NEW LEARNING ENVIRONMENTS

Introduction

Two recent developments have had a strong influence on the range of provisions for language learning and teaching in Higher Education in Europe: firstly the rapid emergence of new technologies, and secondly the strong increase in (student and staff) mobility. It is now quite common for students and staff members to be linked to computer networks and to have access to email and the Internet, and for faculties or departments to have modern multimedia centres offering facilities for self-study. It is equally common to have visiting exchange students or staff members speaking a language that is not the first language of the host institution.

As a result of these developments, new opportunities for language learning have emerged. Traditionally, language learning mostly took place in a classroom setting, under the guidance of a language teacher who might or might not be a native speaker of the target language. The teacher would normally determine which materials had to be studied and which tasks or exercises to be carried out. The introduction of new technologies in language learning has created a new learning environment: learners have access to a wide range of learning materials, available on CD-ROM or via the Internet, which they can study when they want, and they can practise their language skills by communicating with native speakers of the target language via email or even in real time (chat).

In addition, the presence of native speakers of a foreign language in the home university (visiting exchange students or staff members) or abroad (exchange students and staff) leads to new opportunities for learning a language as well. Learners have the opportunity to communicate directly with a speaker of the target language and to receive immediate feedback. Of course, language learning in a naturalistic setting, i.e., outside a classroom, is not an entirely new phenomenon, but its role and significance has changed considerably as a result of the process of European integration and of the strong increase in mobility that is part of this process. For the purpose of this report, however, new learning environment is taken to refer to more formal environments that are part of the structure of an institution.

It is obvious that there are some fundamental differences between the traditional and the new learning environments and that these differences have implications for the learning process. The demands made on a learner in a traditional classroom setting are quite different from the ones that arise in a situation where a learner is able to exercise varying degrees of control over his or her learning. If these (at times still only potential) developments are to succeed, new technologies and the appropriate methodologies must be integrated fully in the language learning process. The new environments create new needs that have to be properly addressed in order to fully exploit the opportunities available. These new needs are emerging for all participants in the process: for learners, particularly in relation to autonomous learning strategies; for teachers, who must understand the potential of new technologies and encourage learners to develop new learning strategies (and in doing so change their own role); and for course planners, who must provide the appropriate technological infrastructure, learner support systems and opportunities for staff development.

As to the different kinds of language training, Information and Communication Technology (ICT) offers much-needed new opportunities for the LWULT (less widely used and less taught languages). By providing ICT access to language courses and new learning materials universities can extend the range of languages on offer and in this way promote multilingualism. With regard to the need of including the languages of all the EU enlargement candidate members in higher education language teaching, only ICT based learning systems and on-line platforms seem to offer a relatively short-time, realistic solution.

Finally, there are other factors that are affecting higher education. The student population has been changing in terms of nationality and cultural background, but also in terms of previous knowledge and experience, type of graduate skills and particularly in terms of the expectations with respect to the facilities and learning modes. These factors too create extra pressures for change.

New technologies and language learning

Perhaps the most radical transformation occurring in higher education in the last decade or so has been the steady advance of new technologies. Teaching and learning in institutions of Higher Education in general and language learning in particular have been strongly influenced by the rapid developments in ICT, among them the development of hardware (computers, computer networks, self-access centres) and software (multimedia resources), the opportunities offered by the Internet (WWW, email, chat), and the introduction of new modes of delivery (distance learning, videoconferencing).

The challenge institutions of Higher Education is facing is to integrate new technologies in the process of teaching and learning in an efficient and meaningful way, making optimal use of their potential while at the same time being aware of their limitations. This is by no means an easy task: it is difficult to immediately give a reliable estimation of the potential of new hardware or software, or to properly assess the extent to which it can be put to use in the process of language teaching and learning.

Some institutions of higher education have self-access facilities and use new technologies, but do not have a vision of the long-term effects that these will have on their language learning provision. The approach of some universities to learner autonomy is sometimes too technology-driven and they may tend to mistake self-instruction for self-direction, thus assuming that learners will turn into autonomous learners once they are learning outside the classroom. New computers arrive and learners are told to start using them. The results obtained are usually not very satisfactory and this will inevitably lead to a degree of staff scepticism which is difficult to overcome.

In addition, new technologies are often perceived as a solution to the problem of the greater resources needed to meet the increasing demand for languages in higher education. Some institutions see the introduction of new technologies as a good way of cutting costs and teaching time. According to these institutions, needs arising from large class sizes and limited time allocated to language teaching can be met by setting up self-access centres offering opportunities for self-study. This is, of course, an approach which does not really meet the needs arising: computers are not to be considered alternatives for teachers, and new technologies do not provide an excuse for reducing staff numbers. To the contrary: the introduction of new technologies can often lead to increases in staffing requirements.

Institutions of Higher Education should have a clear vision of what they want to achieve when they decide to introduce new technologies in the language learning process. This vision should be based on an analysis of the needs arising in relation to language learning. It is of crucial importance that all participants are involved in the often difficult and complicated process of integrating the new technologies in the teaching and learning of languages, and that every single relevant aspect is taken into consideration. Decision makers, for instance, should be aware of the inadvisability of integrating computers into language courses without equipping teachers with the necessary skills and knowledge to enable them to use them properly. Unfortunately, quite a lot of decisions relating to the introduction of new technologies cannot be related to a clear, well-structured policy which gives proper consideration to the issues at stake.

Introducing an institution-wide ICT policy both for languages (as well as other disciplines) 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.

RECOMMENDATION	Institutions should adopt an integrated approach to the introduction of new technologies in the area of language teaching and learning, based on a clearly defined set of aims and objectives and relating to an analysis of the needs arising from all participants involved.

The place of new technologies in policy documents

Ideally, those who have to take decisions relating to new technologies should be able to find guidance and inspiration in policy documents issued by authorities at the institutional, regional, national or European levels.

There seems to be general agreement at the various levels that Information and Communication Technologies have an increasingly important role to play in language learning. The great majority of policy documents relating to education in general, and to language learning in particular, at both national and European level, emphasise the importance of developments in ICT for the learning process. However, even those with expertise in the area would find it difficult to identify a coherent and explicitly stated common policy emerging from the many documents which describe and determine the policies to be implemented. Generally speaking, developments in new technologies are encouraged in these documents. However, the references to a more specific role for ICT tend to be very brief and general in nature, and there is little evidence that experts in Information and Communication Technologies and language learning have been involved in the drafting of the major documents.

The most recent initiative undertaken at European level is the European Commission's eEurope programme. One of the objectives of this programme is to make digital literacy one of the basic skills of every young European. The eLearning initiative aims at implementing and supplementing the eEurope programme in education and training. The Commission's Communication *eLearning – Designing tomorrow's education* specifically mentions language learning as one of the issues which will receive special focus. In this respect, the *Linguanet Europa* project is mentioned as an opportunity to create a virtual language resource centre for language teachers and the general public. The document contains a series of objectives. One of the objectives for adapting the education and training systems to the knowledge-based society is the adoption of a European framework to define basic skills to be acquired in lifelong learning, knowledge of foreign languages being one of these skills. However, the lines of action described in the document do not contain any reference to language learning as such.

The diffusion of information is very important. This includes theoretical information such as the meaning of learner autonomy as opposed to self-instruction, and practical information such as the kinds of human support required, ways of encouraging students to become autonomous and so on. Both types of knowledge seem to be unevenly spread between institutions. Ways in which information can be transmitted from one institution to another need to be created and extended. One of the measures that could be taken to improve the situation is to disseminate relevant information regarding new technologies and language learning in a systematic way. An obvious way to proceed would be the creation of a resource centre, a clearinghouse containing information about policies, projects and initiatives at local, national or international level, revealing both the potential and the limitations of the new technologies.

RECOMMENDATION	There should be a policy of dissemination of information concerning the role of ICT in language learning, with an emphasis on the fact that it should be pedagogically driven and needs-led. ICT should be seen as support for teachers and as a guidance tool for learners. Information concerning both the potential and limitations of ICT should also be disseminated.

Facilities for independent language learning

Independent language learning (i.e. language learning outside a formal classroom situation) may take place in multimedia centres, resource centres, or language laboratories. It is nowadays quite common for an institution of Higher Education to have well-equipped multimedia centres. Almost everywhere in Europe, institutions are in the process of either replacing ageing language laboratories with modern, up to date multimedia centres, or creating the latter ad hoc. Still, there is considerable variety here: situations also exist in which there is a marked lack of facilities lending themselves to independent language learning, and because of the great increase in demand for languages over the last couple of years many of the structures set up to propagate language learning are stretched to their limits; this, coupled with budget cuts, means that institutions of higher education can quite often only partially satisfy the increasing demands being placed on their resources.

Language centres or similar units play a crucial role in the process of independent language learning. They are a relatively recent innovation in many countries and were created to cover the growing need for practical language courses. For this reason they frequently coexist along with more traditional language teaching units found in language departments or other faculties. In some countries (like Italy or the United Kingdom) language centres normally manage the audio-visual and multimedia resources for the language departments. Because language centres are sometimes expected to be semi-independent financially, they often offer courses to the general public (as in the United Kingdom and the Netherlands), or they require a financial contribution from the students.

In addition to the facilities offered by language centres, there are frequently opportunities for independent language learning in multimedia centres belonging to non-language oriented departments, or even in centres devoted to language specialists, not to mention so-called tandem arrangements or mixed language tutorials.

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 of language studies into the curriculum of students of other disciplines. One of the problems in integrating language courses into the curriculum of other disciplines (apart from the often denied but obvious fear that it may be introduced as a replacement of other 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. Specifically for such students, 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. There are some indications that there is a budding trend to offer discipline related courses to students in other languages than their own (or the ubiquitous English), thus providing HE institutions from various countries a new and exciting opportunity for co-operation in setting up ICT based programmes in which each partner offers course materials in its own language.

RECOMMENDATION	Units within institutions of higher education whose main mission is language teaching should be provided with an infrastructure that meets the needs of modern language teaching and learning. A certain number of material conditions have to be satisfied in order to ensure the quality of language programmes. These include rooms equipped with audio-visual and CALL facilities, trained staff to maintain the equipment and a budget to ensure its reasonable renewal. The layout of self-study centres is crucial. In some cases classrooms have to be redesigned to meet the needs of both teaching and autonomous learning.

EXAMPLE OF GOOD PRACTICE	The *Talencentrum* (Language Centre) of the Universiteit Gent (BE) is evolving into an advanced computerised resource centre for language learning. It has developed and offers a uniform web-based interface for accessing language learning materials, digitised audio materials, and specially designed multimedia desk furniture. Its approach takes as a starting-point the assumption that both language learners and language teachers want more flexible learning environments. The integration of multimedia resources into courses and programmes is taken a step further by also integrating materials from the "real world" in the learning process (email, text chat, voice chat, videoconferencing). The Language Centre developed a browser-based shell in a LAN environment with access to the Internet. The fact that the shell is browser-based ensures a smooth integration of future concepts and materials. The Language Centre is currently developing a completely interactive on-line language learning system which will enable anyone interested in learning a language to take a language course on-line. Learners will have a wide range of multimedia applications and tools at their disposal, permitting them to access course materials independently. In addition, they will be able to contact on-line language advisers and fellow learners. For more information, see http://www.taalnet.rug.ac.be

A need for new learning strategies

One of the main advantages of the advent of new technologies and the emergence of new learning environments is that language learners have unlimited access to all kinds of resources and learning materials and have new opportunities for contact with native speakers. Learners who want to make use of these opportunities to learn a language will have to adapt their learning strategies. The environment in which they will be learning is different from the traditional ones. The new learning environment requires a different attitude, a different approach to the learning process: learners have to take on responsibility for the learning process, to plan their activities and to monitor their progress themselves. They have to be able to detach themselves from the learning process as such and look at it from a distance, to critically reflect upon it, to make decisions regarding the course of the process, to redirect it if necessary. In other words: as a result of the emergence of new learning environments, learners have to become autonomous.

Learners are not born autonomous, they have to be trained to become autonomous. For that purpose, a central goal of current approaches to language teaching and learning is to enhance the learner's control over the learning process. These approaches stress the importance of "learning to learn": learners need to be taught strategies that will enable them to cope with new technologies and new learning environments, and will help them to learn the target language in a more effective way. A notion which is closely related to learner autonomy is self-directed learning, which refers to a learning process involving an autonomous learner.

Obviously, the attitude towards learner autonomy is a crucial factor in the process of integrating new technologies in language teaching and learning. An institution which supports and promotes learner autonomy is likely to have a different view on the use and usefulness of new technologies than an institution which is not really convinced that learner autonomy is something to be pursued.

A survey carried out in TNP1 by Subgroup 3 showed that there is a variety of attitudes towards learner autonomy across Europe, and that there are many different ways of implementing the notion in courses and programmes. Some institutions have reflected a great deal on the various ways to implement and promote learner autonomy, others, however, although equipped with new technologies and self-access centres, seem to lack insight into the ways they should be used optimally. Some institutions consider self-access an integral part of the students' learning programme, others see it as something separate from the day-to-day teaching curriculum, treating it as an optional addendum. Some of the institutions have a high level of usage of self-access centres by students, others have had difficulties in motivating students to use them. These differences are to some extent a reflection of the great variation in learning cultures in European countries. The implications of this variation for the successful implementation should not be underestimated and fully taken into account.

Autonomy is also important on a social level. More and more often it is realised that it will be a vital component in the future effective functioning of the individual in society, and the need for more varied, open and flexible ICT facilities is just a consequence of this. In industry too, there has been a move away from 'training' to 'learning/performance', from the classroom to 'anywhere/any time', from 'paper' to 'on-line', from 'training management' to 'knowledge management' and from 'just in case' to 'just in time'.

RECOMMENDATION	Information and Communication Technologies and multimedia applications should be integral parts of all modern language curricula. They provide teachers and learners with authentic materials and cultural information and help to promote intercultural awareness and mutual understanding. They should serve as learning tools and classroom resources rather than instructional devices.

RECOMMENDATION	**Self-directed learning as a departmental policy** (Language Centre, Jyväskylän yliopisto, FI)
	All Higher Education degrees in Finland have compulsory statutory language requirements (3-4 languages, including two national ones), and the Language Centre's responsibility is to provide the language and communication training aiming to develop skills for both academic study and professional life in the disciplines that the students are studying. As regards Jyväskylä University with its 12,500 full-time students in 1999, this meant a total of 18,000 contact hours in 600 groups, producing a total of 22,500 ECTS credits. Contact teaching (+self-access) is given in 15 languages and (only) self-access materials are available in 18 other languages. The total staff is some 65, including a teaching staff (50-55), administrative and planning staff (8), and technical support and other support staff. With a continuous increase in student numbers in the past years, it has been necessary to develop new solutions to carry out the discipline-specific language instruction required by the statutes.
	The efforts to promote learner and teacher autonomy through departmental action research and establish it as a joint policy for action were started at Jyväskylä University Language Centre in 1993. The main rationale for adopting this approach was that it enables full staff participation and involves a considerable number of learners in the process, thus acting as a tool for both learner and staff development in this area and affecting the quality of both teaching and learning. Since proficiency requirements are constantly increasing, it was felt necessary to adopt an approach which would address the development of enabling skills for continuous language learning independently. This required, however, that both teachers and learners become aware of the language learning process and how it might be directed and monitored. Over the first action research cycle, a considerable amount of data were collected from various learner training courses and about the teachers' experiences in incorporating learner training elements into their contact teaching. The second cycle, started in 1998, explores the pedagogical implications of ICT (information and communication technology) enhanced language instruction for professional and academic purposes, experiments with various kinds of learning tasks and courses designed for autonomous language learning, and develops academic skills modules to be integrated into the content area instruction in the seven faculties of the university. In addition, a considerable amount of learner and staff training materials have been designed and continuous workshops arranged to learn to use the new self-access learning facilities renovated in 1999. More information about the findings of the action research are available in Räsänen, A. & E. Randell (eds) 1999: *Towards Learner and Teacher Autonomy* - self-directed learning as a departmental policy for quality development in language centre instruction. Action Research Report 3 from Jyväskylä University Language Centre, and about self-access facilities and the pedagogical approach of the

	Language Centre at www.jyu.fi/kielikeskus .

A new role for the teacher?

As a result of the introduction of new technologies and their integration in the learning process, the role and position of the teacher is undergoing changes as well. He or she will have to adopt the role of the learning facilitator rather than play the role of the sole provider of input and metalinguistic explanations. The process of language teaching will be considerably modified by the integration of new technologies to the extent that dispersed learner-centred teaching is likely to gain importance at the expense of teacher-centred classroom situations. In such a situation, the responsibility for learning is more and more being taken over by the learner, while the teacher will be acting more as a language counsellor whose task it is to advise learners on an appropriate choice of materials and learning strategies suited to his/her personality, give consecutive feedback, etc. He or she will not primarily describe (or prescribe) the correct use of language and guide the acquisition process, but rather create favourable conditions that will enable the learner to develop his learning process in a personal way. The role of the language adviser is therefore to act as a "bridging figure" between the role the teacher used to assume, the learner and the new resources. What becomes important is not only the material to be learned (the 'product') but the way the student goes about in attaining that goal (the 'process'). This means that we have to look beyond language teaching and learning approaches, and instead concentrate on more general learning theories, notably constructivism. It will be obvious that this requires a totally different approach from the teacher (now language adviser) than has been commonly accepted up to now.

Some of the tasks of the language adviser, as defined at the University of Hull (where the concept was first developed), are the following:

- listen to the learners' needs and elicit further conversation
- obtain relevant information for the design of a study plan (e.g. educational background, learning styles and perceptions, time management, aims etc.)
- provide adequate and clear guidance and support for learners to work autonomously
- monitor the learning patterns of the users of the service and provide relevant and effective feedback
- help the institution provide appropriate language learning opportunities
- monitor resources in relation to users' needs
- train users to become proficient learners through better understanding of their learning processes
- act as 'mirrors' and keep on reminding learners of their original aims and objectives
- help them find and keep their motivation

RECOMMENDATION	The European Union needs to recognise the emergence of new professions in the area of language learning and teaching. One of them is that of the "language adviser", but other professional profiles are emerging as well, often combining computer skills with more content-related skills such as developer and library specialist, and organisational skills such as project manager, and multimedia co-ordinator.

EXAMPLE OF GOOD PRACTICE	**SMILE and PLAN (Professional Language Advisers' Network)** (Language Centre, University of Hull, UK)
	The University of Hull is an active developer of web-based learning environments (e.g. the Merlin Learning Environment) and of exploring the strategies of managing independent learning environments (the SMILE project). The SMILE project includes a wide network for language advisers (PLAN), as well as an electronic learner support network. In addition, the project is involved in collating four databases which include a) learning resources and independent learning environments; b) learning cultures and learner profiles; c) profiles of advisers' roles, functions and expectations; and d) strategies and applications of independent learning outside classroom. The project arranges workshops involving staff and students, and monitors the uses of self-access resources and their relationship to language performance in its partner institutions. In addition, they provide adviser training through computer conferencing and teleconferencing and in the face-to-face mode, and have arranged dissemination events for academic and related staff within partner institutions (including a ten-week programme across disciplines). The project also aims at creating an infrastructure for modules in language learning strategies and a Diploma in Language Advising. Detailed information about the SMILE project is available at www.hull.ac.uk/langinst/smile

The Professional Language Advisers' Network (PLAN) was started up in 1996 and focuses on the language adviser as a bridging figure between regular language teacher, learner and resources in self-access centres. The organisation is based in the UK but the membership is international. The specific aims and objectives of this project are to:
• raise awareness of the role of language advisers in self-access centres
• define the characteristics of the language advising profession
• create an infrastructure to support staff training and development
• spread good practice in language advising
• provide a rich biography of materials on issues related to language advising. |

Apart from the new pedagogic approaches to language learning, it is of course crucial that teachers have the opportunity to familiarise themselves with new technologies and to learn how new technologies can be integrated in language teaching and learning. With the increase of teaching loads, usually in traditional language classes, teachers can rarely find the time to spend on course and materials development. Yet, it is the selection and provision of specific learning materials based on specific students' needs that will become one of the major tasks of teachers/language advisers. To be able to perform such a role more and more teachers will have to be highly proficient in terms of ICT skills, as well as language skills and advising skills. This requires considerable and consistent technical support in operational terms but also in terms of materials development and multimedia processing. The lack of this technical support inevitably leads to the breakdown of technology. Less technologically minded teachers find this experience very frustrating and avoid risk-taking by holding

on to the traditional classroom. There is a marked gap between the high level technical skills and mastery of the new technologies shown by a small number of the centres, and the deficiencies in training and information shown by other centres. One of the challenges facing language educators will probably be to narrow this gap which exists both between and within countries.

Language teachers in higher education should be guaranteed a suitable and flexible number of hours per week to devote to the development of learning materials, to direct learning in self-access centres, to carry out action research in their field and take part in in-service training. Institutions should be aware of the fact that the use of IT and greater learner autonomy requires an investment of time. More time will be required for training and for materials development. In addition, teachers should also have the chance to learn how to provide learners with transferable skills. To reach these objectives, it is necessary to develop programmes and courses specifically aimed at language teachers.

RECOMMENDATION	It is necessary to redefine the role of the language teacher as a facilitator of student learning. Teacher training programmes have to take account of this development. Teachers should be aware not only of the development of new teaching methods bus also of the importance of new learning methods in the context of new technologies. This will require new professional profiles.

EXAMPLE OF GOOD PRACTICE	TALLENT (Teaching and Learning Languages Enhanced by New Technologies) is a project for the development of a sixty-hour in-service module for teachers and trainers in European languages as a second/foreign language. The course will provide guidance in the use of the technologies, focusing on areas such as learner autonomy, self-access, language advising, learner strategies and learning to learn. It will familiarise participants with key areas in new technologies and language learning such as: • language learning and ICT; • reference tools: on-line dictionaries, data-bases and library resources; • using the Internet; • creating a website for language learning. Course participants will be able to integrate new technologies into their teaching. They will also be provided with transferable skills which they can subsequently apply in their own professional and personal development. The course consists of seminars and workshops. For more information, please contact Angela Chambers, University of Limerick (IE).

EXAMPLE OF GOOD PRACTICE	ICT4LT (Information and Communication Technology for Language Teachers) is a project for the development of a web-based specialist course in ICT specifically aimed at language teachers (and in particular, but not exclusively at language teachers already in service), with an emphasis on the implementation of new language teaching methodologies. The course will consist of a total of 15 modules at three different levels, with 5 modules at each level, using the World Wide Web as the main delivery mode, backed up by printed materials, email, and computer conferencing. Every module contains learning tasks and topics for discussion. The basic level contains introductory modules on: • new technologies and how they can contribute to language learning; • computer hardware and software: what the language teacher needs to know; • the use of text tools in modern foreign language classrooms; • Computer Assisted Language Learning (CALL); • the Internet. For more information, please contact Hamid Momtahan (project co-ordinator) at Thames Valley University (UK).

There is considerable variety in the opinions expressed about the extent to which the role of the teacher will really change. Some institutions of Higher Education are still convinced that the introduction of new technologies will not lead to any significant changes in the role of the teacher, others hold the opinion that the role and position will change but still see a central position for classroom based teaching, and still others envisage a whole new role for the teacher, who will be acting less as a teacher in the traditional sense of the word and more as a kind of language consultant. Taking into account the developments in ICT in other fields of discipline and the emergence of 'virtual' universities all over the world, it seems likely that the last position will be the more dominant one.

A new role for the learner?

Despite the fact that learners all over Europe increasingly make use of information technology in their professional and leisure activities, a high degree of scepticism can still be found among learners and teachers alike as far as New Learning Environments are concerned. This scepticism is firmly based in learning cultures. In the mind of many Europeans, language learning is still connected to the classroom, the textbook and the omniscient language teachers. This also applies to students in institutions of higher education. Account must be taken of the great variation in learning cultures in European countries and the implications of these differences for the successful integration of new technologies into the language learning process.

Even so, it is clear that it is important for teachers to make learners aware of the processes involved in language learning and to help them find environments that suit their needs best. Learners should be helped to absorb the principles of autonomy in a gradual way, since paradoxically, autonomy grows of interaction and dependence, as a consequence of the social-interactive roots of learning (see Little, 1991). Therefore a balance must be found between providing opportunities for the learners to take control over their own learning while at the same time supporting those learners who are not ready or who feel unprepared to take on this responsibility for themselves.

The relationship between the concepts of learner autonomy and self-directed learning is not always clear. Holec (1988) describes autonomy as "the ability to take charge of one's own learning". This ability is not something we are born with but has to be learnt either consciously or unconsciously. The learner who has this ability and makes full use of it can be said to be engaged in *self-directed* learning. On the other hand, an autonomous learner need not use his/her ability completely and may be only partially involved in self-directed learning

Holec maintains that there are varying degrees of self-direction in learning which may be connected to varying degrees of autonomy. He distinguishes the following components of an entirely self-directed process:

- fixing the objectives
- defining the contents and progression
- selecting the methods and techniques to be used
- monitoring the acquisition procedure
- evaluating what has been acquired

Obviously, this is not possible without preliminary orientation and regular monitoring, and it is in this area that the teacher's responsibility towards the prospective autonomous learner is greatest. Continuous self-assessment amongst the learners is another critical skill, and this can be achieved by compiling portfolios of the student's work.

A major problem in all this is that in order to be effective, the concept of autonomy has to be introduced across the institution. It is very difficult to encourage students to learn autonomously if they are used to a highly structured 'top down' learning culture in the institution at large.
That in itself is often a major impediment to procuring sufficient human support for learner autonomy within a language learning context.

Students will also have to be taught how to use the asynchronous and synchronous communication facilities offered by ICT, especially through the Internet. They usually form part of a larger learning environment for the whole of the institution (and not only the language centre or department). Using them, a student can contact his or her teacher but also other students, either in writing or orally (e.g. through Netmeeting). Synchronous communication facilities include chatting, shared blackboards, application sharing and file transfer. Asynchronous communication includes threaded discussion lists, file uploads to a common webspace and of course email

A typical discussion list and open forum is the BSCW server which is available free of charge to educational institutes. Students can be given assignments, documents to be read and they can contact other students and post both their finished assignments and comments onto the discussion list. Individuals have to know and understand that they have an equal role to play in the learning process, and therefore all interaction and reasons for interaction in the group forum should be non-threatening. The learners should be allowed to participate in all interaction at their own pace. The individual participant needs to be allowed to take his or her own time to enter the on-line community, and entry for the first time to this community must be as non-threatening as possible. It is the tutor/facilitator who plays a key role in establishing these 'rules of behaviour' She/he promotes initiative and maintains the sense of community. From an organisational point of view, autonomy acquires a new urgency here as well, since the increased interactivity may mean that teachers have to answer numerous questions, unless they find a way to enable students to solve their learning tasks more autonomously either on their own or through collaborative efforts.

Other systems such as tandem learning have long since proved to be of great help in this respect too.

EXAMPLE OF GOOD PRACTICE	**The International Tandem Network** The International Tandem Network is an example of a project which is firmly based on the philosophy of learner autonomy. Within the context of this project, teachers play a marginal role. The International Tandem Network, based at the Seminar für Sprachlehrforschung at the Ruhr-Universität Bochum (DE) assists students in finding partners to learn languages in tandem, i.e. students learning the mother tongues of their tandem partners, primarily via the Internet. It brings together tandem partners from all over the world (free of charge) for a growing number of language combinations. At the same time it provides materials and guidance for tandem learning. More information about the International Tandem Network is available at the project's website, http://www.slf.ruhr-uni-bochum.de/index.html.

EXAMPLE OF GOOD PRACTICE	**ALMS Programme – Autonomous Learning Modules** (Language Centre, Helsingin yliopisto, FI) Helsinki University Language Centre is the largest of the university language centres in Finland, as is the university itself, catering for over 30,000 students and their compulsory language requirements. As with other centres in the country, the development of novel approaches to discipline-specific language learning and teaching has been a necessity over the past years. The first Autonomous Learning Modules (ALMS) at Helsinki University Language Centre were offered in 1994 as alternatives to more traditional teacher-led courses. The main rationale for their development was to give more space, more independence and more responsibility to the students and to provide opportunities for developing awareness of personal learning strategies, styles, and experience. The ALMS programme has the following main features: learner awareness building; contracts/projects, support groups/workshops, counselling, and record-keeping and evaluation. The duration of the ALMS module is usually one term, including an initial orientation session (one day), and a minimum of three counselling session, and a final group session. Record-keeping is done through an ALMS LOG. The project coordinators also arrange peer training for colleagues teaching English or other languages. The ALMS programme is very popular among students because of its novel approach and the flexibility it offers. More information on the programme and its recent developments is available in Karlsson, L., F. Kijsik & J. Nordlund 1997: *From Here to Autonomy*. A Helsinki University Language Centre Autonomous Learning Project. Helsinki: Helsinki University Press, as well as at www.helsinki.fi/kksc/alms

What kinds of new learning environments?

The twin developments of rapid advances in ICT and mobility have meant that the context of language learning is changing rapidly as well. Whereas traditionally language teaching was often done in the classroom by teachers who sometimes even did not use the target language, more and more language learners are now being faced with a situation where learners travel to the country of the target language. There they take part in formal language training and have the opportunity to try out their knowledge in real interactions with native speakers.

In addition such students (but also those in the home country) often have access to state-of-the-art information technology, i.e. e-mail, the world wide web (WWW), videoconferencing etc., which makes it possible to overcome the artificiality of the language classroom, as it allows for real communication with native speakers on a much larger scale. At the same time it enhances learner autonomy by providing unlimited access to information in the target language on all levels. Thus the advantages of the target language environment can be extended to learners in a non-target language environment by providing new platforms for learning.

New Learning Environments can be created either in combination with traditional classrooms, in self-access facilities specially designed for teacher-independent learning or they can be constructed virtually in cyberspace providing learners with the opportunity to access them from their PCs at home or wherever they are.

The fact that the teacher is no longer the only provider of information, as the learners' access to information in and about the target language is practically unlimited, empowers them and also provides ample opportunity for learning outside the classroom. They no longer depend on one teacher, as they have unlimited opportunities to find a tutor either in their home country or in the target country through distancelearning. Automatic feedback linked to learning materials allows the learner to keep track of the progress that is made.

With increased options for learning, the learners themselves can decide on learning environments that suit their needs best. Life-long learning and distance learning become a realistic perspective, thus fostering the idea of multilingualism in the European community.

Intercultural learning, which is crucial in the concept of European identity, no longer depends on teacher input or on written materials. The learners have the opportunity for experiential learning through long-distance communication with native speakers. The added value of authentic communication with native speakers or other learners is that the target language is no longer used simply for the sake of learning. Interdisciplinarity becomes a realistic perspective, as the learners have the opportunity to gather information and enhance their knowledge in the areas in which they are interested professionally. The combination of language learning and cross-national, cross-cultural co-operation should be part of the educational efforts to create a European citizenship.

EXAMPLE OF GOOD PRACTICE	**DiLTS** DILTS (Distance Language Teaching for Small and Medium Sized Enterprises) is a joint venture of institutions of higher education in Great Britain, Germany, Italy, Finland, Centres for vocational training and Business Innovation Centres (BIC) aims to develop a flexible approach to language training in English, German and Italian for small and medium sized enterprises. The core elements of the distance course are:

	• Learning materials on CD-Rom • A distance tutor in the target language area • An on-site tutor in the area of the learner • The World Wide Web, e-mail, videoconferencing and telephone as communication tools • Tandem partners in the target language areas Local needs and requirements for integration into the wider European market provide the context for the language training materials. The training will lead to recognised qualifications and accreditation. More information is available at the project website, http://www.leonardo-dilts.de.

Technologically and organisationally, such learning is more and more often incorporated in webbased telelearning platforms or integrated on-line learning environments. Typical examples of such software are WebCT, Blackboard, Top Class and E-college, to name but a few. They are not primarily designed for language learning, but for computer managed instruction in general. Often, they still lack features that are essential in language learning and their interactivity tends to be relatively limited for language learning purposes. Apart from the sometimes considerable limitations (e.g. bandwidth) in terms of technical operability, it should also be realised that there is still a very limited experience with teaching and learning supported by a web-based environment.

Overall, a telelearning platform may consist of up to 7 components that may either exist on their own or be combined in even larger components. The minimal learning unit within such a telelearning system is a learning, testing, practice or reference object that can be used on its own. For the sake of simplicity all such objects will be subsumed under the term learning object in what follows.

The components are the following:

- Authoring environment: within this component, which can be off-line or on-line, the teacher-developer designs learning objects. Usually the authoring environment is standardised with wizards and/or templates.
- Data storage and management component: usually an on-line or off-line database in which the developer can store the learning objects and tag them with the necessary metadata so that they can be managed and retrieved at will. This component is often called the repository or knowledge pool.
- Structuring component: a selection of various learning objects is combined into a lesson, module or course (learning path) that can be offered to the learner. These objects can also be tagged with relevant metadata and then become objects in their own right.
- Delivery component: typically a webserver that presents the learning objects to the learners. Depending on the availability of structuring, the learning paths are fixed or suitable for self-directed learning. The learner accesses the materials through a browser and may have to install plug-ins to be able to use all the available functionality. Each student enters the system via an individualised log-in page.
- Student tracking component: the answers and scores of the learners are sent back to the server in a progress report. This also includes data on what learning objects the learners have started and/or finished. These data are stored on the server. Different data and reports can be made available to learners and to teachers (a better term here would be coaches or advisers). Developers too can use the data to check how students performed with respect to certain learning objects.

- Communication component: this component enables the learners and coaches to communicate with each other synchronously and asynchronously. The teacher-coaches and sometimes also students can define groups for various forms of communication and interaction.
- Student management and administration component: this subcomponent ensures interaction with other IT resources within the institution. As such it is partly outside the telelearning platform itself. In a typical set-up the software allows students to access the system, assigns usernames and passwords (possibly imported from other database systems) or exports student scores to the central scoring storage system. Sometimes the component is also used to divide learners into groups and assign modules and learning programmes to them.

Telelearning platforms and the international standards now being worked out that will ensure full compatibility between various systems, will ensure that co-operative efforts become possible to develop software that can be gradually extended by design teams in a variety of institutions into larger pools of learning objects that can be combined into a multitude of learning paths.

At present most of the software on today's market still has two basic drawbacks. First of all, it is technology driven. This means that the developers put the emphasis more on technical than on methodological aspects. Thus, outdated teaching methods reappear on CDs and on the World Wide Web. Secondly, it is usually created for self-study without proper needs analysis. Teachers usually find it difficult to connect teaching software to their activities in the classroom or in other teaching environments. On-line learning systems with repositories of learning objects that can be adapted or newly-designed can solve this problem.

Unfortunately, not all software solutions for on-line learning environments start out from compatible visions on the design of learning objects. Most platforms are strong in one or two components, but much weaker in the others. In many cases it may be necessary to combine existing systems and to reconfigure parts of them to arrive at a common software framework that is appropriate for language learning both from a technological and a methodological point of view, and that can meet the requirements of learners, as well as developers and teacher-coaches. Such a system will require extensive co-operation across institutions from various countries.

From the point of view of developing such learning materials, content independence and reusability will have to be crucial starting points. Learning content has to be divided into parcels of information and interaction that are stored in databases, where they can be reassembled into lessons, exercises, modules and courses, that can be stored in their turn in the repository as learning objects on a higher level.

This approach also requires the development of a standardised metalanguage in order to describe the learning objects, so that they can be recognised and reused by other developers. The Common Framework of Reference of the European Council forms an excellent starting point on which to base not only the linguistic and cognitive objectives of the learning materials but also the codes that are used for the content descriptors of the metalanguage tags.

As such, the descriptions of the Common European Frame of Reference may be used for far more purposes than the ones originally intended.

EXAMPLE OF GOOD PRACTICE	**Project Merlin: language learning over the Internet** Project Merlin began in September 1995 as a research and development project to be carried out by members of the Language Institute at the University of Hull in collaboration with and funded by British Telecommunications plc. The aim of this project was to develop an Internet based platform, which would deliver language courses to learners all over the world. A major task for the Project Merlin team was to explore ways of exploiting the potential of the

Internet and WWW for language learning and teaching while at the same time recognising the limitations that the very nature of the discipline threw into the development of any technological supported language learning. The principles governing the design and development of a web-based learning environment had therefore to ensure that the technology would provide the appropriate environmental conditions for learning to take place. This could only be achieved if the design and development were to be needs led and driven by the pedagogy, the teachers and student feedback rather than the latest innovations in blue sky technology. It was very important that the teams focused not only on supporting and making more effective the learning process for remote based learners but also of supporting effective teaching in the virtual classroom.

A number of specific needs of the remote based language learner and the tutor working within a virtual environment were identified.

Communication (audio and text) between the learners and their tutor and between the learners themselves.
Flexibility for the learners to work independently at their own time and pace and according to their own particular study style.
Simplicity of design to ensure clear navigation and guidance through the learning resources for both student and teacher
Accessibility in terms of equipment specification
Ease of use to ensure minimum training requirements in the use of the technology

A Notice Board provides a sense of working as part of a community, giving instant access to messages from the group facilitator and information about other members of the group. Learners have their own private Mailbox to send messages to any individual in the group and open discussion on particular topics takes place between the group in the Exchange conferencing areas. Messages in both the Mailbox and the Exchange can be sent as written text, an audio recording or a combination of both. A Pathway provides a clear structure to guide the individual through the learning resources. Templates allow structured material and tasks to be assigned to the Pathway by the tutor, without the need for any specialised programming skills. The tutor is also able to create additional on-line resources with the aid of easy-to-use templates. These include a Case study facility, Lecture Presentations to store and deliver PowerPoint presentations and link accompanying audio files and the Image Library where photo images can be stored and linked to explanatory text. The Personal workbook allows the individual learner to submit work to the tutor for feedback and monitoring and the Group workbook encourages collaborative work and peer support. The Resource Centre provides an unlimited amount of Internet based resources available to the group on an open access basis.

More information can be found at:

Measuring proficiency

In order for students to be able to measure their progress, objective reference standards across languages need to be worked out. They will not only measure what you know in terms of predefined language forms and structures but even more importantly what you can do in operational terms. The overall framework for such 'can do' statements can be defined in language independent terms. The Common European Framework of Reference and the work on the European Language Portfolio form excellent starting points for such a common approach across Europe, but extensive development work needs to be done in this area before they can be made operational in an ICT based environment.

With respect to reference tools such as hypergrammars and hyperdictionaries, for example, this means that a common menu structure has to be designed. Another, no less important reason why such a language independent approach is needed, is the necessary reusability of the tools that the language specialists will have to 'fill' with content. To many, this will seem an inexcusable attack on 'academic freedom', but the tasks ahead are so huge both in terms of the technological tools and the content to be developed that only a product-oriented, project-based approach will offer a way out. No single institution, let alone department, will be able to develop such products on their own, and therefore broad cross-national networks of both content and technology-oriented centres will have to be set up. This in turn will require large changes in the way language institutions work together, since there will be huge problems in management and organisation to make these networks really work. Existing attempts at such large scale co-operation efforts have made clear that these problems can be very large (and costly) but not insurmountable.

Similar development work will have to be undertaken in terms of syllabus design and the coding of learning objects (the metalinguistic tags). This is again absolutely crucial for the development of repository databases in web-based learning systems where the learning objects are stored and then reassembled into higher learning tasks, modules and learning paths on the basis of direct and indirect queries. All this development work will require close co-operation between technological experts (the technological tools), pedagogical experts (learning theories) and language specialists (the content across languages).

In private industry efforts are already under way to combine such large training and learning systems into work performance enhancing systems that combine generic skills such as ICT and languages with knowledge systems within the company as a whole, starting out from autonomous and collaborative learning. Translated into terms of institutes of higher education, this means once again that universities have to develop overall policies that clearly state the objectives of the institute as a whole in terms of target groups, types of learning, disciplines and infrastructure. The integration of all this is only possible through ICT.

EXAMPLE OF GOOD PRACTICE	**DIALANG**
	DIALANG is a European project for the development of diagnostic language tests in 14 European languages, including the 11 official languages of the European Union (Danish, Dutch, English, Finnish, French, German, Greek, Italian, Portuguese, Spanish, and Swedish) as well as Icelandic, Irish, and Norwegian.
	The DIALANG project is a new and unique European venture. It makes use of state-of-the-art developments in both language testing and pedagogy and in ICT and it has a distinct European perspective, developing tests in a large number of European languages, among them less widely used and taught languages,

and incorporating them into a framework developed for Europe – the Council of Europe's Common European Framework of reference.

DIALANG is conceived of as a computer-based and Internet-delivered system providing assessment, self-assessment, diagnosis of language level, feedback on performance and advice on further improvement. Everyone with access to the Internet will be able to use the DIALANG system anywhere at any time. The system will not be confined to specific regions or states. Users will be able to choose the language in which they want their proficiency to be tested, the skill – reading, writing, listening, grammatical structures, and vocabulary –, and the language of test administration and feedback. In its final fully operational version, to be available in late 2001, DIALANG will already incorporate item-level adaptivity for those languages in which a large enough number of pilot testees were available. Item-level adaptivity means that the system chooses test items according to the user's level of proficiency as pre-diagnosed by the system.

From its very beginning, DIALANG has been supported by the European Commission under the EUs education programme SOCRATES (LINGUA Action D). It is linked to a number of aims pursued by the Commission in the field of education, among them:

- to enable European citizens to have their skills and knowledge assessed and recognised outside formal qualification systems
- to promote the learning of languages
- to stimulate the production and use of ICT products and services for teaching and learning purposes
- to promote lifelong learning

DIALANG will be innovative in various ways. It explicitly seeks to diagnose rather than merely to certify a user's language ability. It incorporates self-assessment systematically into the assessment of language ability, encouraging learners to reflect upon the accuracy of their self-assessment and to develop autonomy in language learning. It provides detailed feedback to test users on their performance as well as advice on how they might go about improving their language proficiency.

DIALANG will be immensely useful for all European citizens who want to obtain reliable information about their proficiency in any of the 14 languages. It will be particularly useful for people who have learnt languages outside formal education. DIALANG will also be of interest to teachers, especially because of the nature of feedback and advice it provides to users. It will play a major role in language teaching institutions - as an instrument for placement purposes and for diagnosis of learning needs. It will be particularly relevant to institutions running independent language learning schemes.

The second phase of the DIALANG project (1 December 1999 – 30 November 2001) is co-ordinated by the Freie Universität Berlin. More information about the project can be obtained at the project website, http://www.sprachlabor.fu-berlin.de/dialang.

The special place of the less widely used and less taught (LWULT) languages

ICT offers many opportunities for the less widely used and taught languages. By now these languages not only include the official languages of the European Union with the exception of English, French and German (and possibly Spanish and Italian) but also the languages of the Enlargement candidate members such as Polish, Bulgarian, Romanian and Maltese to name but a few, and even the languages of the countries that participate in the educational programmes of the European Union on a voluntary basis such as Icelandic and Norwegian.

It now seems certain that, even though the dominant language in industry, science, education and politics is and will continue to be English, more and more people accept the tenet that it is imperative to acquire some degree of proficiency in the language of the country that you have close educational or professional links with, e.g. through an exchange programme. By providing ICT access to courses and new learning materials, universities can extend the range of languages on offer and in this way promote multilingualism.

On the political level too, it has now been accepted that provision will have to be made for translations and interpreting in all of the languages of the future EU, be it with 15 or 28 members, and the consequences of this policy on the training of e.g. translators and interpreters (who will be encouraged to study a fourth language) are already being investigated in detail. More generally too, every European citizen should be given the right to study any of the languages referred to here, without necessarily having to go to the country itself. This will have far-reaching consequences for the higher education sector, not only in terms of the language and cultural preparation of exchange students, but more generally too, since it seems impossible to provide for language departments or even language centres in all the universities concerned that will teach all of the languages at issue and develop materials for it. Only ICT based learning systems and on-line platforms offer a realistic solution for this problem, provided they can be operated and maintained through extensive cross-national networks. Both in technological terms and from a point of view of the design of such learning materials, efforts should be combined in co-operation across campuses and countries to extend the present capabilities. Good materials need to be brought together, made accessible in all language teaching units and combined within common learning environments that conform to newly emerging international standards.

Many materials are being designed at the moment for the LWUTL languages but they are not provided within larger learning environments that can be accessed by groups of students all over Europe and they usually offer no perspective of being able to be integrated in larger ICT based learning systems.

Basically then, a common framework should be established in which design teams from various countries and institutions develop web-based interactive materials that can then be stored on a central server and accessed from any place at any time by the participating institutions. Technologically, this is a daunting task, not so much because the technology is unavailable, but because it requires co-operation and agreement on standards, objectives and procedures that is virtually non-existent at present. Methodologically and pedagogically too, it requires common agreement on such issues as types of tasks, learning strategies, presentation techniques, scoring, self-assessment and peer-

assessment, needs analysis and the role of the teacher, which is far from obvious in a Europe that is characterised by a multitude of learning and teaching cultures and different views on teacher involvement. On top of this, the very nature of the development work requires language-independence. In this sense research and development projects designed to support LWULT languages should be funded not only for their own sake, but because in principle they can also produce benefits for majority languages.

Projects should therefore not only be concerned with the development and adaptation of new and existing materials, but also with the delivery on the web, and the development of training modules for teachers in order to prepare them for this new role of both developer and coach. Once operational on the web, even on a small scale, the system can be maintained by the participating design teams, and provide not only learning materials for students, but also extensive support for teachers, who can therefore, after an initial period of training, be based locally.

The teaching/learning need not be exclusively autonomous either, since classroom activities can easily be used both as follow-up and preparation for work done on the computer. In this sense both the 'traditional' teacher as well as the 'learning adviser /coach' will still be necessary. The materials need not only be screen-based either. Very often it is in fact highly advisable to provide students with photocopies of materials to be studied or to set assignments (through the computer) that have to be done by using books from the library.

A less ambitious, and therefore far more realistic short-term solution for the LWULT languages, is the setting up of Intranet-based electronic self-access systems that combine existing courses and materials (both in digital and analogue form, and commercial as well as self-developed) within an electronic language learning environment that combines reference materials, courses, lists of relevant websites, remedial exercises and tools such as dictionaries, grammars and concordancers into one overall browser-based system that can then gradually be extended into a web-based telelearning platform as described before, concentrating on integrating what exists and then fill the gaps with self-developed materials rather than starting design work from zero.

Such a system also solves the copyright problems of existing commercial materials since it is locally based, and at least for the time being, offers a stability and ease of operation that is still almost impossible to achieve through completely web-based technology.

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