Thematic Network Project on Languages - sub-project 8 Language Provision for Students of Other disciplines

Definitions and aims. Present practice

V. Meus (University of Gent)
Anne Räsänen (University of Jyväskylä)

Introduction

The need for better communication is an ever recurrent theme when dealing with the needs of future European graduates. It is emphasized even more strongly in the recently published White Paper on education and training (November 1995) by the European Commission. It argues for the mastery of three languages of the European community by all citizens of Europe: *'The mastery of several community languages has become necessary if all citizens of the Union are to benefit from the personal and professional opportunities offered by the large internal market without inner borders. This language mastery must be combined with the ability to adapt to a multicultural working and living environment. Languages are indispensable to get acquainted with other people. Language proficiency contributes to a strengthening of the feeling that we are all part of Europe with its rich cultural variety and encourages understanding among the European citizens.'*

In this context it has been suggested that all European citizens should ideally know three community languages, one of them preferably being a less widely used national language.

Aims

The aims of language teaching for students of other disciplines are of the following types:

- to enhance mobility and therefore the European dimension
- to facilitate academic study and to develop skills that are directly applicable in the specific discipline
- to enhance professional development and to prepare students in terms of their social and communication skills for their future careers.

An additional but related aim is to provide for the possibility of the life-long learning of languages, including the perspective of self-directed, autonomous learning.

Types of language provision for students of other disciplines

Based on the aims elaborated above, a distinction can be made between:

- Language for European mobility purposes (LEM), i.e. courses that prepare the student for mobility within the framework of European exchange programs. Included here are not only social survival skills but also conversational techniques and intercultural communication strategies (including e.g. politeness conventions).

This kind of language instruction is to be seen as a fundamental right for every exchange student.

- Language for Academic Purposes (LAP), which includes academic skills in general, study skills (academic reading, self-study skills, note-taking, ...), writing, types of rhetoric (academic styles, written vs. oral style, politeness conventions, ...), communication skills for seminars, etc.
  An important variant is content-based language teaching, There is some variation on what the term actually refers to: to some it means teaching the topic itself through the language (with the implication that language learning will somehow follow), while to others it means organising language courses that are beneficial to a better understanding of the topic. Whatever the definition, language teacher expertise is necessary to make the link between content learning and language learning in a systematic way.

- Language for professional purposes (LPP).
  This includes professional discourse conventions (i.e. discipline specific), social communication skills (presentations, report-writing, meeting skills) and other skills needed within a discipline-specific, professional context. Ultimately, industry and business should be convinced to contribute extensively to this type of teaching.

Obviously all three types are interrelated and overlap to some extent

In terms of medium of instruction a fourth distinction should be made, i.e. the semi- or fully autonomous multimedia type of language instruction available in self-access centres. This kind of instruction would be totally integrated with new technologies and require a supporting role from the teacher, rather than a guiding one. This type of course organisation may become extremely important in terms of life-long learning. The implications of this type of course are far from clear yet, but it seems evident that it will require new ways of organisation, course and programme design and teacher training.

Results of the SIGMA conference

Introduction

Most of the issues mentioned above (and more) were already dealt with by the SIGMA conference held in 1995 in Stockholm. Separate country reports were made that discussed the situation in each European country .

The following observations seem to be of overall relevance for our purposes.

The concept of the monolingual expert should be abandoned when educational aims are considered and replaced by the idea of a 'multilingual European expert'. This means that languages should be given a greater role in the curriculums of all subjects, both in terms of the number of hours spent on it, and the relative importance in terms of evaluation (and prestige). In language programmes too, language teaching is still too often practised with the aim of preparing students for a teaching job. It can be argued that even language programmes should become more interdisciplinary, and aim to train multi-purpose specialists that can seek employment in many professional contexts. Examples of such bi-speciality programmes can already be found in connection with economics and law studies. In this way languages become an integral part of modern European expertise in general.

Level of integration

Even though several of the national reports indicated the increased importance of language skills or communication skills for employment or professional opportunities, and the increasing European dimension of post university jobs, languages still seem to have a rather low esteem.
Apart from Business Studies and Law in a number of countries, the development of serious discipline-specific language skills does not generally seem to be structurally provided .

The courses that do exist are mainly concerned with terminology and discipline-specific reading skills. More often than not no official curricula assessment criteria are available, and in most cases it is the teacher who is ultimately responsible for the course content.
When structurally integrated courses exist they tend to be given by university language departments, or by language units within faculties, but only in rare cases is the teaching seen as an aim in itself, with all the concomitant attention for research

and intensive collaboration with teachers of the discipline itself. Consequently the technique of ‘team teaching’ is only rarely applied. Team teaching in this context is taken to refer to the situation where teachers of the discipline and language teachers co-operate intensively to make sure that their courses complement each other. In most cases this means that the language teachers have to be aware of at least a number of the content specifications of the discipline and of the skills that are required from students to study the discipline. Some of these may be general, others are very specific to the discipline. This does not imply that the discipline teacher and the language teacher teach courses jointly in the same classroom (a technique which might be interesting in itself, but which is unrealistic in financial terms), but that each takes into account of what the other is doing, and that some of the objectives are worked out jointly.

Opinions differ on to what extent the mere teaching of a topic through a foreign language can be considered language teaching, and be classified as content based language teaching. The general opinion seems to be that it will obviously improve certain language skills but that it lacks a systematic approach to language, that the range of language use in the classroom is too limited and often unrealistic, that the teachers concerned are not always good models of language use, that the productive skills are often underrepresented, and that the students, when faced with the choice, will concentrate on the subject rather than on the language learned. Generally, it is thought that the aims for language learning cannot be achieved in isolation or without particular attention attached to them. Such teaching should therefore not be considered content-based language teaching.

There are some indications that this concept of ‘language learning’ is often promoted by cost-conscious authorities who want to avoid the full integration of languages in the curriculum. Indeed, this type of teaching is relatively easy to organize. In practice there are many problems, not the least of which is the decision on which language (English, French, German, ...) to use for which topics.

To remedy the overall lack of integrated courses, institutes of higher education often set up language centres, but even though the quality of this type of teaching seems high enough, lack of funding and the low pay/status of the teachers are serious problems. The courses are often perceived to be ‘service’ courses and therefore less prestigious. Again, it is often left to the students to decide whether they want to attend such courses or not, and often they even have to pay for them. There are problems in terms of scheduling, certification and career opportunities for teachers.

Because of this teachers generally lack the required specialisation, work in isolation and hardly engage in interdisciplinary work.

In many cases teachers have to concentrate on general language skills, and are unable to teach the more complex skills mentioned above, because the overall proficiency of many students is too low, even in a lingua franca such as English.

Pedagogical approach

It is striking that the country reports are very vague on content and pedagogical approach. They consider the problem mostly in structural terms. The reason for this is again the lack of integrated solutions, not only in terms of the curriculum, but also in terms of the centres in which the teachers are active. Tenured positions are rare, the number of teaching hours required within a full-time job is often too high to allow additional research, and even when research is carried out, its prestige is lower than that of the more 'traditional' fields of (applied) linguistics and literature. In addition, the development of practical teaching materials is almost never taken into account as research in an environment where the number of publications and the occurrence in citation indexes are the main criteria for career advancement.

It seems obvious that the language teaching provided should be pedagogically good and realistic. In practice, this means nowadays that they should be communicative and task based in their approach. More traditional courses that concentrate on the mere reading of scientific articles, with heavy emphasis on word explanations are no longer acceptable. One of the problems that seems to be correlated with this type of teaching, is that some students, because of the emphasis on everyday communicative skills in secondary and adult education, have a good command of informal, everyday language use, but are unable to switch over to the different styles and degrees of formality used in scientific and academic contexts. In terms of vocabulary too, students find it difficult to distinguish between the finer nuances expressed by 'everyday' scientific discourse, where basic words may have slightly different meanings (e.g. the use of the word 'scaffolding' in tissue growing, temporal as in 'temporal bone', etc...) may not be recognized for what they are (e.g. maize-maze), or where Latin-derived words may be used instead of the more common English ones (minute-small).

Most language centres have realized this and provide high-quality teaching from a learner-centred perspective. Paradoxically enough, in trying to teach like this, resentment may be induced in some students who have to adapt their learning style, have to engage in group work and generally have to submit to a type of teaching that they are not used to in their own disciplines.

Which languages to learn in Europe?

It goes without saying that in Europe English, French and German predominate as languages taught in academic situations. Russian is strong in certain areas, but cannot even begin to compete with the other languages. Spanish is widely taught, but is often limited to a personal sphere of interest. Until a few years ago, it was widely assumed that English would eventually become a lingua franca for the whole of Europe, and in many respects it is beginning to assume that role, but the widespread mobility schemes of the last decade have also rekindled an interest in the less widely used national languages in the European Union. Many people prefer the variant 'less widely taught languages', because for Europe as a whole a clear division can then be made between the 'Golden Triangle' of English, German and French on the one hand, and all the other languages on the other. A further distinction should be made between less widely used/taught 'national' languages (including Irish for Ireland) and the wider concept of less widely used languages, which includes e.g. Catalan and Welsh because they are officially recognized by the authorities and there is an educational system of higher education that uses such languages as a medium of instruction. All other 'regional' languages would then be 'minority' languages.

It is now widely accepted, partly as a result of the recognition of the value of linguistic cultural diversity but also as a result of the great interest in intercultural communication, that the teaching of the less widely taught languages should be promoted by the European community and that the predominance of the Golden Triangle languages should not be accepted as inevitable. Contrary to what was originally assumed, exchange students who stay in countries with such languages enthusiastically take up the study of the language and take it for granted that they should be able to at least communicate in the local language. In fact, surveys carried out among exchange students about the most rewarding elements of their exchange period, consistently find that the enrichment as a result of discovering a new culture and its language scores very highly, and in fact often higher than the discipline-related new knowledge that was acquired.

As a result of this renewed interest in the less widely taught languages, the ECCLiPS conference (European Conference on the Cultural and Linguistic Preparation of Exchange Students) was held in Antwerp (Belgium) in 1996. The final recommendations of the conference were the following:

1. Linguistic and cultural **preparation** at an elementary or basic level should be a (fundamental) **right** of every (exchange) student.
2. The pedagogic and content principles agreed upon during the conference have to be converted into a common European curriculum with language-specific syllabuses.
3. Linguistic and cultural preparation should mainly be organized in the **host** country (60-80 hrs) at the beginning of the exchange period.

4. **Cultural training** should be fully integrated in every part of the preparation and go beyond the obvious differences.
5. In the host country courses should be organized by recognized institutions involving qualified foreign language teachers.
6. The integration of the language preparation within the normal exchange curriculum is a crucial issue. The courses should entitle the student to study credits (ECTS)
7. Students can and should be expected to devote considerable energy to linguistic and cultural preparation..
8. In terms of costs, about 5 ECU per student per hour for a group of no more than 15 students is suggested.
9. The conference participants suggest the introduction of a voucher system that would entitle each student to at least one preparatory course
10. In order to reach the aims of the conference a more permanent network must be set up that will encourage and stimulate the development of content (syllabuses), ODL-development and organisational guidelines (code of good practice).

Since then, the final recommendations of the conference have been presented to the European commission and have been used as a reference document in many European universities during the preparation of their proposals for an institutional contract, to be submitted as part of the new Socrates programme.

Problem areas, needs and solutions

Some of the problems most often cited in the country reports of the SIGMA conference concerned the lack of good materials and of common frameworks within which teachers can operate. There are usually no minimum national standards for language study and requirements for employment. As a result, teachers tend to work in isolation. Only in Finland does the situation seem to be more advantageous, in that standards are set by the Ministry of Education.
For the whole of Europe the psychological role of the European Union is of great importance. Measures should be taken to promote the setting up of systematic co-operation across the disciplines, e.g. in the production of materials. It would be a good idea to set up materials banks that can be made available on the internet. The technical and organisational problems, let alone the content, of such collaborative projects are still staggering, however.

Related to this is of course the need for standardized assessment criteria. Again, interdisciplinary co-operation seems to be the only real answer here. At the moment there is also almost no way in which different language courses can be compared across institutes and countries. With ECTS (European Credit Transfer System) becoming more widespread, this should obviously be remedied.

Another issue that is sometimes underestimated is the integration of intercultural education. Differences in cultural, academic and even professional customs at home and in the target culture exist which now often go unnoticed until students take part in exchange programs. Differences of this type are a major problem which should be dealt while learning the language: a country with an oral academic culture, or with an emphasis on group work will require different linguistic skills from students than a culture with e.g. a tradition of lectures in large auditoriums and limited personal interaction with lecturers.

Other problems to do with differences in academic style between the host and the home country involve the style that is common in reports and articles, the amount and nature of student-student interaction (in the learning process!), forms of politeness, knowledge-imparting vs. problem solving teaching, ...
At one time it was believed that a lingua franca such as English could avoid such problems and lead to a kind of language with a common 'European culture' behind it, but experience has shown that the widespread use of English only masks these problems, and that the problems themselves remain all too real. After all, as was mentioned in one country report, even technical terminology is linked to its linguistic and cultural contexts.
A remarkable side effect of this cultural adaptation is that knowing different academic systems helps the students to be more critical of their own. Indirectly, this may lead to an improvement in overall quality.

Types of language provision revisited

Language provision for mobility purposes

When discussing Language for Mobility Purposes (LMP), several issues have to be addressed. Most of them were dealt with extensively during the European Conference on the Cultural and Linguistic Preparation of Exchange Students (ECCLiPS), held in Antwerp in 1996.

The conference strongly argued for the introduction of a policy of linguistic and cultural preparation for all exchange students in Europe, more especially for the less widely taught languages. Students who stay abroad have to be able to communicate both inside and outside the educational context. Mobility is a means to teach students to move about not only in their own environment, but also in that of others. Language mastery and an understanding of the way of studying and living in the host country is necessary to this end. This training should be an inalienable right without any extra cost. This is true irrespective of the field of study. It has a positive influence on the quality of an exchange period and should be considered a right on a

par with support from a local international bureau, adequate housing, etc. Linguistic and cultural preparation should mainly be organized in the host country and at the beginning of the exchange period. In addition, elementary preparation by means of courses or self study in the home country should be strongly encouraged.
Linguistic and cultural preparation in the host country is a powerful tool for exchange students to adapt to the new environment (in social, organisational and academic terms). The preparation period allows the students to get used to the social reality of the new country, to settle in, collect all the information necessary to fit in well with academic life: getting in touch with the professors and laboratory staff, finding the way through the administrative system etc. Neglecting this stage has been found to lead to major problems, conflicts and poor success in every conceivable domain targeted by the exchange programme.

Each student that visits another member state of the EU for a study period of at least 3 months should minimally be given the opportunity to participate in an introductory course in language and culture consisting of: a preparation for the visit before departure (20-40 hours) at the home institution, and a training of about 80 hours at the host institution, i.e. an intensive course immediately after arrival (60 hours) and ‘Maintenance' training during the stay (20 hours).

In order to benefit in real terms from a study period abroad, the linguistic and cultural preparation of exchange students must include a number of components.

– At the home institution the emphasis should be on:

Language :	'every day language’
Culture:	factual information on people and country and about the educational system;
Language and culture :	relevant contrastive aspects in the areas of language and culture.

– At the host institution the emphasis must be on:

Language:	survival skills (oral skills) and academic language use (written skills);
Culture:	social conventions, customs and educational ways;
Language and culture :	language use which is directly linked to culture, communication strategies.

– Courses in the host country (min. 60 contact hours) should be very functional and fit in closely with the needs and aims of exchange students. They should be communicative in nature and be mainly task-oriented and aim towards the

acquisition of useful conversational strategies. They should comprise basic language skills, focused on everyday routine and daily contact with the local people. Versatile functions and strategies should be developed.. The starting points of the course should reflect as much as possible the contexts and tasks that the students will be faced with during their stay.

- Academic language use should be given special attention in the preparation, in the sense that students should be able to survive linguistically in daily academic situations. Communication strategies, conversational techniques and interaction conventions should be included explicitly. Problems with differences in academic style between the host and the home country (teaching in large or in small groups, which style is common in reports and articles, the amount and nature of teacher-student interaction, forms of politeness, knowledge-imparting vs. problem solving teaching, ...) require explicit attention.

- In many places, language centres are confronted with students who want/need more than the basic course. A longer type course is sometimes made available which contains a great many more details and leads to linguistic competence for (virtually) full use in all circumstances, including academic life. The above-mentioned distinction between basic linguistic and cultural preparation and an extended course determines the final level of proficiency the student is expected to attain. Other factors that play a role are 'linguistic distance' between the mother tongue and the language of the host country, personal motivation and talent, study background, knowledge of other languages, etc.

The basic logic in most existing courses is that cultural preparation is fully integrated in the language course. Command of the language is the aim but at the same time a considerable amount of information is provided on ways of interacting, the structure of society and even on the history and art of the host country. Cultural coaching should cover underlying properties and factors that determine the value systems of the host country and have a very pervasive effect on everyday interaction. Cultural training should be incorporated in every part of the preparation and go beyond the obvious differences (greetings, leave-taking, lunch and dinner hours, ...).
Problems with differences in academic style between the host and the home country (teaching in large or in small groups, which style is common in reports and articles, the amount and nature of teacher-student interaction, forms of politeness, knowledge-imparting vs. problem solving teaching, ...) require explicit attention.

Especially in the host country use should be made in the course of a task-oriented approach. Contexts and tasks that will be a challenge for the students during their actual stay should be taken as starting points wherever possible.

Attendance in the introductory course should give the student the right to a certificate that is recognized and valued by the home institution. On the other hand, the preparation should be honoured in its own right and should be fully integrated in the study exchange itself by yielding study credit points (ECTS). The latter recommendation is far from generally accepted at present.

The assumption - which is NOT always met - is that exchange students should be capable of attending lectures in the host country's local language. This goal goes beyond basic linguistic and cultural preparation. A reasonable goal for preparation, however, is for exchange students to be capable of using the local language for everyday exchanges.
The overall aim is to further understanding of the local culture by students, to increase the feeling of being 'European' citizens and to enable students to take part (survive) in social life.

A distinction therefore has to be made between the introductory linguistic and cultural preparation and the courses needed to partake fully in academic courses taught in the local language. The latter aim requires extensive tuition (a minimum of 200 hours) before the start of the study period, preferably in the host country. Although laudable in itself, the realisation of this aim goes beyond the scope of linguistic and cultural preparation of exchange students. Even so, it must be said that students, especially the motivated ones, are able to cope remarkably well once they have acquainted themselves with the new culture and language as defined above. Additionally, the learning process does not end when the introductory courses end, and institutions should make special efforts to provide extra courses and self-study materials for students to take part in, e.g. modules that provide subject integrated materials. Obviously, an attempt must be made to adjust linguistic and cultural preparation as much as possible to the students' previous knowledge of the language and culture, and courses at various levels should be provided. The European Commission has already shown in various manifestos that it attaches great importance to linguistic and cultural training in the process of European integration. It is of great importance that it should keep doing so and continue to exert pressure on educational institutes to realize this by way of guidelines and recommendations. Moral pressure is not enough, however. The financial burden for linguistic and cultural preparation must be spread as widely as possible. In addition to the educational institutions, the European Commission should therefore also be willing to contribute in a structural way.

During the beginning of 1997 a survey was made among the participants to ECCLiPS from the countries with less widely taught languages, to check whether ECCLiPS had had an impact on existing practices of linguistic preparation. Seventeen universities filled in the questionnaire. All universities considered the

recommendations to be still valid. In a large majority of cases linguistic preparation was explicitly provided for in the institutional contract for Socrates, with courses of 60 hours at the beginning of the academic year, possibly followed by weekly follow-up courses later on as the dominant type of course.
In most cases (11 out of 17) there was a mix of linguistic and cultural preparation and tuition in English in specific cases. Clearly, some form of compromise between English as the language of instruction and the exclusive use of the mother tongue with exchange students has been reached in the field.

Language provision for academic purposes

As indicated above all three types of language provision overlap, and a number of observations valid for Language provision for mobility purposes also apply to the other two types. Specifically for Language for Academic purposes, a division must be made between what is often called Language for Specific Purposes, content-based language teaching and 'general' academic language, which is partly culture-oriented in that it also focuses on academic styles in various countries, communication strategies, conversational techniques and interaction conventions that may differ from country to country, not only in oral language use but also in written.

One observation that tends to made is that the general foreign language proficiency after secondary education does not seem to increase any longer, but rather decrease, in spite of the increased demands that are inherent in internationalisation and a wider exposure to foreign language use in general. Students generally tend to score rather well in everyday oral language use, where the language used can be kept simple, grammatical mistakes are usually not much of an impediment to communication, and the vocabulary needed is easily learnt. In that sense, students score far better than they used to in the seventies and eighties. General comprehension skills are also high, both in written and spoken language.

When it comes to using more nuanced language in a more formal setting, however, especially in writing, great deficiencies become apparent: spelling errors abound, words are mixed up, and there is a great interference from the mother tongue in terms of grammar, vocabulary and style. It is not the scientific jargon itself that seems to be problematic, but the more formal general vocabulary that is used in academic writing, the syntactic rules that govern them, and the linking devices that are needed in coherent texts. Words such as 'inordinate, issue, policy, diversity, to pursue, apparent, to enable someone to do something or something to happen, etc.' appear ever so many stumbling blocks. Cohesion, the use of conjunctions and politeness markers are just three areas that generally seem to confuse students, partly - it seems

- because they somehow cannot muster the time and energy (or motivation?) needed to thoroughly master the relevant skills in the foreign language.

Perhaps somewhat paradoxically, the emphasis should therefore not be largely on the 'academic' part of language use in language provision for academic purposes in as far as this term refers to the scientific use of language, but rather on the intricacies of style, spelling and other areas that make language coherent, clear and well-structured.

Language Provision for Professional Purposes

Again, language provision for professional purposes has much in common with the other two types. It refers to the language used in professional contexts, e.g. in industry. Because of internationalisation and wider access to foreign language documentation (e.g. Internet), the need for foreign language mastery becomes ever more acute in professional circles. This includes the need to perform well in international meetings and visits, the writing of reports for international audiences, presentations, working lunches and much more. Here too, however, a feeling for the correct forms of interaction may be a more important issue than the content dealt with. Industry captains have been known to observe that they will take care themselves of the necessary skills and content needed to do a job well, and that they are not dissatisfied with the overall language proficiency of their personnel, but that the most important issue is that students have to be prepared how to act appropriately in complex situations, including the use of politeness markers, general conversation techniques and other skills that make a good impression on the interlocutors.

In general, however, industry will have to make an effort to participate in the provision of such language teaching themselves, not only in terms of financial and organisational resources, but also in terms of research into the more specific needs of employers with respect to the language proficiency of their personnel.

New technologies, self-access centres and lifelong learning

One of the most important developments in language teaching in the future will undoubtedly be in the area of new technologies. In language teaching for students of other languages, their use will be crucial. Indeed, one of the advantages of the use of new technologies is that it may offer at least a partial solution to the need of a more structured integration into the curriculum of students of other disciplines. One of the problems in integrating language courses in the curriculum of other disciplines (apart from the often denied but obvious fear that it may be introduced as a replacement of other, more discipline-related courses), is that the timetable of students is so full, and so fragmented into various subdisciplines, practical work etc... that it may be virtually impossible to find suitable time slots, so that a lot of such courses are

scheduled in the evening or on Saturdays. This, in turn, has a predictable negative influence on motivation.

The new technologies may be able to provide mass access to a wide variety of courses and exercise materials that are geared to the specific needs of widely diverging student groups. Autonomous learning will be given a greater place in such systems, and students will be able to do most of their learning in their normal learning environment (faculty computer networks) or indeed even from home, without having to be physically present in a class room at regular intervals. Obviously, group meetings in the presence of teachers will still be needed, but even there computers will take over much of the knowledge transferring role that the teacher has often been associated with traditionally. Indeed, because the students may have different rates of progression, groups may regularly change in composition as well. This will not mean however, that a student will have to work on his own all the time. On the contrary, it may well be that collaborative learning will become much more important than it is now. In general, teachers, though still officially in charge of whole courses and classes, will probably follow up students individually or in small groups, and help them in reaching their predefined goals in the most efficient way possible. Students will probably be required to negotiate 'learning contracts' in which they determine beforehand how much time and effort they will be required to put into a given course in order to reach detailed and predefined objectives. The students will have to be taught to develop new learning strategies and self evaluation skills. The more traditional language centres may be transformed into self-access resource centres, and teachers will be required to divide their time between helping individual students to attain their learning goals by acting as consultants and designing new learning materials by processing the huge amounts of language use available electronically world-wide into learning materials that the students can efficiently deal with. Specifically for students of other disciplines, the link between language learning materials and discipline-related learning materials may become a much closer one in that both may be offered in one overall system that encompasses both.

All this will require a huge shift in mentality, however, not only on the part of the teachers (and their trainers!) and students, but also on the part of the administrators who will have to provide the necessary infrastructure and the environment needed to make it work. Far from providing a cheap and less personnel-intensive way of language learning, the integration of the new technologies into language teaching will require huge investments in terms of infrastructure, the retraining (at the moment mostly in their own time) of teachers, the provision of interdisciplinary staff and the availability of time in which teachers can prepare materials. It is to be expected that all this may in fact ultimately require more rather than fewer teachers and human interaction than before.

Conclusion and summary

The fields of language provision for European mobility purposes, language for academic purposes and language for professional purposes are all interrelated. They require an interdisciplinary approach and (should) aim to train multi-purpose specialists than can seek employment in many professional contexts. At the moment, they suffer from a lack of integration in the curriculum or the larger system of which they form part. Because of this, teachers are generally unable to reach the required level of specialisation, work in isolation and hardly engage in interdisciplinary work. Minimum na tional requirements are needed as well as standardized assessment criteria. The new technologies may well lead to a completely new organisation of language courses for students of other disciplines, provided the necessary shifts in mentality can be made.

Index: