# Thematic Network Project in the area of Languages

## Sub-project 6: Language Teacher Training and Bilingual Education

---

## Papers presented at the Conference "THE MULTILINGUAL CHALLENGE" HELD IN BRUSSELS (BE) ON 8 AND 9 MAY 1999

# OPENING ADDRESS
## DELIVERED BY WOLFGANG MACKIEWICZ, CO-ORDINATOR OF THE THEMATIC NETWORK PROJECT IN THE AREA OF LANGUAGES

Rector Witte,

Director Lenarduzzi,

Director Muylle,

Ladies and gentleman,

On behalf of the European Language Council and of the Thematic Network Project in the Area of Languages, I should like to welcome you warmly to this Conference.

Both the European Language Council and the Thematic Network Project are driven by the deep conviction that one of the characteristic features of European society is its diversity of languages and cultures and that communicative competence in several European languages constitutes an essential part of European identity and European citizenship. Communicative ability in a number of languages and the ability to adapt to different cultural environments are indispensable preconditions for achieving solidarity, co-operation and mobility within the European Union. I am convinced that everyone attending this Conference shares this belief.

When, two years ago, we founded the European Language Council, an association linking universities and associations specialising in languages, we did so in the belief that universities have a crucial role to play in promoting linguistic and cultural diversity in Europe. They are responsible for the education and training of a large section of the next generation. Their institutional language policies and practices are of immense importance for young people's attitudes towards languages and cultures – in other words, for the development of European citizenship. They are responsible for a large variety of language-specific teaching programmes, among them programmes for the education of teachers and the training of language specialists such as translators and interpreters.

In emphasising the role of universities in promoting linguistic and cultural diversity in Europe, we subscribe to the view that in the area of languages – like in other areas – universities have to recognise and respond to the changing demands of the social, professional and economic environments in Europe. This is why those of us who back in early 1996 were engaged in the creation of the European Language Council were eager to become involved in the new SOCRATES-ERASMUS Action of Thematic Network projects.

Thematic Network projects, which have a life-span of three years, are based on the assumption that higher education programmes in the EU are frequently out of step both with the state of development in research and with changing needs in society. Whilst research is developing steadily, whilst the social, professional and economic environments and their demands on higher education have been changing, higher education programmes have in many cases remained unchanged. It is one of the principal aims of Thematic Network projects to address this issue and to work out recommendations and strategies to overcome this state of affairs and to prepare the ground for improvements and innovations in higher education in Europe.

The Action of Thematic Network projects seemed to us at the time to offer a welcome opportunity to develop and to concretise our ideas regarding the responsibilities of universities in the area of languages. We identified a number of issues which we thought were particularly relevant to the professional and social needs of a united Europe, issues such as

- New technologies and language learning
- Language studies for students of other disciplines
- Testing
- Translation and interpreting and
- Language teacher training

to mention just some of them. In the event, we created and carried out nine sub-projects, each dedicated to one such issue. Each sub-project convened its own Scientific Committee comprised of experts from a representative number of participating countries. Approaches varied from sub-project to sub-project. However, all sub-projects in one way or another

- analysed and described the status quo in their specific sub-area;
- attempted to identify changing needs;
- identified examples of good practice;
- sought to apply research findings relevant to the issue at hand;
- drew up sets of recommendations;
- drafted proposals for action and prepared the launch of joint European development projects.

If Thematic Network projects are to achieve their aims, they have to interact with all the players in the field.

- They have to talk to representatives of the professional and economic environments.
- They have to talk to the decision-makers at institutional, regional/national and European level.

They have to try and identify the needs and demands by communicating with the non-academic environments and they have to persuade the powers that be that changes are needed and feasible. This is why TNPs cannot conduct their business behind closed doors, as it were; this is why they have to disseminate their ideas and results and try to obtain feedback on their ideas and results.

The area of teacher training is a particularly good example of what TNPs are all about and why they are a potentially powerful instrument to get things moving. European integration has been accompanied by a growing awareness of the need for improved quantitative and qualitative knowledge of European languages. There is now broad agreement that it is our schools that hold the key to achieving improved language ability. There is also considerable consensus on strategies and methods that can lead to improved language ability. And yet, in spite of a number of promising developments, there is still a gap, in some cases a huge gap, between the strategies and methods propagated on the one hand and the state and results of language learning in the school sector on the other.

When we turn to teacher education programmes in place across the Union, we find that in many cases there has been little change. Universities are apt to point out that teacher education is a particularly difficult area, that both school education and teacher education tend to be regulated by the state, and that because of this there is little room for innovation. This was also the message I received when I presented our TNP in the Culture Committee of the European Parliament. And yet, when I visit schools in Berlin – which I regularly do – and talk to colleagues there, I find that in many cases their own ideas are more advanced than the programmes offered by my university. I am always at a loss when teachers ask me why my university does not run continuing education courses on bilingual education, for example.

I believe that in teacher education – like in other subject areas in which non-academic players have a stake – it is the responsibility of the universities to take the initiative. I also believe that Thematic Network projects offer a particularly useful framework for new initiatives. In our Scientific Committees experts from across Europe take note of new developments under way; they compare innovative practices and identify those elements that are essential to programmes that are to meet changing needs. These essential elements will be moulded into recommendations; they may also provide the starting point for joint projects.

In this way, to cite another area, we launched, from within the Thematic Network, a project for the joint development of a Master's type programme in conference interpreting. Here, the points of departure were the need for interpreters with language combinations which include one or more than one of the less widely used and less taught languages and the demand for courses of this kind expressed by a large number of young graduates who happened to have such language combinations.

I said earlier that TNPs have to engage in dialogue with their target groups within and outside academia. This is the main purpose of this Conference. The TNP sub-project on Language teacher training and bilingual education wants to present its findings and ideas to other stakeholders, to colleagues, to people from state authorities and from professional organisations. The members of the Scientific Committee want to persuade – but they will also listen to what other stakeholders have to say.

This Conference is only the beginning of the dissemination of the results of our TNP. We are currently preparing a grant application for a fourth year which will

focus on the exploitation and dissemination of project results. In this we want to involve a substantial number of experts and institutions from the new participating countries and of representatives of the non-academic environments.

Meanwhile, the European Language Council is taking up new issues. In November last year, we convened a task force on quality management in higher education language programmes. Quality management will be a major theme at the 2$^{nd}$ ELC Conference, which will be held in Jyväskylä right at the beginning of the Finnish Presidency, and we intend to make this a cornerstone of a new project, possibly a new Thematic Network project.

Enough of the future.

Before I conclude, I should like to express my gratitude to a number of people and institutions who made this Conference possible. I should like to thank

- the members of the Scientific Committee on Language teacher training and bilingual education and in particular its co-ordinator, my friend Piet Van de Craen. Without Piet's dedication and determination this Conference would never have got off the ground.
- I should like to thank the European Commission. The Commission has supported our projects since the SIGMA days; their advice and good will have been a constant source of inspiration and encouragement. It is particularly gratifying for me that I can express my thanks in your presence Signor Lenarduzzi and Monsieur Muylle.
- I should like to thank the Vrije Universiteit Brussel for the tremendous support we have enjoyed for over three years now. The Vrije Universiteit Brussel hosted the meeting at which the project for the creation of the European Language Council was launched. Thank you Rector Witte for playing host to yet another milestone in our activities.

Last but not least I should like to thank you all for joining us here in Brussels to discuss ways of bringing about reorientation in teacher education – to meet the multilingual challenge presented by a united Europe.

Thank you.

# LANGUAGE TEACHING IN EUROPE:
# THE PRESENT VIS-À-VIS THE FUTURE

## Piet Van de Craen

Professor of Linguistics at the Vrije Universiteit Brussel, Belgium. Chair of the sub-group "Language Teacher Training and Bilingual Education" of the Thematic Network Project in the Area of Languages and Secretary of the European Language Council.

## 0. Introduction.

It is not an easy task to explain, on the one hand the various activities of the sub-group "Language Teacher Training and Bilingual Education" of the Thematic Network Project in the Area of Languages and, on the other hand, to make clear the philosophy which has led the group to take on the ideas that are to be presented at this conference. This is the first challenge that I am facing here in front of you this morning.

However, there is a second - even more difficult - challenge which we had to face during our work. The Thematic Network Projects are in the first place meant as think tanks. As such they bring together a number of scientists who - perhaps for the first time in their life - had to become "political" in the sense that they had to move away from the hard life of research to the hazardous activity of suggesting formulas for the implementation of a number of scientific results within a European context. It is the result of this second challenge that lies at the basis of this organization.

The sub-group "Language Teacher Training and Bilingual Education" feels that it has overcome its natural inclination "to go scientific", it feels that it has produced results that can be beneficial to European education as a whole, it feels that the proposed innovations are firmly grounded on sound scientific thinking, on research results and on a deep insight of what is happening inside the learner.

However, as a think tank the group's power is limited. As we all know it is one thing to bring forward a number of ideas no matter how sound and interesting they are, it is another thing to implement them in practice. While there is some hope that in a fourth TNP year devoted to the dissemination of information gathered by the TNP's more time can be spent on the actual implementation of the results - assuming that the TNP will materialize - we have chosen not to wait and we have invited you - educational policy makers, educational authorities and administrators, language specialists and teacher educators - to come to Brussels and to share and discuss and even challenge our ideas. In our mind the ideal situation is that, when you leave this room on Sunday afternoon you will not be the same person as you are now. We hope that you have changed in such a way that - when we come to visit you next year - you will show us proudly the progress that have been made saying "all this came about after the Brussels conference in May 1999".

In this introduction, first, the philosophy behind the adoption of Content and Language Integrated Learning (CLIL) as a method for language teaching and learning will be outlined. But at the same time this philosophy will be related to a - yet to be defined but badly needed - European language policy. One of the basic ideas that I am bound to address is that a European language policy should be in any case related to a European educational language policy and vice versa. Both are not only interrelated but intricately intertwined. Second, some socio-psycho-neurolinguistic factors related to language teaching and learning will be addressed while the third part will deal briefly with teacher training and some of the solutions we have come forward with.

## 1. Towards a European Language Policy in Educational Perspective.

### 1.0. Introduction.

In recent months a number of conferences have addressed the issue of a European language policy. One of these, organized by the Council of Europe, takes place in Innsbruck the day after tomorrow, and actually turned out to be a competitor to this organization preventing representatives of the Council of Europe to attend the discussions here in Brussels. In this part the arguments against the "englisg-only" movement are examined and discussed.

### 1.1. A European Language Policy: English only?

At the conferences in Holland and Brussels the Dutch sociologist De Swaan held the key-note address. Twice he advocated - be it in different terms - the idea that Europe, slowly but steadily, is drifting into a situation where English is the only prestigious language, degrading the others to second class. For De Swaan and others Europe is slowly anglicizing and as a result language education should concentrate itself to the teaching of English and forget about investing time and energy in teaching, say, French, German or Italian in countries like, say, Spain, Italy or Switzerland. The argument is warranted by quoting figures indicating the number of published scientific articles in English and the apparent decline in Europe of languages such as French and Russian in favour of English.

At least four kinds of arguments can be brought forward against this line of thought: first, the situational or circumstantial, second, the sociolinguistic and, third, the interactional argument and, fourth, the psycholinguistic argument. Let me expand on them a bit.

(1) The situational or circumstantial argument. Arguments such as stating that English on its way to become an important lingua france in Europe should be compared to the actual linguistic situation in a number of European countries. While it is undoubtedly true that, for instance, the language of science has increasingly become English, it is equally true that there are vast areas in Europe where English is not spoken at all. While this is in itself not an argument against English becoming a lingua france it is an argument against the idea of a general expansion of English in education.

Furthermore, the fact that English is used does not mean that English is understood. A Dutch study revealed that advertisements in English are only understood in about 50% of the cases and when people were asked to write down what they heard in spoken advertisements the results were even worse. Style and love for my hair became invisual terrifics, whatever that means and my fans are my pension plan became my fans are my pitch and plan. This reminds us of the joke at the Thai laundry shop indicating "drop your pants here for good results".

(2) The sociolinguistic argument. Arguments such as De Swaan's pass by important sociolinguistic observations that have been done in the past and present. In the 1950s most people thought that Brussels was on its way to become a monolingual French-speaking city in the same way that Barcelona thought that it would remain Castilian speaking forever. Today, Brussels and Barcelona are officially bilingual cities where respectively Dutch and French and Catalan and Castilian are spoken, taught and learned. An important body of legislation has brought the new situation about and this indicates that language policies can play a vital role in the evolution of a language situation. Consequently, a European language policy might and should heavily influence the evolution in Europe. If it were true that one language should prevail and if it were the case that this is considered undesirable legislation should then interfere. Hardly a stronger argument can be found in favour of a European language policy.

(3) The interactive argument. Arguments such as the ones under discussion ignore an important distinction between, on the one hand, the "political" use of a language, for instance, as a working language within the European Union and, on the other hand, the "communicative" use of a language, for instance, as a vehicle for personal interaction. Let me illustrate this by an interesting anecdote coming from Finland. As we know Finland has been advocating bilingual schools for some time now; at least 5% of all schools organize some form of bilingual education (cf. Marsh 1997). Not so long ago at a meeting with teachers some of them were actually asking why they should learn English or any other language for that matter since up to now Finnish has done quite well. In other words the communicative factor is an important trigger for learning and speaking languages.

There is yet another argument that falls into this category. A moment ago I mentioned that the fact that English is used does not mean that English is understood by the same token it can be said that the fact that English is used does not mean that English is going to replace vital interactive functions in daily life. In other words local languages are not easily exchanged for something else.

(4) The psycholinguistic argument. Not so long ago left-handed pupils were systematically forced to write right-handedly. Not so long ago we were in doubt whether to teach reading in primary schools using a 'synthetic' method or rather from an 'analytic' one, i.e. should we start with letters of with complete phrases? Now we know that left-handers should not be forced to become right-handed writers and that reading results in young children benefit more from a synthetic rather than from an analytic approach. In other words certain methods and approaches work counter-productive to the development of individuals. Imposing

English as the sole foreign language ignoring and bypassing cultural, educational and traditional values related to other languages of the region and/or country works equally counter-productive. It would be bad for learners and teachers alike.

## 1.2. Towards a multilingual language policy.

A European language policy based on English is bound to fail. What is needed is a multilingual language policy such as the one already proposed in 1984 by the Council of Ministers of Education and repeated in the 1995 White Paper. It suggests

> "la connaissance pratique de deux langues en plus de la langue maternelle"

and the main reason do so is

> "le respect de pluralisme linguistique en vue de maintenir la richesse culturelle de l'Europe" (quoted by Lietti 1994:64-5).

The fact that since 1984 no real progress has been made and the fact that ideas such as the English only movement seem still alive is an indication that apparently no key has been found to open the doors of multilingualism and pluralism. To quote Lietti again

> "les programmes issus de ces réflexions [referring to the 1984 recommendation, PVdC] restent d'une grande timitidé et ne prévoient pas la promotion d'un enseignement bilingue" (Lietti 1994:65).

The previous has led me and the TNP group to the unavoidable and logical conclusion: in order to implement a multilingually inspired European language policy we need an educational language policy across Europe advocating some kind of multilingual education. The most interesting approach to date is Content and Language Integrated Learning (CLIL) - formerly called Content-Based Language Teaching - or in french l'Enseignement d'une matière par l'intégration d'une langue étrangère which gives us the wonderful acronym (EMILE), invented by my distinguished friend and colleague Hugo Baetens Beardsmore.

## 2. Towards new forms of language teaching.

## 2.0. Introduction.

The reasons to look for new forms of language teaching have to do with political as well as with individual aspects of citizenship in the European Union. Both aspects are dealt with below.

## 2.1. The evolution of Europe and new forms of language teaching.

It has become a cliché to refer to the greater mobility in a technologically advanced Europe. Still the consequences are not less far-reaching. Mobility simply implies more interaction and more interaction entails a change in personal behaviour including

language behaviour. Consequently, more people will speak more languages. Our educational systems have to cope with that. Hence, the need for a European language policy based on a European education policy.

However, Europe's modern societal and technological evolutions pose heavy demands on its citizens. What is needed are quick solutions to fast problems. One of these solutions have to do with teaching methods. While it is true that it is difficult to judge which teaching method is better than the other in language teaching it has become increasingly clear that, first, 'authentic' methods are to be preferred to 'non-authentic' ones and, second, that methods who stimulate active participation from the learner are to be preferred to methods that do not seek active participation.

## 2.2. CLIL/EMILE as a solution.

Methods based on CLIL/EMILE create a better learning environment than any other method. There are at least four arguments in favour of some form of content learning of languages. They can be called the (social) psychological, didactic, social and linguistic arguments.

(1) The (social) psychological argument. Success in language learning largely depends on the way people can use languages in daily interaction and in various formal and informal learning environments. As a result attitudes towards the language and its speakers change positively. This stimulates in its turn the learning process and warrants better results.

(2) The didactic argument. Facilitating the learning process lies at the heart of many didactic principles. The use of authentic material together with the active participation of the learner facilitates the learning process in such a way that learners feel hardly anything is being learned. Yet, the results are better than with any traditional method.

(3) The social argument. In view of what has been stated in 2.1. it would be criminal not to offer the best methods to the European citizen. The creation of a multilingual Europe is not only a political task it is a social and humane task whereby all available resources should be called in.

(4) The linguistic argument. Although it has always been clear that languages are learned via languages some linguists have blurred the common sense idea of language learning and tecahing by maintaining that language is learned through rules. In so doing actual cognitive processes were confused with actual learning much the same as to confuse the motor of a vehicle with the actual movement. In other words modern linguistic theory on learning has adopted the psycho-sociolinguistic attitude and consequently it advocates CLIL or CLIL like methods.

## 3. Teacher training as a means for change.

## 3.0. Introduction.

If the above philosophy is correct it follows that a new European teacher has to be created. This teacher is able to teach his special subjects in at least three languages if necessary: his first language and two others in which he has studied himself the subjects he is teaching. While this may sound like an impossible mission today it is

clearly the path to be pursued. In this section two measures suggested by the TNP group are summarized.

### 3.1. A Foundation module in multilingual education.

In a number of European countries multilingual education has already begun. The social demand is great and political interest is increasing as well. The foundation module is created to make the future teacher - or any teacher who wishes to do so - aware of what goes on outside his/her own country. For this reason the universities of Jyväskylä, Finland, Utrecht, The Netherlands, Wuppertal, Germany, Nottingham, England, Dublin, Ireland, Brussels, Belgium, Strasbourg, France, Barcelona, Spain and Venice, Italy will sign a mutual agreement stipulating that they are willing to receive for a short period of time - not more than three weeks -(future) teachers from the countries mentioned above. The module is considered part of the curriculum and the result may be a small certificate as proof of the visit and the activities undertaken. For some teachers this short visit may just be enough to take up the more ambitious advanced level programme.

### 3.2. An Advanced Level Programme in Multilingual Education.

Elsewhere in this report the Advanced Level Programme in Multilingual Education is presented by Dieter Wolff. Here, the basic ideas are commented upon. First, the terminological aspects. It is felt that the name 'advanced level programme' is better than the traditional term 'masters'. On a European level 'masters programmes' cover many different kinds of curricula. In particular this is the case with respect to teacher training. In some countries teacher training education takes place at university level while in other countries teacher training for primary schools takes place outside universities. For this reason it seems safe to avoid legal and procedural matters. An advanced level programme in the area of multilingual education should in principle be accessible to all future teachers and trainers and, by extension, to all interested teachers and teacher trainers, who want to specialize in multilingual education and new methodologies related to it.

As far as content is concerned the Advanced Level Programme can easily be compared with a traditional master programme. Moreover, candidates in the advanced level programme are being prepared for an eventual doctoral programme. It is also felt that this programme should be considered an interesting contribution to European higher education programmes.

### 4. Conclusion.

The contributions of the TNP group no. 6 on 'Language teacher training and bilingual education' are multiple. First, it is recommended that a European language policy should be accompanied by a European educational policy. Second, it is suggested that the implementation of such a policy should run parallel with new didactic principles, such as CLIL and/or EMILE. Third, proposals for teacher training in a multilingual perspectives are suggested. The Foundation Module in Multilingual Education and an Advanced Level Programme in Multilingual Education are brought forward. These programmes will be coordinated by the universities of Jyväskylä, Finland, Utrecht, The Netherlands, Wuppertal, Germany, Nottingham, England, Dublin, Ireland, Brussels, Belgium, Strasbourg, France, Barcelona, Spain and Venice, Italy.

# NEW RULES FOR THE LANGUAGE & CONTENT GAME. FROM CBLT/CALL TO CLIL/TILL

## Ronald Soetaert & Bart Bonamie

*"I advance on the question slowly, just as Larry does. I am an intelligent officer. Nothing exists without a context."*
(Le Carré *Our Game*, p. 113)

## The Language Game

Tower of Babel
In Genesis the people begin to build a tower on the plains of Shinar in order to "make a name for ourselves, so that we may not be scattered about the whole earth" (11:4). For their pride, they are punished with exactly the fate that they feared: "It was named Babel therefore, because there Yahweh confused the language of the whole earth. It was from there that Yahweh scattered them over the whole face of the earth" (11:9). As Umberto Eco observes: ever since, Babel has been the symbol of humanity's arrogance. God inflicted linguistic diversity on humanity as a curse. Fascinating how this story can be read as a mythical explanation why the various peoples of this world cannot understand one another. Is linguistic diversity a punishment? Anyway, it annoys lots of cultures, the attempt to design or recover a language, which is identical for all people 'is part of all cultures' (Eco: 1995). Today we are part of that history. Of course we are only a footnote in that history, a note in the margin of the search for the ideal language, or more fit to this occasion: *the quest for the ideal methodology* for language teaching.

Diversity versus Unification
In the construction of Europe the linguistic and cultural problem is high on the agenda. First we had coal and steel, and now the citizens have to warm to the idea of a European community through education, culture and language.

Whatever we say about this unification we should be deeply aware that there aren't many successful examples of unification without a common language. Can the different languages be described as the curse of God inflicted on the European civilisation?

In the rhetoric of European politicians, the diversity of languages is described as a richness. Even if we are in favour of integration, we have to preserve the linguistic and cultural diversity as it represents a storehouse of wealth, which can contribute to the lives of all European citizens. So, the curse is reversed as a blessing. A mixed blessing because it implies: "European language education policy recommends knowledge of three community languages." Becoming a true European implies knowing languages - so our problem has been reversed as a strength – even a characteristic of our identity.

How can we live together in this continent "the origin of which is multilingual"? Umberto Eco writes: "European culture of the future will not

benefit so much from a total polyglottism (someone who would speak all languages would resemble Borges' poor 'Funes el Memorioso', who cannot forget anything and has a headful of uncountable, torturing images), as from a community of people who are able to understand/share the spirit, taste and atmosphere of another language".

Of course, we all agree on the necessity of a good foreign language education for the younger generation; we also agree that all European citizens should have an active working knowledge of languages other than their mother tongue. Again, nice thoughts – but at all the conferences we attend, after a short ritual the conversation slowly turns into English. The other languages still function but only in a particular functional context.

Language for specific purposes
In fact all language learning is inspired by a specific need. In this multicultural, global world these needs are changing and will influence our language teaching. In deciding *what* sort of language to select and *how* we are going to teach the language, we should ask *why* someone is learning a language. At the heart of – for example – ESP (English for Specific Purposes) is the belief that it is more effective to plan an English course on the basis of the needs of a learner than to teach everyone with the same methodology/content. In fact this is true for all language learning.

In 1995, we were invited to two European Sigma conferences: one in Stockholm about 'Language Studies in Europe' and one in Osnabrück about 'Teacher Training'. In the Stockholm conference we were confronted with a question: 'What is the future of less commonly taught/spoken languages?' The answer to this question is full of paradox: to defend their own language, speakers of minority or speakers of less spoken/taught languages should defend their language and culture against the majority languages or the lingua franca and at the same time they should become more or less bilingual in a major language. We should refrain from romanticising this process but try to describe it from a pragmatic perspective. Some languages can have specific pragmatic functions for some people. For example English is becoming more and more important as a lingua franca - for international communication – and for many specific purposes (academic, business, fun etc.). Taking this evolution into account we can more or less predict that for many speakers it will be essential to become more or less bilingual in English – and for a lot of pragmatic reasons English is at this moment a good choice.

The importance of English is also growing because of the Internet. As Warschauer states (1999): "As little as two years ago, there was widespread concern that the Internet was fostering linguistic imperialism. Some 82% of Internet servers were in English, leading one Russian critic to proclaim that the Internet was becoming "the ultimate act of intellectual colonialism". Well, we remember – more or less at the same time a mail written by a Russian student asking for help – helping him to learn English because (we are quoting from a lost source): "the Net speaks English".

Warschauer (1999) wonders: "Is the Internet an English-only phenomenon or a medium of multilingual expression?" Well, the story is changing; according to recent estimates 'other languages' are catching up and even passing over… So Warschauer (1999) wonders again: "Does this mean the era of English-language privilege on the Net is over to be replaced a Babylon of languages?" We think his answer on that question is interesting for the recent evolution of all languages:

"I would contend then that we are facing a situation of diglossia on the Internet. On the one hand, English is the main (but not exclusive) lingua franca used for global communication (with other major languages, such as Spanish, used for international communication in particular regions). Indeed the daily international communication made feasible by the Internet strengthens the need for a world lingua franca, and it appears that English will continue to play that role, at least for the foreseeable future. On the other hand though the multiplicity of channels made feasible by the Internet also allows for the full range of expression in other languages."

Indeed, globalisation and new technologies create new opportunities for all languages (also regional minority languages that can escape from the dominance of national languages or who can benefit from new media for their survival and use).

## The Methodology Game

For many years the search for the ideal methodology was inspired by a debate between traditional language teaching and the communicative approach. In traditional language teaching 'grammar' and 'literature' played a central role.

In the communicative approach the importance of 'functions' and 'notions' were stressed. In fact 'notions' referred to content but very often content was more or less neglected because of the importance of process (doing things, stressing skills… cost time so inevitably for some teachers 'content' was neglected).

Probably we should be aware that traditional courses underestimate the importance of skills and processes because they are overstressing products and knowledge. On the other hand communicative courses seem to overestimate the importance of processes (learner-centred) and so underestimating the fact that communication is about content. This 'progressive' attitude towards content and knowledge confronted us with a crisis in cultural literacy - the disappearance of a shared knowledge (Soetaert & Bonamie 1999).

Today we realise that there is more at stake than this ongoing discussion between two methodologies. More and more we become aware of strengths and weaknesses of all methodologies. No single methodology is an ideal methodology for all learners. There is no methodology without some weaknesses and strengths.

Recently we are confronted with different trends not one unifying theory. Dieter Wolff (1994) selected five new approaches that tried to overcome the weaknesses of the past methodologies: task-oriented learning, content-oriented learning, cognitive learning, process-oriented learning and learner autonomy. Wolff suggests that the main paradigm shift in the post-communicative turn can be described as a shift from "instructivism" to "constructivism" (1994). Indeed, constructivism seems a major trend in teaching. In this article we want to focus on the importance of 'content-oriented learning' combined with a constructivist perspective.

The term 'content-based language learning' covers a growing number of different approaches which view language as a medium for learning content, and content as a resource for learning language.

## The Content game

In the curriculum 'Language Arts' are very often considered as an independent subject separated from disciplines. This separation suggests that teaching the skills, the grammar, the vocabulary and the genres should proceed subject matter. When we rephrase the question from the perspective of content, we are confronted with the fact that language is embedded in learning all subjects – across the curriculum. We live in "a domain of subject-dependent knowledge and subject-dependent reality . . . We literally create the world in which we live by living it" (Maturana, 1978, pp. 60-1).

Learning subject matter can be described as learning a kind of discourse… - a kind of rationality. We are learning through language and we are learning to use a particular discourse. Therefore we would like to plead that all teachers should be aware of the essential role of language in teaching and learning. Or to put it differently: CBLT/CLILL is an interesting perspective for all teachers of all subjects. Again based on the principle that learning 'something' can be described as learning a particular literacy, and this implies becoming socialised into a particular discourse.

Although, this is a simple statement, it creates complex problems: How do students become socialised in a discourse community? What are the discourse acquisition processes of learners? How do we learn subject matter discourse? We need research, theory and examples of good practice focusing on the use and acquisition of language in subject matter courses. We need to reorganise our teaching in situated, activity-based forms and strategies of communication. Anyway, we need to move away from the concept of language as a disembodied subject matter on its own.

Of course we shouldn't disembody our new suggestions from the past. For example we should bear in mind an important lesson from the communicative approach: we have to avoid decontextualised language teaching. Indeed: "Communication is not learned through language, but rather the reverse; language is learned through communicating" (Devitt 1989: 7). We can also learn something from a more traditional view on teaching: learning is not content-free. But we should reconsider what we mean when we talk about 'content', and not going back – as in back-to-basics – to outdated ideas of content, teaching and learning.

So, we need more research on the learning processes in subject matter courses – both from the perspective of native speakers as from the perspective of non-native speakers. This question can also be rephrased: in fact we are asking how people are socialised in situations of linguistic, cultural, disciplinary, contextual diversity. The discourses we are dealing with emerge within workplaces (or in academic settings) and are best learned in such discourse communities.

Teachers should be aware of how specific contexts generate modes of discourse, how teachers and students construct together the ways of using language that constitute their approach to a subject matter. From the perspective of this conference, we can argue that we need more information about functional bilinguals in the classroom. We should also end to the compartmentalisation between foreign language acquisition specialists and other specialists in language learning and teaching (see also Valdes 1992). We need a theory integrating ideas from language acquisition (mother tongue and foreign languages) and content acquisition.

Again we can learn something from the communicative turn: the importance of 'language input' (Krashen 1985). Combining 'skills' and 'content' implies combining two kind of competencies: communication skills and "cognitive academic language proficiency" (CALP) (see Cummins 1983, Snow et al 1989).

Knowing a language is being able to use a language. This functional approach should be combined with the fact that communication functionally implies communicating about 'things', about 'content'. Very often in schools this implies communication within a particular subject domain.

But we also want to criticise this idea. First of all because we don't want to overstress the importance of disciplines. What we are saying should be true for all 'things' or 'subjects' we can communicate about. The place of each topic we are communicating about is in the context of life; its relevance is in the engagement of the participants.

## The Ranking Game

In our research group we became aware - influenced by our cultural studies - that accepted practices of gathering knowledge within the Academy and in education in general are problematised. The borders of these disciplines are blurring. In fact our 'accepted practices' are always problematised, there is on-going discussion of what counts and what doesn't…An ongoing hierarchy of knowledge hierarchies. The Ranking Game, as Janet Wolff (1999) characterised this post-modern perspective. This ranking game can best be illustrated by the traditional 'content' of language teaching: literature or more specifically the literary canon.

In traditional teaching very often 'literature' was the main content: the ultimate aim of learning a language was reading its literature, embedded in its culture (Landeskunde, cultural studies, civilisation...).

In our work we started problematising the literary canon - the traditional core of language teaching. But we were also confronted with the problem of "defining the canon of academic knowledge". And more problematic: the new kind of content that appears in a digital environment (Soetaert, Top & van Belle 1995; Soetaert & Van Kranenburg 1998; Soetaert & Mottart 1999).

## The Literacy game

For Hirsch (1987) and others culture should be seen as a database of facts which should be memorised because this matrix represents the best of the West (or the best of the Nations). And we need to be literate in our shared cultural heritage in order to participate in our democracy.

Such a traditionalist approach tries to protect young people against the dangers of media addiction by cultivating a taste for high culture mainly found in book literacy (Postman 1985, 1992).

This protectionist approach tries to put traditional content back on the agenda: the Literary Canon, the Founding Fathers, and the National Heritage. In fact back-to-basics wants to restore traditional boundaries which were problematised by modern and post-modern thinking: borders between nations, cultures, genres, media… between 'high' and 'low' culture, between 'real' and 'virtual'. Their criticism was focused on post-modern problematisation of traditional content and traditional hierarchies

Indeed, in our post-modern society 'content' was further problematised: whose culture should we teach? Even a traditional 'content' as literature was problematised: there was a shift towards literature with a small l (focus on

popular culture). This was combined with a trend toward a curriculum in textual studies, media studies and cultural studies.

The problem is the status of culture on the curriculum or the development of a 'culture curriculum'; teachers were asked to shift their concerns "from a curriculum oriented to a literary canon toward a curriculum in textual studies" (Scholes 1985: ix-x), and even broader 'cultural studies' or 'media studies' (Schmidt 1993). In our information society 'knowledge' - content - was further problematised: how is knowledge represented in an electronic network?

Education needs to confront new kinds of literacy so students can deal with the challenges of the cultural and technological revolution that we are currently involved in. The new media are altering many aspects of our society.

All these changes were deeply influenced by several significant trends: social, political, economic, cultural and technological developments, all of which are characterised by the prefix -post.

## Post-game
Lyotard (1984) describes *postmodernism* as the loss of belief in 'grand narratives' and the consequent disintegration of communication into 'language games'. In a *post-industrial society*, the prefix '-post' refers to the fact that manpower has been replaced by information and automatisation, from 'manufacturing' to 'mentofacturing'. What kind of language skills do we need in a new society? A very complex question but anyway, a new elite job class of 'symbolic-analytic workers' is emerging.

The world system of nation states is being transformed by the growing globalisation with some important consequences, not only in terms of economy and commerce but also in the realms of culture and education. As a consequence of globalisation, modern national education can no longer be limited to narrow cultural chauvinism. Of course, this will influence language teaching. The new media are likewise transforming cultures and politics. Time and space are compressed; new global networks create new identities (see later): 'network' has become the dominant metaphor of our times. Our entire modern culture rests on print/books. How will post-print, digital technologies change this long-standing tradition? Indeed, changes in technology triggers off changes in literacy.

## The computer game
Since two or three hundred years books (printing) were the dominant medium in our Western culture. Today we are confronted with a few major shifts: from paper page to digital screen, from 'writing' to the visual-audio mode, from older organisation of texts to digital design, databases etc (all toward a multi-semiotic landscape). More and more traditional content is transformed in digitised content (offline and online).

We are expected to be literate in a traditional sense (reading, writing, listening, speaking) but also "across a various and complex network of different kinds of writing and various media of communication" (Scholes 1998: 130). Language teachers have to regain their prestige not only by referring to the past but by suggesting an agenda for the future. Apart from the basis skills we also need to pay attention to "rhetorical techniques of interpretation that can be applied to a variety of cultural texts" (Bérubé 1998: 25). Special attention should be paid to the question: how do computers change our culture and education? Indeed as Kathleen Welch (1999) argues: "When we in the humanities ignore or, worse, jeer at the acoustic/spoken/visual/written basis of their new literacy, their

special knowledge/ability (…) we fail them as their teachers and exemplars of language" (1999: 4).

Therefore we should confront the concepts of 'culture/education' and 'media'. What is the relation of 'tools' and education? In fact the question should be broadened towards a more fundamental question: what is the relation between media and culture? Can they be separated?

Our world, our culture, our literacy is also constructed by the tools we use. Bruner about Vygotsky: "...the mind grows neither naturally nor unassisted (...). Intelligence, for him, is readiness to use culturally transmitted knowledge and procedures as prostheses of mind. But much depends upon the availability and the distribution of those prosthetic devices within a culture."

Kinds of media create kinds of literacy - and kinds of intelligences. Egon (1998) - influenced by Vygotsky - tries to show how a development of a particular intellectual took results in kinds of understanding: an oral understanding differs from a written culture. Printing, Television/film, Digitalisation all create a different kind of literacy. So, digitalisation creates a new culture, new forms of content, new writing & reading spaces, new educational contact-zones. What role does ICT play in language education?

## CBLT/CLIL and CALL/TILL

Warschauer (1996) distinguishes three phases in the development of CALL over the last 30 years: behaviouristic CALL, communicative CALL, and integrative CALL. Behaviouristic CALL (1960s) entailed repetitive language drills. The computer is serving as a tutor, a vehicle for delivering instructional materials to the student. Communicative CALL (1970s, 1980s) was pleading against the former phase, arguing that we need more authentic communication in language teaching, more intrinsic motivation and more interaction. Instead of using the computer as a kind of tutor, in the communicative approach the computer is used as a stimulus. In the third model - integrative CALL –the computer is introduced as a tool. This implies the learner is empowered to use language in a new kind of environment ('tools' are for example: word processors, spelling and grammar checkers, desk-top publishing programs, concordances and – last but not least – the Internet). The computer-as-a-tool agrees with the fact that a number of educators are seeking today "ways to teach in a more integrative manner, for example using task- or project-based approaches" (Warschauer 1996). And we could add to these trends: more content-based approaches.

In fact we are all looking for a model with less compartmentalisations and with more integration of the various aspects of the learning process. Some are pleading that the computer technology (hypermedia) is providing us the opportunities to construct more authentic learning environments in which skills can be easily integrated (even more than the four traditional skills – visual and audio aspects can be added), in which learners have greater control over their own learning. From the perspective of this conference we certainly agree with Warschauer: "a major advantage of hypermedia is that it facilitates a principle focus on the content, without sacrificing a secondary focus on language form or learning strategies" (1996?).

The computer has or will become so widespread in our culture that all teachers and language teachers in particular are obliged to reconsider their major questions. The first question: 'How does CALL influence our foreign language teaching?' is gradually replaced by 'How do we introduce CALL-aspects in our language teaching?' Nobody can escape the computer as nobody could

escape print culture. Inevitably, also in content based teaching, teachers are wondering how they can use the computer: How can software, help us in creating bilingual teaching, how to enhance native language instruction using technology, and what content areas can be covered with computers in two languages?

And has anybody out there used the Internet for this purpose?

But the purposes - the reasons why we use ICT – are changing fundamentally. Teachers will be more or less obliged to use the Internet. And the Internet will transform our teaching towards a new educational paradigm. Some people are worried about this inevitable evolution - the fact that teachers are more or less obliged to use the Internet. They are deeply concerned with a basic question: "How do I fit the Internet into my pedagogical goals for my students?" But at the same time the media - the prosthetic devices - are transforming culture and education. Probably we will be obliged to rephrase our questions. From: 'How do I fit the Internet into my teaching?' to: 'How do I change my teaching to fit the Internet?'

Probably we will be obliged to rephrase our definition of immersion, CBLT and CLIL. Again, the digital environment itself changes the space in which we teach: "The best way to learn a language is the interaction with native speakers, the real interaction, using the real language in real communicative situations. Unfortunately, in the school context the opportunities to establish a true interaction are not abundant."

CALL (computer assisted language learning), TELL (technology enhanced language learning), TILL (technology integrated language learning) all refer the role of ICT in language learning and teaching. Realising that technology is more than an "add-on" TILL (technology *integrated* learning) is a better acronym than CALL (computer *assisted* language learning) (Soetaert & Bonamie 1999).

The same evolution can be spotted in content based language teaching – the rephrasing of the acronym from 'content based language teaching' (CBLT) to 'content and language integrated learning' (CLIL). The reconfiguring illustrates the same need: to integrate what has been compartmentalised. And this compartmentalisation very often was due to the use of a certain technology. Today we hope new media can integrate different skills, integrate language and content – and bring language teaching closer to the learner's aspirations because we do not learn a language for its own sake but for particular reasons: content based and integrated.

## Bibliography

Crandall, J. (1987) *ESL through content-area instruction: Mathematics, science, and social studies*. NY: Prentice Hall.

Cummins J. (1984) 'Wanted: A theoretical framework for relating language proficiency to academic achievement among bilingual students'. In: Rivera C. (Ed.), *Language proficiency and academic achievement* (pp. 79-90). Clevedon, England: Multilingual Matters.

Devitt Sean M. (1989) 'Classroom Discourse: its nature and its potential for language learning'. *CLCS Occasional Paper N° 21*, Spring 1989.

Egan, Kieran (1997) *The Educated Mind: How Cognitive Tools Shape Our Understanding*. Chicago: University of Chicago Press.

Eco, U. (1995) *The Search for the Perfect Language (The Making of Europe)*. Blackwell.

Krashen, S. (1985) *The Input Hypothesis: Issues and implications*. New York: Longman.

Le Carré, John (1995), *Our Game*. London: Hodder & Soughton.

Scholes, R. (1998) *The Rise and Fall of English'*. New Haven and London: Yale University Press.

Snow, M. A., Met, M., & Genesee, F. (1989) 'A conceptual framework for the integration of language and content in second/foreign language instruction'. *TESOL Quarterly*, 23, p. 201-218.

Soetaert, R., Luc Top & Guy van Belle (1995) 'Creating a New Borderland on the Screen'. *Educational Media International*. The Official Quarterly Journal of the International Council for Educational Media. Volume 32, Number 2, June 1995, p. 62-68.

Soetaert R. & Rob Van Kranenburg (1998) 'Cultural Studies in Language Teaching. Culture and language in a network'. In: Calvi Licea & Walter Geerts (ed.) (1998), CALL, Culture and the Language Curruculum. Springer-Verlag. ISBN 3-540-76192-6.

Soetaert & Bonamie (1999) 'From CALL to TELL till TILL. Complaining, blaming, curing and problematising language teaching and teacher training'. *Jitte*, 1999. In print.

Soetaert, Ronald & Andre Mottart (1999) 'Communicating Complexity. Content, interaction & media in teaching literature'. In: Kooy Mary, Tanja Janssen & Ken Watson (Eds) (1999), *Fiction, Literature and Media*. Amsterdam: Amsterdam University Press. ISBN 90-5356-392.

Warschauer, M. (1996) 'Computer-assisted language learning: An introduction'. In S. Fotos (Ed.) *Multimedia language teaching* (pp. 3-20). Tokyo, Japan: Logos International.

Warschauer, M. (1999) 'Millennialism and Media: Language, Literacy, and Technology in the 21st Century'. Keynote address delivered at the World Congress of Applied Linguistics (AILA). Tokyo, August 1999.

Valdes, G. (1992) 'Bilingual minorities and language issues in writing'. *Written Communication*, 9, 85-136.

Wolff, Dieter (1994) 'New Approaches to language teaching. An overview'. *CLCS Occasional Paper No.3.* Summer 1994.

Wolff, Janet (1999) 'Cultural Studies and the Sociology of Culture'
*In[ ]visible culture. An electronic journal for visual studies*, Issue 1, Winter 1998.
(http://www.rochester.edu/in_visible_culture/issue1/wolff/wolff.html).

# TOWARDS A EUROPEAN MASTER'S DEGREE
# IN BILINGUAL EDUCATION (EMBE)

Dieter Wolff, Bergische Universität, Gesamthochschule Wuppertal, Germany.

## Abstract

Bilingual Education or CLIL (Content and Language Integrated Learning) as an innovative pedagogical concept can only be put into practice on a larger scale if there is a sufficient number of teachers who can teach content subjects through a foreign language, i.e. who are not only qualified subject and foreign language teachers but who are also familiar with the specific CLIL methodology. Teacher training programmes taking into account all these qualifications are still very rare in the European Union.

In my paper I will sketch out such a teacher training programme, a programme which has not yet been implemented anywhere, however. It was designed jointly by the members of the TNP subgroup "Language Teacher Training and Bilingual Education" (the organisers of this conference) and a number of CLIL experts.

I will first discuss very shortly the background of our initiative looking at already existing programmes at different universities and teacher training institutions in the EU. In the second part of my paper I will describe the aims of our programme, the EMBE (European Master in Bilingual Education). In the third part I will discuss a number of problems which we encountered while discussing the possible structure of the programme. The fourth part is devoted to the presentation of the EMBE itself; I will first speak about admission requirements, then about structural points of the programme and then, of course, about the content components of the programme (modules). Evaluation and the European aspect are among the other points dealt with in this part of my paper. In my conclusion I will try to sum up positive and negative aspects of establishing such a programme.

# Multilingual education:
# problems and solutions in Catalonia

*Carmen Pérez Vidal*
Unversitat Pompeu Fabra, Barcelona

## Introduction

The topic presented here, multilingualism in Catalonia, is a vast one. This paper first looks at language and educational policies concerning first languages and foreign languages within a historical perspective, given that there have been crucial changes in the last half century. Next it aims at assessing the situation the way it is today, analysing students' achievement, the nature of the educational programmes, and the state of teacher education programmes. Finally, it intends to evaluate the extent to which these policies have brought about changes in the actual social use of the languages in question. It endeavours to draw a broad picture, present the background to the present situation, present the problems that have arisen and their solutions, and finally the results. For the sake of comprehensiveness, there will be some inevitable simplifications and possibly some areas will be treated in less depth than they may deserve.

## Background

Three specific factors have affected the situation of languages in Catalonia, having an impact on language policies and, by extension, in the situation of languages in education.

- Firstly, multilingualism was forbidden during the first decades of the dictatorship imposed by General Franco's regime, after the Civil war (1936-39) which put an end to the second Republic. Spanish was declared the only official language. Yet, looking at the linguistic situation of Spain today, it will be seen that not only Catalan, but several other languages: Basque, Galician, Andalouisan and Aranès are in a state of relative "good health'' unusual in Europe for lesser used languages.

- Secondly, population growth in Catalonia (and also in the Basque country) has mainly been due to the influx of workers from other parts of Spain in the 1920's and later during the dictatorship between the 1940's and 70's. Most came from Andalousia, Extremadura, Murcia with Spanish as their own language. At present 41% of the population are first or second generation immigrants.

- Thirdly, French was the foreign language taught in schools and universities during the dictatorship, and generally following rather traditional methods.

The effects of these three factors in Catalonia were as follows: Catalan, which had just been standardised at the end of the Republic, was prohibited in the public administration, education and the mass media, and limited to domestic use. However, the population was not subdued by the monolingual laws imposed by the regime, and learned to survive between two languages. Since the Catalan speaking areas welcomed Spanish speaking immigrants at a time when Spanish was the only language with official recognition, this meant that there appeared social mechanisms which favoured the use of Spanish as the only legitimate language for exchanges between the migrant population and the local Catalan speakers (Nussbaum, 1990; Boix, 1993). Consequently, there was a sharp decline of the Catalan-speaking population in percentages: 75% in 1940 to 68% in 1968 and to 60% in 1975 (Institut Català de Sociolingüística).

With regard to foreign languages, little by little, the increasing dominance of English worldwide gradually penetrated into Spain. This brought about an increasing social demand for English to be made a school subject. In Catalonia, as in most bilingual communities, there was little room in the curriculum for yet another language. This meant that French was progressively being replaced by English, at a time when universities were only beginning to set up English Departments, and teachers with a good command of the language were scarce.

## Turning point

With the establishment of democracy, a constitution was passed (1978) and the former Regions of Spain were granted political rights and administrative power through the Statutes of Autonomy (BOE, 1981,101). As a result, in communities with different languages from Spanish, these languages were granted official status. Through the Laws of Linguistic Normalization (1983) local control over the linguistic policies affecting the educational system and the media was regained. These two issues were a priority at the negotiation table, when the political pacts which led to our `political transition without breaks' were sealed.

## Problems
## First languages

In 1978, the situation was such that, while speakers of Catalan from previous generations knew 2 languages, the migrant population knew only Spanish. So only Catalan speakers were bilingual. During the years of the political transition in Catalonia people did not want two separate communities, but rather a country where citizens would be respected and would become fully integrated and able to take part in all areas of public life. That meant giving them the means to also become bilingual in both Spanish and Catalan. Linguistic policies were therefore designed to:

a) redress the social imbalance which was causing social discrimination against those who did not speak Catalan
b) re-establish Catalan in those domains where it had not been permitted for several decades

The Law of Linguistic Normalization (1983) established a model which sought to re-establish Catalan by promoting its use, while also maintaining competence in Spanish. One crucial decision made was that children were not to be separated in 2 different types of schools. They were kept together, following the programme most appropriate to the majority of the student population in the particular school. This was relatively unproblematic, since communities tended to be polarized in either mostly Spanish-speaking, or mostly Catalan-speaking areas.

At schools where most pupils spoke Spanish, Catalan immersion programmes were set up.  In order to re-establish Catalan in those domains where it had been suppressed it was given a place in the schools curriculum, and little by little it was made the vehicle of instruction in schools with Catalan-speaking children The task of implementing these changes in the school system was gigantic. Several problems can be mentioned. Firstly, few teachers spoke Catalan. In 1980: 64% of the teachers in nursery and 72% in primary education were speakers of Spanish with virtually no Catalan, and they were supposed to be teaching in the immersion programmes. Unfortunately the language training programmes they went through were fairly traditional, focusing mainly on the formal properties of the language, with emphasis on the written competence, the oral competence being somewhat neglected. Another problem was that Catalan programmes were not implemented in Secondary education  In 1991 only 34% of the teachers in the public secondary schools, and 26% in the private sector declared to use Catalan as their medium of instruction during their lessons. Finally, integration of the relatively important number of non EEC immigrant children arriving in Catalonia proved complicated, and still remains a problem in certain communities.


## Foreign languages

The new political situation after joining the European Community increased social awareness of the gap between our standards in foreign language competence, and those averaged in Northern Europe. Furthermore, the rapid switch from French to English in the majority of primary and secondary schools, in a very short space of time, was not helping matters either. Teacher competence in English was low, particularly at Primary level, which until recently continued until the age of 14.

Until very recently, teachers of English at primary level, had completed a diploma course with no specialisation in English, after which they generally had not even reached a First Certificate level. At present, after a reform in the curricula, they can specialise in EFL teaching, receiving 240 hours of English language classes, plus a 120 course of language acquisition and methodology. At secondary level, whereas teachers have studied for a degree in English Philology, and their standards in English would be higher, teacher education has consisted of simply a 60-hour pre-service course. Fortunately this is changing, and the teacher training course has been turned into a proper master-type course comprising 600 hours of instruction and practice. Finally, although many teachers would use coursebooks with a communicative approach, most classroom teaching cannot be described as communicative. For a long time, overcrowded classrooms and lack of confidence in their oral skills in English among teachers often result in

conventional lessons, with the traditional emphasis on writing skills. Obviously, while the situation has improved and is improving, there is still a long way to go.


## Solutions
## First languages

Before going on to describing the current situation for the L1 programmes in Catalonia, a brief description of how the situation has developed since 1978 is necessary. As can be seen in Table 1, development in policies affecting the school-system can be roughly divided into three periods: beginning with a timid presence of Catalan in the curriculum, either as simply a subject, often optional, or as the medium of instruction whenever teachers voluntarily used it, through a time when immersion programmes are being set up, until we reach the situation as it is today, where most teaching is carried out in Catalan, and Spanish is now only a subject in the curriculum - either a language subject or a literature Subject This situation is considered by a few as rather unbalanced in detriment of language proficiency in Spanish and general knowledge of Spanish culture and traditions.

| | *Table 1. Bilingual education* (Vila, 1995) |
|---|---|
| 1980 | Catalan allowed as a subject or as the meduim of instruction in the curriculum |
| 1983 | Initial immersion and normalisation programmes in kindergarten and Primary education |
| 1987 | Spread of programmes to previous only Spanish, or Catalan/Spanish schools |
| 1990 | Educational Reform |


During this period, four types of schools were set up, in order to institutionalise the new programmes, (Table, 2). These, along with the developments in the percentage of pupils attending each type of school, are displayed in Table 2.

| *Types of education* (Vila, 95) | 1986-97 | 1989-90 |
|---|---|---|
| Monolingual Catalan | 697 (24%) | 976 (36%) |
| Progressive bilingual | 1.124 (39%) | 1.078(40%) |
| Static bilingual | 1.014 (35%) | 645 (24%) |
| Monolingual Spanish | 60 (2%) | 31 (1%) |


In the monolingual Catalan schools, Catalan was the medium of instruction and Spanish a language subject. In the monolingual Spanish schools the situation was the reverse. In the progressive bilingual schools, where the immersion programmes were implemented, there was a slow progressive introduction of Catalan as the only medium of instruction, and Spanish was taught as a language subject. This started at the age of 3. In the static bilingual, the school curriculum was split between Spanish and Catalan as the medium of instruction. As the table shows, the two types of bilingual schools were the most successful

initially, but in a short space of time, monolingual Catalan schools have overtaken the static bilingual.

The immersion programmes were organised according to the following features:
- Aims: total competence in both official languages.
- Objectives: oral comprehension and production are aimed at, during the initial years of the programme; oral production in the TL is not required.
- Methodological approach: instrumental 'doing' things with language, use it as the medium of instruction for content subjects.
- Teachers' profiles: bilingual.
- Children's social background: low-middle class, working class
- Children's linguistic background: no competence in Catalan.
- Participation: voluntary between 1983-1992. Tendency has been for families to ask for the Catalan programme

In sum, they sought to motivate students through highly contextualised pleasurable activities as the best way to lead them to understand that Catalan was the language used in the school.

As mentioned above, one of the main problems for this programme was the lack of Catalan speaking teachers. Training programmes were, therefore, set up so that Spanish speaking teachers could gain the required competence in Catalan. As a result, in 1990 as many as 75% of the primary school teachers had already completed Catalan courses, in addition, they also followed extra courses which were organised to compensate for deficient oral proficiency. Similarly, measures were taken to encourage the use of Catalan in Secondary education.


Foreign languages

An Educational Reform was proposed and accepted (LOGSE 1990), undertaken against a background of dissatisfaction with the results obtained so far in mainstream compulsory education in Spain in general, and with foreign language competence in particular. Since then, the Reform has been applied right across Spain, with minor local characteristics in autonomous communities. It has as its main two assets:
- the extension of compulsory education by two years (previously ending at the age of 14 and from now on at the age of 16)
- the abolishment of the two branches of compulsory education, academic and technical, which were merged into one covering the entire compulsory education period.

The new regulations contained in the Reform undoubtedly offered an immense potential for improvement as far as foreign languages are concerned, either structurally or more qualitatively. The Reform comprises:

a) earlier introduction of foreign languages in the curriculum (before at 11, now at 8)
b) students optionality to learn a second foreign language (in primary education if there are enough teachers and parents who ask for it; in secondary

education it must be offered in the curriculum and students can choose to take it optionally)

c) optional 35 hour modules during secondary education, which students obligatorily take during the second half of that secondary period

d) a languages-across-the-curriculum approach, so that not only the two foreign languages taught, but also the first languages are being treated accordingly, based on the hypothesis that content and procedures can be transferred from one language into another

e) increase in the number of hours in the new system (from 750 to 800). However, the actual amount of exposure is difficult to measure, since it cannot be guaranteed that all teachers use the TL as the medium of instruction, due to different factors (lack of confidence, use of strategies based on old methods, discipline problems)

f) recommendation for an interdisciplinary approach to the teaching of foreign languages: either the FL being used as the medium of instruction for other subject matters, or vice-versa the introduction of content matter within the language curriculum

g) objectives in the curriculum which are not only communicative but also procedural, including the development of several types of strategies to help the learner learn, and incorporating metalinguistic knowledge

## Results

The effects of some of the measures have only started to be analysed. On the whole, it is still too early to measure the results obtained by students undergoing the Educational reform. Research findings so far, partly undertaken at the initiative of the educational authorities and partly by independent academics, are still scanty, and often contradictory. No doubt they will be controversial too.

## First languages

For first language competence, it seems that Catalan immersion students achieve similar levels of writing competence as Catalan-speaking students, but lower levels of oral competence (Serra, 97; Arnau and Artigal, 97). For Spanish there are some initial differences in linguistic competence between children having Spanish as the medium of instruction or as a language subject, but this seems to disappear as soon as the children have more hours taught through the medium of Spanish. (Ribes, 1993). This is, of course, a particularly controversial domain. For example, Hernández (1999) has shown that the Spanish used by university students is far from meeting desirable standards. This evidence adds to the general concern for academic standards in Spanish, and for those L1 Catalan children who live in neighbourhoods where Catalan is the language that most people use, and hence may have few occasions to use Spanish.

With regard to language use in schools, although these are being progressively 'bilingualised', they still reproduce social norms prevailing in the neighbourhood where they are located (Vila, X. 96; Unamuno, 97). In Spanish-speaking neighbourhoods, immersion schools serve the purpose of providing a Catalan interlocutor - the teacher(s) - to Spanish speaking children, and of maintaining competence in Catalan, for Catalan-speaking children. This means a situation

where L1 Spanish children use Catalan with the teacher and Spanish with their peers, while L1 Catalan children use Catalan with the teacher and the few Catalan-speaking peers, and Spanish with their Spanish-speaking peers. It is, therefore, easy to understand that such differences in exposure and in opportunities to use Spanish make it easier for a Catalan speaking student to learn Spanish than it is for a Spanish speaking student to learn Catalan (Vila, I. 95).

Finally, as can be seen in Tables 3 and 4, surveys show that the decline in the use of Catalan seems to be halted and that social use of Catalan has increased, although somewhat irregularly, and that attitudes have changed.

| Table 3:  Use of Catalan in Catalonia. Percentages | 1993 | 1998 |
|---|---|---|
| Read, write, speak, understand | 41 | 48 |
| Declare themselves BL | 1,1 | 16 |
| Answer phone in Catalan | 51 | 57 |
| Go shopping in Catalan | | -3* |
| Take notes in Catalan | | -3* |
| Talk to strangers in Catalan | | -2* |

- Less than in previous censeses (knowing Catalan does not necessarily entail that speakers subsequently use it)
- Source: *Centro de Investigación Sociológica*  Ministry of Presidence Censuses (Madrid)

Source: La llengua catalana en l'actualitat. 3ª. Edició.

| Table: Catalan speaking population from 1939-1977 | Trends in percentages |
|---|---|
| 1940 | 75 |
| 1968 | 68 |
| 1975 | 60 |

Source: *La llengua catalana en l'actualitat. 3ª. Edició.*

### Foreign languages

As has been mentioned above, one of the goals of recent reforms has been to improve foreign language skills in general, and one of the changes has been to have children start FL instruction at the age of 8, instead of 11. So far, there have been few clear-cut benefits. Research on the earlier introduction of a foreign language carried out in other contexts has proved that while adolescents are quicker in acquiring grammatical structures, children are better at reaching near-native levels of competence in the long term (Krashen, Long and Scarcella, 1979; Singleton, 1995). But the requirement is that they have sufficient exposure to the target language, and with adequate intensity. Both in Catalonia and the Basque country there are research projects currently under way,

Barcelona Age Factor Project, (Muñoz, 98; Pérez et al. 98), Basque Country Age Factor Project (Dolz, Lasagabaster, 99) whose results will throw further light on the issue, and specifically with data from an EFL situation.

As for the methodological approach to foreign language teaching: the experience and results of bilingual programmes do not seem to have inspired teaching practices in FLT, despite the possibility of transferring skills, as if there was no link between the two. With Catalan, learners have experienced learning both Catalan in the school environment and in the social environment - similarly as would happen with Basque or Galician. They are acquainted with the contrast and complementation of explicit and implicit learning (Schmidt, 1995), have practiced transferring learning strategies from one language to another, and have used languages meaningfully, with a real need for negotiating meaning, hence with communication being central.

It should therefore have been easy to transfer the experience to foreign language instruction, leading to the adoption of a Content and Language Integrated Learning approach, with all the possibilities that it entails of increasing exposure to the target language and opportunities for meaningful use. In the same way, it could have been used for Spanish instruction, having Spanish not only taught as a subject but used as the medium of instruction for some subject matter, something which would have immediately raised academic standards in this language. In this sense, the recommendations contained in the reform with regard to the teaching of languages across the curriculum are proving insuficient.

## Summary and conclusions

As has been shown, in Catalonia the social use of Catalan has increased. This is, to a great extent, due to the effect of educational policies concerning languages. As a consequence, Catalan has become a more functional language for our children. Yet, foreign language competence has improved little, and it remains to be seen what the effects of the current Educational Reform are going to be on the actual proficiency in EFL of our students. As time is precious in the school curricula of bilingual communities, already with 2 languages, we are interested in finding the most efficient type of programme for the tuition of languages. It should be easy to help learners to transfer the experience gained with Catalan programmes to Content and Language Integrated Learning (CLIL). It should also be easy to transfer it to Spanish, so as not to waste the opportunity of having students fully master this language with little extra effort. With the Reform, the focus has been placed in the earlier introduction of the FL, rather than in the 'content' approach, although it is present in the official recommendations contained in the law. Yet, in order to draw the benefits from the early introduction (Singleton, 95) considerable and adequate exposure to the language is required. Exposure could be considerably increased by using English as the medium of instruction for other content subjects. This would also ensure sufficient intensity. If the official regulations recommend CLIL, one wonders why in practice this is so little done. I, therefore, believe that all efforts should be directed towards the implementation of such CLIL programmes, an approach which has successfully been used in other countries (Van de Craen, forth.). This,

however, requires a consistent programme of teacher education to be implemented (Pérez Vidal, 1999).

In conclusion, the objectives set out in the White paper for Education and Training issued by the EEC state that each young student should know at least 2 additional languages other than their first language(s), the 2+1 formula. In the same book, the potential advantages of a Content and Language Integrated Learning approach are clearly presented. As is explained in Fruhauf, Coyle & Christ (1996) such recommendation have been followed by different countries to different degrees. In those where both recommendations have been followed for FLT, the younger generations are definitely going to show higher standards of linguistic competence(s). Up until now, this has  not been the case for Catalonia, or even Spain. Consequently, measures should be applied so as not to loose pace with this general trend, in order to guarantee our students proficiency in several languages, a requisite for full integration in modern Europe.

## References

Arnau, J. And Artigal, J. M. (eds.). 1997. Els programes d'immersió: una Perspectiva Europea Immersion Programmes: a European Perspective. Barcelona: Universitat de Barcelona.  Baetens Beadsmore, H.1986. *Principis bàsics del bilingüisme.* Mireia Aragay (trad.) De. La Magrana.

Aragay, M. (trad.) Principis bàsics del bilingüisme: els orígens.Barcelona: La Magrana.

Brinton, D.M., M.A. Snow & M. B. Wesche. 1989. Content-based second language instruction. New York, Newbury House.

Cenoz, J. 1994. `Le bilinguisme et l'acquisition de la troisième langue dans la communauté autonome basque', 6e Colloque Flarep. Saint Sebastian/Henday: Ikas-bi.

Cenoz, J. & D. Lindsay. 1994. `Plurilingüismo desde edades tempranas'. Informe de investigación sin publicar. Ikastolen Elkartea.

Cummins, J. 1981. Bilingualism and Minority language children. Ontario: Ontario Institute for Studies in Education.

Dolz, A. and Lasagabaster, D. 1999. `El factor edad en la producción escrita en inglés'. Paper presented at the XVI Aesla Conference. Alcalá: Universidad de Alcalá.

Fruhauf, G., D. Coyle, & I. Christ (eds.) 1996. Teaching Content in a Foreign Language. Practice and Perspectives in European Bilingual Education.Alkmaar, Stitchting Europrint.

Institut d'Estadística de Catalunya.in press. La llengua catalana en l'actualitat. 3ª. Edició. Direcció Gral. de Política Lingüística.

Krashen, S.D., R. Scarcella, & M. Long.1996. `Age, rate and eventual attainment in second language acquisition'. in S. D. Krashen, M.H. Long & R. Scarcella (eds.). Child adult differences in second language acquisition. Rowley, M.A: Newbury House: 202-226.

Lasagabaster, D. 1997. Creatividad y conciencia metalingüística: incidencia en el aprendizaje del inglés como L3. Phd. Diss: University of the Basque Country/Euskal Herriko Unibertsitatea.

Muñoz, C., Nussbaum, L., Pujol, M. 1998. `Appropriation de langues en situations de contact'. In AILE 10, pp. 3-18.

Munoz, C. 1998. ´The age factor in EFL bilingual students ´Paper presented at the Spanish Angloamerican Society Conference. Lleida. University of Lleida.

Nussbaum, L. 1990. `Plurilingualism in foreign language classroom in Catalonia' in Network on Code-Switching and Language Contact. Papers for the workshop on Impact and Consequences: Broader considerations. ESF, Strasbourg: 141-165.

Pérez-Vidal, C.  1999. `Teacher education: the path towards CLIL'. In Marsh, D. and B. Marsland (eds.) CLIL initiatives for the Millenium. Jyväskylä University.

--------------, M.L, Celaya; M.R. Torras. 1998 ´Written competence in EFL compositions by two age groups of beginner learners of English´. Paper presented at the Eurosla´8 Conference. Paris: University of Paris.

Ribes, D. 1993. Immersió al català. Phd. Diss.: University of Barcelona. Singleton, D. 1995. `A critical Look at the Critical Period', in D. Singleton & Z. Lengyel (eds.) The age factor in second language acquisition. Multilingual Matters: 1-29.

Unamuno, V. 1997. Lenguas, identidades y escuela: etnografía de la acción comunicativa. Phd. Diss.: University of Barcelona.

Van de Craen, P. (ed.) (forth.) ´Language teacher training and bilingual education in Spain´ In Piet V. de Craen (ed.) ELC Report on Teacher Training and Bilingual Education.

Vila, X. 1996. When classes are over. Language choice and language contact in bilingual education in Catalonia. Ph.D. Diss.: Université Libre de Bruxelles.

Vila, X.1999. Escola i promoció de l´ús´In Llengua i Ús Direcció General de Política  Lingüística. Generalitat de Catalunya. pp.: 56-76.

# CONDITIONS THAT HINDER, ACTIONS THAT FOSTER: PROSPECTS FOR BILINGUAL EDUCATION IN ITALY

**Carmel Mary Coonan**, Università Ca' Foscari di Venezia, Italy

We present first of all an overview of the situation as it stands at the moment in Italy as far as regards examples of bilingual education in mainstream schooling. Then we proceed to discuss the conditions that at the moment would seem to be propitious for the development bilingual education in Italy. These favourable conditions however would seem to be in jeopardy on account of certain factors and situations. We will explore some of these.

The term *bilingual education* is used here to refer to the presence, in the school curriculum, of two or more vehicular languages – one of which is usually the normal language of the school/state and the other(s) a second autochthonous language or a foreign language of international status.
Throughout the article this form of vehicular teaching is also referred to as language medium teaching.

## 1. Bilingual learning experiences in mainstream schools in Italy

Bilingual education experiences in Italy can be divided into two separate categories: those situated in special statute areas which are characterised by special linguistic situations and special laws; and those situated in areas characterised by neither of these.

### 1.1. Special statute areas

Italy has been considered a majority of minority languages and cultures (Pellegrini cited in Zuanelli Sonino, 1984:280) on account of the rich variety of languages to be found on its soil. There are 15 historical minority languages[1] spread throughout the country in the form of peninsulas (in the north) and islands. The peninsulas are portions of territory that are contiguous with the borders of other nations where that same language or variety of the same language is spoken. It is the case of German in Bolzano, and French in the Valle D'Aosta, Slovene in Friuli-Venezia-Giulia and Ladin in Bolzano. The islands on the other hand are either cut off from their language relative (eg, Albanian, Greek, Catalan, Croatian,) or have no language relatives at all (eg, Sardinian, Friulan) being as they are confined linguistically to Italy.
A Bill[2], at the moment under discussion at the Senate, aims to protect all the historical minorities of Italy in keeping with article 6 of the Constitution and with the general principles established by European and international organisms. Article 4 of this Bill specifies that these historical minority languages can be used,

---

[1] The languages are: Albanian, Catalan, Germanic (Cimbro; Mocheno; Walser; Tyrolese), Greek, Slovene, Croatian, French, Franco-provençal, Languedoc, Friulan, Ladin, Sardinian)
[2] The disegno di legge (Bill) 3366

if requested, as instruments for teaching and learning in schools from the nursery schools up to the lower secondary level.

At the moment however it is only in those special statute areas where the language(s) and culture(s) of the region have been protected by law for quite some time that forms of bilingual education have been developed.
This means therefore that only in the special statute areas of the Valle D'Aosta and Trentino Alto Adige have organised forms of bilingual education been developed – some institutionalised, others more experimental in nature, some encompassing the whole school system, others what we could call 'mini models' of limited extension.

Brief mention only will be made of the situation of bilingual education in these areas. The reader is referred to the TNP's first report[3]

Trentino Alto Adige
### i) The Province of Bolzano
*a) Italian and German schools*
Article 19 of the Statute of the Province of Bolzano, with reference to the German-speaking and Italian-speaking communities specifies that each group is to have its own schools. All schooling has to be imparted in the mother tongue by mother tongue speakers. This legal specification would seem to exclude the possibility of bilingual education.
A move to breach the established situation came in 1992 when a lower secondary Italian school[4] began a project of foreign language medium teaching. The project consists in the teaching of geography (anthropological and cultural aspects) through German for two hours a week by the second language teacher[5]. To counter the legal obstacles the teaching-learning perspective is turned around. It is not in other words geography being taught through a second language (a discipline-driven focus where the principle responsibility is to satisfy discipline learning objectives) but the second language being taught through geography (a language-driven focus where the principle responsibility is to satisfy language learning objectives[6]). In other words content becomes the vehicle for language learning rather than language being the vehicle for content learning.
Since then other lower secondary and primary schools have followed suit. In the primary schools the second language is used for four hours a week as a vehicular language. In the primary schools the approach is interdisciplinary whereas in the secondary schools the approach is disciplinary.
*b) Ladin schools*
Separate provision is made for the Ladin-speaking community in the province. The Statute of 1948 specifies that schools in the areas must be trilingual. German and Italian are taught not only as subjects from the nursery school up but are also used as vehicle languages for other subjects. Ladin is taught as a

---

[3] The first report of the TNP *Thematic Network Project in the Area of Languages: Language Teacher Training and Bilingual Education* was presented at the ELC Evaluation Conference at Lille III, Université 'Charles de Gaulle', July, 1977
[4] Scuola Media – Mittelschule "Archimede" Bolzano
[5] The choice of the second language teacher and not the discipline teacher represents the solution to the legal obstacles. The focus of the programme however is different as a consequence
[6] This distinction between discipline-driven language medium programmes and language-driven language medium programmes is deescribed by Cenoz & Genesee 1998

subject and is used as a language of explanation for the first years of primary school. The Statute specifies that not only has equal weight to be given to Italian and German (both of which are second languages for the pupils) but also that equal competence in both languages be reached.

**ii) The province of Trento**

As far as regards the Province of Trento forms of bilingual education in the form of projects have been conducted recently or are currently underway. They concern the Ladin-speaking group and the Mocheno and Cimbro speaking communities.

Valle D'Aosta.

The Special Statute of 1948, article 38 establishes equal rights to both Italian and French. However it is only since 1985 that bilingual education has been developed beginning first with the nursery schools. Today the whole school system is involved. Both French and Italian are used as vehicle languages and both enjoy 50% of the school curriculum.

All the above mentioned experiences are different – this in part due to the different legal circumstances surrounding the use of the languages in the schools. Thus, the methodological didactic solutions found are different and for that reason very interesting. As far as regards the use of the languages, for example, the criteria used in the different regions for language separation is different. In the Ladin secondary schools the criteria is the discipline/teacher (for the two coincide). In the Valle D'Aosta the same teacher – who has to be a qualified bilingual – alternates the language at a macro level within the discipline teaching.

The situation overall is one of an interesting diversity of developments both at the level of school organisation, teaching methodology and solutions in teacher training. However, if we take the situation of the historical minority languages in Italy as a whole, we can see that there is potential for a further extension of forms of bilingual education, especially if the Bill referred to above gets passed in Parliament.

*1.2.    The rest of Italy*

Historically speaking, outside of the above mentioned Special Statute areas Italy has had until recently no tradition of bilingual education in mainstream schooling. This is now changing. The last decade has seen an increase in interest in this type of learning experience due to the synergetic influence of various factors (see below).

Today there are over two hundred schools at the level of the scuola superiore (upper secondary school) that have introduced the teaching of non-language disciplines through a foreign language - a foreign language that the student is also learning as a subject in its own right. It is interesting to note that these experiences were launched for the most part at the very beginning of the decade immediately after Maastricht in the form of experimental projects run by the Direzioni in the Ministry.

Since their inception at the beginning of the 90's the number of schools adhering to the projects has increased. Some of the experimental projects are in fact curricula innovation projects of which the use of the foreign language as a

medium for non-language discipline teaching and learning is just one characterising and important feature[7].

The experimental projects are:

Liceo Europeo (Classico) – curriculum innovation

Liceo Linguistico Europeo – curriculum innovation

Liceo della Communicazione – structural and curriculum innovation

Liceo Internazionale

Single schools[8]

- Liceo Europeo

To date 17 Licei Classici, distributed quite evenly throughout Italy, are involved in the experimental project Licei Europei which began in 1992/3 under the direction of the Direzione Classica of the Italian Ministry of Education[9]. The project was designed for a particular type of upper secondary school which is organisationally different from others (the Convitti[10] and the Educandati Femminili).

The project involves the creation of an experimental 5-year curriculum characterised by the introduction of two foreign languages, a greater European dimension to content, and with the overall aim of promoting European awareness and consciousness. A characterising feature of the project is the use of one of the foreign languages introduced into the curriculum to teach (from the first year) history and geography. Although the norm is that only one foreign language act as a medium of instruction for the two subjects, there are cases where two medium languages are used. Disciplines other than history and geography can be taught through the foreign language if the school board so decides. The vehicle languages are: English, French, German and Spanish with there being however a preference for English and French followed by German.

- Liceo Linguistico Europeo

At the moment, 1998-9, a total of 95 Licei Linguistici are participating in the Liceo Linguistico Europeo project which, like the Liceo Europeo, has been elaborated and is run by the Ministry – in this case the Direzione Scuole non Statali[11]. The project began in 1992. The schools adhering to the project are distributed throughout the whole of the country with a greater presence in the north, in particular in the regions of Lombardia, Piemonte and the Veneto.

The aims of the project are similar to the Liceo Europeo project in that a greater European dimension is introduced to the curriculum in order to promote greater European awareness. Of the three foreign languages studied in the schools adhering to the project one is used for the teaching and learning of one or two non-language disciplines[12].

Although normally such medium teaching begins in the third year of the five year cycle, many schools opt to anticipate this type of learning experience to the biennio (the first two years of the school cycle) Any of the disciplines of the school curriculum, except Italian and the foreign languages, can be taught

---

[7] See also the first TNP report for further details

[8] Under the direction of the Direzione Generale per l'Istruzione Media non Statale (Prof. Miceli) language medium programmes are also being introduced in some private Italian Licei abroad , eg, French and Italian in Marocco, English and Italian in Egypt.

[9] The person responsible for the project is Professor Portolano at the Direzione Generale dell'Istruzione Classica, Scientifica e Magistrale

[10] The schools have a longer day and many of them have boarding accommodation for the students

[11] The person responsible is Professor Miceli of the Direzione Generale per l'Istruzione Media non Statale

[12] Normally it is two non-language disciplines instead of one that are studied through the foreign language

through the medium of the foreign language. The disciplines preferred are[13]
(data from Ministry):
- History: 30 schools
- Art: 15 schools
- Physics: 10 schools
- Sciences: 7 schools
- Economics: 5 schools
- Mathematics: 2 schools
- Physical education: 2 schools
- Philosophy: 1 school
- Religion: 1 school

The preferred languages are (data from Ministry):
- English: 75%
- French: 19%
- German: 4%
- Spanish: 1%

- Licei internazionali

The Licei Internazionali are a group of 12 Licei (for the most part Classici) that have introduced the use of foreign language medium teaching as from the first year of the five year cycle in order to widen the cultural base of the school and open up the school to Europe. Unlike the two above-mentioned projects which are top down in nature, the move to introduce this form of teaching, within the framework of the existing traditional curriculum, was a grass roots phenomenon as it came from the founder school member of the group in 1990[14]. Contacts were made with the Ministry[15] which is now involved in co-ordinating activities and collecting data on the experiment.
A characteristic feature of the experimental project is the focus afforded to the promotion of foreign languages other than English. Indeed, French is a vehicular language in five of the schools and Spanish is a vehicular language in seven of the schools[16]. Some of the schools offer three alternative vehicular language programmes. Furthermore, the vehicular language programmes are characterised by what is called a 'strong' teaching of the languages which consists in an increase in the number of hours dedicated to the teaching and learning of the foreign language as a subject (five hours instead of the normal three). The subjects taught through the foreign languages are for the most part Geography and History.

- Liceo della comunicazione

The Liceo della Comunicazione[17] is an institution that has been newly formed to take the place of the previous Istituti magistrali and Scuole magistrali now abolished. The preparation and certification that they afforded in the training of

---

[13] The following data refers to those schools that are **currently** implementing language medium teaching. The other schools who are part of the project will implement the language medium teaching when their classes reach the triennio (the final three years of schooling)
[14] The founder school of the Licei Internazionali movement is Liceo Galvani Bologna
[15] The person responsible for the Liceo Internazionali is Prof. Clavarino at the Direzione Generale dell'Istruzione Classica, Scientifica e Magistrale
[16] Data from the Ministry
[17] The person responsible is Prof Miceli at the the Direzione Generale per l'Istruzione Media non Statale

nursery school and primary school teachers has now been taken over by the new 4-year university degree course in Scienze della Formazione Primaria.
Apart from the other innovative features of this type of school, what is particularly interesting from our point of view here is the provision that, in the final three years of the five year cycle, a non-language subject be taught through a foreign language. This provision is obligatory for the 'Comparative Civilisations' component of the programme and is optional for all the other components[18]. In the year 1998-9 – the launching year of the school and its programme – there are 105 such new schools. As the language medium teaching only begins in the final three years of the schooling there is as yet no data as to the number of schools choosing to carry out language medium teaching.

- Single schools

Under this heading are included schools that, of their own initiative, have undertaken foreign language medium teaching. They are by no means numerous[19]. It is of interest to note that:
- the schools that have already begun or are planning to begin language medium teaching are different from the type of upper secondary school so far mentioned. These are not Licei but rather technical and professional institutions that have a very strong vocational bent to their curriculum.
- what strikes also is the strong decisional, organising and supportive role of the Principal.

## 2. The stimulus for innovation: signals from Europe

Apart from the Special Statute regions of the Valle D'Aosta and the Ladin-speaking areas of the Province of Bolzano where bilingual education is actually **required** by law, in the other areas of Italy the factors that have resulted in the development of this form of teaching are diverse.
As far as regards the Italian schools already mentioned in the province of Bolzano the move to introduce a form of language medium teaching came from a twofold realisation: firstly that the German linguistic skills of pupils, despite 6 hours a week dedicated to the teaching of German, were totally unsatisfactory; and secondly, related to the first, that there was a need for a level of competence in German that would allow the young people of the Province to mix more. In other words, language competence is seen as a solution to issues of a socio-cultural nature.

In general however, and particularly with reference to the rest of Italy, the indications deriving from the work of the European Union and the Council of Europe with regard to languages and the importance these organisms have afforded to the knowledge of languages for European unity, the safeguard of European culture and the promotion of a European awareness, have been fundamental in a raising of consciousness towards the potential of language medium teaching.

---

[18] It is not clear however whether it is optional for the school to offer the language medium teaching or whether it is optional for the student to accept/refuse such language medium programmes being offered.
[19] It is however difficult to know just how many schools are taking the initiative themselves to experiment with language medium teaching

Important 'European' milestones this decade that have stimulated innovation within national education systems are:

- The Treaty on European Union signed at Maastricht on 7 February 1992 depicted a Europe without boundaries that would consent the free movement of peoples of the Union. This is not possible if people are hemmed in through restricted knowledge of languages and ignorance (or worse refusal) of other, neighbouring, cultures.

- The recommendations of the *White Paper* on Education and Training presented by the European Commission in 1995 and entitled *Teaching and Learning: Towards the Learning Society* which assigns knowledge of languages as one of the prime objectives in promoting the learning society, suggesting a means whereby this might be done:

**"It could even be argued that secondary school pupils should study certain subjects in the first foreign language learned, as is the case in the European schools."**

- The Recommendation N° R (98)6 of the Committee of Ministers of the Council of Europe to member states concerning modern languages which in general measure n°2 suggest that plurilingualism be made widespread

**" by encouraging the use of foreign languages in the teaching of non-linguistic subjects (for example history, geography, mathematics***) and the creation of favourable conditions for such teaching***"** (our italics)[20]

- The Council of Europe's *Common European Framework of Reference* which explicitly foresees, in its curriculum scenarios, a curriculum in which the learning of non-language subjects be carried out through the medium of a foreign language (p. 105).

## 3. Favourable conditions

As can be seen, at a European level, the guidelines recommend the promotion of foreign language medium teaching and learning - in certain circumstances (eg, secondary education).

### 3.1. Needs
What conditions, in general, are going to **play in favour** of the continuation and expansion of language medium teaching in Italy today.
Essentially language medium teaching can be seen as a form of learning that can fulfil the needs of today's language learners.

a) International school contacts
- An ever increasing number of schools in Italy are establishing (or have already

---

[20] This is not a minor point by any means and it is quite significant that the recommendations actually highlight this aspect.

established) contacts with schools in other European (and extra European) nations. These contacts can consist in developing projects together through the exchange of information – written or oral (eg, videoconferencing) – and may also perhaps lead to reciprocal visits. Contacts can also be established with schools of different language communities for the same reason, eg, the Italian schools working together with the German schools in the Province of Bolzano. Indispensable for the successful evolution of projects is the ability to use one or two community languages as a vehicle language. This implies two things: that the students be able to **understand** the content elaborated by the project partners in the non-native community language and also that they be themselves able to **communicate** content to the project partners in the non-native community language. In terms of cognitive and linguistic demand, this is quite a different kettle of fish from the kind of language required for the traditional pen friend-like communication.

- A school's preparation of their students for entrance into higher education must include an adequate linguistic preparation that will allow the students to follow lectures and seminars in a foreign language. Foreign language competence becomes imperative therefore when the Italian students spend a period of study abroad on  Erasmus exchanges.

- Young people are circulating Europe today to an extent that even in the 1970s would have been inconceivable. Today, not only can they spend periods of study abroad but they can also enrol at universities in another community country. Some countries require a certified level of linguistic competence as a precondition for entry - a level of linguistic competence that is normally not reached in the 'traditional' language class alone.

Thus, for the three above reasons, schools may be **persuaded** of the potential gain to be acquired for their students if they experience, while still at school, forms of language medium learning. This because language medium teaching will be able to promote (given certain conditions) what Cummins (Baker, 1996) calls **CALP** (Cognitive Academic Language Proficiency) as opposed to **BICS** (Basic Interpersonal Communicative Skills. **BICS** is the type of competence which is typically developed in the language learning class and which prepares the students for 'communicative survival'. **CALP** is the type of proficiency that is required for study purposes and is, at the same time, promoted through it.

b)  Quality in language learning

Related to this is the question of quality in language learning.

The communicative approach seemed to hold all the answers to the problem of language competence but dissatisfaction persists. What is missing? What can be done? Is it the lack of interest and motivation on the students' part? Is it the amount of time assigned to the language teaching on the timetable? Is it the kind of materials the students work on? Is it the teacher's fault? Apart from the fact that the answer may be all of these, it is precisely this climate of dissatisfaction that might persuade and encourage schools to call for language medium teaching seeing it as a solution to the problem of language learning. This, in fact, was a major factor underlying the decision made by the group of Italian schools in the Province of Bolzano.

We, as advocates of language medium teaching, are in fact convinced that learning non-language content through a foreign language can enhance the quality of the learning of that language (see the CALP and BICS distinction

above). Indeed, language medium teaching may well find a satisfactory answer to all the questions posed above (except that of the teacher of course). However, several conditions have to be met. Better language competence will not come about automatically.

*3.2. Creating the conditions*
What actions have the Italian authorities taken to **openly encourage** such teaching. With reference to the Council of Ministers *Recommendation* what favourable conditions have the authorities begun to create for such teaching?

As far as regards **actions** undertaken by the authorities **to promote** this kind of teaching of course we must keep in mind the ministerial projects currently underway and which we have already referred to.
As far as regards **actions** undertaken to **create the favourable conditions that will further such teaching** (as suggested by the recommendations of the Committee of Ministers mentioned above) the new law on school autonomy passed in 1997, and which will be completely operative on 1st September 2000, is fundamental in this respect.

Up until just over two months ago the potential, inherent in the Law on school autonomy, for establishing language medium teaching in Italian mainstream schools was quite considerable. This precisely because the law assigns full didactic autonomy to schools (within a framework however of minimum restrictions) as well as freedom to conduct research, experiments and projects without the need to subject project proposals to the central authorities for approval and permission[21].

The Law establishes the basic, important principles. The rules concerning its application are more precise.
In February 1999 the Council of Ministers approved the Regolamento which provides the rules for the application of the law and it is here that specific mention is made of teaching non-language subjects in a foreign language.
In article 4, sub-section 3 we can read the following statement (*our translation*):

" Within the sphere of didactic autonomy, formative itineraries that involve several disciplines and activities and **even involve**, **in the application of international agreements**, **teachings in a foreign language**, can be programmed on the basis also of the interest demonstrated by pupils."

With regard to the future development of language medium teaching in Italian mainstream schools the above is extremely important <u>because such teaching is sanctioned by law</u>. Such teaching will not need to figure as centrally authorised experimental projects. Language medium teaching will be <u>normal procedure</u>. In addition there do not seem to be any restrictions concerning the level of school where such a type of teaching might take place. Potentially, it could be carried out in the primary school as in the lower secondary school. These are the school levels that at the moment do not figure amongst those involved in the experimental projects we have already referred to.

---

[21] It must be pointed out that the Special Statute regions regulate the principles of school autonomy through their own laws.

Furthermore the specification mentions 'insegnamenti' (meaning 'teachings) which is a vaguer term than 'teaching a discipline in a foreign language'. This is significant as it allows room for other forms of language medium teaching that do not entail the teaching of a discipline. The term 'teachings' can capture the concept of 'module' – a term that refers to a piece of work which is limited in time, can be interdisciplinary/pluridisciplinary, and not be restricted to the idea of the class (either in terms of the class pupils or the class time).

## 4. Conditions that hinder

### 4.1. *"International agreements"*

Compared however to what one could have hoped on the basis merely of the law itself, the Regolamento actually delimits the possibilities for language medium teaching.
Let us look at the qualifying expression "**in application of international agreements**". What does this mean? What, with reference to this particular issue, is an international agreement? Who are the parties who have to be involved? How formal will the agreement have to be? Is it a formal agreement between national governments and, if so, what could the agreement consist of? Could it be a Socrates project? We cannot know – not by reading the Regolamento anyway.
The Licei Internazionali and some of the Licei Europei are directly assisted by national agencies like the British Council, the Bureau Linguistique and the German Government. Their assistance has been instrumental in the successful development  of language medium teaching in these Licei as they have been able to provide the expertise (both methodological and linguistic) which was lacking.
 If this is the kind of international agreement that the law on autonomy refers to then these Licei will have no problem in continuing their language medium teaching experience. However, what is to become of  the Licei Linguistici Europei who do not seem to enjoy such assistance? Are they destined to close as soon as the law becomes operative? How also are single schools who wish to introduce language medium teaching going to manage? Would assistance from the international agencies be available on demand to any school who wishes to carry out language medium teaching? Will this condition be binding also for schools wishing to begin teaching in a second historical minority language – like Albanian or Catalan for example?
The expression as we have seen is not clear and, in our view, **does** seem to have the potential not only **to restrict** future implementation in the field but also to **curtail** what is already underway.

It is natural therefore to ask oneself why, for the implementation of language medium teaching, there is the need for an international agreement. No such condition is attached to foreign language teaching.
One possible reason might be the possibility an agreement could offer in allowing the students to sit international exams that would facilitate their possibilities of gaining entrance to a university in another country of the European union. This might imply changes in the curriculum to accommodate exam content - examples are the International Baccaulaureate, the IGCSE (International General Certificate of Secondary Education), or the Arbitur.

In the *Sections Bilingues* that have been established in five Licei Internazionali and 12 Licei Europei under the supervision of the Bureau Linguistique in Rome a *Mention Special* is issued on completion of the course of studies. This is a certificate of the French Ministry of Education issued by the French Embassy which will exonerate a student from having to sit the special language test for non-native speakers which is obligatory for acceptance into a French university.

An agreement might also result in qualified native speaker teachers being sent by their Governments to teach in the Italian schools. This already happens in some (but not all) of the Licei Internazionali.

An agreement might also entail help at the methodological didactic level.

The specification that such language teaching be carried out within the constraints of an agreement is, in our view, an expression of the caution that is felt is needed with regard to such teaching. This is totally comprehensible. However, it seems that in this way the problems – that do exist – are not faced but are rather shouldered onto the agreement.

The law on school autonomy allows schools the possibility of extending the school timetable, either through extending the teaching hours of a specific subject or by adding extra 'subjects' (eg, projects, and modules). Such 'extras', so to speak, could be conducted through a second/foreign language. A possibility might be to extend the timetable for geography and the extended time be conducted in French. Or, the school might decide to provide an extracurricular course (or module, etc) on photography or on computers, etc. This could be conducted in any of the foreign languages the pupils are learning.

As the Regolamento stands at the moment however such a solution could only be possible if backed up by some kind of international agreement. Is this necessary? After all these would be extracurricular activities.

What, however, is absolutely necessary is a teacher who knows how to teach as a language medium teacher.

So if language medium teaching and learning is to have a **solid role** to play in the linguistic preparation of a **wide spread** of pupils (not only from the Licei but also from the professional and technical schools) then expertise is going to have to be available in loco through the creation of favourable conditions augured by the Committee of Ministers referred to above.

Favourable conditions cannot only lie in 'international agreements' (**as they surely do**) but also in the independent availability of teachers trained for such teaching and in schools that are sufficiently-enough informed of the ins and outs of such a form of teaching as to be able to make informed and principled decisions about enacting it in the form that is consonant with their situation.

*4.2. Availability of teachers*

Thus **the** major condition that at the moment is a hindrance to the further development of quality language medium teaching is the absence of a sufficient number of suitably qualified teacher. Let us say it represents a **very unfavourable condition**.

For the teaching of a non-language discipline through a foreign language the teacher chosen must be qualified teachers of the discipline they teach. They may

be either mother tongue teachers of the language they teach in or be non-native speakers who have a competence in the language.

However, we might venture to say that the issue of language competence – which is and must be considered a pre-requisite for any kind of language teaching – is not the issue that is going to seal the success of language medium teaching- whether it be of a discipline, an interdisciplinary project or extracurricular activity.
What is going to help language medium teaching is teachers who not only have a qualification in their discipline (meaning knowledge of the contents as well as discipline-specific pedagogy) and adequate competence in  the medium language but also competence in issues – linguistic and methodological - that constitute the specificity of this type of teaching. A discipline teacher is going to need to know the linguistic characteristics of the discourse world of his discipline; he is going to need to
know what cognitive-linguistic difficulties are associated with his discipline; he is going to need to know how to facilitate language growth and discipline understanding through the adoption of adequate techniques and activities , etc,(just to mention a few).
In other words, the non-language teacher teaching through a foreign language is going to have to know things that he does not normally have to know or which he normally takes for granted. Furthermore the things that he will need to know are, only to a certain extent, the baggage of knowledge normally associated with a foreign language teacher's professional preparation.
The scenario in other words is more complicated for this teacher needs professional training in what is termed CLIL methodology – meaning CONTENT AND LANGUAGE INTEGRATED LEARNING methodology. Teaching non-language content through a second or foreign language requires that the content be language-sensitive or language-enhanced in order for both the objectives – content and language - to be fulfilled. Thus competence in a CLIL methodology becomes imperative.

## 5. Necessary action
### In-service training
Who can provide such competence? As has been done in the Special Statute areas of the Valle D'Aosta and the Province of Bolzano articulated in-service training programmes have been established to prepare the teachings in all aspects – both theoretical and practical – of bilingual education.
Such a solution could be undertaken by school consortiums in the rest of Italy, interested in the issue. The wealth of knowledge, particularly from a methodological and didactic point of view, that the two regions have accumulated over time – with the help of distinguished experts from other countries in Europe – will surely be of help for any one taking their first steps in the field.

### Initial training
The organs that can officially qualify teachers for this kind of teaching - at initial-training level - are the Scuola di Specializzazione for secondary school teachers and the university degree Scienze della Formazione Primaria for nursery school and primary school teachers. Although at the moment there is no such provision a solution needs to be found whereby a teacher qualifying in, say, geography

could be offered the possibility of being able to follow curricular content that would allow him to acquire an extra qualification as a foreign language medium teacher of geography. This would certainly give 'added value' to his preparation, if his formal qualification recognises it. A solution of this sort would represent an official recognition of the distinct nature of this type of teaching.

*Socrates*
The above solutions will not come about over night also because there is a lack of trainers to do the training.
In the immediate future solutions for practicing teachers already exist in the opportunities offered by Socrates.
Lingua Action B specifically caters for language medium teaching.
The criteria for selection and the priority accorded to applicants for a grant to follow training courses includes courses that
 "promote teaching through innovative methods like the early learning of languages, **teaching through a foreign language (bilingual instruction)** …"

The categories of people identified by Action B include as a consequence
"**teachers who teach other disciplines or who intend to teach through a foreign language.**"

As this Action is directly administrated by the single nations rather than the European Commission, Italy will be able to afford the necessary attention that this form of teaching necessitates when deciding on the priorities for grants.

Two issues have been singled as those which, above all others, represent the main unfavorable conditions for the implementation and the development of foreign language medium teaching - the Regolamento on school autonomy and the qualification of teachers.
Of course there are other outstanding issues:
- the text books to be used in the classrooms
- the final state exam which in part has been solved through the provision that internal members of the school can sit on the commission
- the final qualification in part solved also by the possibility that mention can be made on the Certificate that the discipline has been learnt through a foreign language
- those issues specific to the Special Statute regions, in particular the Province of Bolzano, where such forms of teaching meet considerable difficulties on account of existing legislation.

Quite a number of schools as we have seen, are actively involved in carrying out language medium teaching. This implies a large number of teachers at grips with the every day running of their lessons in a foreign language. But there is no contact between these teachers. They are not even aware of each other's existence.
So as a final issue I would like to mention
- the lack of networking and the lack of a network. Teachers find ingenious solutions for problems- these can be pooled through a network. Teachers work badly because they are isolated – this can be overcome through networking.

**References**

Zuanelli Sonino, E. (1984), *Lingue, Scienze del Linguaggio, Educazione Linguistica*, CLESP, Padova

Cenoz, J. & Genesee, F. (eds.) (1998), *Beyond Bilingualism. Multilingualism and Multilingual Education*, Multilingual Matters, Clevedon

Baker, C. (1996), *Foundations of Bilingual Education and Bilingualism*, Multilingual Matters, Clevedon

European Commission, (1995), *Teaching and Learning: Towards a Learning Society*, White Paper on Education and Training

Van de Craen, P. & Wolff, D. *Thematic Network Project in the Area of Languages: Language Teacher Training and Bilingual Education*, Report prepared for the TNP Evaluation Conference, Lille, III, Université 'Charles de Gaulle', July, 1997

Council of Europe, (1998), *Modern Languages: Learning, Teaching, Assessment. A Common European Framework of Reference*, Council for Cultural Co-operation, Education Committee, Strasbourg

# EMILE - MATIERES NON LINGUISTIQUES ET LINGUISTIQUES: DIVERGENCES ET CONVERGENCES DANS LE DISPOSITIF ALSACIEN (ACADEMIE DE STRASBOURG, FRANCE).

**Claude Springer, maître de conférences, Université Marc Bloch, Strasbourg, France.**

L'Académie de Strasbourg accorde depuis longtemps une attention particulière à l'enseignement des langues. Deux dispositifs de formation nouveaux ont été mis en place au début des années 90: les sites bilingues paritaires français-allemand et les sections européennes dans différentes langues et matières. Nous nous intéresserons plus spécialement au deuxième dispositif puisqu'il s'agit d'offrir aux élèves de suivre des matières scolaires (les disciplines non linguistiques ou DNL) au travers d'une autre langue que le français. Cette optique relève bien de l'EMILE (Enseignement d'une Matière par l'Intégration d'une Langue Etrangère). Je propose, dans un premier temps, d'étudier les fondements théoriques de ce dispositif: comment envisage-t-on la question du bilinguisme/plurilinguisme? Nous verrons, dans un deuxième temps, quelles en sont les modalités d'application: quels objectifs, quelle formation des enseignants? Pour conclure, je relèverai un ensemble de questions que semble impliquer ce nouveau type de formation.

L'Université Marc Bloch de Strasbourg (Département de linguistique appliquée et de didactique des langues) s'est engagée dans un projet de recherche sur les pratiques pédagogiques en DNL. En effet, l'un des postulats de base de l'EMILE repose sur l'idée selon laquelle les disciplines non linguistiques peuvent fournir un environnement communicatif naturel, ou semi immersif, offrant une alternative intéressante et nouvelle aux cours de langues. Dans un cours de DNL on s'intéresse avant tout au contenu de la matière, la langue n'est qu'un outil et non pas un objet d'étude, comme c'est le cas dans un cours de langue. On fait le pari que l'on va pouvoir profiter au maximum d'une communication plus "authentique", c'est-à-dire centrée plus sur le sens que sur la forme. On devrait ainsi voir se réaliser le souhait de l'approche communicative d'apprendre à communiquer en communicant, c'est-à-dire permettre le développement des stratégies de communication de haut niveau. Il nous a paru logique de nous intéresser à ce qui se passe réellement dans ces cours. Ce compte rendu préliminaire fera ressortir quelques convergences et divergences dans les pratiques de classe et nous permettra de souligner quelques pistes de réflexion.

## 1. L'Option européenne et bilingue en Alsace: le dispositif institutionnel

### 1.1 Les sites bilingues français-allemand

Notre objectif n'est pas de faire une analyse exhaustive du bilinguisme alsacien (il existe des études sur cette question), mais de citer quelques faits marquants, car le dispositif bilingue constitue le cadre de référence incontournable pour toute politique linguistique en Alsace. L'option européenne y est fortement rattachée.

Une première circulaire rectorale (20 septembre 1991) définit les conditions de l'expérimentation des "sites bilingues" dans le premier degré en Alsace. Après trois ans d'expérimentation, la circulaire du 20 décembre 1994 fixe "les objectifs pédagogiques d'un enseignement bilingue adapté aux réalités de l'Alsace". C'est la phase de développement du dispositif bilingue alsacien.

Evolution des ouvertures de classes bilingues

| 1994-95 | 46 classes | |
|---------|------------|----------------|
| 1995-96 | 73 classes | 1500 élèves |
| 1998-99 | 214 classes | 4791 élèves |

La circulaire de 1994 définit clairement les finalités du dispositif bilingue. Il s'agit, ni plus ni moins, de

"conduire les enfants, au moyen d'un cursus continu, à une "bilingualité équilibrée", c'est-à-dire à la capacité d'accéder à des compétences sinon entièrement égales, du moins comparables dans les deux langues dans tous les domaines de leur utilisation et dans toutes les compétences de langue: compétences de compréhension orale puis écrite, compétences de production orale puis écrite."

L'objectif prioritaire est de favoriser le développement de "sites paritaires", parité horaire français-allemand (13 heures / 13 heures): il s'agit de conduire des activités d'enseignement dans les deux langues, l'allemand étant objet d'étude dans le cours de langue et outil dans les autres matières.

"La particularité de l'enseignement bilingue est d'utiliser la langue comme vecteur d'apprentissage pour les activités de l'école maternelle et les disciplines de l'école élémentaire."

A partir de la rentrée 99, un certain nombre de sites bilingues sont créés en collège afin d'assurer la continuité de l'enseignement. Ce développement récent est encore timide.

## 1.2. Les sections européennes

Notre Emile alsacien s'inscrit dans ce cadrage académique. Les "sections européennes" sont ouvertes en collège et en lycée: une discipline au moins doit être enseignée dans une langue étrangère. Théoriquement cela concerne toutes les langues européennes (sections européennes) mais aussi les langues orientales (sections orientales). Théoriquement aussi toutes les matières peuvent être concernées.

En 1997-98, 181 section sont ouvertes en Alsace:

| allemand | 106 |
|----------|-----|
| anglais | 64 |
| espagnol | 5 |
| italien | 4 |
| portugais | 2 |

Il en existe plus de 1000 au plan national. En 1998-99, ces sections concernent:

- histoire-géographie,
- sciences et vie de la terre,

- mathématiques,
- physique-chimie,
- économie, éducation physique et sportive,
- éducation civique,
- communication-vente,
- cuisine-restaurant,
- bureautique,
- vente,
- conducteur routier,
- commerce,
- électronique,
- plasturgie,
- électrotechnique,

pour environ (chiffres tirés d'une note interne: liste des sections européennes - année 1998-99):

|  | allemand | anglais | espagnol | italien |
|---|---|---|---|---|
| collège | 2500 élèves | 1150 élèves | 130 élèves |  |
| lycée professionnel /technologique | 450 élèves | 220 élèves |  | 13 élèves |
| lycée | 1200 élèves | 1200 élèves | 100 élèves |  |

La circulaire du 19 août 1992 régit la mise en place des sections européennes dans les établissements du second degré. Ce dispositif vise
"la formation du plus grand nombre d'élèves à un niveau proche du bilinguisme, assorti d'une connaissance approfondie de la culture des pays étrangers."
Il ne s'agit donc pas de créer une nouvelle matière mais d' "européaniser" les établissements. Le principe d'extension repose sur le volontariat et l'implication forte des acteurs localement. Il n'est pas question d'alourdir le budget ni de créer une nouvelle catégorie d'enseignants. Certaines conditions sont prévues pour donner un coup de pouce à ce dispositif: horaire linguistique renforcé les deux premières années (deux heures hebdomadaires supplémentaires), formation des enseignants, mention au baccalauréat.
"Les sections européennes offriront ainsi un parcours progressif qui permettra, à partir d'un renforcement des compétences linguistiques, l'utilisation de la langue étrangère comme moyen de communication dans d'autres disciplines."

## 2. Les fondements théoriques: quel bilinguisme / plurilinguisme?

### 2.1. Une certaine idée de la " bilingualité équilibrée": le bilinguisme idéal

Ces deux dispositifs se caractérisent par leur référence à un "bilinguisme" que nous allons tenter de caractériser. Le bilinguisme alsacien, bilinguisme français-allemand (texte de 1994), fait référence à la "bilingualité équilibrée", c'est-à-dire des
"compétences entièrement égales du moins comparables dans tous les domaines dans les 2 langues".

L'option européenne (texte de 1992) vise un "niveau proche du bilinguisme" considéré comme un
    "niveau idéal ne pouvant jamais être atteint".
    On se situe, sans doute possible, dans une acception "maximaliste" et "idéale" du bilinguisme. La première conséquence de ce choix revient à refuser le "bilinguisme dominant" (J.F. Hamers, M. Blanc, 1983) dans lequel les compétences ne sont pas identiques. On aurait pu *a priori* penser que cette deuxième optique serait plus conforme à la situation générale de l'Alsace (l'alsacien perd du terrain et n'est pas la langue majoritaire première). Il est en effet abusif de penser que le bilinguisme français-allemand (alsacien) soit un bilinguisme actif dans la région.
    Ce postulat s'appuie sur un principe de séparation totale entre langue première et langue seconde: il sert de slogan à l'enseignement bilingue dans le premier degré, à savoir "une langue, un maître"; il est confirmé dans l'enseignement secondaire: une matière, une langue avec la parité des exigences disciplinaires (langue, matière non linguistique) . La clé de voûte du dispositif repose donc sur la qualité des enseignants. Nous reviendrons plus tard sur ce point crucial, notons que dans les deux dispositifs on a choisi de s'appuyer sur des enseignants français spécialistes d'une discipline et disposant d'un excellent niveau dans la langue étrangère.

## 2.2. Le bilinguisme additif

    Ce bilinguisme à parité vise un haut degré de compétences dans les deux langues (on tend vers l'équilibre). On se situe dans une optique "additive" du bilinguisme, qui pose *a priori* des effets cognitifs positifs sur le développement de l'enfant. La circulaire rectorale de 1994 définit sans détours le niveau terminal visé à la fin du premier degré:
    "… les compétences acquises en allemand à l'issue du CM2 seront du même ordre, sinon du même niveau ou de la même ampleur que celles acquises en français. Les enfants seront capables de produire des énoncés significatifs dans les deux langues et se servir de l'une et de l'autre dans des situations quotidiennes, les deux langues se développant de manière égale et harmonieuse."
    Le répertoire langagier est donc censé se développer sans heurts ni conflits. En ajoutant une deuxième langue au répertoire langagier de l'enfant, on lui fournit un autre outil de communication, une autre manière de penser (J.F. Hamers, M. Blanc, 1983). Or, si l'on tient compte des travaux de W.E. Lambert, la bilingualité dépend fortement de l'influence de l'environnement social et culturel. La construction de l'identité culturelle est intimement liée aux valeurs culturelles du milieu familial et social. Certains chercheurs pensent que l'apprentissage complet de deux ou plusieurs langues est contraire au caractère indivisible de la personne humaine.

## 2.3. Pour un plurilinguisme pragmatique

    Nous pensons donc que le "bilinguisme équilibré" de ces deux dispositifs porte en lui-même un ensemble d'ambiguïtés, de contradictions et de difficultés. C'est de toute évidence une approche plus normative et idéalisée que réaliste et pragmatique. Parler deux ou plusieurs langues avec une égale perfection dans

toutes les circonstances de la vie semble un idéal inaccessible. Rappelons, par exemple, la position relativiste de W.F. Mackey (1962):

> "Il paraît que si nous devons examiner le phénomène du bilinguisme, nous devons le considérer comme quelque chose de tout à fait relatif. En outre, nous devons inclure la connaissance non seulement de deux langues mais de n'importe quel nombre de langues."

On peut, en effet, craindre que cette position normative et idéale soit contraire à (ou freine) une véritable éducation plurilingue et européenne.

## 3. Modalités d'application et conséquences pédagogiques pour les sections DNL européennes

### 3.1. Politique linguistique: intégration et implication locales

L'option "européenne" dépend d'une implication forte des établissements et des différents acteurs. Les aides accordées par le Ministère et le Rectorat sont plutôt symboliques. Tout repose donc sur le principe du volontariat. Les établissements disposent, à travers l'option européenne, d'un outil leur permettant de rationaliser la politique d'ouverture sur l'Europe et la politique linguistique. On demande aux établissements de veiller à la diversification des langues. Cependant l'ouverture d'une section européenne est proposée à partir de la première ou de la deuxième langue étudiée. Cette restriction peut avoir pour conséquence de renforcer l'anglais et l'allemand au détriment des autres langues. Les statistiques semblent confirmer cette tendance. D'autre part, le coût non négligeable pour les établissements d'une ouverture de section européenne constitue un frein important à l'extension du dispositif. S'il n'y a pas de moyens financiers supplémentaires, il n'y a pas non plus d'horaire et de programme spécifique: les classes DNL se font à l'intérieur du programme et de l'horaire officiel.

Cette situation particulière fait peser sur les classes DNL un ensemble de contraintes importantes, parfois difficiles à gérer. Etant donné qu'il ne peut pas y avoir des sections par filières, les élèves, issus de classes différentes et parfois de filières différentes, sont regroupés pendant une partie de l'horaire. L'enseignant ne peut pas compter sur une progression identique des chapitres du programme ni des connaissances acquises. Il va y avoir conflit entre les objectifs du programme de la DNL et les objectifs communicatifs. Ces difficultés posent de toute évidence la question du statut et du poids des classes de DNL dans le curriculum général.

### 3.2. La formation des enseignants

La formation initiale des futurs enseignants est un maillon essentiel du dispositif. La formation est assurée depuis 1994 pour l'enseignement bilingue français-allemand (enseignants du premier degré) et plus récemment pour l'option européenne (enseignants du secondaire, anglais et autres langues). D'une manière générale, les futurs professeurs de collège et de lycée (stagiaires deuxième année de l'IUFM), dans les disciplines non linguistiques, peuvent se déclarer volontaires pour l'option européenne et bilingue. Ils vont d'abord passer un test linguistique pour évaluer leur niveau de langue. S'ils sont acceptés, ils suivront, en plus de leur formation générale, une formation spécifique qui se compose de quatre éléments:

- 50h de formation didactique et linguistique (conférences, témoignages, textes officiels, programmes européens, formation linguistique);
- un stage de 2 ou 3 semaines dans le pays (Allemagne, Irlande, Espagne: régions liées par convention avec l'Académie de Strasbourg);
- un stage pédagogique de pratique accompagnée avec un professeur chevronné, conseiller pédagogique (20h);
- la rédaction d'un mémoire professionnel sur une question spécifique à l'enseignement d'une discipline non linguistique dans le cadre des sections européennes.

On peut relever que la formation théorique est réduite: il n'y a pas de réflexion sur les différentes formes de bilinguisme, sur la nécessité du développement du plurilinguisme et de la citoyenneté européenne, sur les phénomènes d'acquisition des langues, sur la question des interactions en milieu naturel et institutionnel. Enfin, il n'existe pas pour l'instant de liaison avec l'université, lien qui permettrait de sensibiliser certains étudiants à cette nouvelle option.

### 3.3. Sélection des élèves / choix des langues et des matières

Nous avons vu que la présence d'une section européenne dépend de la volonté de l'établissement et d'un enseignant de matière non linguistique. En théorie, lorsqu'il est possible d'ouvrir une matière dans une langue donnée, les élèves peuvent faire acte de candidature sans restriction. Certains établissements jouent le jeu de la non-sélection. D'autres estiment qu'il est important d'avoir l'avis des professeurs de langues au minimum. A l'heure actuelle, le choix d'une DNL et d'une langue est donc limité.

### 4. Les pratiques des enseignants de langue et de DNL

### 4.1. Le projet de recherche

Le Département de linguistique appliquée et de didactique des langues, dans le cadre de la maîtrise de didactique de l'anglais, offre depuis cette année une réflexion sur le plurilinguisme. Nous nous sommes donc engagés, à la demande de l'inspection académique, dans une recherche sur les pratiques en classe de DNL. Nous avons pu observer une dizaine d'enseignants en maths, physique-chimie, et histoire-géographie. Ces classes sont toutes des classes de lycée général ou technologique.

L'étude, pour l'instant, est limitée: dans cette première étape, nous cherchons à rendre compte des différents types d'interaction. Nous sommes partis de l'idée qu'il est nécessaire avant tout de bien comprendre les textes officiels, les conseils pédagogiques et les types d'interaction des disciplines non linguistique. Il est, nous semble-t-il, important de connaître ce qui se passe en langue maternelle pour éviter tout contresens sur ce qui se passe en langue étrangère. Enfin, nous avons tenté de caractériser les cours de DNL en anglais. Les résultats de cette première phase ne sont pas encore en totalité disponibles. Nous ne présenterons donc que quelques éléments.

### 4.2. Un cas concret: la classe de physique – chimie

Nous avons pris la physique-chimie pour exemple. L'analyse est simplement esquissée, mais elle permet de se faire une idée de l'intérêt de cette recherche de terrain.

- Les instructions officielles

L'approche communicative a apporté un changement d'orientation des objectifs de la discipline des langues en faveur de l'apprenant. Les textes officiels des DNL s'inscrivent également dans cette optique de didactique générale. Trois objectifs sont présentés par les textes officiels.

Le premier objectif est <u>épistémologique</u>: il s'agit de développer " une culture scientifique " et une *compréhension* des concepts sous-jacents à la discipline. Par conséquent et dans un souci d'implication de l'apprenant, les activités expérimentales doivent avoir une place importante. Cette rigueur méthodique et scientifique doit favoriser la " critique et l'honnêteté intellectuelle ".

Le second objectif est d'ordre <u>éducatif</u>, il est centré sur l'apprenant: fort de ses compétences épistémologiques, celui-ci doit être en mesure de mettre ses acquis à profit. Pour cela, l'enseignement se veut " ancré sur l'environnement quotidien et les technologies modernes ", la plupart de ces dernières trouvant leurs fondements dans la physique. De plus, l'enseignement de cette discipline doit permettre à l'élève de se forger un mode de pensée autonome (" mode d'emploi de la science ") et indépendant de toute doctrine ésotérique, occultiste voire obscurantiste en " montrant que le monde est intelligible ".

Le troisième objectif est une <u>orientation vers la discipline elle-même</u> qui a pour objet de " susciter des vocations de scientifiques " (techniciens, ingénieurs, physiciens,...). On tend ici vers un objectif professionnel, d'où une mention des " relations transversales " entre la physique d'une part et d'autre part les sciences de la vie (médecine), les sciences du globe (météo), l'air et espace, la communication, l'informatique, la musique et arts plastiques, l'architecture.

- Pédagogie du cours de physique-chimie

L'enseignement de la physique-chimie est dispensé par le biais de deux types de séance: les cours magistraux (CM) et les travaux pratiques (TP).

Les CM comportent une partie théorique et magistrale, et une partie plus pratique consacrée à des exercices d'application. L'ordre de ces parties n'a rien d'arrêté dans la mesure où les aléas d'un cours peuvent rallonger la partie théorique forçant l'enseignant(e) à reporter la partie pratique à la séance suivante sous forme de correction de travail personnel à faire chez soi.

Les TP se déroulent en trois phases: une première partie magistrale qui consiste en la lecture de rappels théoriques figurant sur la fiche de la séance, une deuxième partie de manipulation selon un mode opératoire fourni sur la fiche et d'application pertinente des données mathématiques vues lors du CM, et une troisième partie consacrée à la mise en commun des résultats et à des ajustements des raisonnements et des connaissances.

Une nette orientation est prise en faveur de la manipulation des concepts et connaissances par les élèves en conformité avec les principes directeurs de physique

> " [l'enseignement] doit montrer que cette représentation cohérente est enracinée dans l'expérience: les activités expérimentales ont une place essentielle ".

L'approche observée suit la logique interne de la discipline et des contenus enseignés. A terme, la progression prévue devra avoir conduit les apprenants à un certain niveau de compétence scientifique après acquisition des divers

contenus enseignés dans chaque unité. Cette compétence englobe des savoirs disciplinaires et un savoir-faire scientifique: savoir appliquer une démarche scientifique dans le cadre d'un mode opératoire établi. On se situe dans une approche déductive qui part de la présentation d'une règle générale et de ses principes théoriques aux applications. Cette optique donne à l'enseignant un rôle prépondérant et place les élèves dans un rôle d'applicateurs de principes déjà posés.

Le cours de DNL en langue étrangère se déroule dans le respect de ces instructions. Notons qu'il est tout à fait possible de définir une autre orientation pédagogique pour la physique chimie.

- Quelques éléments descriptifs du discours

Le discours, en cours de physique et de chimie, est le résultat d'un ensemble de "spécifications langagières". Ces spécifications aboutissent en fait à des limitations du potentiel discursif. Elles sont observables en classe de physique et de chimie et transparaissent au travers du lexique, de la syntaxe et de la modalité.

*Spécificité terminologique*

Prenons un extrait d'une séance avec une classe de première (P, A et B représentent respectivement l'enseignante et deux élèves).

**P**: ...qu'est-ce que c'est qu'une combustion? (écrit au tableau le début d'une équation-bilan).
**A**: une réaction.
**P**: une réaction avec qui?
**A**: avec le dioxygène.
**P**: avec le dioxygène, pour donner quoi?
**A**: du $CO_2$
**P**: du $CO_2$, et...?
**B**: de l'eau
**P**: et de l'eau, d'accord? (complète l'équation au tableau). Pour la combustion suivant le produit chimique qui brûle, il faut d'abord qu'il soit sous forme gazeuse. Donc vous aurez un changement d'état: vous partez d'un liquide ou d'un solide à un état physique vapeur et ensuite seulement vous aurez la réaction de combustion.

Cet échange professeur-élève a pour but de dénommer de manière précise les objets ou concepts. Le mot " combustion ", couramment employé, ne pose *a priori* aucun problème. Mais il s'agit ici de le définir de manière précise et par rapport à la DNL. Cette opération lexicologique pose quelques difficultés: les élèves doivent utiliser une terminologie adéquate, qui renvoient à des concepts spécifiques. L'enseignante relance à chaque étape la définition pour aider les élèves à la compléter. Mais, savoir employer à bon escient une terminologie spécialisée implique aussi une maîtrise des concepts sous-jacents; nous retrouvons là une prescription des textes officiels:

" l'acquisition [du] langage et du vocabulaire qui y est associé (...) est nécessaire à qui veut *parler* chimie (...). Sous-jacent à ce langage, figure un certain nombre de concepts abstraits ".

En DNL scientifique, on va mettre, de toute évidence, l'accent sur le rôle de la terminologie et sur son maniement, pré-requis indispensable à l'acquisition d'une méthode de travail scientifique: il faut définir le système à étudier avant l'application d'un calcul ou d'une règle. Le lexique de spécialité, présent dans le discours étudié, véhicule les concepts à acquérir et permet une économie langagière. L'activité lexicologique cache une activité cognitive complexe d'appropriation de concepts. Cette limitation ou spécification du champ lexical est essentielle à repérer, si l'on veut qualifier correctement le type de discours qui se déroule en classe de DNL et les activités cognitives suscitées.

*Spécificité syntaxique*
La langue de spécialité ne se résume pas à son aspect lexical et terminologique. L'objectivité scientifique exigée par la nature de la DNL amène des spécificités d'ordre syntaxique. L'une des caractéristiques essentielles est l'emploi d'un sujet neutre, par exemple le recours au pronom " on ", à la tournure " il faut que ". Le discours scientifique se caractérise par sa valeur universelle et objective.

P: Tollen's reagent is prepared by adding an ammonia solution to a 0.05mol/L silver(I) nitrate solution until the precipitate of silver oxide nearly dissolves, and must not be prepared in advance: you must wash away Tollen's reagent immediately after use, as it becomes explosive on evaporation.

On a ainsi en anglais un usage poussé de la voix passive et du pronom personnel " you " à valeur générique. Le discours de DNL scientifique est donc peu teinté par la subjectivité et l'agentivité: nous avons majoritairement une focalisation sur le protocole d'expérimentation et le procès scientifique (le phénomène reste le même indépendamment de celui qui le met en œuvre). Ce type de spécification syntaxique doit être relevé: tenir un discours scientifique, c'est adopter un point de vue non subjectif. L'énonciateur-élève doit apprendre à maîtriser les outils langagiers particuliers à ce type discursif.

Il existe d'autres caractéristiques du discours scientifique, par exemple la présence forte de connecteurs du discours.

S: Aldehydes are good reducing agents, therefore they can even be oxidised by mild oxidising agents such as Fehling's solution and Tollen's reagent.

P: Toute décomposition d'un explosif est une réaction d'oxydoréduction, d'accord? Donc quand il y a réaction d'explosion d'un explosif, comme les réactions de combustion de n'importe quel carburant, ce sont des réactions d'oxydoréduction. Bien sûr, quand on parle de réactions chimiques, on s'intéresse au fait qu'elles soient exothermiques, endothermiques ou athermiques; donc on parle aussi de chaleur de combustion.

Les connecteurs expriment différents types de rapport entre propositions, tels que la conséquence logique (dans le cadre d'une démonstration par exemple). La préposition " therefore " du premier passage traduit ce lien logique exigé par le discours de chimie. Cependant, si les connecteurs du discours scientifique sont nécessaires à la rigueur cohésive de celui-ci, il n'en reste pas moins que ces liens participent également à la présentation pédagogique des contenus enseignés.

C'est le cas dans le deuxième extrait où " donc " possède également une valeur illocutoire récapitulative. Cette " ponctuation " pédagogique a pour but de permettre aux élèves de mieux cerner les étapes du discours de l'enseignante et de suivre la progression du cours, de la démonstration, etc. Il peut donc y avoir ambiguïté et incompréhension des élèves. En DNL scientifique, les élèves-locuteurs doivent apprendre à maîtriser une syntaxe particulière.

*L'énonciateur et le discours: la modalité*

Tout discours fait appel à différentes valeurs modales. La dimension pédagogique implique un discours empreint de modalités du premier ordre (assertion, interrogation) et de modalité intersubjective (impératif, injonctif). Voici quelques exemples.

**P**: Donc au départ, vous aviez une certaine quantité de paraffine et après, vous avez une partie de la paraffine qui s'est transformée en quoi? en $CO_2$ et en eau (écrit l'équation et la réponse au tableau).

**P**: (…) donc la quantité de chaleur s'exprime en quoi?
**N**: Joules
**P**: Joules, la chaleur de combustion (…)?

**P**: sinon, vous encadrez celle-là. De toute façon, ce type de relation vous devez savoir après les retrouver par vous-mêmes, (…).

Ces deux modalités sont fortement présentes, mais ne caractérisent pas la la DNL. Considérons les extraits suivants:

**P**: Si vous brûlez une bougie de 352 grammes jusqu'à la fin, elle va mettre un certain temps à se consumer.

**P**: La masse, vous, vous mettez votre résultat; la masse molaire, je l'ai donnée avant: 352, alors si vous mettez la masse en kilogramme, il faut mettre la masse molaire en…?

**P**: When I drew the loudspeaker/ the membrane was here and we said/ if we move the coil/ the membrane produces sound// but if I move the membrane/ remember you did the stuff with the coil/ you moved the coil/ if you speak in front of the membrane/ it will move/ and because it will move the coil will move/ and I'll get electricity/ so both of them can be used in both ways.

Le discours scientifique est marqué par la modalité dite "épistémique ", c'est-à-dire évaluer la probabilité de réalisation d'un procès. Dans le premier passage, l'actualisation du procès de la proposition principale dépend de celle de la proposition introduite par " si ". Les "if-clauses" et autres structures hypothétiques dominent le discours de la DNL scientifique. L'énonciateur, en cours de DNL scientifique, n'a pas à produire les mêmes intentions énonciatives que dans dans une situation courante. Cet aspect est également fondamental si l'on veut apprécier réellement ce qu'une DNL permet de mettre en œuvre.

*Pour nous résumer*

Ces quelques éléments d'analyse, collectés à partir des travaux d'étudiants de maîtrise, montrent bien que la classe de DNL scientifique est loin de fournir un "environnement communicatif naturel", complètement ouvert et libéré des contraintes, qui permettrait à tous de communiquer de façon courante et fluide sur des sujets ordinaires. Les environnements de communication en DNL sont en fait très particuliers. On peut se demander si ce type d'environnement communicatif offre une garantie de transfert pour des contextes autres que scientifiques. Nous avons pu montrer que la communication en DNL se caractérise par des limitations importantes du potentiel discursif offert aux élèves.

De plus, nous constatons que la DNL impose un discours spécifique exigeant, qui doit respecter la rigueur du discours scientifique. La langue est certes un outil, mais l'outil que les élèves doivent maîtriser relève plus d'un discours spécialisé que d'un discours général. Le discours spécialisé impose aux locuteurs l'utilisation d'un code particulier. Les élèves-locuteurs n'ont pas le choix de leur parole: ils doivent manipuler une parole contrainte par un ensemble de règles strictes.

Nous avons pu voir aussi que l'ambiguïté, que l'on croyait inhérente au cours de langue, est en fait inhérente à toute situation pédagogique. Le discours scientifique et pédagogique en DNL scientifique semble même apporter d'autres formes d'incompréhensions possibles pour les élèves. On doit donc se poser la même question qu'en cours de langues: les interactions pédagogique en DNL sont-elles propices au développement des stratégies de communication de haut niveau et aux stratégies d'apprentissage?

## 4.3. Divergences et convergences dans l'option européenne

- Pratiques convergentes

On trouve dans les textes officiels (que ce soit en langue, en mathématiques, en physique-chimie), le même souci de centration sur l'élève et sur les savoir-faire. Il y a une convergence certaine au niveau des conceptions pédagogiques. Ces conceptions de didactique générale renvoient à la notion de pédagogie active, de constructivisme, de développement personnel, de priorité aux savoir-faire, de valorisation des interactions sociales en classe.

Cependant, dans la réalité du terrain pédagogique - ce que l'on observe réellement - on constate la même difficulté des enseignants à réellement se centrer sur l'élève et les savoir-faire. On peut ainsi voir que l'attention est portée aux contenus et que le cours est largement dominé par la parole et les actes de l'enseignant. En classe non linguistique se rajoute l'obsession du programme et de la préparation au baccalauréat. Certains chapitres réputés difficiles vont occuper une grande partie du temps. Enfin, les activités pédagogiques proposées par les enseignants sont assez réduites et suivent le schéma traditionnel. Le temps de parole des élèves n'est donc pas plus important que dans un cours de langue.

- Pratiques divergentes

Nous pouvons noter plusieurs types de variation. Les variations sont d'abord locales: le statut de la DNL dépend du degré d'implication de l'établissement scolaire. Dans certains cas, on aura une implication minimale avec par exemple une DNL pour le plaisir, jouant le rôle d'une option. Dans d'autres cas, la DNL sera parfaitement intégrée. Le degré d'implication joue un rôle fondamental dans la réussite du dispositif et en particulier dans le degré de

satisfaction des enseignants et des élèves. Mais ces divergences sont également personnelles. Chaque enseignant fonctionne par rapport à l'idée qu'il/elle se fait de la DNL et de l'apprentissage des langues.

Il existe une divergence "naturelle" des DNL: nous sommes, en effet, en présence de discours spécialisés qui imposent un ensemble de contraintes langagières à la communication. Le cours de langues en lycée, lorsqu'il est consacré à l'étude de textes littéraires ou de civilisation, peut être également considéré comme un discours spécialisé (on utilise une langue étrangère pour parler de littérature, faire un commentaire de texte, …). Chaque DNL apporte une approche plus focalisée et complémentaire à la communication quotidienne. Pour offrir une formation complète, il faudrait ainsi pouvoir proposer aux élèves une palette variée de DNL.

Il me semble que l'on peut estimer que les DNL ne sont pas une alternative au cours de langue mais un complément nécessaire, parce que, justement, elles offrent des contextes communicatifs différents.

## 5. Ouvertures: quelques pistes de réflexion

- Quelle bilingualité?

Ce début d'observation de terrain nous invite à questionner le concept de bilinguisme idéal à parité. Dans le cas des classes d'anglais, cette conception des classes européennes est en totale contradiction avec la réalité observée. Il nous semble plus pertinent de réfléchir à la définition d'une bilingualité pragmatique pour en tirer un certain nombre de principes pédagogiques plus réalistes.

- Quelles compétences viser?

Est-il raisonnable de se fixer comme niveau à atteindre une compétence globale à parité? Nous ne le croyons pas. Dans ce cas, il est nécessaire de réfléchir aux compétences partielles que ce type de dispositif permet de mettre en valeur. Nous avons vu que les DNL peuvent jouer un rôle complémentaire aux cours de langues. Comment définir alors ces complémentarités en termes de compétences? Les compétences visées en DNL scientifique sont-elles identiques aux compétences visées dans d'autres types de DNL?

- Quelle prise en compte des phénomènes acquisitionnels?

Nous n'avons pas observé de prise en compte explicite des différents niveaux de performance des élèves. On fait comme si on avait des élèves avancés ou largement débrouillés, même si dans la réalité on sait que ce n'est pas le cas. Comment définit-on ce niveau "avancé"? Cette approche idéaliste des élèves en tant que locuteurs avancés leur retire le statut d'élèves apprenants. C'est une dérive possible du cours de DNL: on pense pouvoir se limiter à une mise en pratique et pas à faire apprendre de nouvelles stratégies de communication. Une réflexion sur le couple stratégies de communication / stratégie d'apprentissage semble nécessaire. Le cours de DNL doit-il ignorer tout ce qui relève du métacognitif? On a envie de dire: en classe de DNL l'apprentissage continue aussi.

- Langue de spécialité / langue générale?

Cette ancienne dichotomie semble réapparaître dans le cadre des cours de DNL. Dans un cours de mathématiques on va chercher à utiliser une manière de dire conforme à un raisonnement mathématique. Ce type d'argumentation est tout à fait spécifique. Il n'est pas évident qu'il puisse être transférable dans d'autres contextes plus généraux. Le cours de DNL semble devoir jouer un rôle

de complémentarité et non pas être en mesure de remplacer le cours de langue: souhaite-t-on développer des compétences plus spécialisées?

- Quels effets du bilinguisme sur la construction des savoirs?

Nous avons été surpris de voir que les enseignants utilisent différentes formes d'évitement de cette question fondamentale. Certains vont décider de faire en français un chapitre réputé difficile ou expliquer en français un point important et difficile à comprendre. D'autres vont doubler un cours en anglais par un cours en français pour être bien certains que les savoirs sont compris. Ces enseignants, pourtant militants, semblent donc penser que tout ne peut pas s'enseigner en L2. On touche ici le fond du problème. Y a-t-il un effet positif ou négatif sur l'acquisition de connaissances en DNL? Peut-on évaluer l'impact de l'enseignement?

- Quelle formation des enseignants?

Cette question focalise aujourd'hui toute l'attention des acteurs principaux de ce type de programme bilingue. Il est en effet difficile de trouver des enseignants prêts à intervenir sans formation. Mais comment, sans abusivement surcharger la formation des étudiants et des enseignants, définir un programme raisonnable. Nous savons que, même pour les enseignants de langues, il est utopique d'imaginer un programme idéal qui garantirait des enseignants parfaitement au clair des nouvelles données scientifiques et pédagogiques. Il semble cependant nécessaire de créer des modules complémentaires pour les étudiants non linguistes aussi tôt que possible. Les tentatives actuelles de formation ne semblent pas satisfaisantes.

- Quel plurilinguisme pour quels effets sociaux?

Pour conclure, il nous semble nécessaire de réfléchir à la spirale qui nous conduit à créer de nouveaux programmes. Nous assistons en effet à une expansion externe forte de la didactique des langues. Cet expansionnisme pose des problèmes d'intégration dans le curriculum général et de continuité du cursus. Il pose également des questions à la discipline des langues dans la mesure où les discours à la mode exploitent ces nouvelles ouvertures pour mieux critiquer l'inefficacité des cours de langues. Il faut donc veiller à ne pas déshabiller la discipline des langues, en la réduisant à sa plus simple expression, pour gonfler des programmes de formation qui ne sont en fin de compte que des compléments, certes potentiellement intéressants, mais sans validation scientifique. On semble oublier que l'objectif prioritaire est de concevoir un curriculum des langues plus sensible au plurilinguisme et au développement d'une citoyenneté européenne. Le danger qu'il faut donc éviter est la création d'une version modernisée de l'élitisme linguistique.

## Bibliographie

Blanc, M.; Hamers, J.F., 1983: *Bilingualité et bilinguisme*, Pierre Mardaga.
*Cadre de Référence Européen*, 1997, Conseil de l'Europe.
Coste, D. & al., 1997: *Compétence plurilingue et pluriculturelle*, Conseil de l'Europe
Dabène, L., 1994: Repères sociolinguistique, Hachette.
*Encyclopedia of bilingualism and bilingual education*, 1998, Multilingual Matters.
Grosjean, F.; Py, B., 1991: « La restructuration d'une première langue: l'intégration de variantes de contact dans la compétence de migrants bilingues », *La Linguistique*, 27.
Lüdi, G., 1987: *Devenir bilingue – parler bilingue*, Tübingen, Niemeyer.

Mackey, W.F., 1962: "The description of bilingualism", in *Canadian Journal of Linguistics*, 7.

Marsh, D. et Marsland, B., 1999: *CLIL Initiatives for the Millennium*, Continuing education centre, University of Jyväskylä.

Py, B., 1992: « Regards croisés sur les discours du bilingue et de l'apprenant, *LIDIL*, n°6, juin.

Springer, C., 1996: *La didactique des langues*, Ophrys.

Springer, C., 1999: "L'acquisition de compétences en milieu scolaire", in *Les Langues Modernes*, novembre (à paraître).

Stern, H.H, 1989: *Fundamental concepts*, Oxford University Press.

Stern, O.; Eriksson, B.; Le Pape, Ch.; Reutener, H.; Serra Oesch, C., 1996: « Acquisition des compétences discursives dans un contexte plurilingue » in *Vals/Asla, Bulletin suisse de linguistique appliquée*, 64.

# CHARACTERISTICS OF POST-2000 CONTENT AND LANGUAGE INTEGRATED LEARNING

**David Marsh**, University of Jyvaskyla, Finland (marsh@cone.jyu.fi)

*Abstract*

The CEILINK Think Tank report, *CLIL Initiatives for the Millennium* (April 1999) provides insight into the types of development which we might expect to see with regard to European CLIL over the period 2000-2010. This insight was gained from the 54 professionals from 17 European countries who joined the Think Tank to brainstorm, collate arguments, and put forward concrete ideas by which to enhance the development of CLIL. Although their interests were diverse, ranging from language planning through to teaching practice, these professionals shared a single objective, namely the identification of areas in need of special attention if CLIL is to develop as a meaningful tool for the learning of additional languages.

During the 1990s we have seen growing interest in the integration of subjects or themes within subjects at different levels of national educational systems. There is clearly a prevailing view that some subjects should not be compartmentalized within a curriculum. The current interest in CLIL should be regarded as one part of this interest. Integration is often connected to the notion of relevance because as teachers and learners know, without relevance it can be hard to achieve and sustain meaningful learning. This is particularly true of the learning of language. Because the notion of curricula integration is capturing the imagination of those who have the power to distribute resources, or change legislation, it is essential that those of us who have been working in this field for up to 30 years do not now miss the opportunity to assert CLIL in its rightful position as a significant example of integrated learning. The CEILINK Think Tank was organised to facilitate this through consolidating experience and examining key forms of action necessary to achieve developmental goals.

In this presentation we examine the recommendations resulting from the Think Tank. These are arranged according to the needs and interests of learners, practitioners and other stakeholders, and could be considered as the current areas which require strategic planning and action if the potential of CLIL is to be realized in the European educational landscape.

## Introduction

The significance of this conference, and numerous other similar initiatives, is based on the core problem of life in a single market which embraces a wide range of languages, majority-minority, widespread-regionalized, empowered or under threat. A single market, a single currency, even a notion as idealistic as European citizenship, can all be created and nurtured through dialogue, the creation of infrastructure and strategic decision-making. But the issue of languages remains, for obvious reasons, a 'black hole' in regional, national and European thought and debate. Unlike trade agreements, currency and projections of identity, the European language dilemma cannot be pegged,

regulated and subject to centralized control unless it is to be used as the object of oppression, or artificially sustained in a way its ability to regenerate is curtailed.

Idealism and 'vision' can go a long way towards achieving outcomes previously thought impossible. But at some point pragmatism has to be introduced if we are to realize sustainable and ethically viable objectives. Top-down decision-making, even if supported by immense power and wealth, can influence, adversely or positively, language planning and policy, but if long-term sustainability and growth is to be achieved, grassroots interest and commitment must also flourish.

Trade rules, currency rates, media soundbites on identity are all political tools which are in the hands of political forces, although with increasing globalization, the power of localized administration is continually diminishing. Languages theoretically remain under the control of nation states. Policy may be carried out through national education systems, but in reality the changing face of trans-global forces and the increasing empowerment of European citizens to access trans-national media and communication systems, and engage in virtual or physical social mobility, unfetters language from localised political power. And yet in Europe there is no acceptable solution in sight which will satisfy idealistic visions and practical needs for sustaining linguistic diversity in the European landscape. For some people who try to reconcile intellectual and ethicial depth of thought with practical aspects of life, the future European linguistic scenario is full of problems, some of which are potentially volatile.

To summarize let us consider three adages. 'Talk is cheap', 'words don't build bridges', and 'you can take a donkey to water but you cannot force it to drink'.

European integration and centralization of power is now so advanced that its fundamental character of linguistic and cultural diversity can no longer be handled adequately through rhetoric and treaties of intent. We are at the stage at which visionaries need to make way for pragmatists because there are bona fide forces operating now, from both within Europe and outside, which are accelerating the pace of change and degree of influence which are impacting on societies. Any pragmatic perspective on linguistic diversity needs to be justifiable in terms of economic value and seen to bring returns on investment. This is as true of language learning as any other issue subject to budget management. The economic yield may, in some cases be indirect, but nonetheless it must be transparent and based on empirical analysis. Finally, the language issue requires grassroots support, commitment and eventual understanding of the returns to be gained from the time and effort invested.

So where does this position statement lead us with respect to *Content and Language Integrated Learning* (CLIL)? This paper argues that CLIL can contribute to the debate on the European language dilemma by providing solutions to a range of the core problems we presently need to address. Based on the outcomes of the CEILINK Think Tank[1] it introduces core development areas which need consideration if we are to identify and implement language learning opportunities which embrace grassroots support and national policies in a manner which is theoretically sound and economically viable.

*Features Indicative of CLIL 2000-2010*

The most striking development forecast is that CLIL will continue to penetrate mainstream education from its founding position in schools and colleges which have special status according to circumstances linked to selective student intake or special regional characteristics[2]. The successful application and experience of CLIL in the small number of 'special status' schools and colleges is therefore likely to be increasingly viewed as offering potential and opportunities for children and young people in mainstream, less-selective institutions. Private finance, organizational subsidies to schools for certain types of employee's offspring, location in highly specific environments such as border regions, will thus no longer be the defining factors which allow for implementation of this approach.[3]

Parallel to this development will be a question mark over the stages at which children should be introduced to additional language learning and teaching[4]. It is envisaged that increasing parental interest will lead to pressure being applied in the primary sector in order that techniques such as 'language nests' and 'immersion' will be used on a small-scale so that children will be introduced to additional language learning at an earlier stage than has previously been the case. This grassroots interest may, in some environments, extend to pre-school and kindergarten. At the other end of the educational spectrum, interest will be increasingly shown towards the introduction of the approach to adolescents at secondary level who may start CLIL without prior experience, probably initially through supporting concurrent formal language instruction[5].

As increasing discussion focusses on the types of student who can both cope and benefit from CLIL, we are also likely to see a shift of interest away from considering that it is only the linguistically or acadamically gifted students who are most likely to reap the rewards of CLIL. Attention will increasingly be given towards students in vocationally-oriented education, which, in some environments, has not tended to devote resources to additional language learning[6].

It is thus considered possible that the range of educational institutions and corresponding age-range of learners will be increasingly discussed in relation to implementation of any of the diverse CLIL models presently being discussed. If and as this happens, further developments may ensue.

One of these concerns credibility[7]. Efforts to introduce and develop this approach in many environments is likely to reach a critical threshold level within a short period of time which is marked by a possible CLIL credibility gap. The difference between what proponents of the approach claim, and the tangible results seen to be achieved will have to be addressed earlier than later if this threshold is to be overcome[8]. If evidence is to be found then its realization will be increasingly dependent on resources being utilized which currently reside in higher education and research institutes. Such organizations will need, themselves, to be convinced of the value of directing research interests towards CLIL, and one way in which this could happen is linked to political, market and grassroots forces requiring practitioners to be qualified to use the methods within the approach in the classrooms.

We thus face a possible cyclical development here in which credibility is required, but can only be attained through other research-based stakeholders focussing attention on establishing verification procedures and benchmarks. It is envisaged that this will occur as higher education establishments, already coming under increasing pressure to assert their relevance and viability in some regions, respond to the need for educating and qualifying teachers for the market[9].

Once developmental thresholds are reached and credibility established it is likely that we will see publishing companies actively trying to reap the rewards of interest in CLIL. Here it is likely that the already powerful commercial interests of English language teaching will adjust output previously focussed on the teaching of English as a second/foreign language, and publish both teacher developmental textbooks and materials for CLIL subject learning. This could pose problems for those in Europe who see view CLIL as a generator of plurilingual rather than solely bilingual education. If commercial interests lead to widespread availability of quality English language materials it is possible that this will lead to a reduction of interest in using alternative target languages in CLIL because of a perceived lack of materials to support other languages[10]. However, this could be countered by a commercial enterprise producing predominantly graphic materials made available with texts in different languages. Once this happens, the major issue facing many practitioners, namely 'lack of materials', may be addressed in a manner which supports the plurilinguistic nature of CLIL which is the next issue we need to consider with regard to the forthcoming decade.

Anecdotal and small-scale enquiry suggests that the majority of CLIL activity in present-day Europe has English as the major target language. However unpalatable this is to the ears of some of us, it appears to be a truism. If English predominates now, what of the future? We know that additional language learning is rarely confined to the walls of the classroom because significant development requires other sources of input and opportunities for output. The most significance source of input currently comes as a result of technological development. In the USA, one of the wealthiest large countries of its time, it took 40 years for radio to get an audience of 40 million listeners; The same number took 15 years to start using personal computers in that country, and after only 4 years the Internet had attracted 50 million frequent users[11]. The in-roads made by satellite broadcasting and the advent of digital TV and TV/PC is forecast to have a rapid and huge impact on media availability in European homes. On a global basis considerable power resides in the hands of English-speaking media and communication corporations. Admittedly technological development will eventually enhance the availability of media which is transmitted and received in other languages, but there is little doubt that English, like a virus, is strong and forecast to become ever more stronger in asserting itself on the European and world stages[12].

In education circles there are those who argue that only a single target language is actually viable for CLIL, and that to consider use of more than one target language in the course of a student's education will lead to learner inter-language confusion, unfulfilled outcomes and dashed expectations. As you listen to these arguments you will find the voices echo other rather questionable views on language acquisition and learning, especially in relation to the concept of 'normality'. Talk of people becoming semi-lingual as a result of exposure to more

than one language, having reduced intellectual and spiritual growth potential, lower intelligence or being otherwise disadvantaged and handicapped [13] has been all too common in certain circles in this century. The same misguided, often politically-driven arguments can sometimes currently be heard in relation to exposure to more than one target language in CLIL.

Leaving the confines of political issues within nation states[14], it is all too obvious that the ability to think to a greater or lesser extent in more than one language is frequently cited as advantageous rather than disadvantageous. But will the future citizens of Europe benefit from being able to switch from their environmental majority language into a single predominant target language, namely English? Some might argue that the only way in which Europe is to function effectively is for widespread use of a single lingua franca. Others would suggest that a Eurolect, possibly initially based on English, may will evolve but that the need, will and desire to nurture linguistic diversity will remain for a very long time indeed[15].

The ever-increasing intrusion of the English language into European life, resulting not from the domination of any single country but the early history of the 20th century and the pragmatics of major global interests is a reality. It is exposure to the utilitarianism of English which is likely to become increasingly instrumental in encouraging interest groups to adopt other target languages in CLIL. In other words, it is envisaged that parents will regard formal instruction and widespread opportunities to learn and use English as a norm of everyday life, and increasingly voice the view that CLIL should be used to promote learning in an additional language. Curiously, we could see the position of English as the catalyst for seeing CLIL practice embracing other languages. In the first hand it is unlikely that this interest will involve the less widely taught and less used languages, but even with respect to these, local considerations might lead to their eventual inclusion as CLIL target languages[16].

Finally, let us turn to language teaching itself. Although the term *Content and Language Integrated Learning* is not as succinct and readily usable if compared to terms such as *immersion* or *bilingual education*, it provides us with a phrase which embraces rather than differentiates the variety of ways in which methods are used. In so doing, it promotes cohesion and solidarity in discussion which has often been marked by partisanship and territorialism leading to prevention rather than encouragement of optimal dialogue and development. It is a term which is predominantly inclusive, particularly with regard to language and non-language subject teaching professionals.

It is the relationship between these two groups which is likely to evolve over the next decade. CLIL, implemented appropriately, is not necessarily within the remit of ownership of either of these professional groups. It is more likely an outcome, resulting from inter-disciplinary cooperation and strategy, which provides the main beneficiary, the learner, with the opportunities not previously seen in some forms of mainstream education. The language teaching profession, in particular, cannot work in isolation from, or otherwise ignore, the impact which CLIL could have on the curriculum. And yet this has been seen to be the case in some environments. Rather than critically dismiss CLIL as a passing fashion, or voicing concerns that it is likely to be deterimental to the overall linguistic competence of

learners, it is likely that the target language teaching profession will increasingly view CLIL as a positive development. It will increasingly see that its own professional goals may be enhanced through having students pass through an educational system with the self-confidence, ability and 'hunger' to use and continuously develop their target language abilities. To a lesser extent, teachers of 'first' or 'majority' languages will also be increasingly drawn into the debate over implementation of CLIL, because they will need to not merely address possible potential threats, as from linguistic interference etc., but also learn to utilize the learner's experience of CLIL so as to enhance the teaching of the first or majority language.

If this type of inter-disciplinary cooperation does not occur within the forthcoming decade then it is unlikely that CLIL will be embedded in the heart of any schools' ethos which would lead to the first major developmental threshold not being overcome, and the full potential for this approach not being realized[17].

These are features indicative of how we may see CLIL develop over the next decade. In some national educational systems such development might be minor, in others large-scale. Alternatively, critics of the approach may be vindicated and dialogue such as this may be destined for the 'idealistic but not pragmatic' shelf in the library of ideas! Personally, I do not believe that this will happen because CLIL offers a cost-effective way in which to prepare the European citizens of tomorrow which is directly in line with the philosophical and intellectual aspirations of those people who are attempting to find solutions to the European language dilemma which faces us in the here and now, and in the mornings to come.

In order that the next decade does witness the type of CLIL development outlined above certain issues exist which need to be addressed by a range of different interest groups, both nationally and trans-nationally. The CEILINK Think Tank produced 19 recommendations grouped into three categories according to the interests of learners, practitioners and other stakeholders. The following text is drawn directly from the CEILINK report and is self-explanatory:

## FOCUS ON LEARNERS

### Target Language Selection

Although CLIL can operate successfully bilingually, it can also be introduced as a tool for promoting plurilingualism in education and beyond. Thus CLIL should not be associated with any one particular language but viewed as an educational approach to support linguistic diversity. Initial CLIL exposure in a widely-taught language can be used as a springboard for later expansion into another widely-taught or less widely-taught language.

### Learner Selection Criteria

Selection for CLIL streams should not necessarily be based on first or target language competence because of the significance of learner motivation in achieving successful outcomes. Guidelines should be drawn up to facilitate the inclusion of a broad range of learners in a framework which encompasses diverse

models of CLIL. This would help to unlock the potential of CLIL beyond specifically privileged minority groups.

Study Skills

One commonly-cited additional value of CLIL is the enhancement of learning strategies and skills, which are related to broader cognitive application. Exposure to trans-disciplinary training in language-specific study skills could enhance development of specifically subject-related productive skills. This can be achieved through closer integration of first, target and non-language specialists in the curriculum.

*Assessing Learner Performance*

Assessment of CLIL learner performance has to be sensitive to the subject-language duality inherent within many models of CLIL. Integrated pedagogical classroom learning needs to be assessed using similarly integrated assessment tools. Viewing an examination text from a solely language or subject point of view negates the trans-disciplinary characteristics of CLIL learning. Testing and assessment apparatus need to be introduced which allow learners to show the breadth of their knowledge and skills in relation to both content and language.

Learner Certification

Formal recognition of learner achievement in certain types of high-activity CLIL should be made at national level. Efforts to have such documentation recognised by authorities and institutions trans-nationally should follow.

## FOCUS ON PRACTITIONERS

Initial Teacher Education

Initial teacher education in CLIL is a pre-requisite for consolidating this approach into mainstream education. Specialised programmes would need to be developed which would encourage inter-disciplinarity by providing subject and language specialisation and certification. Such programmes need to be more than add-on modules, and might involve a longer time-frame of study than conventional programmes. They might also require a closer working relationship between training institutions and schools, maximising the development of practitioners' skills in the learning of the linguistic, scientific and pedagogical aspects of CLIL.

In-Service Teacher Education

Experienced teachers of subjects and languages should be provided with the opportunity to move into CLIL through the provision of in-service development programmes. The outcomes from these programmes could then also inform the development of curricula for initial teacher education in CLIL. A continuing programme of in-service development is necessary for all practitioners, thereby providing up-to-date information concerning advances in CLIL, and maintaining both subject and language proficiencies. In-service packages should also be seen as a necessary part of context-specific development regionally and institutionally.

Postgraduate Qualifications

A trans-national higher degree programme, designed and implemented by key European centres of expertise in this field should be made available. Such a venture could act as a catalyst in establishing a flagship academic programme for European CLIL which could have a multiplier effect on trans-national initial and in-service education, and on research initiatives.

Practitioner Skills Assessment

External systems of quality assurance should be made available regionally and nationally for teachers and schools which wish to have professional review and feedback of competencies. Assessment teams would ideally comprise expertise in research and practice. Recommendations arising from the assessment would focus on the range of knowledge and skills required for good practice in CLIL which include factors such as language proficiency, pedagogical competence and socio-cultural awareness. In addition, part of such assessment would require focus on institutional capacity and implementation. Practitioners should also be encouraged to engage in continuous self-assessment using tools such as diagnostic language tests (or, for example, European Language Portfolio and Common European Framework of Reference) and classroom practice review, in order to identify developmental areas.

Utilising Existing Resources

Council of Europe and European Commission supported initiatives have produced a range of resources relevant to CLIL. A jointly compiled compendium of such output would be highly advantageous in ensuring ease of access by a wide range of CLIL interest groups. Practitioners should be encouraged to use not only the well-publicised existing tools, such as the Common European Framework of Reference and the European Language Portfolio, but also to seek out those less widely known project outcomes, such as EuroCLIC, which might have direct relevance to their own situation.

Internet Materials Bank

To assist in the provision of quality materials, which could be integrated into a range of national curricula, an Internet Materials Bank could be developed and piloted. In the first stage the Bank should only focus on a small range of modular or topic-based learning materials, specified according to level and language. The materials bank should ideally comprise downloadable resources, which would be designed with a view to flexibility and ease of adaptation, and links to other similar sites. Reviews of other suitable materials in published sources should also be included, alongside guidelines for practitioners to create their own materials.

## FOCUS ON OTHER STAKEHOLDERS

Description of CLIL Models

It is necessary to define, concretise and exemplify how CLIL can be implemented in different contexts and have this information produced in a style accessible to a non-specialist audience. Brief descriptions of variables and options should be supported by case-study exemplification with an overview of the range of models implemented. By examining facts drawn from existing experiences, interest groups would be able to select features of established practice which might be suitable for their local situations.

Dissemination & Promotion of the CLIL Concept

There is a need to establish a coalition between educationalists, parents/learners, and administrative and political interest groups. This requires that the feasibility of CLIL be expressed in clear and accessible terms alongside evidence of potential outcomes and cost-benefit analysis. This can be achieved through establishing a trans-national CLIL Consortium to examine key features of good practice, and tangible outcomes in relation to required investment. The Consortium, comprising multi-disciplinary expertise, would then establish and implement a strategic dissemination plan for regional, national and trans-national policy groups. The strategy plan should be able to capitalise on the European Year of Languages 2001.

Language Planning

A publicity drive targeting language planning groups, which sets out to provide information on the potential impact of CLIL on minority language interests and needs, should be incorporated into the strategic dissemination plan.

Curricular Development

Insight into those topics and modules, within subjects, which are reported as being particularly suitable for CLIL, should be considered in terms of the development of elements of a curriculum relevant to various European contexts. If such topics/modules were taught across Europe in different languages, a key problem in materials development would be overcome.

Breadth of Potential

Case studies of successful implementation of CLIL ranging from pre-school to higher education should be carried out to examine the full range of potential of this approach for all age groups.

Utilising Existing Expertise

Pilot projects should be used to bring together existing expertise and established infrastructures in, for example, specialist schools such as International Baccalaureate, European and others. This would establish dialogue and complementarity between these schools and mainstream educational institutions.

Testing and Evaluating Innovation

Initiatives should be made to include a wider range of expertise in CLIL than has previously been the case. Such expertise, generally research-driven, is needed to explore the multi-disciplinary and holistic features of CLIL. Objective empirical data are increasingly required to substantiate claims made for and against CLIL. The analysis of such data is instrumental in allowing informed decision-making on future development. Key issues requiring attention include:

- Linguistic multiplier effect of CLIL
- Concept formation in different languages
- Cognition and code-switching
- Development of pragmatic and metalinguistic skills
- Attitudinal change
- Comparative approaches to subjects
- Impact on first (and home/heritage) language and cultural identity
- Professional and societal long-term impact of CLIL.
- Second language learning/acquisition vis-à-vis CLIL
- Early learning in the CLIL environment
- Partial competencies
- Methodological integration of languages and non-language subjects

Previous relevant research findings should be brought together with the results from these areas of enquiry, and made accessible to a wider audience. A research inventory collating the European experience of CLIL would complement existing data from other continents. It is desirable that some future research initiatives be carried out by teams comprising both researchers and practitioners. These issues are unlikely to be addressed in a meaningful way unless official recognition of the need leads to the injection of targeted funding.

Support Mechanisms

The current availability of an interactive Internet site, which can provide the tools for networking different interest groups, needs to be sustained.

Conclusion
In any environment the single largest risk facing those wishing to develop CLIL probably lies in potential conflict of interests. It is clear that this method evokes both positive and negative appraisal. On analysis, it is possible to see that polarised and confrontational talk often reveals more about professional territory and perception of importance or influence than it does about the possible advantages for the most important beneficiaries, the youngsters of today who are the citizens of tomorrow. If CLIL is to have a future in mainstream education, then it is essential that key interest groups see that they are stakeholders in the provision of linguistically-enhanced education for the benefit of the wider society. In so doing, it is then necessary to undertake strategic planning which leads to coherent and sustainable implementation. Although countries differ widely in respect to educational curricula and interests, there is considerable overlap with respect to description and validation of the approach which can be enhanced through trans-national dialogue.

# TEACHER EDUCATION FOR MULTILINGUAL EDUCATION: A CLIL TEACHER TRAINING CURRICULUM

**Do Coyle, Centre for Research into Second and Foreign Language Pedagogy at the School of Education, University of Nottingham**.

## Introduction

Being a teacher trainer in the UK, who spends a large proportion of time training CLIL teachers - both initial and in-service- means that many of the challenges with which we are all familiar, have to be addressed and deliberated in an ongoing and dynamic way. The purpose of today,s session is to demonstrate how having to deal with the pragmatics of training has given rise to a set of guiding principles upon which our philosophy hangs. I should therefore like to consider the following elements:

i. training for CLIL teachers - mapping courses, matching needs

ii. establishing a common CLIL training curriculum

iii. ways forward

Before developing these three points, I should like to position myself within a national framework and within a philosophical paradigm.

## The English context

There are four important national factors to bear in mind when one thinks about CLIL in England:

Firstly, the one language which cannot be used for CLIL is English: French, Spanish and German are the most commonly taught modern foreign languages in the UK and therefore CLIL teaching naturally focuses on those languages. Whilst the non-English approach makes a valuable contribution towards diversifying the range of languages in the CLIL context, it does prove more difficult for us to find partner schools and establishments with which to collaborate.

Secondly, the CLIL movement in the UK is led by linguists and modern languages teachers, who believe that this may go some way towards helping improve the image of and motivation for modern foreign language learning. One might be forgiven for painting a somewhat depressing picture of modern foreign language learning in the UK, as in Legutke and Thomas's words (1991:8) a state of dead bodies and talking heads, is reached after three or four years. "Classrooms often generate output which is simply boring, uninspired and non-committal" - harsh criticism indeed, yet with a familiar ring. Inspection reports and research studies echo the same messages e.g. Powell's 1986 and Clarke's 1998 work on boys' under-achievement. "Fenced in by syllabus demands, often represented by the

complete dominance of the textbook, learners do not find room to speak for themselves, to use language in communicative encounters, to create text, to stimulate responses or to find solutions to relevant problems". It is therefore little wonder that languages teachers perceive CLIL as offering a potential context for their learners to find a voice. The current shortage of modern languages, science and geography teachers simply exacerbates the crisis.

Thirdly, discounting European and International Schools, there are between six and ten schools (both state and private) where there are established bilingual sections i.e. where students learn a substantial part of their curriculum, for at least one year, through the medium of another language. However, the number of schools where there is an interest in developing a modular approach to CLIL is rapidly expanding, especially in the state sector, as teachers become increasingly under pressure to raise standards and respond to national educational policy dictum.

Fourthly, in initial post-graduate teacher training (i.e. after having gained a university degree or equivalent), the PGCE (Post Graduate Certificate in Education programme) lasts for one year of which 24 weeks must be based in school. This statutory requirement, clearly has an effect on the approach to CLIL training and the way in which training institutions such as our university works with its partnership schools.

Fundamental principles

I shall now briefly outline the fundamental principles upon which we base our CLIL training in Nottingham. These are as follows:

-we use language for two purposes: to communicate and to learn

-current debate tends to either ignore the crucial role language plays in learning, or simply considers both aspects together. We believe that communication is less to do with the input-output metaphor and the giving and receiving of information, and more to do with social interaction.

-all teachers are teachers of language (Bullock Report 1974) - this carries a fundamental message for all teachers and underpins the national literacy drive in initial teacher training courses

-whether a teacher has a discipline specialism or a language specialism or both, means that teachers can make different but equal contributions to the CLIL movement. Ultimately, CLIL is to do with improving the quality of learning experiences offered to our young people.

-integration is the key concept, the foundation stone upon which we build our courses ie an approach to teaching and learning where languages and DNLs (I borrow this term from the French - disciplines non-linguistiques) are integrated within explicit and developing methodologies.

-learner entitlement is also at the heart of the CLIL philosophy. Varied and innovative ways of working must be developed in order to ensure that a wide a

range of learners as possible is offered a rich CLIL experience. This includes making CLIL available to more learners in terms of age, abilities and languages.

-the ideal CLIL trainee is not a naturally occurring phenomenon!, We must work positively with what we have in our pool of human resources and turn our limitations to our advantage. After all if England can.........!

**Part one**

Mapping courses- matching needs

In the recently published CEILINK report, I make a plea for the mapping of training courses. What does this mean?

Initially, it is useful to consider what a CLIL trainee teacher might offer. There is in my view, no such being as the ideal CLIL trainee. We often look with envy to those countries where graduates leave their higher educational institutions armed with a certificate stating that they have expertise in a subject area and a foreign language. However, in my country and in many others, we do not have very many such potential trainees- the system does not facilitate this. Instead, we have well-qualified subject specialists and well-qualified linguists - yet never the twain shall meet- except by occasional special personal circumstances. In my view, the future of CLIL is far too important to rest upon accidents of birth. Besides, there is a growing pool of young people who have spent at least one year abroad as part of their under-graduate studies within the Erasmus scheme, such as scientists who may have studied at a French or German university, whose experiences are most unlike students having experienced more traditional routes.

I prefer to see CLIL training as one where potential trainees stand on a balance. Whether the balance tilts in favour of specialism or language or whether the balance retains an equilibrium, simply determines the optional modules of the training course which trainees need to access in addition to a common core. I also prefer to see specialism, as a strength and to build on the areas of deficit. Of course, the nature of the specialism may well raise specific issues which Dieter Wolff described yesterday:

For the content specialist concerns about

personal linguistic competence and classroom management in L2

teaching issues- such as those linked to vocabulary extension and the role of translation

methodological issues - fundamental changes demanded by CLIL from where subject is taught in the mother tongue

For the language specialist concerns about

personal knowledge, skills and understanding linked to curricular subject

teaching issues - such as the realisation that language can no longer be ordered according to neat formulae and grammatical progression

methodological issues - a tendency to revert to methods of which individual teachers have had past personal experience (usually knowledge transmission)

Neither must we make assumptions about those trainees who have expertise in both areas- i.e. that they might naturally make connections between two traditionally discrete areas of the curriculum.

However, these problems, are not insurmountable if we can organise and map out training courses aimed at meeting carefully identified needs and dealing with specific issues. Organising in-service courses for subject teachers about to work in *classes europeennes*, has opened my eyes to some common pre-training perceptions. I quote a typical example:

"My conception of history teaching in English was limited to the simple translation of a typical French history lesson into English which would be a good point of studying English sources in their original tongue... The outcome of it would have been ( I thought) to enlarge the English vocabulary of the students on a specific topic ...." (Nottingham, February 1999)

The nature of trans-national elements incorporated into training courses also needs careful thought, especially in terms of the aims of school practice observations. Visiting schools in the target language country where L1 lessons are in operation, does not satisfy the same set of needs as visiting a CLIL classroom in another country, where the foreign language medium is shared by teachers and observers. We must be clear about the trainees, role in different learning contexts. However, if one analyses the potential training needs of different specialists (subject, linguist or joint), in addition to identifiable specific needs, a common training focus emerges for all trainees.

Common elements include:

-de-constructing current perceptions of teaching and learning - again I quote from an in-service course evaluation:

"The fact that our teaching methods are so different made us think about them- I,m pretty sure that I won,t teach in the same way than before coming here because I now know some answers to the big question - how can we make students get involved in their learning, especially if it's difficult work as in bilingual teaching."

-reconstructing the concept of integrated language and subject learning and teaching:

"I now know several ways to teach a specific historical or geographical subject through the medium of English, and I learnt much about learning in general..".

-reconsidering the role of language across the curriculum (Bullock Report)

"This module has made me aware of the linguistic problems raised by teaching in a foreign language which I had not taken into consideration at all- it now seems obvious to me that although I am not an English teacher, I cannot afford to teach in English as I would in French."

-the use of authentic materials, sources and culture:

"It was a powerful experience for me to see how the Norman Invasion was presented in English textbooks... when I think about how we approach it.... as for Waterloo!"

-an awareness of how language works and the role of language and teaching strategies to support learning:

"When I planned this lesson, I set about my science objectives, then I considered what the students, needs were likely to be in terms of the language they would want to use and be familiar with. That's why I have emboldened the key words, given visual support throughout the worksheets and presented the statistical information in this grid" (Science trainee teacher, using French as the medium for instruction. April 1999)

-an integrated methodology:

"Content specific methodology would have to focus on the learner, making language and content explicit and transparent, defining subject-specific skills and thus enabling the learners to bridge the gap between -the learners, conceptual and cognitive capacities and the learner,s linguistic level." (Edgar Otten, Council of Europe Report 12A)

"Linguistic content is inseparable from linguistic expression. In subject matter learning we overlook the role of language as a medium of learning. In language learning we overlook the fact that content is being communicated. (Mohan 1986)

These are but illustrations and examples of the common areas which emerge from listening to course participants and CLIL trainee students. This gives a strong steer regarding the content of the training courses.

Thus, in this part of the session I have tried to illustrate that the ideal CLIL trainee does not exist and that our training courses should reflect the rich diversity of potential trainees that are already part of our national resources. Whilst one country can not possibly open the way to all the potential routes on the map, it is possible that with effective collaboration, different countries could offer different training modules i.e. offering what we are all best at doing, in addition to core modules. In this context, yet another map of Europe might emerge. A concrete example of collaboration is taken from the BILD project (Bilingual Integration of Languages and Disciplines, Lingua A: Teacher Training Project for CLIL) which unites four training institutions in Europe (the universities of Nottingham, England; Wuppertal, Germany; IUFM Strasbourg, France; and the Institute in Wrocwraw, Poland).

[Video clip- This extract shows a Science session for trainee teachers at the University of Nottingham. Students are investigating the importance of questioning in the science classroom. They are all native speakers of English and the session is carried out using English. Part of the session also involves the analysis of a filmed school science lesson, where trainees analyse the type of questions used by the teacher. Videos such as these, which are inexpensive to make, could easily be exchanged with an institution where CLIL science trainees are working through the medium of English. The video can be exploited and analysed by CLIL trainees for different purposes - its language, its methodology and its cultural bias. Potentially a rich source of effective training materials.]

**Part two**

Towards a common CLIL training curriculum

In March 1997, at the Lancaster conference, I reported on work in, what I called at the time, the 3Cs Curriculum. Since that time, I have extended this concept through having worked with many more CLIL trainees and teachers, to include the 4Cs Curriculum. I should now like to present the 4Cs training curriculum as a potential European framework for CLIL training. I believe that if we can arrive at a common framework for CLIL training based on an agreed set of guiding principles - of course flexible enough to allow for national differences and specialism- then the next step would be to identify and define the training in terms of outcomes or teacher competences. Such competences would form the basis of our training, which would in effect enable training institutions to become more accountable and focussed, allow trainees to build up a commonly agreed portfolio of experiences, knowledge and skills, and to ensure that CLIL training became integrated into the international pedagogical and political arena.

The four Cs are as follows:

Communication

Content

Cognition

Culture

I shall illustrate each of the Cs with some examples of issues to be addressed as a matter of some urgency:

*Communication*

A critical review of classroom communication and the CLIL context including:

- using language to learn

- learning to use language

- language awareness

- language learning and acquisition

- developing learner interaction not reaction

- ways of developing from a transmission model to an interactive one - changes in how to encourage learners to speak and engage with their learning

- critical look at IRF

(initiation by teacher, response by learner and feedback by teacher eg

How many chairs are there? Six. Good)

- "Content classrooms present a high proportion of teacher talk, and

the opportunities for student response are limited and highly controlled... if teachers can provide more opportunities for exploratory talk and writing, students would have the chance to think through material and make it their own." Mohan (1986)

- "How do I know what I've found out until I hear what I say? (14 year old pupil)

*Content*

An analysis of the content or syllabus in terms of:

- key concepts, knowledge, skills and understanding

(deconstructing and reflecting upon what we teach, why we teach it the way we do and how we might teach it better)

- teaching for progression, given linguistic demands of CLIL environment

- use of emerging methodologies to make the most of the content and linguistic potential of a given theme, topic, syllabus

*Cognition*

Analysing the CLIL curriculum for its cognitive challenge:

- learning must be challenging

- contexts can facilitate thinking

- working with cognitively demanding but linguistically accessible texts, materials and so on

- teaching thinking skills

- CLIL and cognitive acceleration (there already exists a growing movement in the profession aimed at encouraging learner thinking in Science and Geography. The time is right for the development of a similar approach to be developed within the CLIL context)

*Culture*

Because culture is not only embedded in the language we use but also in the methods and approaches we have in organising our classrooms, then CLIL has to consider the cultural implications of teaching through the medium of another language and its relationship with another culture. Examples of issues to be addressed:

- wholesale adaption of another country's textbooks may not be feasible because of implicit methods which may conflict, and yet on the other hand

- using another country's materials may provide a rich cultural experience for the learners- working towards the nature of truth from different or conflicting perspectives

- how can cultural issues be exploited in the CLIL classroom and transformed to raise learners cultural awareness as European citizens?

The points I have added under each of the headings merely serve as an illustration of the many issues which are pertinent to moving CLIL forwards and need to be addressed. For me, this is the next stage of development for CLIL training. Once we have a common framework, then the details can be made to fit according to different requirements- such as the length of the course, the particular focus of a module, the methodologies used to respond to the core principles and so on. An agreed framework will provide the pegs upon which to hang effective training.

**Section three**

Ways forward

The final part of this session is to look at ways forward by drawing on experience so far.

I shall list some features of our CLIL initial training course which I hope offers food for thought:

To raise linguistic awareness, students are exposed to an unknown language (usually Russian or Japanese)to encourage a deeper understanding of and empathy for learners

Each trainee is set an individual language programme to help them improve their linguistic skills. This also helps them become aware of the importance of autonomous learning. They are also encouraged to work in tandem with modern languages trainee teachers

All students take part in micro teaching sessions where they are required to teach for a short period of time. This is filmed and analysed. In particular, our CLIL trainees engage in micro teaching with the modern languages trainees since this leads to fruitful discussion and analysis

Trainees focus particularly on creating materials by considering task types which encourage classroom interaction and problem-solving. There are also specific sessions on using effective question techniques.

Trainees consider how to present new material - especially that which is cognitively demanding but linguistically accessible. They consider how to incorporate learning strategies into their teaching and how to use teaching strategies effectively. Great emphasis is placed on lesson planning based on the 4Cs strands.

All trainees are required to audio record lessons (their own and another teacher) in order to transcribe. It is through transcription that trainees can understand at a micro level the intricacies of classroom interaction and make considered judgements about their own teaching. This is the start of inculcating the role of teacher-researcher into our training courses. We believe this to be essential. All students have to carry out an action research project during the course.

Trainee languages teachers are also exposed to the CLIL concept. Not only do they work alongside CLIL trainees wherever possible, they also have sessions which look at how to extend foreign language teaching, how to work collaboratively with other subject departments in school, how to organise a collaborative curriculum and so on.

Our CLIL trainees are also offered help and support in how to present effective arguments in their teaching practice school as to why trainees might pioneer, extend, introduce CLIL work - this has been essential since there are currently insufficient places in CLIL schools for our trainees.

### Summing up

Finally I should like to sum up by calling for

A trans-national working group to identify CLIL guiding principles - such as the 4Cs curriculum- as a basis for developing core modules in training programmes for CLIL teachers.

Based on the guiding principles, to define a series of teacher competences to assist in unifying the projected outcomes of a variety of CLIL training courses

The collaborative drawing up of a training route map which will feature different specialist and core modules.

At the very end of this session, I should like to illustrate the 4Cs curriculum in a very concrete way. Here is a teaching unit in English which has been developed by the trainees. The theme is around Modern Heros. The learners are presented with the book The Tin Pot General by Raymond Briggs. This uses very simple

language, since it is a parody of a child‚s story book. In fact it tells the story of the Falklands War in a very simple, cynical and hard-hitting way. This is then followed by an extract from a BBC programme about Simon Weston, a British soldier, who was badly burned, injured and disfigured, when his ship was bombed. Not only do the video clips show the realities of war, but also follow Simon's recovery, marriage and ultimately a meeting with the Argentinian soldier who bombed his ship. The video is also backed up with newspaper clips downloaded from the Internet and an extract from The Guardian newspaper at the time of the conflict.

So how does such a harsh set of materials embody CLIL principles?

Quite simply - communication ( the authentic materials used treat the theme in a way which is compelling for young people to discuss - one can not help but have opinions about one sees); content (there are challenging concepts contained within and the theme relates to many school curricula); cognition (the materials are linguistically accessible but cognitively demanding - especially in the underlying issues); culture (the materials are authentic and encourage the learners to see the war from very different and at times conflicting perspectives).

Materials and themes such as these can not be found in textbooks - they are generated by our learners for other learners. After all, in the words of Hugo Baetens Beardsmore (1998):

Bilingual education is about getting education not about becoming bilingual.

# DIDAKTIK/FACHDIDAKTIK
# AS INTEGRATIVE TRANSFORMATION SCIENCE(-S) - A SCIENCE/SCIENCES OF/FOR THE TEACHING PROFESSION?

**Friedrich Buchberger & Irina Buchberger**
Institute of Comparative Education at PADB in Upper Austria (buchbergerf@pa-linz.ac.at) & Department of Teacher Education, University of Helsinki (irina.buchberger@helsinki.fi)

## Abstract

Most conceptions of professionality (e.g. functionalist, system-theoretical, structuralist) stress the relevance of the existence of (a) corresponding, well developed science(-s) and of (scientifically) validated practices for a particular (academic) profession. The fulfilment of these criteria has remained an open question for the teaching profession, although much (scientific) knowledge and some (scientifically) validated practices relevant for teaching and learning in schools and the teaching profession have been developed. This knowledge has mainly been produced by Erziehungswissenschaften ("educational sciences") and its subdisciplines (e.g. Didaktik, educational psychology) as well as by various Fachdidaktiken ("subject-related didactics") for different subjects taught at schools. Questions will be raised on the status of different types of knowledge produced and their relevance both for teacher education (TE) and the teaching profession. A (preliminary) model of "Didaktik/Fachdidaktik" (DF) as an integrative transformation science dealing with teaching/studying/learning will be presented. The potential of DF to become a science/sciences of/for the teaching profession and some measures perceived to be necessary to approach to it will be brought to discussion.

## Preliminary remark

As a concrete outcome of an all-European and European Commission supported project (Sigma) on the evaluation and perspectives of a large number of higher education studies the European Commission has established so-called thematic networks within the Socrates programme. The report on the evaluation and perspectives of TE in the Member States of the European Economic Area has been submitted by T. SANDER et al. in 1996. Established in 1996 the Thematic Network on Teacher Education in Europe (TNTEE) may be seen as a big network dealing with core problems of TE in a number of subnetworks. These subnetworks may be understood as meeting places for teacher educators and researchers aiming at improvements of TE both theoretically and in concrete all-European projects.
One subnetwork of TNTEE (subnetwork E: Didaktik/Fachdidaktik as science(-s) of the teaching profession?) focusses on the role of Didaktik ("didactics") and Fachdidaktik(-en) ("subject-related didactics") and their potential to contribute to the improvement of the quality of teaching/learning both at schools and in TE.

Additionally, this subnetwork explores the potential of Didaktik/Fachdidaktik to become (a) science(-s) of/for the teaching profession. So far, this subnetwork consisting of experts of different academic disciplines and coming from 11 European Economic Area Member States have published a heterogeneous collection of more than 20 publications on its topic. This article may be seen in relationship with ongoing work of the subnetwork mentioned. It is both a modified and enlarged version of the publications "Scientific bases of initial teacher education and their relevance to evaluate it - between the state of practice and the state of the art" (F. BUCHBERGER 1998) and "Didaktik/Fachdidaktik as science(-s) of the teaching profession?" (F. BUCHBERGER, I. BUCHBERGER 1998).

## Introduction

Ironically, one might state that education and training have increasingly become big super-markets. Education policy- as well as social policy- and economic policy documents unanimously stress the necessity of human resource development and of high quality education and training for all (cf. European Commission 1995, 1997, OECD 1996, 1998). It is argued that the prosperity of post-industrial information and knowledge driven societies would depend on the optimal development (and exploitation) of the human capital of all its citizens and that these societies had *"to transform themselves into dynamic learning societies"* (OECD 1996). Substantial reforms of education and training are perceived to be indispensable. Focussing on traditional *"more of the same - rationales"* (modification- and adaptation strategies) to improve or to make education and training more efficient is perceived as inappropriate (OECD 1996) considering the amount of problems persisting and the rapidly changed/changing contexts (e.g. "globalization", cf. S. AMIN 1997, U. BECK 1997) and conditions (e.g. multimedia revolution, cf. S. TELLA 1998) of and expectations on education and training. Policy documents mentioned frequently stress the important role education and training establishments, teachers and their education had to play to meet these challenges adequately and to realize education and training reforms perceived to be necessary. H. JUDGE (1998, vii) has described the status quo of education reform and the role of teacher education (TE) in the United States in his foreword to the evaluation report on the Holmes Commission/Partnership activities (cf. M. FULLAN et al. 1998) as follows: *"The most salient change since 1986 has without doubt been the installation of teacher education reform at or near the head of every agenda for educational regeneration: a hitherto neglected or subordinate theme has become dominant. Just as it has emerged as a commonplace that reform cannot be achieved without good teachers, so it has become axiomatic that good teachers need and deserve a first-class preparation."* But, at the same time J. SIKULA (1996) has stated in his introduction to the second edition of the "Handbook of Research on Teacher Education" that schooling and teacher preparation have not been high priority issues in American education policy yet *(1)*.
In parallel to developments in the United States policy documents of the European Commission stress the importance of high quality education and training for all and the role teachers and TE ought to play. "Quality" *(2)* of education and training in general and of TE in particular had to be improved. Reforms of TE perceived to be indispensable had to relate to aims and objectives, contents and learning areas, teaching/learning strategies, learning environments

as well as to administration and governance issues. However, coherent action can not always be detected - both at European Commission level and at the level of the different Member States of the European Union. Despite of rhetorical agreement education and training reform in general and TE reform in particular indispensable for education reform recently do not rank top neither on the political agenda of the European Commission nor of most of its Member States (cf. F. BUCHBERGER 1998a, b).

However, there seems to exist broad agreement on the relevance and importance of best education possible making use of best knowledge available. This calls for coherent efforts to produce scientifically validated knowledge and practices. Efforts to produce scientifically validated knowledge and practices neither contradict nor do these imply a devaluation of the relevance of other types of knowledge relevant to education (e.g. tacit knowledge of education practitioners). As both models of (simple) applications of explanatory knowledge ("theories") and of knowledge transfer have proofed to be rather inadequate (cf. F.-O. RADTKE 1996) problems of different types of knowledge and their relevance for (professional) educators as well as of knowledge transformation have found more attention - a new challenge for TE and educational research? In every case it seems to be necessary to professionalize *(3)* (teacher) education by adopting scientifically validated knowledge and practices in approximating best education possible. Most conceptions of professionality (cf. A. COMBE, W. HELSPER 1996) include as one defining concept the existence of a well-developed science of/for a particular profession. If teaching should be understood as a profession, it needs clarification which science or sciences this/these might be and how well this science/these sciences are already developed *(4)*.

(Comparative) Research on TE and its reform (a rather poorly developed field in most Member States of the European Union) has highlighted both a large number of (persisting) problems of TE (e.g. problems with theories of TE as well as methodologies adopted in TE, problems with a research-based knowledge base of/for the teaching profession or with appropriate teaching/learning strategies) and a (sometimes rich) potential to improve it (cf. T. SANDER et al. 1996) - with sometimes big differences between the different Member States of the European Union.

Against this background outlined this article will mainly deal with scientific knowledge bases of TE. It will focus on the role of "Didaktik/Fachdidaktik" (DF) as a possible science(-s) of/for the teaching profession.

Without going into detail some terminological remarks have to be given in advance:

(i) The concept science (Wissenschaft) will be used in a rather liberal form following meanings attached to it in continental European cultural contexts. It will in no case be restricted to "natural sciences".

(ii) The concepts Didaktik as well as Fachdidaktik(-en) (literally translated as "didactics" and "subject-related didactics") are closely related to German Geisteswissenschaftliche Paedagogik and the concept of Bildung (cf. W. KRON 1994, H. SEEL 1998). This fact may be brought into relation with problems of intercultural (mis-) understanding *(5)*.

(iii) Both the (double-) notion Didaktik/Fachdidaktik and the singular/plural with science(-s) reflect uncertainties and may be interpreted as unsolved problems *(6)*.

In a general form DF will be defined as (a) science(-s) of teaching and learning (in a learning formation/places recently called schools). It will be conceived as a transformation science dealing integratively with
(i) contexts of teaching, studying and learning,
(ii) aims and objectives of teaching, studying and learning,
(iii) contents of teaching, studying and learning,
(iv) teaching and learning strategies,
(v) media and teaching/studying/learning aids,
(vi) evaluation of teaching, studying and learning,
(vii) actions of actors involved in the teaching/studying/learning process.
While there seems to exist some broader agreement on the topic of DF as a science (of teaching and learning) and to a smaller extent on the seven areas mentioned, the notions "transformation science" and "integratively" will have to be elaborated on in this article.
As a science DF aims at the production of
* descriptive knowledge/theories (Beschreibungswissen),
* explanatory knowledge/theories (Erklaerungswissen), and
* efficiency-oriented knowledge/technological theories (knowledge and measures to provide opportunities for change) (Veraenderungswissen).
In producing Veraenderungswissen DF may be seen as a "design science". While research on teaching and learning has focussed on the production of descriptive and explanatory knowledge, the production of technological theories for teaching/studying/learning may be seen as a blind spot (and some education researchers even doubt whether in education technological theories may be possible) (cf. L.-M. ALISCH 1995).
The article does not provide answers or solutions. It aims at the definition of some main elements of the problem-space. Space available does not permit to go into detail and this fact may lead to some misunderstanding considering very different background knowledge accumulated in the different cultural contexts of the European Union (cf. different problem-definitions in England, Finland or Germany). Additionally, the article has to be restricted to some main components of initial TE (ITE) although the authors are very well aware that TE has to be conceived as a continuum and that dealing with ITE always has to consider conceptions on the (professional) role of teachers and their professional development (cf. F. BUCHBERGER 1994, 1996; J. OELKERS 1997).
Within the frame outlined six statements will be brought to discussion (chapter I) and some measures will be described which might contribute to the development of a science of/for the teaching profession (chapter II).
I) Between the "state of practice" and the "state of the art"
Six statements will be presented to outline the recent situation of ITE (1-4), to describe a concept of DF as integrative transformation science (5) and to define some requirements to develop it (6). These six statements may read as follows:
(1) Teaching and ITE have to be oriented on the "state of the art".
(2) The "state of practice" of ITE may be characterized as rather problematic.
(3) (Research-based) Knowledge bases for teaching and ITE do exist, but are used to a limited extent only.
(4) More research on teaching and ITE is indispensable to increase the scientific bases on teaching and ITE both in quantity and quality.
(5) DF conceived as an integrative transformation science might have the potential to become the main science of/for the teaching profession.

(6) Producing and adopting scientific knowledge bases to improve teaching/learning and ITE calls for co-operative problem-solving processes of all actors involved.

1. Teaching and ITE have to be oriented on the "state of the art".
Let us introduce this first statement by a fascinating court case from the 1930s in the United States involving the T.J.Hooper, a tugboat. This court case has been described in the preface to the AACTE publication "Knowledge Base for the Beginning Teacher" (cf. W. GARDNER 1989):

*The T.J.Hooper and the ship it was guiding got into trouble in the Atlantic Ocean when a storm blew up. The storm damaged the ship and caused injury and property loss to its clients, who promptly sued. At the time common practice among tugs was to get weather information via hand signals from shore. Although radio had been introduced it was not common in use. The T.J.Hooper did not use radio, but if it had, the tug master would have known of the danger and been able to take its clients to shelter, thus avoiding damage to life, limb and property. The case turned on the question of T.J.Hooper´s responsibility: was adherence to common practice (e.g. hand signals) enough or did the situation demand "state of the art" (radio)? The courts ruled that, when important matters are at stake, the legal obligation is to use the state of the art. The T.J.Hooper case has been effectively used by educational authorities to demonstrate that in the United States, where schooling of the young is involved, schools must use the state of the art techniques and materials".*
In principle, the situation in the Member States of the European Union does not differ substantially from that in the United States. The importance attached to education and training in a "knowledge-driven society" is calling for "state of the art" - solutions *(7)*.

2. The "state of practice" of ITE may be characterized as rather problematic.
Leaving teaching and learning at school aside this paragraph will focus on ITE. Let us start again with a statement of H.JUDGE (1990, 11): *"Teacher education (in England and Wales) is a product of history rather than of logic"* and adding that much progress might have been made the past few years. This statement seems to hold true for most of the TE systems and programmes in the European Union and it refers to substantial curricular problems of ITE programs *(8)*. It might be argued that theoretical and research-based argument as well as rational system planning or the expertise of those involved in ITE have not always played the most prominent roles in constructing and developing systems and models of ITE. To become more explicit: Most programmes of ITE in the Member States of the European Union are based primarily on some form of common sense, beliefs, opinions and (unrealistic) expectations (idealizations, illusions) (cf. F. BUCHBERGER 1994, J. OELKERS 1997). They combine some studies in certain academic disciplines with some methodology courses, some (teaching/school) practice and some educational/professional studies. These components mentioned as well as their different (and sometimes rather peculiar) combinations frequently neglect state of the art knowledge on
(i) teaching, learning and TE (cf. L. DICK 1994, F. OSER 1997, L.SHULMAN 1987) as well as on
(ii) sociology of knowledge (cf. F.-O. RADTKE 1996) or
(iii) educational psychology (cf. K. REUSSER 1994).

They may be seen as "collection code curricula" consisting of fragmented components with sometimes unclear relevance to teaching and learning, and as rather outdated "technology". Difficulties obvious frequently are circumscribed with the ficus leaf formula "theory-practice-problem". Additionally, these common sense based (curricular) models of ITE may be seen as an enormous waste of resources *(9)*.

Curricular problems of ITE may be explained in many different ways:

(i) T.POPKEWITZ (1993) speaks of a "social arena" of TE where different interest groups and lobbies try to keep their influence in a social "power game" (e.g. scientific/academic disciplines) and in which adaptations and re-orientations necessary because of changes in the context are not made *(10)*.

(ii) Another explanation might focus on general systems theory (N.LUHMANN 1984) and a tendency of systems to inner-systemic differentiations neglecting increasingly the systems environment. Reluctancy towards substantial curricular changes may be explained in this way.

(iii) Educational sciences (including educational psychology or educational sociology) and especially a science of teaching as relatively young academic disciplines could not really establish themselves in many ITE curricula *(11)*.

(iv) A science of the teaching profession may be seen as not very well developed while much normative (not to say dogmatic) argument and lay - technology (not tested on its effects) seems to dominate especially as regards methodology.

(v) A lack of pro-activity of institutions and staff of ITE not always aware of both the changing context of education/TE and state of the art knowledge produced in relevant academic fields of study.

(vi) Problems with the recruitment and the career-structures of staff of institutions of ITE. While decisions to become a teacher are sometimes perceived as "second best choices of the second best" (cf. G. NEAVE 1992), academic careers in TE do not seem to have the most prestige in academic circles.

Similar as with the curricula of ITE applies to the learning cultures adopted in many programs of ITE. Research on teaching and TE has highlighted the importance of the concept of "powerful learning environments" (cf. F.BUCHBERGER et al. 1994). But, the evaluation report on TE in the European Union (T.SANDER et al. 1996) clearly indicates that many programs of ITE are by and large oriented on outdated knowledge transmission models - a "preaching water and drinking wine-phenomenon"? Similar applies to problem-, project- and research-oriented learning processes in ITE, which have to be missed in many models of ITE in the European Union (cf. as an exception the model of ITE adopted in Finland, F. BUCHBERGER 1995).

As regards the practical/clinical component of ITE programmes rather outdated apprenticeship models or models oriented on the formula "practice-relevant experiences" seem to dominate. Again, knowledge and practices avaliable to provide "powerful learning environments" for prospective teachers to acquire a flexible repertoire of teaching actions is used to a limited extent only. Although a coherent and by specially educated staff provided supervised teaching practice component (in co-operative problem-solving groups) may be seen as a necessary condition for high quality ITE (e.g. H. BRENN et al. 1997), most models of ITE do not adopt the knowledge bases and scientifically validated practices available.

A coherent knowledge base component, an elaborated clinical component and a research component as well as their integration within ITE programmes still have to be missed. It would be easy to continue with methodological shortcomings of ITE and this might again result in a long list of claims. In short, ITE programs do

not make intensive use of research-based knowledge and scientifically validates practices, and this fact may be seen in close relationship with unclear aims and goals of ITE (cf. M. KENNEDY 1990), superficial and sometimes irrelevant content, suboptimal methodologies and rather inappropriate learning cultures counterproductive to aims declared.

It is worth mentioning that some models and programmes of ITE in Member States of the European Union may be seen as counter-examples on what has been outlined before. This applies in many ways to ITE at Finnish universities (cf. F.BUCHBERGER 1995). In addition to some promising approaches all over the European Union these approaches may bring about much input to improve the quality of ITE *(12)*.


3. (Research-based) Knowledge bases for teaching and ITE do exist, but are used to a limited extent only.

Much research-based knowledge has been developed on teaching and learning and to a smaller extent on several aspects of TE (e.g. The Handbook of Research on Teaching edited by M. WITTROCK 1986, The International Encyclopedia of Teaching and Teacher Education edited by L. ANDERSON 1995, The Handbook of Research on Teacher Education firstly edited by W. HOUSTON 1989 and then by J. SIKULA et al. 1996, or The Knowledge Base for Beginning Teachers edited by M. REYNOLDS 1989). Making use of this knowledge in teaching/learning in education at school or in TE programmes might lead to substantial improvements and help to reduce sometimes severe shortcomings (e.g. predominance of knowledge transmission models of teaching). At the level of political decision making, at institutional (school) level and at an individual (classroom/teacher) level these scientific knowledge bases might contribute to more adequate decisions and better outcomes *(13)*.

At that point it may be asked:

(i) Why are research-based knowledge and scientifically validated practices used to a limited extent only by institutions of TE and teachers?

(ii) Why are most institutions of ITE rather reluctant to contribute pro-actively to an increase of the scientific knowledge bases of teaching and TE?

(iii) Which conditions may be made accountable that education politicians in some Member States of the European Union do neglect state of the art - knowledge on teaching/learning and TE, and in some cases even counteract, when calling for reform and improvement of TE? *(14)*

The focus of this paragraph will be on knowledge bases for TE. Making use of scientific knowledge bases on teaching/learning and TE several commissions and committees have presented proposals to improve the curricula of ITE (cf. The Holmes Commission 1986, 1995; Bildungskommission NRW 1995; DGFE 1997). Considering a large number of knowledge submitted by the social sciences in general and the educational sciences in particular Bildungskommission NRW has submitted a proposal containing aims, content and methodologies for ITE programmes (embedded in an overall framework of TE). Integrated into research-based knowledge problem-oriented, research-oriented and co-operative learning processes within ITE should contribute to the development of the following professional action structures/competences of a (beginning) teacher (and each competence is split up into three to five subcompetences):

(i) subject-related and "didactic" competence

(ii) methodological competence (e.g. a broad repertoire of teaching/learning methodologies)

(iii) competence to manage learning groups
(iv) diagnostic competence
(v) competence for counselling
(vi) metacognitive competence
(vii) competence to deal with (new) media
(viii)co-operativity
This coherent set of professional action structures/competences may form the substance for the development of curricula of ITE and replace the rationales of common sense based curricula *(15)*. As regards the clinical component of ITE, much knowledge has been accumulated on its effective organization. The concepts of action research or of reflective practice might provide much input for more effective ITE. Similar applies to teaching/learning strategies. Knowledge on establishing "powerful learning environments" in ITE is still available, but used to a limited extent only *(16)*.

4. More research on teaching and ITE is indispensable to increase the scientific bases on teaching and ITE both in quantity and quality.

At the meeting of the Standing Conference of Ministers of Education of the Council of European Unionrope the Swedish educational scientist U.LUNDGREN (1987) said: *"The amount given to research in education compared to the costs of education as a whole is minimal. If this fact is related to the demands on education the situation may be characterized as absurd. Even though comparisons of this sort are problematic, a comparison with companies or medical welfare underlines this absurdity. A company which were to plough back as few of its resources into research and development would not survive for long".* This statement explicitly refers to one of the basic problems of education and TE: high expectations expressed, but a restricted committment to fund research and development indispensable to improve them - a "knowledge driven society" without sufficiently developed scientifically based knowledge?
Proposing that more research is needed may sound popular, but not necessarily creative. As regards ITE the following aspects seem to be of highest relevance:
(i) ITE has to incorporate a clear (educational) research component into its curricula.
(ii) It seems to be indispensable that institutions of TE develop a clear committment to (educational) research.
(iii) Prospective teachers may be provided with curricula and learning situations which give ample opportunity to them to become competent both in understanding educational research and in transforming it into pedagogical professionality.
(iv) Prospective teachers have to be given opportunity to become "critical action researchers" (cf. J. ELLIOTT 1998).
(v) Teacher educators have to become (educational) researchers themselves *(17)*.
(vi) Finally, living in times of ambiguity and contradiction it may be asked which types of research identities might be adequate for (teacher) education? (cf. J. ELLIOTT 1998).

5. DF conceived as an integrative transformation science might have the potential to become the main science of/for the teaching profession.

Before the concept of DF as an integrative transformation science will be described some additional arguments will be presented in support of the necessity to conceive DF as a science of/for the teaching profession.

### 5.1 Arguments in support of DF as an integrative transformation science

(1) One of the main leitmotifs in improving TE and education at school the past thirty years has been "professionalization" of teaching and TE. Adopting an approach of pedagogical professionality (cf. A. COMBE, W. HELSPER 1996) pedagogically professional actions may be conceived as cogent and justifyable transformations of scientifically based knowledge and practices on education, teaching and learning to particular cases by specially educated/trained personalities (education staff) considering the interests of the clients (e.g. students) involved. Both as prerequisite and consequence scientifically based knowledge and practices on education, teaching, studying and learning have to exist.

(2) For the teaching profession it has remained debatable, which science(-s) might form its scientific knowledge base(-s). As regards education at (lower and upper) secondary level of the school systems in most of the Member States of the European Union (prospective) teachers receive much training in (frequently two) academic disciplines, while a preparation for the main tasks of teachers (educating - providing teaching-studying-learning environments) is perceived of minor importance. In most countries (prospective) teachers do not graduate in education (or educational sciences) but in other academic subjects. This fact may have tremendous impact on the development of professional identities of (prospective) teachers. In addition to basic problems of rather reluctant education policy decision making behaviors several problems of integrative theories of teaching and learning as well as theories of TE might be made accountable to this fact.

(3) Recently, syllabuses as well as (national) curricula of most of the Member States of the European Union may be evaluated as common sense based (in historical terms explanable) collection code syllabuses/curricula not always compatible with changed/rapidly changing tasks and expectations of society (cf. European Commission 1996) or the progress of scientific disciplines as well as changed patterns of knowledge production. Substantial reforms or restructurings of syllabuses and (national) curricula are still pending in most European Union Member States. Coherent curriculum research might have become indispensable. An orientation of existing syllabuses and (national) curricula on some academic disciplines has to be seen as rather problematic in at least four ways:

(i) The fragmentation of syllabusses/curricula into (school) subjects corresponding to certain academic disciplines may be seen as a debatable pattern of organization of teaching/learning closely related to (since several years outdated and not any more adopted) industrial modes of production (cf. Taylorismus vs. Post-Fordismus).

(ii) The question still remains debatable, why certain academic disciplines have been incorporated into the syllabuses/national curricula and others have been rejected or are neglected recently (e.g. communication sciences).

(iii) A (sometimes hidden) assumption may be detected, in which a correspondence of a particular academic discipline with a particular subject at school is stated. While H. SEEL (1998) has analysed the inappropriateness of this assumption for the (school) subject geography, I. BUCHBERGER (1999) has submitted argument that mother tongue teaching/learning as subject at school has to integrate knowledge produced independently in more than 14 different

academic disciplines. However, in attempts to establish a (school) subject "media culture competence" in the German education system J. SCHOENERT (1998) makes refence to 23 different academic disciplines but focussing on the philological tradition of the academic discipline "Germanistik").

(iv) The difference between the aims and tasks of (many) academic disciplines (production of explanatory knowledge structured systematically in a propositional format) on the one side and the aims of teaching/learning on another side is neglected in many ways leading to severe problems.

(4) Closely related to what has been said above ITE and its programmes are split up into different and in many cases unrelated (academic) disciplines. These academic disciplines focus on the development of scientific knowledge/explanatory models and theories, and do not consider the phenomenon of teaching/studying/learning particular topics. The transformation of scientific knowledge structured propositionally and systematically into (human) knowledge structures following different patterns of organization (e.g. holistically, episodic) frequently may not be seen as an aim of Date: Mon, 10 May 1999 10:10:32 +0200 From: Buchberger Friedrich X-Mailer: Mozilla 4.0 [en] (Win95; I) MIME-Version: 1.0 To: pvdcraen@vub.ac.be, m.grenfell@soton.ac.uk Subject: Buchberger Article X-Priority: 3 (Normal) X-UIDL: 48d2fe5d0c41abcedce73d7afbda8386 academic disciplines and their fields of knowledge production.. Additionally, a number of academic disciplines oriented on a philological tradition seems to devaluate the relevance of scientifically validated practices and does show only limited interest in developing them which may be perceived as problematic when it comes to teaching/studying/learning phenomena analysed by these academic disciplines.

(5) Teaching, studying and learning may be defined as the central content areas of a science of/for the teaching profession. Teaching, studying and learning always

* take place in certain contexts/environments (e.g. makro-systems, meso-system particular school, micro-system learning environment and learning situations),
* have to be seen primarily as intentional actions of the actors involved
* directed towards aims and objectives,
* have substance/content, and
* may be supported by different media (e.g. teachers, teaching/learning aids).

The focus is on the studying/learning processes of the student who has to be provided with learning situations appropriate that he/she can develop/construct his/her structures of meaning, knowledge and action. Supporting the construction of meaning on one side and on another side transmitting propositionally defined and systematically structured knowledge may be seen as rather different entities.

(6) In a number of European cultural contexts Fachdidaktik(-en) in/of various fields could establish themselves as academic disciplines and have sometimes made remarkable progress. Various Fachdidaktiken may recently provide scientifically based knowledge and practices for teachers to establish learning situations in their respective fields. In many cases a tendency to isolate particular Fachdidaktiken even from neighbouring ones as well as a certain lack of integrativity may be observed - the learning individuum might get lost, while expectations of a particular Fachdidaktik related to an academic discipline and its structures might become predominant. Similar may apply to a holistic development of an individuum. Are Fachdididaktiken able to define criteria for

justifyable aims of Bildung/education, and if, which criteria may be adopted by Fachdidaktiken to relate defined subject-specific aims to more general and holistic aims of Bildung/education? A frequently given justification of particular Fachdidaktiken on the argument that they had to provide scientifically validated knowledge for different school subjects as these have been defined by education politicians in (national) sylabusses/curricula might give an impression of superficiality *(18)*.

(7) The explosion of scientific knowledge and the process of fragmenting knowledge may be seen in close relationship with an increasing illiteracy - even of highly educated personalities - in an increasing number of content areas. Procedures of knowledge transformation seem to become indispensable - another case for DF as an integrative transformation science of/for the teaching profession?

(8) The production or design of scientifically validated practices and educational software may be seen as a rather neglected field of Didaktik as well as Fachdidaktik. Designing educational software calls for co-operation in collaborative problem-solving groups comprised of experts in a number of different fields (e.g. Didaktik/Fachdidaktik, linguistics, communication sciences, telematics). In most countries of the European Union DF did not really cultivate the possible task of producing educational software and has given free way to marketization in this field with outcomes obvious. It will be suggested that DF as an integrative transformation should deal with the production/design of scientifically validated practices and educational software. Maybe, it could then reduce technological deficits obvious in the field of teaching, studying and learning hided behind ficus leaf formulae (e.g. "theory-practice-conflict") *(19)*.

(9) Teaching, studying and learning in places called school may be defined as central content areas of DF, but the relative relevance of teaching and learning in places called school in relation to other sources of learning (e.g. home, peers, community, mass media and the net) has to be considered in DF as an integrative transformation science.

## 5.2 DF as an integrative transformation science

Against this background outlined a (preliminary) structural model of DF as an integrative transformation science may be brought to discussion as follows:

(a) The model of DF as an integrative transformation science consists of 4 different levels linked together by 3 different transformation processes.

(b) At a first level we differentiate into "general aims of society" and "(scientific) knowledge" produced by many different academic disciplines. The category "general aims of society" may be conceived as general (and in particular societies to a large extent collectively shared) patterns of interpreting phenomena of live and the world manifested in not very precisely defined (general) aims (gesellschaftliches Deutungswissen einschliesslich unspezifizierter Absichten/Rahmenzielstellungen). The category "(scientific) knowledge" refers to the huge amount of knowledge (and technologies) produced by the sciences.

(c) "General aims of society" and "(scientific) knowledge" are either too unspecified or too extensive to get relevance for teaching, studying and learning. Both have to be transformed for teaching, studying and learning (transformation 1). General (and sometimes contradicting) aims of society have to be transformed into more specified aims for teaching and learning. Concepts such as Bildung may have important roles to play in this transformation process (cf. W. KLAFKI 1992 and his concept of Allgemeinbildung oriented on key-problems of society). Propositionally formated and systematically structured knowledge of

particular academic disciplines has to be transformed into knowledge structures. Both transformations within the first transformation process may not be seen independently. While many interactions exist between "general aims of society" and "(scientific) knowledge" and its production, dialogues between representatives of society (democratically legitimated authorities) and the DF research community may be seen as imperative in transformations necessary. As regards the transformation of "(scientific) knowledge" into knowledge structures the dialogue between respresentatives of the different academic disciplines and the DF research community may be seen as a necessary condition.

(d) "Specified aims" and "knowledge structures" may be seen then as the second level of DF. They form a potential pool of aims and knowledge structures to become subjects of teaching, studying and learning.

(e) In a second transformation process specified aims and knowledge structures have to be integrated to possible "thematic units" or "themes" (thematische Lernangebote) for teaching, studying and learning. Considering
* on the one side the many aims possible and the huge amount of knowledge structures available and
* on another side the limited resources human information processing capacity and time available
transformations of type 2 are indispensable. Transformation 2 has to result in a justifyable pool of "themes" od thematic units.

(f) "Thematic units" or "themes" conceived as coherent sets of aims and content may be seen as level 3 of DF.

(g) In a third transformation process "thematic units" are transformed into concrete learning situations (level 4). Learning situations may be characterized by the following components:
* context,
* actors (e.g. teachers, learners), their characteristics and actions,
* aims and objectives,
* content/substance,
* teaching/studying/learning strategies, and
* media.

(h) Having categorized "general aims of society" and "(scientific) knowledge" at the first level, and "learning situations" at the fourth does not imply superiority of the first or less relevance to the category "learning situations". The model of DF as integrative transformation science intends to outline the integrated nature of the phenomenon under discussion which may not be reduced to one or the other category/level or transformation.

The model of DF outlined might have enormous impact on restructuring TE (e.g. orientation on teaching, studying and learning instead of academic disciplines), the organization of teaching and learning in schools (e.g. orientation on learning situations and thematic units/problem areas instead of subject-matter structures) and the teaching profession (e.g. solid scientifically validated knowledge and practices should contribute to empowerment and reduction of dependencies from external and political control as well as from non-teaching related academic disciplines). Additionally, DF conceived as an integrative transformation science would open up new opportunities to tackle another problem of teaching and learning wiedely neglected. It could provide a framework for the production of empirically validated teaching and learning technology/Veraenderungswissen (e.g. netbased learning environments and software) comparable to treatments/medicines in the medical sciences.

6. Producing and adopting scientific knowledge bases to improve teaching/ learning and TE calls for co-operative problem-solving processes of all actors involved.

T POPKEWITZ (1993) cogently has characterized TE as a "social arena" with a large number of actors with conflicting interests and different power. Many resources are wasted because of "power games" of different lobbies and interest groups and may be made accountable for inappropriate improvement (cf. for the situation in Germany J. OELKERS 1998). Adopting principles of general systems theory (cf. N. LUHMANN 1984) it may be proposed that systems open to their environment produce more appropriate results while the opposite applies to systems with tendency to closeness. This proposition calls for input to make systems more aware on their environments and to stimulate the systems´ (inner) capacity for (self-) renewal. As one major consequence this calls for co-operative problem-solving processes of all actors involved in the improvement of a system - be it a TE institution or a particular school. Main actors seem to be: education politicians, school administrators, (prospective) teachers and the scientific community including teacher educators, educational scientists and scientists of a large number of fields of inquiry (and not necessarily restricted to traditional sciences corresponding to content areas of recent curricula of schools). One of the main findings of the evaluation of TE reform in the United States indicates that co-operative problem-solving processes of all actors involved have to be seen as a necessary condition for progress (cf. M. FULLAN et al. 1998).

Additionally, problems to be solved cannot be tackled adequately by one person, a small team of specialists in a particular field of inquiry or a particular research tradition alone. Interdisciplinarity and co-operation have become indispensable. Considering the limits of human information processing capacity this fact again calls for co-operative problem-solving groups. It seems to be necessary that rather individualistic and disciplinary-bound cultures of research have to be replaced by co-operative ones (cf. L. SHULMAN 1987 and his remarks on searching for missing links in research on teaching and learning). But, many patterns of organization at universities and corresponding cultures of research may be seen as sometimes severe obstacles. If actors will avoid co-operation and neglect integrativity centered around the teaching/studying/learning process, and will not pro-actively make use of effects of synergy as well as scientific knowledge bases existing (and to be developed), they may find themselves easily - or remain - in the position of the famous German baron Muenchhausen, who tried to pull himself on his tuft out of swamp - without success.

II) Developing DF as a science of the teaching profession

Systems and programmes of TE in the Member States of European Union may be characterized by some communalities and a rich variety of differences (cf. F.BUCHBERGER 1994). Within these systems the role of scientific knowledge on teaching and learning is interpreted very differently and may range from a negative appeal and ignorance to high esteem and highly developed academic cultures. This fact may be seen in close relationship with the state of development of a scientific knowledge base for teaching and learning. While some systems of TE have still remained in a pre-scientific state and focus on dogmatic, not to say normative methodologies, others have been able to make use of scientific knowledge and have developed research cultures. With good reason one can propose that some basic elements of a science of/for the

teaching profession have been developed which may form valuable bases for the further development of a science of/for the teaching profession (e.g. the research and development cultures at Finnish departments of TE at universitarian faculties of education; F.BUCHBERGER et al. 1994). Similar applies to research and development centres for particular fields of teaching and learning (e.g. Institut fuer die Didaktik der Mathematik, Bielefeld/Germany) established in the seventies.

Developing a science of/for the teaching profession has to consider insights developed by innovation theory and has to be conceived as a change of a social (academic) system. In addition on what has already been said on restructuring curricula of ITE and schools the following proposals will be made to establish and to develop DF as a science of the teaching profession:

(i) If institutions of TE make use of Wissenschaftsdidaktik and transform principles developed there to its own curricula and teaching/learning situations, first progress may be expected.

(ii) Institutions of TE should be encouraged to establish co-operative problem-solving groups consisting of staff/researchers of different academic specialization and background. They should be encouraged to research on concrete problems/projects integratively.

(iii) In institutional terms faculties of education seem to have high potential to provide appropriate research and development cultures.

(iv) Centers of excellence might be established doing research and development in selected teaching/learning areas (e.g. Centre for Multimedia Education at the department of teacher education at Helsinki University, S. TELLA 1998).

(v) If statements in education policy documents (e.g. European Commission 1995) intend to be more than lip-service, then coherent action at European Union level seems to become indispensable. We suggest to establish an all-European task force on teaching and learning dealing with problem areas mentioned in this article pro-actively and constructively. A special chapter on this issue might be included into the targeted socio-economic research programme (TSER) of the European Commission to provide resources necessary.

Let us conclude with a modified statement of the Austrian poet E.FRIED: *"Those, who want that teacher education and the teaching profession remain as they are, do not want that they remain".*


Remarks

*(1)* In these first two paragraphs commenting on major education and training policy documents we have frequently used the notion "perceived". This decision reflects the fact that (education) policy documents make use of the language of policy and aim at establishing certain patterns of discourse and thinking closely linked to the interests of particular political groups (e.g. neo-liberals). Under this perspective policy documents reported and issues contained in them may be seen as subjective interpretations and perceptions, not as "facts given" or "inescapable trends" (cf. J. ELLIOTT 1998 and his comments on this phenomenon in dealing with education research identities).

*(2)* "Quality" has become a slogan/formula with ambiguous meaning(-s) since the late eighties and has increasingly begun to dominate the education discourse (cf. F. BUCHBERGER, K. BYRNE 1995). Recently, it may be seen as one of the key concepts of so-called New Public Management (NPM) aiming at a substantial restructuring of organizational and administrative patterns of education and

training establishments (cf. H. FORNECK 1997 and his critical comments on discrepancies between aims of education and aims of NPM).

*(3)* The concept "professionalization" has very different meanings in different European cultural contexts (cf. thematic issue on professionalization of the European Journal of Teacher Education, 2-3/1994, R. BOURDONCLE Date: Mon, 10 May 1999 10:10:32 +0200 From: Buchberger Friedrich X-Mailer: Mozilla 4.0 [en] (Win95; I) MIME-Version: 1.0 To: pvdcraen@vub.ac.be, m.grenfell@soton.ac.uk Subject: Buchberger Article X-Priority: 3 (Normal) X-UIDL: 48d2fe5d0c41abcedce73d7afbda8386 1994) which may be seen as a source of much misunderstanding. In addition to sociological interpretations of professionalization we interpret this umbrella concept as "paedagogische Professionalitaet" (pedagogical professionality) (cf. A. COMBE, W. HELSPER 1996, H.-J. WAGNER 1998).

*(4)* R. Kuenzli (1998) has recently adressed the problem how well a science for/of the teaching profession (Didaktik) had to be developed and has submitted arguments to conceive it (recently) as a "popular science" ("propaedeutische Populaerwissenschaft").

*(5)* cf. the contributions of German, Scandinavian, English and American educationists in colloquia on "Didaktik and/or Curriculum" (33. Beiheft der Zeitschrift fuer Paedagogik 1995, B. GUNDEM, S. HOPMAN 1998).

*(6)* W. KRON (1994), H. SEEL (1998) or P. KANSANEN, M. MERI (1999) present more differentiated categorizations of the field of Didaktik by adopting criteria such as general - specific, content/subject matter or age.

*(7)* The "T.H.Hooper" - decision of the US Supreme Court had substantial impact on special needs education in the USA. In analogy to it parents received the legal right for best education provision for their disadvanteged children. It would be a fascinating case, if parents in the European Union would sue providers of (compulsory) education because of suboptimal education provision (not following the state of the art knowledge on teaching/learning and sometimes rather problematic in relation to the Declaration of Human Rights) in various cultural contexts of the European Union.

*(8)* J. LANIER, J. LITTLE (1986) have described the many problems of curricula of ITE in the United States; J. OELKERS (1996, 1997) has submitted cogent analyses on the problematic state of ITE curricula in German speaking contexts.

*(9)* Studies on the effectiveness and efficiency of ITE have still to be missed. Recently a big study in Switzerland has tried to provide answers to this problem (cf. Oser 1997). Additionally, it is frequently mentioned that effects of ITE "are washed out" when young teachers enter the teaching profession (cf. H. VONK 1994), that a "culture of induction" has not fully been developed, and that "learning/professional development" at the working place school and its cultivation may be seen as blind spots of TE (F. BUCHBERGER 1994). These facts may be brought into close relation to a suboptimal use of (especially human) resources.

*(10)* As regards syllabusses E. WENIGER has stated that syllabusses/curricula have to be seen as outcomes of struggles of different political and social groups. J. OELKERS (1994) has analysed the influence of the (nation) state and governments on curricula of ITE in Germany and has spoken of the influence of "Staatspaedagogik".

*(11)* J. OELKERS (1996) has analysed a rather ambivalent relationship between the development process of educational sciences and TE in Germany. B.REYNOLDS 1998 has claimed the non-existence of educational sciences in

England (while submitting the same time a rather narrowly conceived conception on it focussing on research on effectiveness of teaching and learning).

*(12)* cf. the model of ITE oriented on professional standards (F. OSER 1997) or the descriptions of some reform projects of TE in Germany (M. BAYER et al. 1997).

*(13)* In a rather neutral form we have used the notions "making use of" scientific knowledge and that it might "contribute" to more adequate solutions. This reflects a position which acknowledges (i) the relevance of different types of knowledge (e.g. propositional knowledge, "tacit" knowledge, action-relevant knowledge), and (ii) takes into consideration social as well as affective components. Additionally, this reflects uncertainties on the relations of different types of knowledge. There is much evidence that simple application models (of propositional knowledge to concrete problems) and knowledge transfer models seem to be inappropriate. More research on models of knowledge tranformation seems to be necessary (cf. F.-U. KOLBE 1997, F.-O. RADTKE 1996).

*(14)* cf. for the situation in England several articles in R. MC BRIDE (1996), or in a more international perspective contributions in M. WIDEEN, P. GRIMMETT (1995).

*(15)* While the model of Bildungskommission NRW reflects a challenging concept for TE reform as regards aims, content and methodologies, organizational as well as institutional issues are adressed in a rather conservative way and might be interpreted as an avoidance behavior of reformers considering powerstructures in the "social arena" of TE (cf. F. BUCHBERGER 1998 a).

*(16)* D. STERN, G. HUBER (1997) have submitted a comprehensive report on active learning in eight OECD member states. An all European consortium is working on a Socrates curriculum development project (ALERT) making use of active learning methodologies in ITE. This project combines the potential of cognitive psychology, learning ecology, different European reform pedagogies, and net-based learning (cf. F. BUCHBERGER 1999).

*(17)* Transforming ITE into the higher education sector of the education system in German speaking Switzerland has brought about heated discussions on the role of research in ITE. While these discussions have led - intellectually - to clarifications on the role of research in ITE, (possible) solutions seem to reflect again more power structures in a social arena than rational argument (cf. S. GROSSENBACHER et al. 1998).

*(18)* In a rather tough way the Konferenz der Vorsitzenden Fachdidaktischer Fachgesellschaften in Germany has critisized efforts to establish more integrated models focussing on domain specific didactics (Bereichsdidaktiken) instead of subject-related didactics in research and TE (e.g. Bereichsdidaktiken as "super sciences"). Unfortunately, rational argument has not been provided against Bereichdidaktiken - a case of struggles in the social arena TE?

*(19)* In most education circles in German speaking countries "technology" or "technological theory" are perceived as "nasty words", and there are frequent doubts whether educational technology might even be possible. A comparison with health/medicine and "standard treatments" of medicine such as antibiotica might bring about new definitions of the problem space of teaching/studying/learning.

References

Alisch, L.-M. (1995): Grundlagenanalyse der Paedagogik als strenge praktische Disziplin. Berlin: Duncker & Humblodt.

Altrichter, H., Posch, P. (1990): Lehrer erforschen ihren Unterricht. Bad Heilbrunn: Klinkhardt.

Amin, S. (1997): Capitalism in the Age of Globalisation. London: Zed Books.

Anderson, L. (Ed.) (1995): International Encyclopedia of Teaching and Teacher Education. Oxford: Pergamon.

Bayer, M., Carle, U., Wildt, J. (Hrsg.) (1997): Brennpunkt: Lehrerbildung. Budrich+Leske: Opladen.

Beck, U. (1997): Was heisst Globalisierung. Suhrkamp: Frankfurt.

Bildungskommission NRW (1995): Zukunft der Bildung - Schule der Zukunft. Luchterhand: Neuwied.

Bourdoncle, R. (1994): Le professionnalisation des enseignants. In: European Journal of Teacher Education, 17, 13-23.

Brenn, H., Buchberger, F., Eichelberger, H., Freund, J., Harb, H., Klement, K., Kuenz, I., Lobendanz, A., Teml, H. (1997): Berufspraktische Studien. Studienverlag: Innsbruck.

Buchberger, F. (1994): Teacher Education in Europe - Diversity versus Uniformity. In: Galton, M., Moon, B. (Eds.): Handbook of Teacher Training in Europe. Fulton: London (14-50).

Buchberger, F. (1995): Lehrerbildung auf dem Pruefstand. Studienverlag: Innsbruck.

Buchberger, F. (1996): Some Remarks on the Current State of Teacher Education Studies in the European Union. Ole Publication Series (2): Helsinki.

Buchberger, F. (1998 a): Lehrer-Bildungsreform als Anliegen. In: Lenz, W. (Hg.): Bildungswege. Studienverlag: Innsbruck (38-58).

Buchberger, F. (1998 b): (Bildungs-) Politiken in der EU - von Rhetoriken und Nachdenkensvermeidungen. In: Herber, H.-J., Hofmann, F. (Hrsg.): Schulpaedagogik und Lehrerbildung. Innsbruck: Studienverlag (45-62).

Buchberger, F. (1998 c): Scientific bases of initial teacher education and their relevance to evaluate it - between the state of practice and the state of the art. http://www.tntee.umu.se

Buchberger, F. (1999): Active Learning in Teacher Education (ALERT). http://www.pa-linz/international/alert.

Buchberger, F., Byrne, K. (1995): Quality in Teacher Education: A Suppressed Theme. In: European Journal of Teacher Education, 18, 9-24.

F. Buchberger, I. Buchberger (1998): "Didaktik/Fachdidaktik" as science(-s) of the teaching profession. http://www.pedf.cuni.cz

Buchberger, F., de Corte, E., Groombridge, B., Kennedy, M. (1994): Educational Studies and Teacher Education at Finnish Universities. Helsinki.

Buchberger, I. (1999): Competence in lingua franca and telematics for embryos? http://www.tntee.umu.se/

Combe, A., Helsper, W. (Hg.) (1996): Paedagogische Professionalitaet. Frankfurt: Suhrkamp.

DGFE (1997): Thesen zur Weiterentwicklung der Lehrerbildung. Duisburg.

Dick, L. (1994): Vom unterrichtlichen Wissen zur Praxisreflexion. Klinkhardt: Bad Heilbrunn.

Elliott, J. (1998): Living with Ambiguity and Contradiction: the Challenges for Educational Research in Positioning Itself for the 21st Century. Key-note adress. ECER conference. Ljubljana.

Europaeische Kommission (1997): Fuer ein Europa des Wissens. KOM(97)563 final.

European Comission (1995): Teaching and Learning: Towards the Learning Society. Luxemburg.

Forneck, H. (1997): Wirkungsorientierte Schulen! Skeptische Ueberlegungen zum gegenwaertigen Stand der Reformdiskussion. In: Beitraege zur Lehrerbildung, 15, 69-81.

Fullan, M., Galluzzo, G., Morris, P., Watson, N. (1998): The Rise and Stall of Teacher Education Reform. AACTE: Washington.

Gardner, W. (1989): Preface. In: Reynolds, M. (Ed.): Knowledge Base for the Beginning Teacher. AACTE: Washington (ix-xii).

Grossenbacher, S., Schaerer, M., Gretler, A. (1998): Forschung und Entwicklung in der Lehrerinnen- und Lehrerbildung. EDK: Bern.

Gundem, B., Hopman, S. (Eds.) (1998): Didaktik and/or Curriculum. New York: Lang.

Hopman, S., Riquarts, K. (Hg.) (1995): Didaktik und/oder Curriculum. Zeitschrift fuer Paedagogik, Beiheft 33.

Houston, W. (Ed.) (1990): Handbook of Research on Teacher Education. Macmillan: New York.

Judge, H. (1990): The Education of Teachers in England and Wales. In: Gumpert, E. (Ed.): Fit to Teach. Atlanta (7-30).

Judge, H. (1998): A Beginning or an End? In: Fullan, M., Galluzzo, G., Morris, P., Watson, N. (1998): The Rise and Stall of Teacher Education Reform. AACTE: Washington (v-xiii).

Kansanen, P. (1995): The Finnish Didactics - Finished or a New Beginning? In: Hopman, S., Riquarts, K. (Hg.): Didaktik und/oder Curriculum. Zeitschrift fuer Paedagogik, Beiheft 33.

Kansanen, P., Meri, M. (1999): Didactic relation in the teaching - studying - learning process. http:www.tntee.umu.se/

Kennedy, M. (1990): Choosing a Goal for Professional Education. In: Houston, W. (Ed.): Handbook of Research on Teacher Education. Macmillan: New York (813-857).

Klafki, W. (1992): Neue Studien zur Bildungstheorie und Didaktik. Beltz: Weinheim.

Konferenz der Vorsitzenden Fachdidaktischer Fachgesellschaften (Hrsg.) (1998): Fachdidaktik in Forschung und Lehre. Kiel.

Kolbe, F.-U. (1997); Lehrerbildung ohne normative Vorgaben fuer das praktische Handlungswissen. In: Bayer, M., Carle, U., Wildt, J. (Hrsg.): Brennpunkt: Lehrerbildung. Budrich+Leske: Opladen (121-137).

Kron, W. (1994): Grundwissen Didaktik. Reinhardt: Muenchen.

Kuenzli, R. (1998): Didaktik - Doktrin in der Lehrerbildung und Forschungsgegenstand. In: Beitraege zur Lehrerbildung, 16, 29-38.

Lanier, J., Little, J. (1986): Research on Teacher Education. In: Wittrock, M. (Ed.): Handbook of Research on Teaching. Macmillan: New York (527-568).

Luhmann, N. (1984): Soziale Systeme. Grundriss einer allgemeinen Theorie. Suhrkamp: Frankfurt.

Mc Bride, R. (Ed.) (1996): Teacher Education Policy. London: Falmer.

Neave, G. (1992): The Teaching Nation. Oxford: Pergamon.

OECD (1996): Life-long learning for all. Paris.

OECD (1998): Bildungspolitische Analyse. Paris.

Oelkers, J. (1996): Die Rolle der Erziehungswissenschaft in der Lehrerbildung. In: Haensel, D., Huber, L.: Lehrerbildung neu denken und gestalten. Beltz: Weinheim (39-53).

Oelkers, J. (1997): Effizienz und Evaluation in der Lehrerbildung. In: Beitraege zur Lehrerbildung, 15, 15-25.

Oelkers, J. (1998a): Forschung in der Lehrerbildung. In: Beitraege zur Lehrerbildung, 16, 18-28.

Oelkers, J. (1998b): Lehrerbildung - ein ungeloestes Problem. In: Zeitschrift fuer Paedagogik, 444 (3-6).

Oser, F. (1997): Standards in der Lehrerbildung. In: Beitraege zur Lehrerbildung, 15, 26-37 und 210-228.

Popkewitz, T. (1993): Changing Patterns of Power. SUNY: New York.

Radtke, F.-O. (1996): Wissen und Koennen. Budrich+Leske: Opladen.

Reusser, K. (1994): Die Rolle von Lehrerinnen und Lehrern neu denken: Kognitionspaedagogische Anmerkungen zur "neuen Lernkultur". In: Beitraege zur Lehrerbildung, 12, 19-37.

Reynolds, B. (1998): Better Teachers, Better Schools. http://www.teach-tta.gov.uk/speech.htm

Reynolds, M. (1989): Knowledge Base for the Beginning Teacher. AACTE: Washington.

Sander, T., Buchberger, F., Greaves, A., Kallos, D. (Eds.) (1996): Teacher Education in Europe: Osnabrueck (second revised edition: TNTEE Publications, Umea 1999).

Schoenert, J. (1998): "Medienkulturkompetenz" als Ausbildungsleistung der Germanistik? In: Der Deutschunterricht, H.6/98, 62-69.

Schwaenke, U. (1988): Der Beruf des Lehrers. Juventa: Muenchen.

Seel, H. (1998): "Didaktik" and "Subject Didactics" as Sciences of the Teaching Profession. http://www.tntee.umu.se

Shulman, L. (1987): Knowledge and Teaching: Foundations of the New Reform. In: Harvard Educational Review, 57 (1-22).

Sikula, J. (1996): Introduction. In: Sikula, J., Buttery, T., Guyton, E. (Eds.): Handbook of Research on Teacher Education. Second edition. New York: Macmillan (xv-xxiii).

Stern, D., Huber, G. (Eds.) (1997): Active Learning for Students and Teachers. Lang: Frankfurt.

Tella, S. (Ed.) (1998): Aspects of Media Education. Strategic Imperatives in the Information Age. Helsinki: MEP (8).

The Holmes Group (1986): Tomorrow´s Teachers. East Lansing.

The Holmes Group (1995): Tomorrow´s schools of education. East Lansing.

Vonk, H. (1994): Teacher Induction: The Great Ommission in Education. In: Galton, M., Moon, B. (Eds.): Handbook of Teacher Training in Europe. Fulton: London (85-108).

Wagner, H.-J. (1998): Eine Theorie paedagogischer Professionalitaet. Weinheim: Beltz.

Wideen, M., Grimmett, P. (Eds.) (1995): Changing Times in Teacher Education. London: Falmer.

Wittrock, M. (Ed.) (1986): Handbook of Research on Teaching. Macmillan, New York.

Questions for discussion

1. DF could not establish itself in many European cultural contexts neither as a science of teaching and learning nor as a science of the teaching profession. We would be very interested to learn on the conditions of this phenomenon.

2. Which conditions may be made accountable that DF did not develop as a "design science" and that in many cases has avoided to produce Veraenderungswissen (efficiency-orientied knowledge and practices)?
3. Which measures seem to be adequate to promote co-operative problem-solving of all actors involved in teaching/studying/learning aiming at a pedagogical professionalization of the teaching profession?

# Panel discussion
## (Chair: Gisa Rauh)

Ladies and gentlemen,

Yesterday and this morning we have been given the chance to listen to various contributions concerning the language problem, language teaching and language learning in a multilingual Europe. The talks have provided insights into the demands and they have suggested partial solutions.

Now we have some time for discussion.

This is how I would like the session to run: in order to remind us all of what we have heard, I will very briefly reconsider the programme. To initiate the discussion I will then put three questions, that I consider to relate to the core of the issue, to the panelists. I will then throw the topic open to the floor.

If you wish to ask a question or make a contribution, then, please, will you identify yourself by giving your name and affiliation and suggest which of the panellists you would like to comment on the point you raise.

Now, let us look back at what we have heard.

Session one concentrated on European language policy and teacher education from the perspective of how to satisfy the demands.

Piet van de Craen, in his talk, pointed out the necessity of bringing together European language policy and European language teaching and training if progress towards European citizenship is to be made. He argued that a scientific approach to this issue is needed.

Ronald Soetaert drew attention to the fact that changes in the outside world necessitate changes in the methods of language teaching, or rather, of teaching in general. He suggested new rules for the content game. One such suggestion is CLIL.

In his talk, Dieter Wolff provided further information on CLIL and presented suggestions for a European Advanced Level Programme for the training of CLIL teachers.

Session two was devoted to language policy and experience with multilingual education in four European countries.

Carmen-Perez Vidal gave an account of the situation in Catalonia with regard to language policy and its results in the field of education.

Against the background of the educational system in Norway and based on his experience as a teacher trainer, Glenn Ole Hellekjaer explained what skills, knowledge and attitudes are needed to be a successful CLIL teacher.

Carmel Mary Coonan's talk considered bilingual education in Italy, exploring the conditions that exist and action that has been taken as well as present developments.

The talk presented by Claude Springer focussed on research on bilingual teaching practices at the Académie de Strasbourg and discussed pedagogical concepts in relation to concepts of bilingualism.

The talks of session three all considered future prospects for language teaching and language learning in a multilingual Europe.

David Marsh's presentation examined the recommendations resulting from the CEILINK Think Tank report on CLIL Initiatives for the Millenium, which provides insight into the types of development which might be expected in the future.

Based on case studies Do Coyle's talk explored aspects of possible initial and in-service models which might be developed in the next decade to form a coherent international training network.

Friedrich Buchberger, finally, argued that in future the results of research on teaching and learning as well as on teacher education need to have more impact on programmes for teacher education than they have at present.

I now would like to put the following three questions to the panellists.

1.     Why should the European citizen of the next century be multilingual?

2.     What are the advantages of CLIL over traditional language teaching and language learning methods and over traditional content-subject teaching and learning methods?

3.     What needs to be done to train CLIL teachers; what recommendations would you give to universities?

The conference is coming to an end now.

What is the message of this conference?
Let me summarize it in 5 points.

1.     First of all, because we want a multilingual Europe there is the need to educate multi-lingual European citizens.

2.     The lesson to be learned from traditional language teaching and learning is that it has not been terribly effective. Considering the amount of time devoted to language teaching in the curricula in schools, the results are not very impressive. So something needs to be done. And what we have learned today is that with respect to content-subject teaching something needs to be done as well.

3.     Research results strongly suggest that CLIL is an approach which is promising in both respects.

4.    We recommend that teacher training programmes should be implemented at European universities which train CLIL teachers.

5.    Success in this endeavour can only be achieved if European language policy and European language teaching and training are brought together. It has to be a joint venture, so to speak.

> And this is where you, i.e. you who have been invited to this conference, come in. If you share our view that there is a need to educate multilingual European citizens and if you share our view that language teacher training as well as content teacher training needs to be improved and that CLIL provides a promising answer to the problem, then please make use of your influence in your professional environment to initiate or reinforce changes in this direction.

In concluding, I would like to thank the panellists for their interesting and enlightening contributions. And I would like to thank the other participants for their stimulating questions and their perceptive and insightful comments.

I hope you enjoyed the discussion and will benefit from it. And I also hope you will put some of the ideas into practice.

Thank you.

---

[1] CLIL Initiatives for the Millennium – Report on the CEILINK Think Tank. 1999, 135p, Marsh, D. & B. Marsland (eds.) University of Jyväskylä: Finland

[2] See, for example, Future Scenarios in Content and Language Integrated Learning. 1998, 128p, Marsh, D., Marsland, B. & A. Maljers (eds.) European Platform for Dutch Education: Den Haag, The Netherlands

[3] See, for example, European Models of Bilingual Education. 1993, 205p, Baetens Beardsmore, H. (ed.) Multilingual Matters: Clevedon, United Kingdom

[4] See, for example, Learning and Teaching Languages in Pre-school and Primary Bilingual Contexts, report on Workshop 5A. 1992, 227p, Council of Europe: Strasbourg, France

[5] See, for example, Bilingual Education in Secondary Schools: Learning and Teaching Non-Language Subjects through a Foreign Language, report on Workshop 12A. 1993, 158p, Council of Europe: Strasbourg, France

[6] See, for example, Content and Language Integration in Vocational & Professional Education. 1998, 26p, Marsh, D., Bognar, A., Coyle, D. & S. Takala. European Centre for Modern Languages (Council of Europe): Graz, Austria. In addition, Mainstream Bilingual education in the Finnish Vocational Sector.1996. 131p, Marsh, D., Oksman-Rinkinen, P. & S. Takala (eds.) national Board of education: Helsinki, Finland, might be of interest. A Leonardo supported project, VocTalk: A teacher/institutional diagnostic development programme for the introduction of CLIL is currently underway (1999-2001) to produce in-service teacher education for the vocational sector. The partnership comprises University of Jyväskylä (Finland), European Platform for Dutch Education (The Netherlands), National Board of Education (Finland) and Uppsala University (Sweden).

[7] See, for example, La consolidation des expériences en éducation pluriligue. 1999, Baetens Beardsmore, H. In CLIL Initiatives for the Millennium, as above.

[8] See, for example, CLIL:A review of current thinking. 1999, Marsh, D., Marsland, B. & T. Nikula. In CLIL Initiatives for the Millennium, as above.

[9] Currently underway within the Thematic Network in the Area of Languages, Language Teaching Training and Bilingual Education (European Language Council) are plans to introduce a trans-national MA degree specifically for this type of purpose.

[10] For discussion on materials and the notion of authenticity in using this approach in the article see: Content-based bilingual education or using foreign languages as working languages in the classroom by D. Wolff. Aspects of Implementing Plurilingual Education. 1997, 64p, Marsh, D., Marsland, B. & T. Nikula (eds.). University of Jyväskylä: Finland. See also A Resource Base for Bilingual Educators. 1998. Kroschewski, A., Schuenemann, A. & D. Wolff, published as part of the CEILINK Think Tank report. University of Jyväskylä: Finland.

[11] Derived from The Reith Lectures, BBC, in a speech on globalization broadcast in April 1999 by Anthony Giddens.

[12] See, for example, The Future of English? A Guide to Forecasting the Popularity of the English Language in the 21st Century. 1997, Graddol, D. Open University: Milton Keynes, United Kingdom. A more controversial set of arguments can be found in The Cultural Politics of English as an International Language. 1994. Pennycook,, A. Longman: London, United Kingdom.

[13] See, for example, Bilingualism and intelligence, p.65, in the comprehensive Encyclopedia of Bilingualism and Bilingual Education. 1998, 758p, Baker, C. & S. Prys-Jones. Multilingual Matters: Clevedon, United Kingdom. See also Who's afraid of Bilingualism by H. Baetens Beardsmore, 1998, published in the Proceedings of the Conference on Basque Language. Vitoria-Gasteiz: eusko Jaurlaritzaren Argitalpen-Zerbitzu Nagusia: Basque Country.

[14] The 1998 changes to legislation in California on bilingual education being the most publicised in recent months. In Europe dialogue between the European Union and the Baltic States, particularly Estonia and Latvia is of particular importance in this respect with regard to Russian language, as is the internal debate over the availability of Spanish medium-education in Catalonia.

[15] See, for example, A single language for Europe? Dupont, P. 1998, in The Linguist, vol.37, No.6, pp162-167, United Kingdom.

[16] See, for example, Lifelong Learning of LWULT Languages. 1997. Marsh, D. *New Partnerships in Least Widely used and Less Taught (LWULT) Languages*, p.47-56, European Commission, DG XXII, Centre for International Mobility and National Board of Education: Helsinki, Finland.

[17] For further discussion on the concept of an initial development CLIL threshold see Marsh,D., Marsland, B. & T. Nikula 1999 in CLIL Initiatives for the Millennium, as above.

**Appendix: French Translation of CEILINK Recommendations**

CEILINK - RECOMMANDATIONS

1.      DU POINT DE VUE DE L'APPRENANT

   a. Choix de la langue cible

      Bien qu'EMILE (Enseignement d'une Matière par l'Intégration d'une Langue Etrangère) puisse fonctionner de manière efficace dans des contextes bilingues, il est possible de l'introduire comme outil pour la promotion du plurilinguisme dans l'éducation et même au-delà de l'éducation. De ce fait, EMILE ne devrait pas viser une langue particulière, mais devrait être perçu davantage comme une approche éducative favorisant la diversité linguistique. Une première exposition à EMILE dans une langue de grande diffusion peut servir de tremplin pour un prolongement dans une autre langue de grande diffusion, ou une langue depetite diffusion.

   b.      Critères de sélection des apprenants

      La sélection des apprenants pour des filières EMILE ne devrait pas être basée sur la compétence en langue cible, mais devrait tenir compte de la motivation de l'apprenant qui est déterminante pour la réussite. Il serait utile de constituer une série de directives afin de faciliter l'inclusion d'une gamme large d'apprenants dans un cadre comprenant divers modèles d'EMILE. Ceci permettrait d'ouvrir le potentiel d'EMILE au-delà de groupes minoritaires privilégiés.

   c. Des capacités d'apprentissage

      Une valeur ajoutée d'EMILE fréquemment citée est l'impact sur l'amélioration des stratégies d'apprentissage, qui concernent le développement de capacités cognitives. Une exposition à une approche transdisciplinaire à travers des capacités spécifiquement liées à l'apprentissage des langues, pourrait favoriser le développement de capacités de production liées à l'apprentissage d'un contenu. Ce but pourrait être atteint en associant de manière plus étroite à l'élaboration du curriculum des spécialistes de la langue source, de la langue cible et des disciplines.

   d. Evaluation de la performance de l'apprenant

      L'Evaluation de la performance EMILE d'un apprenant devrait tenir compte de la dualité contenu-langue inhérente à beaucoup de modèles d'EMILE. L'apprentissage pédagogique intégré devrait être évalué à l'aide d'outils d'évaluation intégrés. Une évaluation portant seulement sur le contenu d'un texte d'examen ou seulement sur la langue nie la dimension transdisciplinaire d'une approche EMILE. Il y a lieu d'élaborer des outils d'évaluation qui permettent à des apprenants de montrer l'étendu de leur connaissances et de leurs capacités par rapport aux contenus et par rapport à la langue.

   e. Certification des apprenants

Il devrait y avoir reconnaissance formelle au niveau national des acquis de l'apprenant engagé dans certains types d'EMILE exigeant une activité intensive. Ce genre de documentation devrait être reconnue par des autorités et des institutions au niveau transnational.

2.      DU POINT DE VUE DU PRATICIEN

a. Formation initiale

La formation initiale à EMILE est une condition préalable indispensable à la consolidation de cette approche dans l'éducation en générale. Il y aurait lieu de développer des programmes spécifiques favorisant l'interdisciplinarité à travers une spécialisation linguistique avec certification. Ce genre de programme devrait dépasser le simple rajout de modules, et il se peut qu'il exige un apprentissage plus extensif que des programmes conventionnels. La mise en place de tels programmes impliquerait peut-être une relations de collaboration entre instituts de formation et écoles, afin de permettre le développement optimal de compétences des enseignants dans les domaines de l'apprentissage des aspects linguistiques, scientifiques et pédagogiques d'EMILE.

b. Formation continue

Des programmes de formation continue devraient permettre aux enseignants expérimentés dans les domaines des disciplines et des langues de s'initier à EMILE. Les résultats de ces programmes pourraient servir à informer le développement de curriculae pour la formation initiale des enseignants à EMILE. Un programme de formation continue conçu à long terme est souhaitable pour tous les praticiens afin de leur fournir des informations à jour concernant les progrès en EMILE, et de maintenir leurs compétences aussi bien disciplinaires que linguistiques. Des mallettes pédagogiques pour la formation continue devrait être mises à disposition pour le développement spécifique à certains contextes régionaux et institutionnels.

c. Qualifications au niveau du troisième cycle

Il serait souhaitable que soit élaboré et proposé par des Centres européens experts dans ce domaine un diplôme transnational de troisième cycle. Une démarche de ce genre pourrait être le catalyseur pour la mise en place d'un programme européen vedette pour EMILE qui aurait un impact de diffusion sur la formation initiale et continue au niveau transnational et sur la recherche.

d. Evaluation des compétences professionnelles des praticiens

Des systèmes externes d'assurance qualité devraient être mis à disposition sur les plans régionaux et nationaux pour les enseignants et les écoles désirant un retour et une évaluation de leurs compétences professionnelles. Des équipes d'évaluateurs comprendraient des experts en matière d'enseignement et de recherche. Les recommandations qui découleraient de l'évaluation porteraient sur une gamme de connaissances et de capacités requises pour la "bonne pratique" en EMILE et prendraient en compte des facteurs tels que les compétences linguistiques, pédagogiques et socioculturelles. Par ailleurs, une partie de l'évaluation porterait sur la capacité institutionnelle et la mise en oeuvre. Il est recommandé aux praticiens de s'engager dans un processus d'auto-évaluation continue à l'aide d'outils tels que les tests diagnostics de langue (ou par exemple, Portefeuille européen de langue et cadre commun de référence) et une analyse critique des pratiques de classe afin d'identifier les zones de développement souhaitable.

e. Exploitation de ressources existantes

Des initiatives promues par le Conseil de l'Europe et la Commission Européenne ont produit une gamme importante de ressources relatives à EMILE. Il serait très avantageux que soient réunies ces ressources afin qu'elles soient facilement accessibles à une gamme importante de groupes d'intéressés. Il serait souhaitable que les praticiens prennent connaissance non seulement des produits et outils connus, comme par exemple le Portefeuille européen de langue et le cadre commun de référence, mais qu'ils recherchent également les produits moins connus comme EuroCLIC, par exemple, qui sont susceptibles de se rapporter directement à leur situation.

f. Banque de données Internet

Dans l'optique de fournir des matériaux de qualité, susceptibles d'être intégrés dans une gamme large de curriculae nationaux, il serait souhaitable de développer et piloter une banque de données internet. Dans un premier temps la banque devrait fournir une petite gamme de matériaux pédagogiques thématiques sous forme de modules,déterminés en fonction du niveau et de la langue. Ces matériaux devraient être conçus de manière à être téléchargeables, facilement adaptables, et il devrait y avoir des liens entre différents sites. Par ailleurs des revues et comptes-

rendus concernant d'autres ressources dans des publications et revues devraient y figurer avec des conseils et des consignes aux praticiens pour la conception et réalisation de leurs propres matériaux.

3.      DU POINT DE VUE D'AUTRES INTERESSES

a. Description de modèles EMILE

Il est nécessaire de définir, de concrétiser et d'exemplifier comment EMILE peut être mis en oeuvre dans différents contextes et de faire produire cette information dans un style accessible à un public non-spécialiste. De brèves descriptions de variables et d'options devraient être soutenues par des études de cas avec un aperçu de la gamme de modèles mis en oeuvre. En examinant les faits tirés d'expériences existantes, des groupes d'intérêt pourraient extraire de la pratique des autres des éléments adaptés à leur situations locales.

b. Diffusion et promotion du concept EMILE

Il y nécessité à établir une coalition entre éducateurs parents/apprenants, les administrateurs et des groupes d'intérêt politique. Dans cette optique il est nécessaire que la faisabilité d'EMILE puisse être clairement explicitée avec mise en évidence de résultats potentiels et une étude de rentabilité. La création d'un consortium EMILE transnational chargé d'examiner les critères de "bonne pratique", et les résultats tangibles dans le domaine de l'investissement requis. Le consortium, constitué d'experts multidisciplinaires, serait alors chargé d'élaborer et de mettre en oeuvre un plan stratégique de diffusion pour des groupes de politique régionale, nationale et transnationale. Le plan stratégique devrait être alimenté par l'Année Européenne des Langues 2001.

c. Planification linguistique

Une action publicitaire s'adressant aux groupes responsables de la planification linguistique, et visant à fournir des informations sur l'impact potentiel d'EMILE sur les intérêts et besoins des langues minoritaires, mériterait d'être incorporée dans le plan stratégique de diffusion.

d. Développement curriculaire

Les différents thèmes et modules au sein de différentes disciplines qui se prêtent le mieux à EMILE devraient être pris en compte pour le développement d'éléments d'un curriculum adapté à divers contextes européens. L'enseignement de tels modules/thèmes à travers toute l'Europe en différentes langues, résoudrait le problème clé du développement de matériaux.

e. Etendu du potentiel

Il serait souhaitable de mener des études de cas sur la mise en oeuvre réussie d'EMILE de l'école maternelle jusqu'à l'éducation supérieure, afin de dégager la gamme de potentiel de cette approche pour tous les groupes d'âge.

f. Exploitation d'expertise existante

Des projets pilotes mériteraient d'être mis en oeuvre afin de réunir l'expertise et des infrastructures établies dans, par exemple, des écoles spécialisées comme l'Ecole Internationale Baccalauréat, l'Ecole Européenne et d'autres. Ceci permettrait d'instaurer le dialogue et la complémentarité entre ces écoles et celles des institutions éducatives traditionnelles.