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“BUT HOW ARE WE SUPPOSED TO DO THAT?”

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REQUIREMENTS FOR CLIL TEACHERS AND WAYS TO (PARTLY) FULFIL THEM

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Between 2008 and 2014, the Goethe-Institut Sofia teamed up with the University of Hamburg to organize further training seminars in CLILiG (Content and Language Integrated Learning in German) in the sciences. This is what happened in one of the first seminar sessions: in small groups, my colleagues and I were testing an experiment for pupils. Each group of four had a bottle on the table in front of them. Fitted with a rubber plug, the bottle contained water, on the surface of which a small glass air-filled “devil” with a very small hole in it was bobbing around – known as a Cartesian diver. If the rubber plug is pushed down, the diver moves slowly downwards. If the pressure is reduced again, it moves back up. By describing and then explaining this experiment, and subsequently identifying the physical forces at play, pupils learn to understand the physical concept of density. During our final reflection session, one colleague commented: “I now realize that we have to return to basics. But how are we supposed to do that?”- She said the words with great thoughtfulness.

So why am I telling you this story? There are four elements to it that we will be looking at in more detail.

First, it illustrates how hugely important the level of content-related didactics is in CLIL. Science lessons in this case are based on a scientific phenomenon, pupils – or in this case we teachers in their place – being required to come up with explanations based on our own understanding of what we see, and then taking the next step, which is to conceptualize the scientific principles at play.

Second, it reveals a specific form of scaffolding – semiotic translation – as being the lesson’s basic methodological principle, one aimed at cognitive activation and real-world orientation: the experiment is carried out and then verbalized; next a drawing is produced, and finally an initial careful formalization of the observed correlation between mass and volume is attempted. In other words, pupils move towards an understanding of the phenomenon by transitioning between different levels of abstraction.

Third, the serious question posed by our Bulgarian colleague about the possibility of designing such a lesson raises the dual issue of how both language and subject content need to be considered at the same time. While the subject in itself is demanding enough for the pupils (we do not talk in everyday life about the concept of density but rather about something floating or sinking because it is “heavy”, a term which in physics refers to the object’s mass), they also have to make sense of the conceptual change despite their limited linguistic capabilities in the foreign language. The same holds true of the teachers, whose proficiency in German – the teaching language – is likewise limited to a greater or lesser extent.

Fourth, the colleague’s remark is also a reference to the fact that the necessities of CLIL run contrary to her experience of the Bulgarian education system so far, its science lessons being highly technical and scientific in nature, featuring teacher-centred instructions to a large extent and being regularly inspected: she draws up a detailed teaching plan for the entire school year and submits her plan to the head; at some point during the year a school inspector will visit to check that she has reached the corresponding section in the plan. In this scenario CLIL is mere wishful thinking, not to mention an unreasonable demand. In other words, to be a CLIL teacher and to meet the particular challenges posed by the foreign language learning situation involves making more or less far-reaching changes to one’s own convictions and teaching practice. And can also mean having to deal with resistance within one’s own working environment. In the following section I will be looking at the specific aspects this entails.

WHAT IS SPECIAL ABOUT A CLIL TEACHER?

Now that CLIL has become sufficiently widespread in Europe to count as part of the educational mainstream, the question increasingly is the extent to which CLIL teachers require or indeed already have special skills and abilities. Are they the chosen few who design particularly outstanding lessons (Bruton 2011)? Do they require special knowledge? And if so, what knowledge is it that they need? Are they more motivated, do they work more, do they plan more thoroughly? Do they have particular methodological expertise, or are they more pupil-focused and especially enthusiastic about their subject? Or are they simply teachers like you and me, whose profile is no different to their colleagues who give monolingual lessons?

CLIL IS EVERYWHERE – ISN’T IT?

It is not easy to answer these questions. Perhaps it is even impossible because the question has not been asked in the right way. It suggests that there might still be non-CLIL lessons. However, if we take the growing linguistic heterogeneity in European classrooms seriously, it is clear that this distinction is already obsolete. To an ever greater extent, multilingualism is becoming the baseline for all content learning. Logically, educational practice and theory discussions of different approaches to CLIL – such as German-language content learning at German schools abroad, bilingual lessons in the school’s foreign languages according to the German model, or language-sensitive German-language content teaching in Germany – have increasingly converged. As a result, the question of the professionalism and professionalization of CLIL teachers is one that is relevant to all teachers.

Unfortunately, this describes the desired state rather than the status quo. As Josef Leisen bluntly put it: “Am I now supposed to teach language on top of everything else?” – aptly summing up an attitude expressed by many teachers in Germany at the start of further training courses in language-sensitive content teaching. In this sense, those teachers who have already engaged with CLIL and have worked on their methodologies and convictions in this field have indeed taken an important step forward. A step that many see as an enrichment, though it also entails a challenge.

So what exactly does this step involve? Or to put it another way, which sub-steps does it comprise? I will attempt to sum up the conclusions of the debate about CLIL professionalization as briefly as possible below. This will necessarily involve some shortcuts. Bonnet und Breidbach (2017) offer some further thoughts and an empirical foundation for these considerations. The starting point is one very straightforward point: good CLIL teachers are those who provide good CLIL lessons. So we first need to clarify just what might constitute a good CLIL lesson.

WHAT TYPIFIES A GOOD CLIL LESSON?

In this context it is helpful to consider the didactic triangle. If we look first at the content, it is noticeable that there are aspects that have nothing at all to do with the foreign language nature of the learning situation. As far as the content is concerned, CLIL has to meet the requirements of content-focused learning in the subject in question, just like any other lesson does. On a cognitive level, this means reaching specific targets in the subject. This in turn leads naturally to certain didactical and methodological decisions. For instance, it would doubtless be difficult to design a science lesson aimed at improving scientific literacy without focusing on actions and phenomena. The phenomenon to be explored must be relevant to the real-world issues, ideas and imaginations of the pupils. If one were to approach for example the concept of density without looking at the phenomenon of the Cartesian diver, beginning instead by defining the quotient of mass and volume, it should not come as any surprise if only a small number of pupils showed any interest. And pupil motivation cannot by any means be taken for granted even if the Cartesian diver is used.

HOW CAN I BEST REACH MY LEARNERS?

In other words, CLIL lessons have to be designed such that the pupils perceive the content as relevant because it is linked to the world in which they actually live. In this context the foreign language aspect itself can help if pupils have a particular interest in it. However, CLIL lessons will first have to establish relevance by employing strategies that are proven in terms of content didactics and are also effective outside the CLIL situation. After all, it makes a great deal of difference to pupils whether they are told that the objective of a lesson is to introduce them to the principles of electrostatics or whether their physics teacher promises that by the end of the lesson they will be able to explain how lightening is produced. Or – as in the example referred to above – that they will be able to use the concept of density to explain how a fish manages to float, rise or sink in water thanks to its swim bladder. As well as establishing this relevance to the real world of the learners and their questions, part and parcel of a pupil focus should also involve taking account of their individual learning situations, i.e. their inclusion status or the different languages they speak in everyday life.

CRITERIA FOR GOOD CLIL LESSONS

Besides these basic content-specific principles, which also apply outside the CLIL situation, a number of interdisciplinary yet CLIL-specific aspects of good CLIL lessons can also be identified. If we combine all of the findings from research into CLIL (content and language integrated learning) and CBI (content based instruction) the following key criteria can be pinpointed:

- A high-challenge and high-support classroom should be created (Gibbons 2009). This is the only way in which learners will achieve cognitive academic language proficiency (Cummins 1979, Baker 2006).
- The foreign language nature of the learning situation must be taken into account by employing language scaffolding measures – such as explicit language work, work with discourse functions or genre-oriented support (cf. Thürmann 2010).
- It is necessary to achieve high cognitive activation with simultaneous content-related scaffolding. In this context a suitable strategy involves continuous (cf. Leisen 2005).

DOES BECOMING A CLIL TEACHER MEAN BECOMING AN EXPERT IN SCAFFOLDING?

Looking at publications about teacher training in CLIL at the European level (for example Eurydice 2006), the focus is clearly on the latter aspects. Summarizing the relevant aspects from literature about CLIL teachers, the following picture emerges:

Besides offering a high level of foreign language and content-related expertise, CLIL teachers should:

- employ strategies of implicit and explicit language work, e.g. tackling language proficiency errors relevant to the subject content, creating a lexical abundance or working specifically to build up vocabulary (cf. Thürmann 2010, for example);
- work in CLIL lessons with discourse functions, enabling pupils to verbally render specific thought processes via appropriate scaffolds (for example naming, explaining or evaluating) (e.g. Dalton-Puffer 2007, Zydatiß 2005);
- employ genre-related scaffolding to enable pupils to further develop their productive language skills (e.g. Hallet 2011);
- design their CLIL lessons with cognitive activation in mind by having pupils tackle subject-related content at different abstraction levels as can be achieved by applying semiotic translation (e.g. Leisen 2005);

- redesign their lesson planning routines so as to give due consideration to the complexity of the lesson with its dual goals of language and content teaching – which quite simply requires more time to be spent on planning (e.g. Dirks 2002).

This gives rise to the impression that teacher training in CLIL means instructing teachers in lesson methodology so as to obtain high-quality CLIL lessons of the kind described above.

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BECOMING A CLIL TEACHER MEANS REINVENTING ONE’S OWN PROFESSIONAL IDENTITY

However, looking at the findings of existing studies into professionalism and professionalization in CLIL (cf. Bonnet/Breidbach 2017 for a more detailed discussion) raises doubts about whether such training measures on their own can produce the desired result. Such studies describe the path to becoming a CLIL teacher not only as an enrichment but also as a challenge, a battle, indeed even as a traumatic experience. This indicates that becoming a CLIL teacher requires more than simply acquiring methodological knowledge.

Let us briefly summarize these challenges:

Due to the partly contradictory requirements of language and content teaching, teachers have to readjust their subjective theories with respect to the lesson goals and learning paths (e.g. Cammarata and Tedick 2012) – not only in terms of methods but above all in a didactic sense. This means that teachers have to seriously rethink how they understand the language acquisition process, for example, and what consequences this has for their lesson design:

- Should language acquisition ideally take place implicitly, and what role is played in this context by explicit learning?
- Is there any link or interface between explicit language knowledge and implicit language proficiency? What role then is played by explicit language work in CLIL lessons?
- To what extent is it justified to work on grammar and vocabulary?

- What role is played by contemporary concepts such as work on discourse functions, or should CLIL lessons be a place where no explicit reference is made to language learning?

To answer questions such as these, one’s knowledge of language acquisition and the ways in which it interacts with the acquisition of competence in subject content needs to be very well-founded, given theoretical reflection and based on experience.

- When CLIL is practised in a high stakes testing environment, as is the case in the USA, instructivist reflexes are triggered in teachers that run contrary to the aforementioned principles (e.g. Palmer and Snodgrass Rangel 2011). These studies show that teachers, when faced with an increased number of forthcoming tests, gear their lessons to the test content – “teaching to the test”, in other words. In addition, they begin raising the proportion of teacher-centred instruction and content presentation and reducing the degree to which the pupils elaborate the content themselves.
- The same is true of the curricular framework. If this is restrictive, teachers tend to reduce CLIL. This can mean that there is less oral use of the foreign language. In this scenario the target language occurs only in the teaching material and is processed only on a receptive basis. However, this can also mean that teachers withdraw entirely from CLIL. If by contrast the curricular framework is flexible, teachers tend to intensify CLIL (e.g. Hüttner, Dalton-Puffer and Smit 2013), that is to say they offer more CLIL teaching on the one hand and maintain a high proportion of foreign language use in the classroom through appropriate scaffolding on the other.
- Teachers become much more willing to embark upon this difficult CLIL path if they perceive the CLIL lesson as being the result of their own efforts and if they feel that they can shape it themselves (Massler 2012, Hunt 2011).
- Because of the high demands of the CLIL situation, CLIL teachers are particularly reliant on developing a positive sense of their own competence, and especially of their own language proficiency (Massler 2012)
- Even if a teacher does have methodological knowledge, their own professional identity will determine whether these methods are actually used. Teachers with a predominantly pedagogical identity appear more likely to create a high-challenge, high-support classroom, whereas teachers with more of a content-focused identity tend to reduce the language requirements (Bonnet/Breidbach 2017).

CLIL TEACHERS IN TIMES OF INCREASINGLY PROBLEMATIC WORKING CONDITIONS

It is self-evident that only healthy CLIL teachers are good CLIL teachers. The question that generally needs to be posed is whether it is in fact possible at all to meet the requirements that have been developed thus far in the current educational landscape in Germany and Europe. The findings of studies of the workloads faced by teachers are also relevant to multilingual lesson situations, perhaps all the more so given the complexity of the requirements here (e.g. Schaarschmidt/Kieschke 2007). Such findings show clearly that appropriate measures to professionalize different areas of their activities (such as lesson design, school development, cooperation, organization of their own activities) can have a positive impact on teacher workload.

What remains unclear, however, is when and how ongoing professionalization of teachers can be ensured once they have completed their initial training. It is still the case that further training has to be completed outside lesson hours, that working weeks of over 25 teaching hours are the average and that additional bureaucratic or administrative tasks that have to be completed in school are not remunerated. The consequence of this is that permanent staff at schools tend to fall ill during peak workload periods, and initially have to be covered by their healthy colleagues.

It is all the more alarming then that there are clear signs that the proportion of insufficiently professionalized teachers in schools is growing all the time. This is presumably due on the one hand to the current situation on the employment market for teachers, in which fully qualified teachers cannot be found ad hoc for certain subjects; and on the other to the fact that cover for teachers who are off sick is often provided only on a short-term basis – to this day German schools have no permanent supply staff. For as long as possible, the lessons to be covered are divided up between healthy teachers; only after a defined period does the head teacher have the option of employing a supply teacher on a temporary contract. Although the relevant authorities and ministries stress that these are merely isolated cases and concern additional duties such as cover for absent colleagues or remedial tuition, it is noticeable in some schools that such teachers – who are far from fully qualified but tend to be highly motivated – end up teaching classes regularly for years.

The situation is similar when it comes to teaching assistants engaged for the purposes of improving inclusion; they are generally supplied to schools not by the education ministries but by institutions such as Lebenshilfe. There are considerable bureaucratic hurdles for schools wishing to engage an assistant, and teachers have to write numerous reports every half year to fight for the assistants, who in any case are assigned only on a per-hour basis. What is more, it is up to the parents to decide whether or not they wish assistants to be engaged. As a result, the teaching assistants change frequently and continuity tends not to be possible.

Even more existential questions are raised in other European countries. In former socialist states in particular, teachers are often not able to support a family on their salary. They rely on taking additional jobs or need to have a partner who also works. Who under such circumstances can afford to take the particular challenges of the CLIL situation seriously and embark on a content and language learning path that may in some cases even run contrary to the demands of their country’s national curriculum? Certainly this will not be the chosen few – but merely the committed or indeed passionate few. They are a minority, however, and run an increased risk of burn-out. This provides no solid and lasting basis for CLIL.

CONCLUSIONS

Starting from the very fundamental premise that good CLIL teachers are those who design good CLIL lessons, we can conclude the following:

- Yes, CLIL teachers need those methodological skills cited also in the European papers in order to create a high-challenge, high-support CLIL classroom.
- Yes, this includes in particular methods of language and content scaffolding, as well as explicit language work.

- No, these skills are not enough. For one thing, CLIL teachers also require subject-specific and general educational professionalism because CLIL demands that content be readjusted to take account of the differing needs of content and language, and therefore need extensive didactic knowledge.
- For another thing, the professional identity of teachers, and by extension the way they deal with the school's framework conditions, determines whether they actually employ their didactic and methodological knowledge in the first place.

In other words, teacher training for CLIL must not be restricted solely to training in methods but must also enable teachers to further develop their own professional identity. Established methods of reflective teacher training, especially case work, are particularly well-suited to this. In this context, interviews or indeed lesson transcripts are jointly discussed during the (continuing) training phase. The subjective theories of those concerned are voiced, and didactic and methodological decisions that are contained in the material are discussed. Working with interviews is especially suitable for addressing the context in which CLIL takes place: questions about the curricula to be implemented, standards to be adhered to and aspects of the prevailing examination practice.

During our continuing education courses in Bulgaria, which brings us back to where we started, we ended up using lesson videos for this purpose – videos made by the event organizers (we also recorded our lessons and critically reflected upon them) and by the teachers themselves. These spotlighted the discrepancies that necessarily arise between the way one perceives oneself and the way one is perceived by others, between the planned goals and the goals that were presumably reached in reality, and between the assumed and actual plausibility of one's own lesson theory. In the Bulgarian system prolonged and continuous work was needed to jointly achieve the required willingness. This reflective approach is laborious but necessary in order to explore the convictions that guide our actions, the framework conditions that impact upon us and the emotions that are tied up therein, and thereby to make possible lasting changes to our own teaching. If we ignore the professional identity and biography of the teachers, and their convictions that evolve in the process, and also fail to take into account the framework conditions in which lessons take place, no lasting lesson development or professionalization can probably be expected.

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After a period spent teaching English and chemistry, Andreas Bonnet has been a professor of English didactics at the University of Hamburg since 2009. Together with colleagues from Sofia/Bulgaria, he ran a series of CLILiG further training courses for teachers in the natural sciences on behalf of the Goethe-Institut. CLIL/bilingual teaching is also one of the focal areas of his work. He also explores cooperative learning, researches and teaches multilingualism in English lessons and, together with colleagues in the educational sciences, looks closely at the question of what makes teachers (not only in the subject of English) professional and how they become it (profession research). However, what has actually astonished him the most throughout his work in the educational system is the fact that Germany, despite being a rich industrialized country, continues to stress ad absurdum the “importance of education in a country that is poor in terms of mineral resources”, all the while drastically underfunding schools and universities yet repeatedly downplaying and glossing over this.