E-Learning as Worldwide Support to Education of Language and Culture for a small country's Diaspora

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Abstract

Croatia is a country with relatively numerous emigrant population and therefore one of its national strategic commitments is to enhance connections with its Diaspora in order to nurture its national identity in the era of globalisation. Important parts of this strategic commitment are educational programmes supported by the Croatian government. On higher education level, there are 34 lector centres worldwide integrated into national university programmes. On the elementary education level, there are 88 teachers working in 19 different countries on Croatian language and culture programmes. In year 2008, the Croatian government supported this programmes with more then 4 million € for the benefit of some 6860 pupils. By applying modern information technologies, such as e-Learning in educational process, availability of educational materials can be enhanced in a way to make them accessible 24/7, regardless of geographical location. The quality of educational materials should be improved as well as the educational economics of Croatian language and culture worldwide. As part of the project, support for the lector centres will be further enhanced. This commitment can be realised trough a carefully planned and implemented e-Education project. Realisation of interactive educational materials in rich multimedia and in the form of hypertext makes them more appealing to younger generations who are accustomed to video and computer technologies. Education is much more then reading and playing with video materials on Internet. Highly intensive interactions with mentor are provided to support pupils throughout the learning process. Mentors' involvement in the educational process will support pupils but also make personal connection not only to their country of origin but also within the Diaspora worldwide. E-Learning implementation for education of the Croatian language and culture worldwide should improve the national image in information technology as well as improve the support for national culture in the globalised world.

Introduction

Croatia is one of the small nations with worldwide spread Diaspora. Considering limited resources, both human and financial, and having as objective to preserve its national identity, careful planning should be applied. Information technologies are one of the tools in spreading globalisation as a process. The same powerful tool could be used to preserve national identity.

At University of Zagreb, there is experience in e-Learning implementation. In close cooperation with the Ministry of science, technology and education, preliminarily preparations are under way for e-Learning implementation as a worldwide support to education of the Croatian language and culture.

Realisation of the project is divided into several phases, which are partially overlapping in time.

In the 1st phase, technological and organizational aspects of the project realisation will be defined. As the next step, a pilot project will be deployed. Croatian language and culture curriculum for Diaspora is adopted as a document defining three knowledge levels. In the phase of pilot project, educational materials for the level II will be developed together with implementation for selected groups of pupils. Following an evaluation in the phase three, educational contents for all levels as well as materials for university courses will be realised. For worldwide implementation, technology background will be provided and mentors educated.

As a permanent task, evaluation and renewal of the teaching contents and realisation of education on all levels shall be provided.

Technological and organisational definition phase

E learning offers a choice of different opportunities, somewhere in a continuum from face to face teachings to full on-line courses. New technologies by themselves alone could not provide edges over the older ones [1]. Understanding the educational context is essential for an effective application of technology.

Definition of the educational model

There are some specifics in educational theory for online learning environment [2]. The choice of educational model depends on such parameters as pupils' knowledge of information technology, knowledge of the Croatian language and culture, preferred models of communication etc. Considering that the primary stakeholders in this project are individuals who have not been covered by current programmes of education because of their dispersion (or for some other reasons), there could arise problems in estimating of these parameters. Our preferred educational model [12] is the hybrid one, including face-to-face education, but it would not be possible to provide it for pupils worldwide. Here, the experience in setting up of a full on-line course [5], can be helpful. As the majority of pupils are expected to be very young, it can be assumed that on-line courses should be supported by on-line tutors.

It is necessary to organise procedures for animating and recruiting pupils through school, church or diplomatic channels, or via on-line applications and to provide tools for checking their knowledge in informatics and language in order to activate them on their appropriate educational level.

From the preparatory phase, the estimated number of users, choice of the educational model, and the number of tutors should provide the first information necessary to calculate the project budget.

On-line courses as part of the educational system

On-line education is becoming a part of education systems but it is still covered by different national standards. This program must be realised in such a way to satisfy the existing national and international standards in that area. In early phases of the project, procedures and requirements for recognition of courses within different national standards should be taken into account as a part of the development. On university education level, standardisation can be probably achieved only on the learning object level. If it turns out possible, the developed courses should be adapted to national standards so that within a university educational system students receive their ECTS (or some equivalent credits) in the framework of their national education system.

LMS parameters definition

It is known that learning with web courseware systems can be improved [9]. Realisation of on-line teaching is carried out in a Learning Management System (LMS) working environment, which should enable pupil's optimal conditions for mastering of educational contents. Defining and selecting an adequate LMS is an important part of the technological definition phase. Complex working environment should be analysed, understood and described. Apart from access to contents, an organised LMS should enable communication with students, communication among students, examination, and encompass other auxiliary tools. Management of a large group of tutors does not seem to be covered in recently evaluated LMSs.

This part of the project will create specifications and requirements for modification of LMSs with the necessary supervision functions to monitor work activity at the mentor's level [10]. It is necessary to make the specification of knowledge within the LMS, and the necessary training of individuals involved in the project.

Some innovative topics in the field were evaluated in research carried out in [11].

Description of the educational contents

As the first step in realisation of educational materials, the standards and a description of the educational contents should be chosen. Research in the field is provided in [8].

Educational learning objects should be standardised with respect to audio and video recording formats, the use of terminology, contents and format of meta-data description elements. In this field one should adhere to internationally accepted standards such as ISO / IEC JTC1 SC36 (Information Technology for Learning, Education, and Training) and ISO / IEC JTC1 SC36 WG1 NO 041 (Vocabulary), Dublin Core Metadata Initiative (DCMI) Metadata Terms , DCMI Type Vocabulary, DCMI Grammatical Principles and IEEE's LOM 1484.12.1-2002 standards. The standardization aim is widened by US National Instructional Materials Accessibility Standard (NIMAS).

Subject contents definition

Based on the Croatian language and culture curriculum for Diaspora, educational materials for level II will be prepared for development. Contents will be structured into modules and lessons. Initial recommendation will be provided for video illustrations and animated video illustrations. As in all language courses, special attention will be paid to the accompanying audio materials. Within each course, the knowledge assessment strategy and evaluation methods will be defined.

Project evaluation

In early phases of the project, it is necessary to define criteria and procedures of evaluation to achieve the project objectives. For project objectives - to increase the availability of educational materials, to increase the quality of educational materials and economy of education there should be the evaluation timing and procedures defined.

Project Council

The Project council shall be established to enforce a highly professional implementation of the project. Composition of the Council should ensure an appropriate representation of scientific, academic and professional communities.

Project management

Project management costs during the technological and organisational definition phase are estimated at modest 8% of total costs

Production of course material for the pilot project

The 2nd phase includes development and realisation of educational materials for the pilot project. As the first step, the level II of Croatian language and culture curriculum for Diaspora will be realised.

Development of the learning material will be supported by a referral centre [7][6], and experience in development of educational materials [3] will be welcome. An early idea of realisation had presumed the usage of learning objects [4] at large.

Realisation of the educational contents

As the first step, a group of prospective e-Learning material authors, language specialists, will receive a briefing in e-Learning educational theory. In addition, some LMS and e-Learning materials development courses will be provided for them.

Providing of texts for educational contents
According to the level II of Croatian language and culture, curriculum texts and the integration of educational contents will be realised.

Knowledge assessment
Based on a chosen knowledge assessment strategy, procedures and evaluation methods as well as knowledge assessment materials will be realised.

Realisation of audio illustrations
In realisation of audio illustrations, a help from the Croatian radio would be welcome.

Realisation of video contents
To provide video contents, a selection of existing materials from video archives (such as the Croatian National Television) will be made. Filming of additional material is also planned.

Realisation of animated illustrations
Some animated illustrations, as a methodologically welcome form of education among young pupils, will be implemented in accordance to the contents. In addition, subtitles for the audio and video illustrations will be provided.

Visual design

In this activity, the concept for visual design will be chosen and its implementation provided through educational materials.

Educational contents evaluation

All developed educational materials will be evaluated by experts. Corrections should be provided.

Methodical review

Methodological reviewing will verify compliance characteristics of the media, LMSa specific requirements and that the contents of educational materials correspond to the age of pupils.

Proofreading

Proofreading the contents of educational materials will align them with the standards of the Croatian language. Special attention will be devoted to the professional terminology and vocabulary.

Contents integration and testing

Corrected contents materials will be integrated into LMS and tested.

Mentors training programme

A programme for training the mentors will be prepared, including contents knowledge but also gaining familiarity with the selected LMS, communication skills and methodology appropriate for on-line teaching. Selection and education of mentors will be accomplished.

Initial cost estimation

The costs for production of course materials during the pilot project are estimated at 6% of total costs.

Course implementation

Enrolment of pupils

Through a network of universities, schools, churches, diplomatic channels and by using on-line applications, pupils are to be animated and recruited. Over the same network, the verification of some minimum mastering of IT skills and of the Croatian language, needed to complete successfully the classes, will be provided.

Development of educational contents

Educational contents for all the Croatian language and culture curriculum levels for Diaspora as well as materials for university courses will be prepared.

Course deployment

Pupils will be organised in virtual classes and supported by mentors. Education will be provided on-line in accordance to the programme. Technical support will cater for software and hardware reliability.

Evaluation

The project will be evaluated toward the established criteria.

Renewal of the teaching contents

As a permanent task, evaluation and renewal of the teaching contents and realisation of education on all levels will be provided.

Conclusion

Support to education of the Croatian language and culture worldwide via e-Learning is expected to strengthen connections of the native country with its Diaspora and among the Diaspora and nurture its national identity in the era of globalisation.

Special attention will be paid to develop courses in harmony with different national standards in the e-Learning field.

The project objectives are to enhance availability of educational materials, to provide higher quality of educational materials by including a choice of multimedia learning objects and to improve educational economics of the Croatian language and culture worldwide.

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