciting business, ... going out your door. You step onto the CLIL pathway and there's no knowing where you might be swept off to."

References

- Barwell, R.** (2016). A Bakhtinian perspective on language and content integration: Encountering the alien word in second language mathematics classrooms. In: T. Nikula, E. Dafouz, P. Moore & U. Smit (Eds.), *Conceptualising integration in CLIL and multilingual education*. Bristol: Multilingual Matters, pp. 101-119.
- Cammarata, L. & Tedick, D.** (2012). Balancing content and language in instruction: the experience of immersion teachers. *The Modern Language Journal*, 96(2), 251-269.
- Coyle, D.** (2008). CLIL – A pedagogical approach from the European perspective. *Encyclopedia of language and education*, 1200-1214. Springer US.
- Drury, R.** (2007). *Young bilingual learners at home and school researching multilingual voices*. Stoke-on-Trent: Trentham Books.
- Forey, G. & Polias, J.** (2017). Multi-semiotic resources providing maximal input in teaching science through English. In: A. Llinares & T. Morton (eds.), *Applied linguistics perspectives on CLIL*. Amsterdam: John Benjamins, pp. 145-164.
- Llinares, A.** (2015). Integration in CLIL: a proposal to inform research and successful pedagogy. *Language, Culture and Curriculum*, 28(1), 58-73.
- Llinares, A. & Whittaker, R.** (2010). Writing and speaking in the history class: a comparative analysis of CLIL and first language contexts. In: C. Dalton-Puffer, T. Nikula & U. Smit (Eds.), *Language use and language learning in CLIL classrooms*. Amsterdam: John Benjamins, pp. 125-144.
- Meyer, O., Coyle, C., Halbach, A., Schuck, K. & Ting, T.** (2015). A pluriliteracies approach to content and language integrated learning – mapping learner progressions in knowledge construction and meaning-making. *Language, Culture and Curriculum*, 28(1), 41-57.
- Moate, J.** (2014). A narrative account of a teacher community. *Teacher Development*, 18(3), 384-402.
- Moate, J.** (2017). Language Integrated Learning (CLIL) pathway in Central Finland. *Kieli, koulutus ja yhteiskunta*. December 2017 <https://www.kieliverkosto.fi/fi/journals/kieli-koulutus-ja-yhteiskunta-joulukuu-2017/developing-an-integrated-content-and-language-integrated-learning-clil-in-central-finland>
- Nikula, T.** (2017). What's the moment thingy? – On the emergence of subject-specific knowledge in CLIL classroom interaction. In: J. Langman & H. Hansen-Thomas (Eds.), *Discourse analytic perspectives on STEM education: exploring interaction and learning in the multilingual classroom*. Cham: Springer, pp. 11-29.
- Nikula, T., Dafouz, E., Moore, P. & Smit, U.** (Eds.) 2016. *Conceptualising integration in CLIL and multilingual education*. Bristol: Multilingual Matters.
- Silver, R. E. & Lwin, S. M.** (2013). *Language in education: social implications*. A&C Black.