COMPUTERIZED MATHEMATICS LESSONS

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Abstract

E-learning will be gradually introduced to all schools and to all specialties including math lessons. Mathematics courses have increased flexibility and can be accessed from anywhere , anytime via computer linked to internt and web technologies.

Characteristics of e-learning in mathematics are : efficiency, immediate, large viewing opportunities , complete and rigorous calculations. These privileges technology offers new opportunities open up new horizons as agreed upon by more and more students. The technology honors two requirements of contemporary education: space and demography.

E-learning that has the same quality as traditional education, technology having negative influences on it except that it is a major change shape representation.

Formative and summative exemplify using WebCT , Web Course Tools through which the teacher provides the student to be read and assimilated with formative and summative evaluations tests.

Keywords: E-learning, Internet, web, tests formative, summative assessment, interactive forms , virtual laboratories

Introduction

E-learning will be gradually introduced to all schools and all specialties. It will be introduced to math lessons contradicting precept specialist teachers saying that this matter is done only by pencil and chalk.

In the rows below I list some advantages of e-learning in the mathematics lessons.

It can be said that e-learning offers opportunities for training courses and mathematics at all levels to create professional learning opportunities.

Main Text

Possibilities for computing and development has met the math makes this a subject to be asked to be learned and used.

Malleability course via the Internet and web technologies makes math lessons can be accessed from anywhere and anytime

Once the technology development we are witnessing the improvement of communication with the student's teacher: at school, at home or on the Internet

Activities can be determined in common teacher student or group of students. Virtual group can have a greater number of students than conventional class. Virtual class is usually made up of students who access the Internet from home, work or a place with Internet access. Images and graphs help improve the course on the Internet. It is easier to handle and maintain than traditional book.

To submit materials for learning such as demonstrations of theorems and solve problems use web and video conferencing technologies.

Peculiarities of e-learning in mathematics are efficiency, immediate results, ways to view the complete and rigorous calculations. Math lessons are designed for e-learning solve equations, derivatives, integrals, graphs of functions and make geometric calculationscan. This range is used for demonstration lessons and training, formative and summative tests.

This creates both mathematics education and in the experimental new vision of e-learning.

Due to the development of software applications was possible the writing of cod and data, was made mathematical problems in new forms.

It is studied practical and physical virtual systems design to be used in computer simulation and mathematical modeling. Are investigated, recorded and studied geometric structures realizing dynamic three-dimensional and four-dimensional images that include time.

To solve equations are unexpected source computer algebra systems.

These privileges technology offers new opportunities open up new horizons as agreed upon by more and more students. The demands of technology honors two contemporary education : space and demography.

Students we refer are far from places of instruction and their financial possibilities are low.

Traditional class becomes larger once resolved demographic demand to capture attention and cause students to study teacher was forced. Are used online interactive forms that occur with virtual laboratories and online interactive matrialele.

In addition to these requirements, current technology provides the ability self training so used in mathematics.

We can say that e-learning have the same quality as traditional education, technology having not negative influences, a major change is shape of representation.

As shown researchers Cohen and Ball quality education is conditioned by three factors: student, course and teacher.

We can say that proper training of students depends on the teacher, course and they tooth relationships.

The teacher takes care of course made available to students so that the matter can be learned easily and without obstacles.

To understand the mathematical problems and to solve them math teachers build on new technologies that graphs and figures are designed to emphasize key points which highlight the reasoning and the mathematical precision.

For a variety of problems are created images that lifted changes in a variable, confirming a solution or rotational parameters, translation or variation.

Representation of numerical symbols and geometric or algebraic calculation, or other area of mathematics is done by constructing precise figures which uses colors and hachures.

One problem or a theory is presented as algorithm sets using computer graphics and figures, thus clarifying the matter in question and made avaible.

The student is thus urging to individual study since the matter has been simplified to self-perfecting and to participate in the work of the house where he will make a substantial contribution.

A striking result of the training is recording work during lessons such as text and formatted materials and discussions and research conducted with students.

Traditional class work is lost, old sheet is removed, while still recorded in digital form work becoming an archive of math course that is an rich source of information for students who wish to review the course and learn on their own. It can be used by other students like the students who have been absent at the time surrendered the matter. Notably, the work of the class is to develop math teacher who often has mastery of mathematics and abilităşi loving species

The work of the class is made under the guidance of math teacher who often has outstanding skills and abilities in mathematics

The work in the classroom can be accessed and manipulated. Students wishing to access these records can learn alone or in groups.

These requirements must be created electronically by the instructor, these students with access to the essence of the course will be able to understand the lesson. The training is more malleable and accessibil.

Due to the development of e-learning teacher communicate more easily with the students they are more motivated to learn than regular class.

Student -teacher link is established by email or web. Traditional course becomes easier and easier to assimilate. Traditional classroom is replaced by the virtual in all processes. For any questions students use the e-mail and the attach. A student - teacher discussion elearnig platform can be taken by a third person being delineated as group discussions.

The discussion between student and teacher on an e-learning platform can be taken over by another person in a discussion group.

Students ask questions about what is not understood and so subject becomes repetitive, repetition being a feature of it.

Virtual course emphasizes the essence of which is marked by computer graphics and other technical means.

E-learning focus on students and groups of students which makes winning both studetii and teachers.

E-learning platforms, generally on sites that make e-learning a great importance is given to privacy and confidentiality

To assimilate the materials, we have at hand both formative and summative evaluation, that can be made using the computer.

Formative assessment is done throughout a course or project and is usually used to support learning. This form is accompanied by a student feedback. These forms of assessment are diagnostic tests. For example, if we are to Algebra, Algebraic Structures Chapter formative assessment can be done by presenting each concept. Thus the group structure definition and related theorems after which Construct a bank of questions from the lesson which includes problems and theory. The bank can be selected by evaluating computernizta 5, 6 or more questions to summarize the lesson.

Formative assessment is used by teachers taking into account teaching and individual work and class.

Summative assessment is usually conducted at the end of a course or project.

These assessments are used to assign student grades. Summative assessment are examinations that are meant to show that learning outcomes will then be made known to students, parents, and stakeholders.

Summative assessment is made at the end of a chapter of a semester in a course.

For example, if I finished chapter Algerbic structures can be summative questions to a bench comprising group theory and problems, ring, body from which the computer automatically selects a set of questions to be solved by the student.

Summative assessment is the so-called assessment to learn when formative assessment is an assessment that measures learning.

A form of formative assessment is diagnostic assessment. Diagnostic assessment measures the skills of a student in order to identify a suitable

program of learning, and also because this assessment can be set easily programmable still learning.

We can say that self- evaluation is a form of diagnosis, being tilizată by students to assess themselves.

The assessment takes into account future hypothetical situations is called anticipatory evaluation.

Exemplify formative and summative assessment using WebCT, Web Course Tools through which the teacher provides the student to be read and assimilated with keywords, course objectives. Course topics are announced for that fall naturally from it and questions resulting from the course.

Examination using WebCT is online, the results are immediate.

Use WebCT has a number of privileges, among which note that students may know that they can take the test immediately after the end of the verification. The student is protected from arbitrary and subjective process in assessing his knowledge. We recall here that the student has access throughout the session to book online notes are listed materials from the session at which exams, date and time set for this time of completion.

On completing the test the students with extra comfort on the computer screen displayed the time passed from the start of the test and the time remaining to complete the degree grids at a time and the opportunity to return to a response and change. WebCT also gives teachers opportunities to review teachers comfortable multiple and complex. Making up test questions are selected at random with little chance of occurring again at the bank next door neighbor. The questions are constructed, usually a professor bench complex questions, varied and numerous.

In the WebCT find ways of testing students' knowledge through a variety of methods to review recall here some of the large number of categories of grills that it provides. The grid mention true / false used to check if the student has retained some important clarifications course that answer "true" and "false ". Thus chapter after body structure algebraic structures can be formulated for the bank of questions, questions like " Answer true or false to the question: a body is a structure defined as a ring algebraic K $1 \neq 0$ such that $\forall x \in K, x \neq 0$ is reversed. "

Another important scale is category choose the correct multiple - choice that puts the student in a position to choose from a range of responses appropriate question the version proposed by the teacher. This option can be used to recognize partial values obtained by the student in solving a math probems and the value or final values .

Here remember matching grille that emphasizes knowledge

Regarding student learned concepts that have to fit in a variety of ways. We can use the knowledge taught and fixed partial results and the final results.

To check how well students have learned the material available to teachers and grid completion the student completes the blanks with appropriate words from the material studied.

A grid is important for Numeric Response mathematicians whose replies are natural numbers, integers, real specific math course.

Work and life is changed by technology in all stances, web and email is irreplaceable. For these blessings of technology must consider what we avantage for math instruction during class, maintaining the current quality of education that goes hand in hand with progress.

Conclusion

E-learning have the same quality as traditional education, technology having not negative influences, a major change is shape of representation.

E-learning will solve two problems that traditional invatamntul not solve, namely: reducing the distance between the school and the student and increasing class of students that need population explosion

Math lesson is introduced with the technology platforms for e-learnig using enhanced graphics and computing capabilities and forms of formative assessment and summative assessment but remains in electronic form.

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