

Reconceptualising the Role of Talk in CLIL

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This theoretical paper offers a reconceptualisation of talk in CLIL based on sociocultural and dialogic theories of education. Building on these educational theories and the experiences of an on-going CLIL project, this paper presents a pedagogical model for the navigation of the 'talkscape' of the CLIL classroom. This model comprises a total of seven talk-types: organisational, social, critical, expert, exploratory, meta and pedagogic. In addition to these talk-types, the paper introduces the notion of a 'transitional dynamic'. This notion aims to capture the transition from first language to foreign language use in CLIL both within the context of individual courses and across a broader CLIL educational pathway. It is hoped that this model provides a useful tool in both the practical realisation and theoretical development of CLIL.

Keywords: CLIL, educational pathway, pedagogic model, talk-types, transitional dynamic

Introduction

The educational innovation of Content and Language Integrated Learning (CLIL) combines the learning of subject matter with the learning of a foreign language (FL). A key characteristic of this approach is the foreign-language (FL) mediation of both teaching and learning, that is both teacher and learners are working through a non-community language (Dalton-Puffer 2007a, Coyle 2007). In practice CLIL is crucially different to immersion education with neither the teacher nor the community providing native-speaker support. This FL-mediated approach arguably requires teaching and learning repertoires beyond commonly held assumptions of first language (L1) classrooms (Coonan 2007, Coyle 2007). The FL-mediated setting affects many different aspects of teaching-learning, from the availability of resources (Lehti, Järvinen and Suomela-Salmi 2006), the appropriacy of established teaching-learning repertoires (Moate 2011a), participant roles (Nikula 2007), and the language-content relationship (Gajo 2007). The political interest to support a plurilingual European community through CLIL (European Commission 1995) has not, however, included the full consideration of key concepts and pedagogical implications of CLIL (Graddol

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2005). The lack of a pedagogical framework for CLIL (Coyle 2008) has serious implications for both CLIL teachers and researchers. CLIL teachers would arguably benefit from a conceptual framework to guide pedagogic activity in the demanding contexts of CLIL and the same conceptual framework could similarly support CLIL research. These are two key motivations behind this paper.

What is particularly interesting about the call for a pedagogical framework is the implicit indication that CLIL is more than a methodology. Indeed the practical changes required by CLIL - the way educational activity is framed and enacted - support the notion that CLIL is methodological. The research findings noted above, however, indicate that CLIL does not only require change in the doings of the classroom, but also in the beings of the classroom: the ways in which educational partners relate to and are present for one another. Other CLIL research indicates improved learning outcomes in CLIL in comparison to L1 learning (Baetens-Beardsmore 2008) and a similarly impressive claim that CLIL widens the opportunity for participation in learning despite the greater demands of learning through an FL (Coyle 2006). These changes go beyond methodology, entering rather the realms of pedagogy.

CLIL as a pedagogical innovation

The original meaning for the term pedagogy was to walk alongside the pupil as he was delivered to the place of learning (van Manen 1991). This is an intriguing notion and in many ways an apt metaphor for modern conceptualisations of learning as a social and individual activity. If CLIL, however, fundamentally affects the ways in which learners are 'delivered to the place of learning', an understanding of this process is necessary in order to develop and enhance CLIL-based education in both terms of theory and practice. This paper hopes to contribute to the development of a CLIL pedagogical framework by suggesting a reconceptualization of talk in CLIL and is an extension of an earlier article (Moate 2010) which revisits the integrated nature of CLIL.

It is perhaps useful here to comment on the significance of talk in education and CLIL in particular. Although classroom communication and learning activities go beyond the spoken word, nevertheless talk has been described as the most ubiquitous tool used within teaching-learning contexts (Mercer and Littleton 2007). Talk as a 'tool', however, still limits the full significance of the spoken word. Talk - whether teacher or learner talk - provides a real-time window into thinking, an immediate snapshot of how someone understands a concept or engages with an activity. Moreover, talk provides a space between educational participants, a place for interthinking (Mercer 2000) and dialogic engagement (Wegerif 2010). These concepts are presented in more detail in the paper, but hopefully this brief description underlines why the introduction of FL-mediated teaching-learning - as in CLIL - has such fundamental implications for pedagogical activity in classrooms.

Research Context

This theorisation of talk presented in this paper has developed within an action research community in Central Finland comprising CLIL partners representative of each educational level from preschool education to upper secondary and higher education. The teacher-partners and researcher have regularly met together to address the challenges of FL-mediated teaching-learning, to share pedagogic experiences and understanding. Stated in Practice Architecture terms (Kemmis and Grootenboer 2008), the praxis of this community has been realised through ‘sayings’ in regular discussions (twice a semester as a whole group, in addition to working group meetings), ‘doings’ by sharing and drawing on previous experiences and research to prepare future actions and recorded classroom observations, and ‘relatings’ as different institutional boundaries are crossed and the teacher community interacts with the local and wider research community.

One of the challenges faced by the community has been to conceptualise pupil progression through the different educational levels. A community working group specifically convened to work with this notion, which was then critiqued by the wider community before being published. In the nursery/preschool activities CLIL is understood as ‘playing in English’ with the FL embedded in the daily routines, activities and interactions with the young children. The continuation of FL-learning in the primary school is described as ‘being in English’. The primary school teachers work to keep FL-use as a normal, non-threatening part of the learning environment for all pupils with a minimum level of two¹ CLIL hours a week per class. In the lower secondary school, the focus is more expressly on ‘learning through English’ as the subject requires greater attention and the pupils have to draw on their language foundation from primary education to resource their subject learning. The focus of the upper secondary school is ‘studying through English’. As part of the International Baccalaureate programme, pupils follow a vigorous academic curriculum which requires a high level of FL within the subject curriculum, although this partner is also moving towards offering CLIL within national courses as well.

The notion of ‘playing, to being, to learning, to studying through English’ offers a conceptual pathway for teachers from different educational contexts to relate to the pedagogic practice of colleagues in different contexts. This pathway helps teachers to see where pupils have come from and to have a sense of where pupils are going to – although the development of such a pathway is not without challenges as reported in Moate (2011b). The talk-based model presented in this article has also been taken to the community for comments and critique. This model draws on the experiences of this community and is based on established educational theories as outlined in the following section.

Talk-based theories of education

Talk-based theories of education essentially relate to two fundamental aims of education. One aim is for children to gain substantive knowledge and skills to become part of and to contribute to the wider community. The other aim is for children to learn how to learn, communicate and interact in school in order to be

able to participate in a democratic, knowledge-based society. These two aims of education involve two different educational processes. In the first, education is seen as a dialectic process as pupils enter established cultural bodies of knowledge. In the second, education is a dialogic process as pupils “learn to see things from at least two perspectives at once” (Wegerif 2008:353-4) and find a voice. Whilst the relationship between these two processes goes beyond the scope of this paper, it is worth noting that participation in a democratic, knowledge-based society is not possible without grasping basic scientific concepts and it is equally difficult to participate in discussions without recognising one’s own voice.

The unifying feature between dialectic and dialogic approaches to education is the primacy of language. In neither of these approaches is language a mere conduit to exchange ideas. Language is a bidirectional phenomenon, affecting contact with the wider community on the social plane and providing the material for thinking on the psychological plane (Vygotsky 1970). The following sections outline in more detail the dialectic view from a sociocultural perspective, before moving on to the dialogic view. These two views are then brought together in the talk-based model section.

Language in sociocultural theories of education

In sociocultural theory language is a resource for participation and mediation, “the most ubiquitous, flexible and creative of the meaning-making tools available” (Mercer and Littleton 2007:2). Vygotsky proposed that through relationships with others a child initially interprets the world, learning how to see and how to understand through the eyes of an expert-other. These experiences then become the lens through which later experience is understood. Language provides the primary tool for mediated experience and with support ‘childish’ concepts become increasingly complex (Vygotsky 1970). Rather than focusing on innate cognitive ability or individualised processes of learning, Vygotskian thinking locates learning both beyond and within the learner, through collaborative interaction – especially with a more-expert other, mediated by language. The radical element of this understanding of learning is that thinking first occurs on the social plane, before becoming part of a learner’s psychological make-up (Vygotsky 1981). From this perspective the role of talk in the classroom is of paramount importance.

Language as a lens

It was noted above that education introduces pupils to establish bodies of cultural knowledge. This knowledge is instantiated in language, i.e. the way in which language is used fundamentally affects the created meaning. A simple example is the everyday expression of the sun rising and setting. Idiomatically this is acceptable, in all likelihood referring to a time when people believed the sun rose and set daily. From a scientific perspective, however, on the basis of accumulated understanding and experimentation, the sun neither rises nor sets, rather the earth spins on its axis whilst it orbits the sun. The language used

provides the lens for seeing and interpreting the world, and for sharing this understanding.

In education, learners come with everyday understandings of the world mediated through the everyday language of their community. Education has the role of extending – or changing – everyday knowledge of the world by engaging with the authoritative voice of subject expertise. It is this appropriation of an authoritative voice which is dialectic, as learners move “towards a more complexly mediated unity” (Wegerif 2008:350), the systematic knowledge of a subject. This educational goal remains present in CLIL contexts. If, however, “the task of internalizing a second language and weaving it together with the existing fabric of verbal thought is a complex one” (John-Steiner 1985: 365) then the FL-mediation of teaching-learning requires extremely careful consideration.

The dialogic dimension of education

The dialectic dynamic is realised through teacher-learner interaction as disciplinary “stories” interpreting the world (Lemke, 1989) are appropriated. For this dialectic process to succeed, however, pupils need to enter into a dialogue, that is, a ‘shared enquiry’ in a Bakhtinian sense with one voice answering another. A tension arises here between the dialectic and dialogic dynamics of education, for on the one hand words become increasingly narrow and specifiable (dialectic), whilst on the other hand “meaning belongs to a word in its position between speakers” (Voloshinov 1986: 102) (dialogic). No ‘ready-made’ meaning exists from a dialogic standpoint, rather it is negotiated or active understanding (Voloshinov 1986: 102) that gives rise to learning. On this basis, “we need to teach students how to engage in the dialogues through which knowledge is constantly being constructed, deconstructed and reconstructed” (Wegerif 2006:60).

Whilst the appropriation of the expert voice, or substantive knowledge meets the dialectic aim of education, dialogue in education supports creativity, problem-solving, ingenuity, imagination and expression. Dialogues open up “a space of multiple possible meanings” (Wegerif 2005: 712) and furthermore

learning to think means being pulled out of oneself to take the perspectives of other people and, through that engagement in a play of perspectives, to be able to creatively generate new perspectives or ways of seeing and thinking about the world (Wegerif 2010:10).

Whilst taking on the perspectives of other people can lead to new understandings, and in that sense support dialectic learning, it is not necessary that dialogues are resolved (Bakhtin 1981: 291) or that difference is eradicated. In a dialogic view of education the ‘dialogic space’ created between participants can be an end in itself (e.g. Wegerif 2010: 17). As this space widens and deepens (Bakhtin 1981: 272) the multiplicity of perspectives creates an arena for thinking partnerships, novel expression and the sharing of joint resources. It is in learning to ‘be’ within a dialogic space that the second aim of education is met.

Dialogue in L1 and L2 contexts

The dialogic dimension of education is no less complex than the dialectic dimension. Emphasizing dialogue in CLIL then, clearly requires additional support in this FL-mediated teaching-learning environment. Research in second language (L2) contexts has demonstrated how dialogic collaboration between peers can resource a level of achievement which “outstrips ... individual competencies” (Swain 2000:111). Swain’s findings in L2 contexts complement Mercer and Littleton’s (2007) findings in L1 contexts offering reason to believe that the same may be true for CLIL.

Dialogic collaboration helps to focus attention and generate alternative options, and this ‘social activity’ between learners allows for the “regulation” of learning activity. Over time this intermental activity becomes intramental activity (Swain 2000; Mercer and Littleton 2007), with the intermental activity having served as a form of vicarious consciousness. Furthermore using “L2 under-development” to mediate collaborative learning means that the inter-language itself also becomes an object for reflection (Swain 2000). This inter-language acts as a shared resource for further collaboration in the construction of knowledge, linguistic and substantive. It is the notion of collaboration resourcing both community and individual talk as well as learning activity that underpins this pedagogic model. In effect, the model provides a meta-framework for teaching-learning premised on the understanding that different types of talk resource different types of educational activity and aims.

A talk-based pedagogical model

The dialectic-dialogic view of language-in-education outlined here suggests that different educational purposes require different ways of talking in the classroom. The talk-based model presented here hopes to build on an understanding of interaction in its totality, “to show the emergence of learning, the location of learning opportunities, the pedagogical value of various interactional contexts and processes, and the effectiveness of pedagogical strategies” (van Lier 2000:250). Figure 1 provides initial definitions of the different talk-types, explained in more detail below and Figure 2 presents the model itself with an accompanying explanation.

The primary aim of this model is to provide a navigational tool for teachers in FL-mediated teaching-learning contexts, as well as a possible framework for CLIL research. Whilst these different talk-types in themselves may not be new to teaching-learning processes, bringing them together into a macro-framework hopes to highlight talk as an explicit tool and space to resource teaching-learning. This section outlines the different talk-types included in the model. The notion of a ‘transitional dynamic’ particularly relevant to FL-mediated contexts is then introduced. The discussion section then focuses on the sensitivity of the model to different educational contexts.

Organisational talk

Organisational talk expresses the what, when and how of classroom activity. This kind of talk is usually concrete and highly contextualised, based in the here-and-now of the classroom environment. Organisational talk is often formulaic and repetitive in nature, the language of instruction: please sit down, turn to page 63, discuss the following examples, etc. (see Hughes, Moate and Raatikainen 2007 for detailed examples of organisational talk in FL teaching-learning contexts). This talk has been described as the ‘regulative register’ of

Talk-type definitions	
Organisational talk	the what, when and how of the classroom
Social talk	safe, non-assessed talk between peers
Critical talk	asking ‘why’ and ‘how come’ questions
Expert talk	the formal voice of the subject
Exploratory talk	talk explicitly focused on pupil understanding – established or emerging
Meta talk	talk about talk as a tool and as the instantiation of knowledge
Pedagogic talk	talk that explicitly bridges every-day and expert perspectives

Figure 1. Talk-type definitions

pedagogic discourse (Christie 2000), important not only in maintaining the focus and pace of activity, but also framing other activities. Depth can be added to organisational talk if teachers include the ‘why’ of classroom activity to frame tasks and endeavours.

Pupils are most quickly socialised into this talk-type as they enter formal education. With organisational talk embedded in the classroom context and culture it is easier for learners to understand the FL and, as such, organisational talk offers a good starting point for FL-mediated activity. FL learners, however, “first exposed to a target language in a highly structured classroom do not find adequate contextual support for their language-learning efforts” (John-Steiner 1985:353). Whilst organisational talk is a positive starting point, it only maintains a superficial level of interaction and is often one-way. Language learning requires more participatory opportunities to engage in language use. Other talk-genres enrich the variety and roles of talk in teaching-learning contexts, but organisational talk can also develop with the FL-learning level of

pupils. Pupils can be given opportunities to give instructions – as with the game ‘Simon says’. In this way organisational talk can become more than instructional talk, offering more extended opportunities for talk-based interaction.

Social talk

Social talk is intended for “community building ... to connect students to each other” (Pierce and Gilles 2008: 40), opening channels for more constructive communication. Social talk is safe, non-assessed interaction between peers, or teacher and learners. From a relational perspective, this talk is vital in the affordance (van Lier 2000) it offers to learners and teachers. Positive social communication prepares the way for more critical interactions and lowers the threshold for collaborative talk. Lemke remarks that removing social talk as a legitimate form of classroom communication denies pupils an important context for trialling questions before addressing teachers (Lemke 1990: 75). Social talk can review earlier learning, prior assumptions, personal associations connected with a topic or trial collaborative interactions. For learners, social talk raises awareness, creating food for thought and a pool of common knowledge (Edwards and Mercer 1987). Furthermore, when learning a FL, the opportunity to become accustomed to the feel of the foreign tongue as an expression of oneself is an important step in language development. For teachers, social talk can provide a window into pupil understanding (Mortimer and Scott 2003) and experience. Once relationships are established, the amount of social talk can be reduced, however, the ability to establish thinking partnerships through talk is a vital skill throughout an educational career and beyond.

An anecdotal example or two can perhaps be offered here. On a visit to the kindergarten partner of our local CLIL community, I sat with the children as they drew pictures based on the illustrated story we had just heard. As one 5 year old boy sat drawing, I asked simple questions, such as “What is this?” whilst pointing at the drawing. The boy sat quietly for a moment, and then answered, “water”. The teacher was delighted. The word had not been formally taught to the child, nor used in the Fox and Chick story that morning, but it had been one of the words at the breakfast table. This small social exchange created an opportunity for authentic interaction in which the child could draw on his growing language repertoire from the organisational talk of his daily life.

When visiting the lower secondary school, just before a lesson began, I spoke with one of the pupils. She told me of her family and a friend she used sign language with. The pupil then surprised me by asking about my family. In our short conversation, this pupil was able to initiate as well as answer, to be creative and responsive. The exchange was pleasant, but not easy, as the pupil seemed to work hard to find the right words, using gestures and guesses as well as checking what was being asked. These few moments opened a window not only into how this pupil used language and strategies, but into her as a person. Indeed as I continued with my formal observations in the following science lesson, it appeared as though this pupil continued to draw on these strategies in the classroom.

Exploratory talk

Whereas social talk is committed to relating, exploratory talk is committed to learning, building understanding together. In exploratory talk pupils make personal understanding available to other group members, and as this talk goes beyond initial assumptions exploring alternative conceptualisations, pupils have the freedom to change their mind and to allow new understandings to grow. Exploratory talk has been described as hesitant, disjointed, thinking aloud (Barnes, 2008:5). This type of talk goes beyond the introduction of new words and concepts, beyond the labelling of phenomena to exploring how new concepts are understood². As Mortimer and Scott (2003: 19) note,

When students are first introduced to a new word or concept in a science class, they may quickly master the teacher's definition of the word, but this is not the end of the learning process, it is just the beginning.

Pupils become committed to the thinking partnership generated by exploratory talk as teachers provide tools, including phrases, to support interaction (see meta talk). With regard to CLIL, in exploratory talk pupils engage with words and phrases in the FL, whilst jointly constructing their understanding of new concepts.

As exploratory talk is intentionally supportive and participatory, the talk becomes not only an activity and a space for thinking, but also a resource for learners to work with: “‘what was said’ is now an objective product that can be explored further by the speaker and others” (Swain 2000:102). Accurate language use may not be present in the initial talk, but drawing on the collective resources of the group and teacher scaffolds, collaborative endeavours can lead to more appropriate instantiations of understanding.

Exploratory talk does not ‘just happen’ in classrooms, however, even in L1 contexts. Rojas-Drummond, Albarrán and Littleton (2008) as well as Pierce and Gilles (2008) report the value of exploratory talk in their interventionist research but both examples demonstrate how time is required to create a classroom culture in which exploratory talk can be utilised for interthinking. The ‘disruption’ CLIL brings to regular classroom activities (Moate 2011a) arguably creates an ideal opportunity for the introduction of exploratory talk as a new way of collaborating and using language between learners.

Critical talk

Critical talk could be described as the talk of ‘deconstruction’, talk based on ‘why’ and ‘how come’ questions. This talk-type applies to education on two levels. On one level critical talk is concerned with the deconstruction of pupil thinking and prior knowledge: What do I know about this topic? Why do I see the world this way? Chin’s (e.g. 2007) extensive exploration of teacher questions shows how important teacher questions are in the development of pupil thinking, but questioning should not remain a resource external to pupil thinking. Learners need to ask questions to actively participate in learning, that is, in the reconstruction of knowledge. Critical talk can be modelled by teachers

sharing their own approach to a topic, the questions they have, and how they form their questions. This kind of modelling would provide a rich resource for novice learners in terms of both substantive and language learning, particularly within the CLIL context as pupil learning is being mediated through an FL.

Critical talk is vital if learning is understood as a dialogue. Questions create spaces both between individuals and within individuals. This space allows for the adoption of the words of another (Bakhtin 1981) and recognises that a comment should give rise to a question or risk falling out of the dialogue (Bakhtin 1986: 168). If pupils have no questions to ask it perhaps suggests that for them 'learning' is following instructions, rather than growing in understanding. Over time critical talk would increasingly entwine with exploratory talk, however to become part of classroom practice, specific attention needs to be paid to critical talk, how to form questions, why form questions, the impact of questioning in opening up thinking.

Critical talk also suggests a more critical stance towards society and repositions learners in relation to the authority of a subject or established cultural knowledge. This does not suggest disregarding cultural knowledge built by experts over generations, but rather legitimates the role of novice participants in a democratic society.

Expert talk

Expert talk is authoritative talk, the formal voice of a subject. As Lemke states, "Every specialized kind of human activity, every subject area and field, has its own special language" (Lemke 1990: 130). This talk is present in the classroom as the accurate instantiation of expert knowledge. Pupils are required to learn this expert talk to demonstrate learning and (emerging) subject community membership (Lemke 1990, Mortimer and Scott 2003). Returning to the earlier example of the sun rising and setting from a scientific perspective this is a false conceptualisation of earth's relationship with the sun.

In research on a CLIL science lesson on reproduction Gajo (2007) draws attention to the insistence of a subject teacher in the use of appropriate terminology. What is interesting in this example is the way in which the science teacher insists on more exact language use as required by the subject paradigm, than the general language paradigm would require (Gajo 2007: 577). This is a feature of content learning present in both L1 and FL-mediated classrooms and all subject teachers face the challenge of acculturating students into subject-specific language.

In research in L2 classrooms, authoritatively presented talk that involved only narrow, highly contextualized definitions with few structural options severely limited learner capacity to appropriate this language (Robinson 2005). To appropriate expert talk learners need opportunities to transition from everyday associations to the 'scientific' story, with incremental definitions and graduated assistance (Robinson 2005, Rincke 2011). Different talk-types are important partners in this process. The prominence of expert talk can vary with the purpose of the activity, but both teacher and learners need to be aware that whilst different types of discussions are important for learning, expert-talk is the target for substantive learning. Expert talk is the voice of the expert community

in the classroom, and part of the educational process is to engage with and appropriate this voice. Placing expert-talk within a repertoire of talk-types for teaching-learning hopefully prevents this form of talk from either dominating classroom conversations or being conspicuous by its absence (Dalton-Puffer 2007b).

Meta talk

Meta talk is the skilful handling and awareness of talk as a tool used purposefully. On one hand meta talk regulates classroom activity. Interventionist research with exploratory talk, for example Mercer, Dawes, Wegerif and Sams (2004) suggest ground rules to engage the classroom culture as a scaffold for collaborative talk-based action. Mercer and Littleton (2007) report several examples of teachers explicitly encouraging pupils to use positive language to explore different ideas in a group, as well as brainstorming phrases with the class to resource group talk, for example, "What do you think?" and "What is your idea?"

Mercer and Littleton's (2007) data also shows how these phrases became part of pupil language repertoires as well as cultural and thinking repertoires. This appears to also be the case in one case-study (Mercer & Littleton 2007: 98-100) in which an L2 pupil transformed from being an apparently reluctant group member to an active participant. Through recognised ground rules how talk is to be used within the community of learners becomes part of a classroom community's shared language repertoire. Explicit focus on the way in which talk is being used as a tool helps to further resource the use of talk, increasing pupil awareness, understanding and sensitivity to talk (Pierce & Gilles 2008). Furthermore, meta talk goes beyond the immediate community of learners and their interactions.

Meta talk intends to make the expert talk more comprehensible by demystifying the structures often used in expert formulations. Lemke remarks that in addition to "thematic content, ... genres and activity structures," it is also the "subtle features of scientific style" (Lemke 1990: 130) that make scientific language challenging for pupils. Meta talk can open, for example, different linguistic devices "specific forms of discourse (formulas) ... directly relevant to subject paradigms" (Gajo 2007:572). These features include, for example, the use of the passive voice, specific metaphors ("the greenhouse effect") and discourse structures (Unsworth 2001). Lemke recommends providing pupils with opportunities to "engage in activities that will require them to first practice combining science terms in longer grammatical sentences, and then describe, compare, or discuss real objects or events using science terms in a flexible way appropriate to the situation" (Lemke 1990: 169). Through this focus-on-form embedded within the subject the aim is to concurrently develop correct language use and subject knowledge.

In addition to discourse features, meta talk aims to make assumptions behind expert formulations clear. Over emphasis of the authoritative expert voice can give an artificial impression of "truth" or the inaccessibility of a subject to non-experts (Lemke 1990). Focusing on the way in which understanding is expressed within a community can help to make the values of an expert community clear

and present a “truer” picture of cultural knowledge as a cultural product which develops over time through debate and argument. Understanding how experts use language is an important step for novice learners as they strive to gain ownership over specialized language.

Meta talk is supported by the use of language frames, teachers and texts explicitly modelling language, and attention drawn to the language being used and why. Collaboration through dialogic activity can highlight the linguistic instantiation of subject knowledge. Together learners can draw on joint resources to explore new understandings in appropriate language. The language and content demands of FL-mediation of CLIL may explain why more dialogic interaction has been identified in CLIL classrooms (Nikula 2007) and why CLIL learners have outperformed non-CLIL peers (Baetens-Beardsmore 2008).

Pedagogic Talk

Pedagogic talk goes beyond organisational talk in the classroom, although it no doubt draws on all of the above talk-types. It is in the pedagogic talk of the teacher, however, that bridges between everyday understanding and expert conceptualisation are built. In pedagogic talk teachers ‘translate’ back and forth between everyday expressions of knowledge and expert formulations (Lemke 1989, Scott 2008). The dynamics of this talk are highly significant as teachers mediate between the expert community and the classroom community, lowering the ‘entry threshold’ of the one, whilst raising the competence level of the other.

Pedagogic talk instantiates teachers’ pedagogic content knowledge (Shulman 1999) drawing on a repertoire of choice examples to engage pupils in a subject. Pedagogic talk, however, has to be sensitive to pupils’ growing understanding (Mercer 2000). Whilst a textbook can present subject knowledge in a ‘pupil-friendly’ manner, pedagogic talk is the joint construction of knowledge in real-time (Mercer 2000). Pedagogic talk humanises the voice of the expert community whilst resourcing the voice and activities of learners. It is also pedagogic talk that opens up the dialogic space for learners to begin their own explorations, to allow the ‘spark’ between participants (Voloshinov 1986:103) and guides the resolution between pupil constructions and expert formulations. This type of talk lies at the heart of teacher activity in education.

The seven talk-types presented here aim to capture the multi-layered, multi-voiced context of school learning environments. The model is based on a broad view of education, recognising the importance of establishing the teaching-learning culture of the classroom as well as mediating the relationship between novice-learners and expert-communities. The different talk-types represent both the dialectic and dialogic dynamics of education. In this sense, talk-types are fundamentally tied to teaching-learning activity. If the teacher is working to build a sense of trust in the classroom, social talk would be more prominent. If the teacher is introducing a new topic, critical talk may be apt to begin deconstructing assumptions before reconstructing a more ‘expert’ understanding. To introduce exploratory talk as a way of working, meta talk on the rules and useful phrases would be appropriate.

In practice these different talk-types overlap rather than neatly fit into assigned slots within lessons. In a lesson social talk may transform into critical

or exploratory talk, the focus of expert talk might change to the language “casing” of knowledge, in effect meta talk before returning to the expert understanding. Pedagogic talk may be punctuated by exploratory interactions as pupils take over the discussions. In these instances, it would be the teacher who decides what is appropriate and why, but rather than haphazardly transitioning from one activity to the next, the model hopes to provide a navigational tool for the ‘talkscape’ of the classroom. The relevance of this model to FL-mediated contexts is then considered along with the introduction of the key notion of the transitional dynamic.

The ‘transitional dynamic’ in CLIL

In addition to the different talk-types, this talk-based pedagogical model is based on the notion of a ‘transitional dynamic’ particularly relevant to the FL-mediation of CLIL. The transitional dynamic represents the idea that the aim of CLIL is to increase the amount of FL in teaching-learning contexts, whilst recognising that the transition into the FL occurs at different rates for different talk-types. This is represented in Figure 2 with the placement of arrows at different points along with L1 to FL continuum.

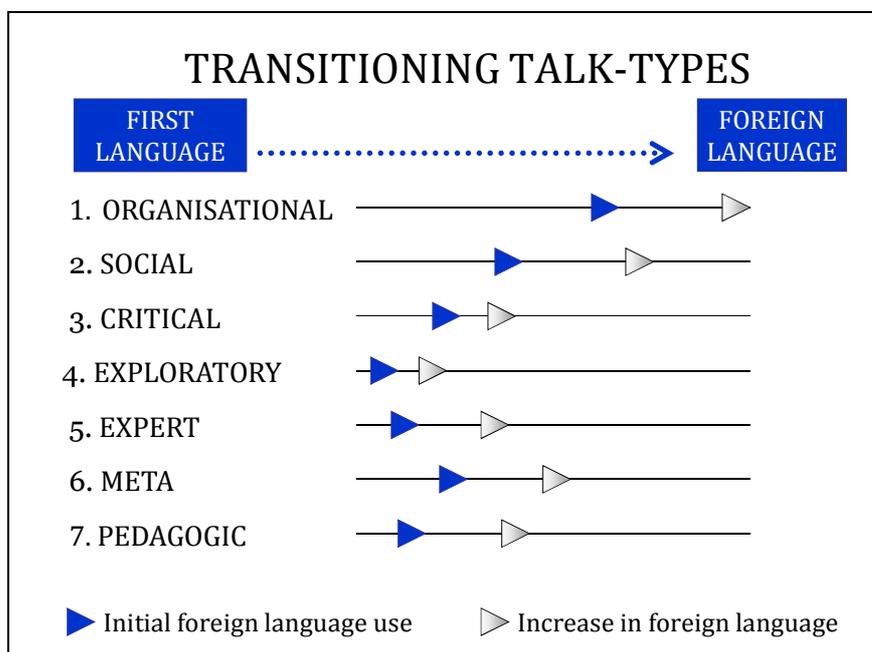


Figure 2. A talk-based pedagogical model for CLIL

The transitional dynamic embedded in a course of study implies that the amount of FL-use at the beginning of the CLIL course would be qualitatively and quantitatively increased by the end of the course (see Figure 2). In practice, the extent and pace of the transitional dynamic would be context-dependent as both

over-stretching and under-demanding FL-skills can cap student development (Baetens-Beardsmore 1999; Walsh 2002). Theoretically, this notion draws on Vygotsky's dynamic view of language learning (Vygotsky 1997) and argues that this dynamic view of language should be a key cultural feature of FL-mediated environments to enhance language development.

The arrow depictions in Figure 2 illustrate the transitional dynamic from the L1 to the FL. The differing positions of the arrows hope to convey the different transitional rates for different talk-types and contexts. The transitional rates are assumed to be embedded in the type of cultural knowledge instantiated in the language, whether more concrete or abstract conceptualisation. As bilingual competence develops, "learners are increasingly able to comprehend, condense, and store information in their weaker language" (John-Steiner 1985:365). Whether the transitional dynamic can accelerate as learner capacity increases is an area open for investigation.

The 'transitional dynamic' notion is an attempt to counter traditional classroom cultures which readily become identified 'as is' rather than 'as becoming'. The extensive international comparative study of educational cultures by Alexander (2000) reveals how readily in many contexts activities and identities become fixed, assumed ways of being rather than intentional and purposeful stages of being. Similarly, within classroom-based observations of the local CLIL community, once patterns are established, it is difficult to introduce change. For example, in the recordings of one science class in the early lessons pupils repeat under their breath new science terms as introduced by the teacher. Using these terms, however did not become an intentional part of the shared classroom culture, and in the later recordings pupils no longer voluntarily mouth or whisper new terms (Moate 2011b). These recordings indicate how easily an opportunity to build on learning repertoires can be lost if it does not become part of the intentional classroom culture.

A shared understanding of the transitional dynamic between teacher and learners would hopefully build the expectation of using the FL into classroom culture. As a cultural feature, the dynamic would become a tool available to teachers. On a more macro-level the progression from playing to studying through a FL can also be complemented by the notion of a transitional dynamic. Whilst early FL learning cannot fulfil the requirements of more advanced study, early FL experiences can provide an important foundation for more advanced language repertoires (see the discussion). The 'transitional dynamic' embedded in this progression is the onward motion and intentional change in the FL experience of pupils as they continue through the educational system.

This notion will hopefully prove to be useful in building the pedagogic repertoire of FL-mediating teachers working in complex, demanding settings. The transitional dynamic coupled with the talk-types of teaching-learning opens a new area for exploration in the development of CLIL and the role of talk in teaching-learning contexts.

Discussion: talk in practice

Who's talk when?

Clearly some of the talk-types are more readily found in the voice of the teacher than pupils or vice versa, although no talk-type should be exclusive to one partner. Teachers need to model critical and exploratory talk, as well as expert talk. Pupils need opportunities to use language in different ways for different purposes particularly when working through an FL. Allowing pupils to give instructions or to pose questions to teachers offers important opportunities for language development and participation. Furthermore the 'distribution' of talk-types at the beginning of a programme of study should not be the same as at the end. Whereas little expert talk can be used when introducing a new topic, by the end of the topic hopefully a significant amount of expert talk has been appropriated by pupils.

Which talk when?

Similarly, different subjects characterise language use in different ways. Whilst mathematics and the sciences often use more specialized, less flexible language other expert communities also use language in particular ways, whether to explore difference, identify similarities, argue for interpretations, and to share understanding. Some subjects may require more divergence in thinking (e.g. critical talk) to support problem-solving, other subjects may encourage more convergent thinking (e.g. exploratory talk) in the generation of a joint piece of writing or art. The appropriacy of the talk-type is deeply embedded in the context and purpose of an activity and in that sense is tightly tied into the nature of a disciplinary subject itself. The aim of the model is to promote awareness of the different talk-based options for teaching-learning activities for classroom-based CLIL practitioners as well as CLIL researchers.

Talk and educational levels

Classroom talk is also characterised by the educational level of the participants. Returning to the community's conceptualisation of FL-mediated education as progression from 'playing' to 'studying', social talk in play and daily routines prepare for more formal learning through English as pupils continue along the educational pathway. As pupils gain confidence in English, as critical and exploratory talk become part of their language repertoire, they are increasingly ready to face the challenges of subject and academic study. Social talk cannot be the key goal of an advanced physics course, however the ability to relate in an academic context, to build 'thinking partnerships' is highly important in advanced physics. In this sense, whilst the emphasis on social talk is reduced, this genre as a learning resource remains significant.

Similarly meta talk in the lower school classroom may more appropriately focus on 'ground rules' for talk than stylistic considerations of scientific discourse; however, recognising talk as tool may significantly benefit more

detailed explorations of expert talk as studies advance. Expert talk should be present in upper secondary school studying, however excluding social, critical and exploratory talk would be to the detriment of the whole teaching-learning community. A discernible change is arguably then desirable in the prominence of different talk-types at different stages of the educational pathway. It is, however, the mutual support of the different ‘languages of education’ that resources teaching and learning along the educational pathway.

Conclusion

The seven talk-types presented here aim to capture the multi-layered, multi-voiced context of school learning environments. The different talk-types hope to create space for the dialectic and dialogic dynamics of educational activity, creating space for both “the interpersonal/communicative and the cognitive/representational functions” of language (Hickmann 1985:239). In practice these different talk-types would overlap rather than neatly fit into assigned slots. Nevertheless, awareness of these different talk-types creates the possibility for both orchestrating educational talk and for supporting the bidirectional character of language in education as a resource both for the wider community and individual thinking.

The reduced repertoire of teachers and learners embarking on CLIL provides a positive opportunity to introduce new approaches to co-constructing knowledge in classrooms complementing the increased interaction already identified in CLIL contexts. In conclusion it is hoped that this reconceptualisation of talk in CLIL, and the broader implications for CLIL pedagogy, provides plenty of food for further discussion. In presenting the model here it is hoped that other CLIL communities and practitioners would be interested in trialling the model, with the view to further developing CLIL pedagogy.

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Endnotes

- 1) The maximum number of hours is 8 according to the National Curriculum requirements. All pupils participate in CLIL lessons in this particular primary school.
- 2) An interesting exploratory discussion between a teacher and learners discussing different understandings of ‘up thrust’ in a physics lesson is reported in Scott (2008)

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