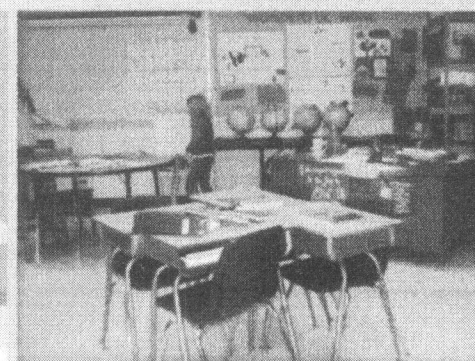
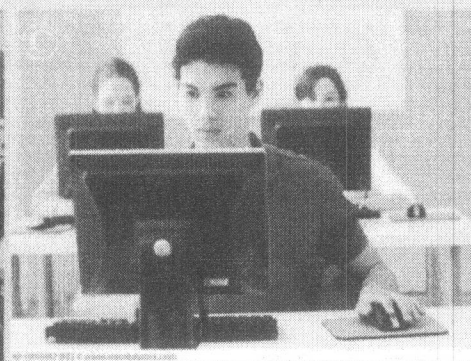
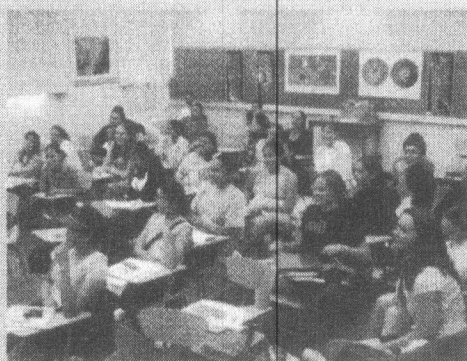


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КОМБИНИРАН ПРИСТАП НА УЧЕЊЕ ВО ВИСОКОТО ОБРАЗОВАНИЕ

Апстракт

Република Македонија прави огромни чекори во развојот на образованието. Основна тенденција е образованието – основа на целото општество. За тоа е потребно да се применат нови технологии во обуката на наставниците поврзани со програмата - Република Македонија како информатичко општество и разните програми за примена на ИК технологии (компјутер за секое дете, Македонија земја на информатичари, покривање на државата со безжичен интернет и сл.). Основа е воведување на е-учење во курикулумот за наставници кој ќе раководи ИКТ програми и проекти во образованието. Со овој труд се преставува склопот на традиционално и електронско учење како една од методите за примена на ИКТ во училниците, не само како алатка

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туку како интерактивен дел на учењето. Се става акцент на искористување напредни системи за учење, вклучувајќи различни видови учење комбинирајќи виртуелни и физички ресурси.

Трудот го преставува користењето на виртуелните медиуми како составен дел на комбинираното учење. Тоа преставува интеграција од традиционалната училишница и средина каде се користи е-учењето. Вклучува комбинација од медиуми подржани со инструкции и решенија со кои се одредува пристапот во разни случаи од високото образование, истакнувајќи го развојот на различни решенија на комбинирано учење кое се применува во наставата во високообразовните институции (Факултети за информатика и образование) кои се составен дел на Државните Универзитети. Универзитетите користат системи за управување со учењето (Moodle и сл.) кои овозможуваат разни можности: блогови, дискусииони форуми, електронска пошта, СМС и различни алатки за креирање квизови. Пристапот до овој систем е преку универзитетските веб портали и преставува комбинација од традиционалната (face to face) настава и електронското (on line) учење.

Клучни зборови: Комбинирано учење, Полу-електронско учење, Електронско и online учење и Системи за управување со учењето.

Introduction

Blended learning is a combination of the e-learning method with other forms of learning, for example traditional learning. This kind of learning means that e-learning is combined with a variety of traditional forms such as classroom training. Blended Learning is defined as an educational process that involves diversity learning methods and resources,

includes combining technology based and printed materials, group and individual study, tutorials etc. Blended learning is also called Hybrid learning. This paper presents the union of traditional and e-learning as one of the methods for the application of ICT in classrooms, not only as a subsidiary tool but as an interactive part of teaching. State University "Goce Delcev" uses Learning Management System (Moodle) that offers huge possibilities: blogs, discussions forums, e-mail, SMS and different tools to create quizzes. This system is part of the combination between face to face classroom instructions with on-line learning. Delivering of Blended Learning can be performed in a variety of ways in different situations, different environments and with different people. It involves the use of technology and allows the student to work and learn. However, it is a relatively new term and ideas of this style of teaching and learning are more common. The goal of these courses is to pair the best features of face to face teaching with the best option of online and electronic learning to promote active and independent learning. Using instructional technologies, the Blended Learning model usually redesigns some lectures into an e-learning and online activity.

Face to Face Learning

The importance of direct group interaction is not only the community aspect of face to face contact already allows students to assess their learning and develop a sense of communication with other students. They need dialogue with their teachers and other students, and they need to check their own learning. Several Faculties of University "Goce Delcev" still use traditional face to face education of students in most of the courses. Traditional teaching is part of Macedonian higher education in the last 50 years where some faculties, before the constitution of University in Stip, were

part of University “Ss Cyril & Methodius” in Skopje. Moreover, conventional face to face education is the most significant study method for delivering some type of content and in acquiring knowledge. But simple repetition that is the signature of face to face learning can be effective in a classroom, but it is difficult to implement online.

E-learning

E-learning is technology supported learning where students absorb knowledge by using computer technology. E-learning is used interchangeably in a wide variety of contexts.

In most Universities, e-learning defines specific mode of attending a course of study where higher education students study online. In other situations, the computer is the key component of the educational environment. They are used in classroom for study and teaching purposes. The University “Goce Delcev” uses learning applications for the implementation of e-learning. The first step was to choose the best software applications and Learning Management System. Unfortunately, this is not always a simple task. Each software product has strengths that make it uniquely suited to a particular training task and many learning applications require using a combination of products. All applications and e-learning contents finally are loaded to the Learning Platform. The goals of e-learning are to guide students in higher education through information or to help students to accept knowledge. E-learning used all available electronic media (internet, satellite broadcast, audio/video, interactive TV and board, etc.) to deliver vocational education and training more flexibly.

Blended Learning Approach

The advent of the WWW and rapid advancements in Web-authoring software have created the possibility of delivering compelling e-learning to

new groups of learners, and for new classes of applications. At the same time, rapid technical innovation is surmounting the bandwidth barrier of the Web and enabling the delivery of online content that is truly interactive and media-rich. While the potential for creating compelling e-learning is enormous, tapping that potential is not always easy. Blended Learning is a mix of face to face and online activities at the University.

That Learning gives possibilities to provide the following steps: Students choose method of learning; Equivalent learning activities in all subjects; Utilize segments of learning activities like learning objects; Equip students with IT skills and give access to all curriculum courses.

The use of e-learning and face to face teaching represent a constituent part of blended learning. It is integrated into traditional classrooms and environments where e-learning is used. It incorporates a combination of media supported instructions and solutions that determine the approach in a number of instances of higher education, accentuating the development of different blended learning solution which are being applied in teaching at institutions of higher education (the Faculty of Computer Science and the Faculty of Education) as constituent parts of the State University in Stip. It therefore combines multiple delivery methods that complement each other. It helps to overcome obstacles and prevent Faculty from training their employees and students for using University Learning Management System and E-Learning Platform – Moodle.

The Faculty of Computer Science students participate in several Blended Courses: Electronic Society, Software Process, Basic of Programming, Data Structure, Algorithms, etc. Blended Learning in Software Process uses a mixture of teaching methods and media to get the right content in the right format. The most important factors of Software Process Blended Learning are: Personnel qualification for e-learning-related

tasks; Quality of Software System; Overall Quality of Learning Management System and E-learning Tools;& Quality of Contents must be adequate for specific needs of Blended Learning.

Software Process course was attended by 200 student of second year. When evaluating the elements of Blended Learning students were most satisfied with: Classroom Training (54%) represented with Teacher Instruction, Collaboration with colleague, Specified exercises and Learning materials;& Web-based Training (46%) represented with Illustrations, Text, Exercises and Animations.

Blended Learning is a promising approach to software process education. In this section we describe Blended Learning approach in Teaching and Exercises of object-oriented Unified Modeling Language (UML). In general UML Blended Learning approach proposes mixture of teacher-steered and self-steered learning activities, cooperative and collaborative learning activities, learning activities supported by online instructions and tutors, traditional face to face classroom learning teaching activities. The goals of UML are to guide students in design of analysis, requirements, specifications, programming, implementation, verification, validation, maintenance and development of Software Process.

Also, the University in Stip provides a rich array of authoring and design software used to create the most engaging interactive e-learning applications available today. This section of the paper guides to e-learning; it introduces you to all the products for creating learning applications and content. Each product is designed for a different purpose, key applications and unique strengths it has for creating online e-learning. The University provides a range of fully featured authoring tools of Adobe Software Suite, including Captivate, Authorware, Director, Dreamweaver, UltraDev and

method of learning, equivalent learning activities in all subjects, utilize segments of learning activities like learning objects for all students, equip students with IT skills and give them access to all curriculum courses. The most important factors of Software Process Blended Learning are: personnel qualification for e-learning-related tasks, quality of software system, overall quality of learning management system and e-learning tools and quality of contents must be adequate for specific needs of blended learning.

The University in Stip provides a rich array of authoring and design software used to create the most engaging, interactive e-learning applications available today. This section of the paper guide to e-learning introduces you to all the products for creating learning applications and content. University provides a range of fully featured authoring tools of Adobe Software Suite, including Captivate, Authorware, Director, Dreamweaver, UltraDev and Flash. All are capable of producing engaging and effective e-learning applications. To help learning students take advantage of all software products, University has used learning extensions to facilitate the creation of common learning elements, including the following: navigation, learning interactions quizzes and data tracking.

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