

Multimedia Products as Basis of New Teaching Organisation (Within Foreign Language Teaching)

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Abstract: University foreign language lecturers need to equalize prior language competence and expand students' knowledge and skills. The existing teaching approaches prove insufficient, which is a reason to search for new and change the old ones.

The development of learning skills using ICT extends basic information channels and thus stimulates the acquisition of new competences. When IT-assisted learning is used in cooperative environment, students gain more knowledge and retain it better.

This article is based on practical experience in multimedia product development and study of international attempts to achieve identical teaching goals and turn products into good teaching materials.

Key words: multimedia products, university education, ICT, FLT

1. What necessitates the changes in the teaching organisation?

The growth of information and communication technologies (ICT) in society is reflected in policies to encourage them in education and the development of related multimedia. One of the great benefits of ICT in teaching is that they can improve the quality and the quantity of education.

The use of multimedia to support learning has become embedded within diverse fields of university education. In an environment of diminishing budgets, lecturers' task to direct the transition of 'classroom specialists' to competent practitioners is a continuous challenge. Furthermore, the rapid and pervasive increase of ICT influence in all areas of modern society provides another significant incentive for change in the nature and structure of courses. Innovative, authentic, and cost-effective ways are required for students to leave their studies confident and competent to begin independent careers and become part of the rich context of contemporary society.

The introduction of multimedia into the classroom has a profound impact on teachers' role and students' learning and motivation. As a result, learners prefer multimedia instructional tools over the traditional

chalkboard/whiteboard lecture format. Video and audio materials provide exposure to real-world language, which in turn heightens students' motivation.

Going to university does not affect one's overall usage of ICT. "The younger generation is intimately familiar with multimedia, accustomed to receiving and sharing information in a range of formats. In contrast, students spend most of their time in the classroom viewing printed text and listening to a teacher. This disconnection is troublesome. While students are accustomed to having a range of means to communicate and process information outside school, they must conform to a more restrictive media environment within school. Printed text is one-size-fits-all, but students' learning strengths, needs, and interests are all over the map. Thus, the traditional print-driven curriculum raises a number of barriers to access and learning.

Integration of multimedia into instruction can help to reduce curriculum barriers and improve learning for all students". [1]

Using technology, teachers can make use of the knowledge of experts; visualize and analyze data with their students; link learning to authentic contexts/situations; and take advantage of opportunities for electronic shared reflection.

The rising cost of higher education, and specifically textbooks, is another reason to turn to e-learning. Virtual libraries, where they exist, are a particular boom to students as they cut down on the cost of acquiring expensive textbooks, journals and reference material.

Multimedia facilitates continuing professional development and lifelong learning. They may have a useful role by allowing experienced practitioners to update themselves on recent advances in core areas of knowledge and practice.

2. Executive Summary

This article is based both on our own practical experience in multimedia product development and the study of international attempts to achieve

identical teaching goals and turn such products into good teaching materials.

The main problems and difficulties that arise in the process of multimedia development necessitate the set-up of interdisciplinary teams.

a) Interaction of traditional methods and new media in FLT

› Newly admitted university students have different levels of general and foreign language knowledge. Lecturers, considering new inventions in theory and practice, make up for their gaps. This is a demanding task in view of the fact that the yearly workload, particularly in foreign language teaching (FLT), has been reduced. The challenge facing educators is that of finding a way out of this situation.

Students' changed motivation frame requires a search for new methods of classroom material presentation, mastering and creative application of basic skills and competences, as well as their evaluation.

The rapidly increasing variety of computer-based learning programs (software) and decreasing students' interest in traditional information sources make lecturers apply new digital technologies. This demands prior computer literacy in using digital presentation techniques combined with creativity and special skills in applying existing software.

The opportunities to manage learning, to acquire habits and key knowledge, to develop practical skills in professional environment are a good enough reason to design new computer or web-based multimedia products, relevant to both current trends in teaching and learning and students' training.

› Traditionally, FLT includes work with textbooks, audio and video tapes, drills in language-labs and video-rooms. The popular methods cannot combine successfully with the new challenges to teach and learn with new media. This calls for new ways to respond to the issues mentioned above.

› Information Technology (IT) has become more accessible, and so have products classified as multimedia documents. They are in electronic format and include text, sound, graphics, pictures, animation, and interaction with the user. Some authors prefer the term "multimedia" only for electronic documents in an intrinsic linear design (e.g. Power Point, ClarisWorks slide show). For documents incorporating a planned non-linear organization (e.g. Digital Chisel, HyperStudio) the term "hypermedia" is used. Most often no distinction between those terms is made.

"For educational technology purposes, multimedia refers to computer-based systems that use associative linkages to allow users to navigate and retrieve information stored in a combination of text, sounds, graphics, video, and other media". [2]

Multimedia is not only a buzz modern word but it also focuses the attention of students and lecturers. That sets new requirements to teaching like individualisation, flexibility, lifelong learning, and specialability approach. What could be changed with the e-media?

Education including ICT is classified as e-learning by many authors. The term "e-Learning" has been accepted widely because it is associated with learning on the Internet. E-learning differs fundamentally from traditional education in its orientation toward students, not lecturers. Educational responsibilities and rules have to change:

- › Lecturers share responsibilities with students.
- › Students can learn where and when they like to.
- › Students work individually or in teams, depending on the purpose and task.
- › Students develop individual or team projects on several program subjects.

The benefits for students and teachers are as follows:

For students:

- › Engaging and motivating
- › Provides opportunity to try new things
- › Incorporates additional useful skills into the curriculum
- › Benefits audio-visual learners

For teachers:

- › Enables teachers to turn teacher-centered lessons into student-centered
- › Easily adaptable to all learning levels
- › Provides opportunities for students to have 'real' audience
- › Places onus of responsibility back on the student
- › Provides a forum for teacher sharing and feedback [3].

"Traditional educational content can now be transformed into interactive multimedia content by using authoring packages. It has enabled the teacher to innovate his/her instructional design by presenting the educational content in an interactive and multi-sensory manner rather than the traditional single media format. This infusion of multimedia into teaching and learning has altered instructional strategies in educational institutions". [4]

b) Conclusions and hypotheses

When IT-assisted learning is used in cooperative environment, students learn more and retain their knowledge better. Interactivity adds a new dimension to the reading/ writing process and the abilities for reading and writing, and later on to speaking as a productive skill.

Integrating ICT in the teaching process requires that students have clear ideas about the advantages and disadvantages of digital media. While IT is developing very rapidly, trends to perfect teaching

methods are rather conservative and changes within educational practice are despairingly slow.

The application of new ICT in FLT changes teaching organisation as well. The learning process becomes flexible and attractive when new material is presented through visualization, animation and simulated situations from everyday or professional life in interactive learning surroundings. New multimedia can be integrated in team work, workshops and individual teaching forms as well as in traditional approaches, but they cannot be applied effectively because of the reduced yearly workload.

The preliminary drill and exercise grading let teaching become individually tailored to students' abilities. The tuning with the needs and learning style increases their motivation and the effectiveness of teaching[5]. The whole organisation of learning changes in such a way that outcomes are evaluated by a program not by students themselves[6]. "The success of multimedia support ... suggests that the library of the future will be intimately involved in the knowledge world at every step of the research process, including the production of information in new media." [7].

The skillful use of the new media affects the relationship between lecturers and students too. Students prefer to harmonize their learning (in classroom or self-study) with the computer. Learning program providers, methodologists and lecturers are in debt to young people. Developing multimedia for specific purposes is a long, difficult and expensive process which not every university is willing to undertake, no matter whether the reasons are financial or there are no experts.

It is a stroke of luck when we find the right learning product to achieve the teaching goals. There are many providers of e-learning software but they can't take into consideration the peculiarities and problems in each country and university no matter how ambitious their efforts are.

c) Experience with available multimedia products

To reach specific goals, one should consider carefully students' motivation about the subject, educational goals and their achievement (teaching approaches and learning techniques) and how those particular media can be of some help.

We have some experience with the multimedia course „Deutsche Sprache in Büro & Business” and „Deutsche Sprache in Hotel & Restaurant” of the Berlin Enterprise for Teaching and Teaching-software Prosonsoft Ltd. in the Faculty of Social Sciences, where new media and old didactic methods are combined in the FLT.

The course disc includes a PDF format exercise book and the multimedia part has lexical and grammatical drills with evaluation tools of the type “true / false”

after each of them. We find this type of evaluation insufficient to rate students' language competence effectively.

Unfortunately, the digital multimedia aimed at the basic skills listening and writing is available only as on-line resources. However, reading and speaking can't be evaluated in this way. There is software which can correct pronunciation and reading comprehension, but speaking and even discussion are realized only within live communication. That means the speaking skill can be evaluated through web-based tools or in a classroom.

The above mentioned program has important built-in control tools, particularly feedbacks. Generally, students' reaction towards mechanical evaluation is positive. In conclusion, traditional methods of evaluation correspond well with new multimedia learning programs. Whether language competence is achieved by traditional methods or new computer based ones is entirely the choice of the lecturer and the learning management.

Digital media make teaching and learning individualization possible, which is very good particularly in evaluating. The German e-learning course “Deutsche Sprache in Büro & Business” has exercises in writing, listening and reading comprehension, cloze tests, multiple choice, and grammar transformations. To further control writing and speaking skills we used tasks such as looking for specific information in lessons or economics texts, which engages students' skills and helps them with their scientific research.

The explanation of terms practiced in the foreign language is based on background knowledge from other subjects, which is helpful in role plays and discussions in workshops, or when working on marketing strategies or advertising projects. The web connection can't be ignored when students perform their tasks, because communication by email or in chat room is implied. The result can be visualized in a blog or Power Point presentation, or in written form. Thus the goal to test and evaluate language competence with digital media is achieved.

3. Project idea (multimedia product)

a) Description and experience

The various reasons and problems we have mentioned so far made us explore the digital media educational resources. As a result we had the idea to integrate parts of virtual games and learning materials and implement them into the environment of a trip. Within a project frame funded by Assen Zlatarov University we set up a virtual library with routes and tours included in the foreign language syllabi of the university. Those virtual

routes had to be presented in a way that allowed students to plan the time necessary to reach a destination, see it in detail, get thorough and up-to-date information, and explain the facts correctly in the foreign language. Our initial ambition could not be realized because 3-D-animated objects call for a considerable resource of specialists, money and time, and we had none of these at our disposal. The software Tourweaver 3.0.(and the up-to-date versions) by the IT-enterprise “Easypano” met our requirements to a certain extent. Naturally, in the course of work we had to change and adjust our ideas to its properties.

By means of Tourweaver students could be sent on different long virtual tours. The visual resource is in the form of static pictures which could be performed as spherical, cylindrical, still image, kaidan one shot, fisheye image or cubic panorama. According to their desire users can get a closer or more distant look at the details. This opportunity can be used when pictures are shot from different angles, which always correspond to the goal of the particular virtual tour. In this way students can examine all details of an object which later they have to present to the tourists while following the tour as real guide. Virtual tours allow lecturers to make teaching more creative by grading information and the ways to present it to the user.

Students are given visual information in a manner which permits them to choose speed and tour direction, objects and the amount of information. The virtual route is in English and German. Students can deepen their knowledge with the help of the texts which can be printed. The multimedia product “Virtual Route Burgas – Varna – Balchik” can be used for training target language and practical skills in the field of tourism service of English and German tourists.

The use of the multimedia product “Virtual Route Burgas – Varna – Balchik” helps students to acquire language and practical skills by stimulating self-study and increasing ability to self-evaluate.

b) Implementation

We took pictures of the destinations and objects which we needed for the virtual route or found them free on the Internet. Then we formatted the visual material according to the requirements of the software. Next we put the material into separate files to correspond to the route elements - a guide’s lecture on a bus, a tour of a city, a visit to a monastery, a visit to a tourist object comprising a large area. Each file includes visual material about the objects as well as maps and plans of the route and destinations. The sound files accompanying the

visual part are concise and have only a directing not a guide substituting function. Tourweaver can put files into two formats: Flash and Java. We chose Flash because it is easier to work with on various computer brands. Our intention was to give the students an example of a guide’s lecture which they, especially the lower level learners, can follow. After storing a database with guide’s lectures, texts for translation and additional information, we developed the CD as a complete multimedia product. An introductory HTML file, an auto run file and technical elements such as an auto run icon for the computer desktop, disc label and covers were the next step.

c) Product description

The structure of the multimedia product “Virtual Route Burgas – Varna – Balchik” gives an opportunity for presentations, team or individual work.

The friendly and simple interface facilitates the learners’ self-study.



Figure 1. Multimedia interface

Students can pick out the language version or select to work with visual, sound and text information. Their choice concerning the exercise duration of a piece of learning material or part of the virtual route is made easier by the buttons and indicators at the bottom of the screen.

Students can adjust the focus/ zoom of the displayed object, move the picture to the left or right, or up and down to see a part of it in detail, leap to a previous or next scene or part of the tour/ route.

The build-in hotspots, marked with headphones



and clover , make possible listening to a recorded piece of necessary or directing information and replaying it as often as needed.

The text download option is a well-balanced opportunity to supplement the visual part of the “Virtual Route Burgas-Varna-Balchik”. It provides

further detailed information about the themes and objects included in the virtual route.

The multimedia product offers an opportunity to exercise students' foreign language and practical skills through stimulating self-study and encouraging self-evaluation.

4. Application

This multimedia product can be used both for individual and group work. The interactive component allows the learners to work with the material so they can control the outcome. They can follow different links in a way which suits their perceptive abilities. Students have an element of choice which may not exist in the traditional classroom – for instance, to listen to a piece of language more than once. Lower level learners and more introverted students can practice their pronunciation in a 'safe' environment, without fear of making mistakes in the presence of their colleagues.

The maps form a basis for group discussions of the sites along the way and the guide's lecture topics. Thus prior knowledge of planning a day trip integrates into new foreign language environment.

The lecturer may choose to present the disc to a whole group or ask the learners to watch it and read the texts in the download folder as a home assignment. Further on students can be asked to 'rehearse' real-life tasks of the type "Imagine you were at that particular place. Show the tourists.... Explain to the group of tourists..."; or can be given individual assignments: to look for particular text information corresponding to visualized information in the multimedia itself or add new facts from other sources; to find and add new texts relevant to the scenes and photos in the route. Thus students are encouraged to do extra work outside the classroom and improve their progress in the language. We had also to bear in mind to prove multimedia links' usability and at the same time to encourage students to handle all of its opportunities. "The structure of links and the arrangement of the links to different parts of the multimedia edition have to be well-considered, but it so heavily depends on the concept of the language materials that brief recommendations would be of little benefit. What is important is an intuitive and simple navigational structure with clear entry and exit points, notes, and return links.

Complex structures in which too many links are found, tend to be confusing both to the end-user and to the developer" [8].

Giving students an opportunity to produce documents of their own helps them to assimilate, systematize, and retain what they have learned. These documents,

presented orally or in writing, are a good basis for assessing progress.

The following assignments based on this multimedia product can be given to students:

- ✓ Consider the intended audience and decide what amount of information is needed to give listeners an understanding of the topic.
- ✓ Write a report about less popular local places of interest, or popularize unfamiliar locations.
- ✓ Find out other places of interest not included in the route for one reason or another.
- ✓ Write topic related advertisements for places of interest or trips to other parts of the country.
- ✓ Use the multimedia product as a model and basis to develop projects for target group trips – teenage/elderly travelers, groups sharing common interests, etc. The assessment of a project presented as a visual and oral advertisement is performed by other teams of students who are engaged in similar projects.
- ✓ Plan thematic tours named 'Early settlers', 'Wine production and Bulgarian cuisine', 'Spas along the Bulgarian Black Sea Coast', etc.
- ✓ Prepare in writing a short quiz about the route (individual assignment). The most interesting questions are included in a list to be used to break the monotony of a trip.
- ✓ Think of possible questions tourists might ask and prepare suitable answers. In a role play, a student describing an object displayed on a multimedia projector is interrupted by the rest of the group acting as tourists. Distracting or specifying questions need adequate response on the part of the guide who has to go on with the lecture smoothly.

5. Commercializing outcomes of multimedia use

a) Diversification, intensification and modernization of students' self-study process, solution to the reduced yearly workload and money problems.

The theoretical and practical educational organization typical for other courses cannot be applied to the FLT, particularly for courses where the foreign language is not subsidiary but compulsory and vital for the future job performance.

Because of the reasons mentioned above, the education, teaching process and also the students' self-study process need sweeping changes. Achievement of educational goals without lowering and minimizing end results necessitates the reorientation of the self-study process. Everything else concerning the quantity of information, exercises for perfecting skills specific for a course, development of projects on different problems and acquiring team work skills is organized as a self-study process. That is why task planning within the

framework of self-study hours of yearly workload is an important part of higher education teaching and should not be ignored.

b) Acquiring competence to use multimedia products in an intercultural environment – a prerequisite for increasing competitiveness on the labour market.

The development of this multimedia product is aimed at solving current educational problems as well as introducing new presentation approaches in the sphere of tourism where our students hope to find jobs. Its prospects for application are various and can be expanded further in the future. Only two of them will be mentioned here. Elements of this product can be included in tourist advertisements. A guide could relieve his/her job while delivering a lecture on a bus by including short 2-3-minute digital presentations which break the monotony of a monologue and illustrate the topics.

Intercultural parallels are inevitable in tourism. Tourists perceive foreign life in the light of their cultural identity. When highlighting certain details of the route tourists' attention is focused on the similarities and differences between the Bulgarian and their own culture and lifestyle. Drawing a parallel between the Bulgarian and the foreign tourists' customs and mode of life helps to establish a stronger emotional contact, which in turn contributes to applying one of the guiding principles of modern society – to draw people closer.

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