## NATIONAL REPORT ON NEW LEARNING ENVIRONMENTS ESTONIA

#### 1. General Introduction

The most significant changes in Estonian institutions of higher education have been connected with the emergence of new technologies for learning and teaching (multimedia, Internet-based teaching, autonomous learning) and their ever increasing incorporation into the everyday work of universities and colleges. The other major change is a considerable increase in staff and student mobility in the universities that had been shut off from international contacts for decades. The twin developments have led to a considerable change in the ways in which both teaching and learning are conducted in institutions of higher education. The present survey will attempt to elucidate to what extent and how the changes have affected the academic environment, especially language teaching and learning in Estonia

There are 9 institutions of higher education in Estonia. First 6 institutions are state universities, the remaining 3 private universities. The University of Tartu is the only traditional university that comprises a wide range of disciplines and faculties. All other institutions have specialised in one specific area, although they also offer courses in other fields in order to prepare the students for competing in the labour market.

The most important institutions of higher education in Estonia:

University of Tartu
Tallinn Technical University
Tallinn Pedagogical University
Estonian Agricultural University
Estonian Academy of Arts
Estonian Academy of Music
Estonian Business School

Estonia Institute of Humanities

Concordia International University Estonia

The contact persons in the listed universities included the Heads of Language Centres, the Heads of International Student offices and the Heads of International Relations Offices.

The academic freedom and autonomy of Estonian universities are guaranteed. Universities have two functions—teaching and research. Institutions of higher education offer both academic (Bachelor's, Master's, PhD degrees) and professional education (professional Bachelor's or Master's degrees or different certificates). The curricula vary greatly from discipline to discipline but currently all students have to take at least one foreign language as well as a computer skills course. More in-depth language studies are conducted within modern languages departments of the major universities but all of the institutions of higher education have a language centre that caters to foreign language needs of students other than philologists.

### 2. The Role of NLE in Language Teaching and Learning

#### 2.1 International co-operation

The contacts between Estonian and foreign institutions of higher education have increased and led to projects of co-operation that have enhanced the level of research and teaching in the Estonian academe and also helped in incorporating new learning environments and strategies into the existing curricula. Estonian universities participate in major international projects like the ERASMUS programme but there are also numerous other partnerships between universities. For example, the increase of international mobility for both students and teaching staff has increased dramatically within past 6 years at the University of Tartu: the number of international students has jumped from 7 in 1989 to 141 in 1994 and to 385 in 2001. Most of the foreign students are engaged in their Bachelor's studies (274) but there are also Master's and doctoral students. The

greatest number of foreign students come from Finland, followed by Russia, the USA, Germany. 37% of the international students come to the Faculty of Philosophy, 35% to the Faculty of Social Sciences and 31% to the Faculty of Medicine. The most popular specialities have been Medicine, Estonian as a Foreign Language, History, Fenno-Ugrian Languages, Russian Language and Literature, Psychology and Political Science. The Baltic Studies programme has also been popular, proving that Faculties often do not provide enough of English-language courses and thus the options of students not proficient in Estonian are somewhat limited. However, a relatively large number of students (274, mostly from Finland) have opted for completing their Bachelor's degrees in Tartu but, within exchange programmes the standard length of the stay is one semester (50) or one year (38).

The number of students from Tartu who study abroad in the academic year 2000/2001 is 202 (79 of them from the Faculty of Philosophy). The most popular destinations are Finland, Germany, Sweden, the USA, Denmark and France. The standard duration of stay abroad is one semester or less (108) or up to one year (90). Most of the mobility is based on the ERASMUS programme (70), individual initiative (69) or other co-operation programmes (43).

The ERASMUS programme has had a considerable effect on the mobility of students and scholars at the University of Tartu and has improved the quality of teaching, research and curriculum design. In the academic year 2000/2001 the University of Tartu has signed cooperation agreements with 48 partner institutions and added a number of new countries to its list of contacts. Within the ERASMUS programme the ties have been the closest Finland, Germany and Sweden but overall contacts involve 17 countries. The faculties most actively engaged in international student mobility have been the Faculty of Philosophy and the Faculty of Social Sciences but other faculties have also been making efforts to increase their international ties. The success of the Faculty of Philosophy in recruiting international students is the result of long-standing efforts to introduce English-

language courses into the curriculum as well as to adopt new learning strategies into everyday teaching.

The Council of Europe has supported several curriculum development programmes at the University of Tartu, for example, European Intercultural Communication Master's programme in the Faculty of Social Sciences and the European Programme for Intercultural Education in the Department of Educational Sciences, both in partnership with the University of Jyväskylä (Finland), Mobilité Linguistique Virtuelle at the Department of Germanic and Romance Languages and Literatures, in partnership with the University of Montpellier (France), Refounding Europe: Creating Links, Insights, Overviews at the Department of History, in partnership with the University of Pisa.

Other universities have experienced similar trends in connection with student mobility, for example, the Tallinn Pedagogical University has sent around 30 Estonian students of foreign languages and literatures to foreign universities within this academic year (in Germany, the USA, Russia, France, Sweden, Finland and Hungary)

In previous years, Estonian universities have been engaged in several large-scale international projects. For example, TEMPUS JEP *Development of an Open University Infrastructure in Estonia* (1999-2001) was co-ordinated by Tallinn Pedagogical University (Estonia) and involved the University of Tartu (Estonia), Tallinn Technical University (Estonia), European Association of Distance Teaching Universities, Katholieke Universiteit Leuven (Belgium) and the University of Turku (Finland) and focused on how new information and communication technologies can deliver and enhance education and training and the design of suitable instructional and learning models in order to create more flexible open learning programmes.

Another example is EU PHARE Multi-Country Programme in Distance Education Modern English for Baltic Adults, co-ordinated by Riga Technical University (Latvia) and involving Tallinn Pedagogical University (Estonia), Kaunas University of

Technology (Lithuania) and National Extension College (United Kingdom) as well as radio organisations of all of the participating countries. The aim of the project was creating an open distance learning course to upgrade English-language skills for adults and it resulted in a course that is in active use.

Estonia has also been involved in other all-European schemes, for example, the European Year of Languages project which was organised in Estonian as a joint effort of institutions of higher education, the Institute of the Estonian Language, the PHARE programme for the study of Estonian and other institutions. The programme included the issuing of a special postal stamp that commemorates the European Year of Languages, television shows although the focus of work has been academic in nature: 5 international conferences both in Estonia and abroad (*The Estonian Language in Europe*, Tallinn, March 2001, *The Language of the Diaspora: Problems and Perspectives*, Tartu, October 2001, *Small Languages in Contact*, Pühajärve, November 2001, *Mother Tongue and Other Languages*, Tartu, November 2001); the week of adult language learners; publication of books and resources on the Estonian language and dialects (e.g., book *Estonian Language* (in English and Russian) or a CD on Estonian dialects); the development of the Development Strategy of the Estonian Language, etc.

#### 2.2 New Learning Strategies

Two main directions are discernible within new learning strategies adopted by Estonian institutions of higher education: incorporating multimedia and information technology into teaching process and focusing on independent learning. The following short survey will dwell on the strategies in connection with language teaching context and bring out highlights of the two approaches, often intertwined, in the key institutions of higher education in Estonia. The programmes that are aimed at enhancing cultural diversity will be touched upon later in the report. The material has been gathered through heads of language centres and Open University programmes in the institutions.

Taking advantage of the advances in technology has been declared one of the aims of the University of Tartu and the institution encourages the incorporation of new learning environments and strategies and has created a Multimedia Centre to cater to the needs of the staff in these endeavours. Although most departments at the University of Tartu have done considerable work in taking advantage of the new technologies, the Department of Estonian as a Foreign Language has achieved the best results in incorporating the resources into language teaching. The Department started teaching non-Estonians already in 1998 and has conducted 4 different courses by now, with the help of the *Telematic Environment for Language Simulations* learning environment (TELSIpro) developed at the University of Oulu (Finland). TELSIpro offers two work modes: documents (creating documents by teachers and learners) and mailing (facilitating communication, exchanging information, creating discussions, using mailing lists). The learning environment has been translated into Estonian and used successfully for language courses as well as simulations.

The University of Tartu has worked in co-operation with its affiliates as well as other Estonian institutions of higher education in this field. For example, with the help of specialists from the University of Tartu, the Estonian Agricultural University has also adopted the TELSI programme into its language teaching practice, combining it with traditional face-to-face class hours. The Internet-based teaching has proved especially useful in post-graduate language programs (German) because many of the students are geographically scattered all across Estonia and the use of new technology will eliminate the problems of logistics and timing and allow the students to make independent choices about their learning process. At the Estonian Agricultural University Internet-based teaching involves feedback from an instructor, not computer and includes options for intra-group discussion. The new learning environment has yielded very good results in the 2 years that it has been used within the post-graduate programme in improving both people's language skills and their attitude towards the language. It is therefore hoped that the example will lead to new developments.

The Tallinn Pedagogical University has not conducted any Internet- or multimedia-based courses but the faculty has used new teaching and learning strategies as much as possible in order to improve the level of teaching (e.g. the EuroPlus set was acquired for the teaching of English, with the help of Open Estonia Society) but they have had to deal with the lack of expertise as well as financial resources to implement significant changes.

The EuroPlus program has also been adopted at the Tallinn Technical University in distance teaching English to students of fields other than linguistics. The University has also conducted an e-mail project *Cross-Cultural Issues in Business Communication* within the framework of which students, as representatives of their virtual companies, interacted with the virtual companies of the students of five different European universities. The University has developed a CD-ROM B.A.L.T.I.C. on Survival English on the basis of Estonian, Latvian and Lithuanian (COPERNICUS 1995-1997). CD-ROMs have also been used to support studies in English and German. The University also plans to purchase the licence for WebCT.

The innovations introduced in the universities will also affect other schools and institutions. The course *Information Technology in Foreign Language Teaching* was taught to teacher training students at the University of Tartu which gives reason to hope that such methods will find wider use among school teachers as well. Yet, the spread of the use of new technologies in everyday teaching is hampered by the lack of access to free Internet or poor connections in many schools and/or areas that would make it possible for large numbers of people to take advantage of the learning resources for independent study. Educational institutions are working in partnership with Estonian Tiger Leap Foundation in order to alleviate the problems of access. Educational institutions, on their part, should continue work on creating new resources (software, websites, interactive CD-ROMs and courses) that could be used with the help of new technologies since their number is relatively low.

However, some very useful electronic resources have been created and are available on the KeeleWeb (Language Web) site at ee.www.ee, for example, dictionaries (Estonian usage dictionary, thesaurus, dictionary of antonyms and synonyms), software (morphological analysis and synthesis, hyphenation, speller) and corpora (Corpus of Standard Estonian, Text Corpus of the Institute of the Estonian Language). The project's aim is making dictionaries, text corpora and language software available on the Internet and developing services connected to the resources and has achieved considerable success. The resources are useful both to people learning the Estonian language and Estonians learning other languages or seeking help in questions connected to Estonian.

The other major direction in the use of new learning environments is an increase of interest in independent learning. The most outstanding example in this respect is the Open University programme that has been in use at the University of Tartu since 1996 and the number of students has grown from around 400 in 1996 to around 2900 and 54 subjects in 2001. The format is now also being adopted by other institutions of higher education. The aim of the Open University is to offer flexible opportunities for studies in degree and in-service training programmes, courses and summer schools to people who are already working and want to complete their higher education or receive a second degree. The work, in short, is conducted under the aegis of lifelong learning. That involves the development of electronic and Internet-based studies and the attendant learning environment, together with a network of regional centres that would allow to enhance the effectiveness of studies and bring them closer to learners. All work done in the Open University is distance learning, with 70-75% of studies dedicated to independent work.

The special nature of Open University programmes has created an increased need for special study materials, especially Web-based materials and courses in an electronic environment. Currently, around 50 Web-based courses are offered but the number has been increasing steadily as has the use of electronic means of communication for interaction between teaching staff and students and students themselves. Yet, there still

are not enough resources specially designed for the Open University format and taking full advantage of the recent technological advances. This results from the lack of competence in information technology, finances and time among the teaching staff and thus one of the current aims of the Open University programme is the training of teaching staff in the field through special courses, seminars and technical support. The Multimedia Centre of the University has been the task of supporting all initiatives connected to the use of information technology in teaching and learning processes, for example, in developing and conducting Web-based courses and video- and audio-conferences. However, the Centre suffers from a lack of funding and thus all innovation activities have remained only secondary in the work of the Centre. Yet, the University of Tartu sees the Open University as an important part of the whole institution the future of which cannot be separated from that of the whole University and the future plans include an increasing emphasis on Web-based resources and independent learning as well as a direction towards English-language-based courses that would enhance the international access to the material and lead to the creation of new co-operation project (e.g., creation of an all-Baltic consortium) that would pool all the resources in the region and thus maximise the education offered.

The Tallinn Pedagogical University has also developed its Open University programme and offers a minor in three foreign languages (English, French, German) and Estonian as a Foreign Language but also shorter courses. There are no full degree programmes as yet.

Independent learning is also encouraged outside the Open University. For example, the Language Centre at the University of Tartu that is responsible for teaching foreign languages to students of fields other than philology possesses both hardware and software that is used in encouraging autonomous learning. The hardware includes a special self-access language centre, donated by the Government of Japan, that includes audio and video equipment as well as multimedia PCs that will get an Internet connection. The software includes multi-media sets for learning English, French and Italian at three levels, CD-ROMs for English grammar, study videos in English and German and a selection of

audio tapes in several languages. However, the resources are still few because of financial constraints.

The Language Centre, together with other units of the University, has been holding seminars and training sessions for the teaching staff on the use of new technology and learner autonomy. Courses have also been offered to teachers from outside the University. The programs are only making first steps the University envisions an increase in their relevance and use in the future, owing to changes in the educational landscape of Estonia and the demands of the labour market.

Other universities have also introduced programs on learner autonomy. The Tallinn Technical University has a computer class dedicated to language teaching, yet the amount of resources is relatively low and the institution cannot hire a full-time support administration due to which the class is not available for independent study. Yet, computers, computer courses and computer support are available and widely used.

#### 3. Promoting Multilingualism and Cultural Diversity

Estonian educational system has defined developing multilingualism one of its core aims. The present report will look at promoting the learning of Estonian as a foreign language and Estonian as a second language. Work in these fields has been done by the University of Tartu and Tallinn Pedagogical University and the key institutions are the Language Centres of the universities, the Department of Estonian as a Foreign Language, the Open University and EU PHARE Estonian Language Training Programme.

Curriculum development programmes in the field of intercultural communication and intercultural education, developed with the support of the Council of Europe, that also contribute to the increase of cultural awareness have been mentioned in above.

Programmes in Estonian as a foreign language are targeted to international student at the University of Tartu and the Tallinn Pedagogical University and they are conducted either

in the form of one- or two-term courses or summer courses. The University of Tartu offers the courses on the basis of English and Finnish. They cover the teaching of grammar, understanding written text and speech and producing written and oral texts and are complemented by an introduction to Estonian culture. The courses and seminars are complemented by autonomous learning ad the self-study centre is supplied with materials for practising Estonian in speech and writing.

Programmes in Estonian as a second language are directed towards Russian-speaking students who need remedial Estonian study before they can proceed with their studies at the universities. The University of Tartu has preparatory courses for graduates for non-Estonian schools whose language skills do not meet the needs of full-time university study in an Estonian-language group. The intensive course in Estonian lasts for 2 terms and includes work on skills of language production and reception, with additional work on terminology in the speciality the student has chosen, and academic writing, presenting and research skills. The focus is on the differences between the Russian and Estonian languages and issues of intercultural communication. Here, too, a wide range of independent stud materials are available in the self-study centre. The Tallinn Pedagogical University offers a year-long intensive course in Estonian for Russian-speaking students whose Estonian skills do not allow them to start their studies in their chosen field.

In addition to the traditional coursework, multimedia and Internet-based resources developed by the Department of Estonian as a Foreign Language at the University of Tartu mentioned above are also have an important role in the integration of non-Estonian speakers into the universities and Estonian society as well as promoting cross-cultural awareness and cultural diversity within the academic setting. The Web-based courses developed between 1998 and 200 have been targeted to preparing Russian -speaking teachers for exams in Estonian and for non-Estonian teachers of the Estonian language but also the simulation course *Job Search*, commissioned by the Narva College of the University of Tartu that trains Russian-speaking students for careers in teaching. There are further plans for developing websites for testing language skills and interactive CD-

ROMs for interactive study of the Estonian language for both young and adult learners. This sphere of activities is especially important because of the large number of Russian speakers in Estonian population and the need to provide them with opportunities for advancing in the Estonian society.

#### 4. The Role of NLE Training Programmes for Language Related Professions

All of the resources mentioned above are actively used in teacher training courses and inservice training courses for working teachers. The NLE are also employed in translator/interpreter training that forms a part of the Estonian efforts in preparing for European accession in preparing competent translation/interpretation staff for work in European institutions. The University of Tartu, in co-operation with Copenhagen Business School and Arhus School of Business (Denmark) has developed a professional Master's programme in both translation and interpretation that extensively uses NLA in their practice sessions for creating real-life contexts that translators/interpreters will face in their professional life with the help of a specialised translation lab equipment in addition to the more traditional audio resources. Further work will have to be done for incorporating other multimedia resources as well as the Web-based materials into the programme.

#### 5. The Role of NLE in Continuing Education Programmes or Courses

The role of the NLE in continuing education programmes or courses was covered above in discussing the Open University project and the attendant in-service training courses.

# 6. Using Information and Communication Technology for Promoting European Co-operation

The universities mentioned above, especially the University of Tartu, Tallinn Technical University and Tallinn Pedagogical University have been working in partnership with the

Tiger Leap Foundation that is dedicated to providing Estonian schools and students with computers, software and training in order to meet the challenges of the information society. There have also been close contacts with the co-ordinators of several EU programmes.

#### 7.-8. Need in the Area of NLE and Measures to be Taken to Meet the Needs

The key problems that have been identified by all of the institutions of higher education that responded to the query had strong similarities. All universities commented on the lack of an infrastructure and resources, both financial and human, necessary for developing and using NLE in everyday teaching and learning. Such training would be necessary on all levels of education, including distance learning and in-service training and special resources have to be developed for all of the levels to meet their special needs.

In addition to the shortage of funds the institutions have to struggle with shortage of time necessary for training the teaching staff to use the new technologies as well as their lack of competence or/and experience with the method. Also, it has been suggested that, die to the facets mentioned above, the introduction of Web-based or multimedia courses does not result in greater efficiency but that the new programs are likely to take up more time than the traditional ones, especially considering the fact that the hardware and the Internet connections are not always up to the task. Thus, teaching staff need special incentives, encouragement and technical support for acquiring the skills and knowledge for the successful incorporation of new technologies into their everyday work.

The other major area of concern focused on the lack of resources that would be suitable in the Estonian circumstances as well as affordable access to them in schools and in cities in general. Efforts should also be made to intensify international co-operation with other European institutions. An overall comment drew attention to the fact that the government has not outlined a specific plan of action in the field of languages and new technologies.