THE ROLE OF COMPUTER ASSISTED INSTRUCTION IN TEACHING THE TOPIC: MILK AND MILK PRODUCTS IN PUBLIC ALIMENTATION

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ABSTRACT

Using the Power Point presentations, the educational software of its own conception is a modern mean of teaching, which allows the combination of fixed and mobile images (animations) and can increase the effectiveness of teaching and learning activities. Also the use of this mode of teaching reduces the time for training activities by transmitting the information without having to write them on the board.

Through the presented experiment we sought to demonstrate that the use of new technology, of e-Learning, significantly changes the learning mode, provides interactive learning environments, students having the opportunity to ask questions, to make comments or to ask for further clarifications.

In the experiment we worked with two classes of close learning level: class IX E and class IX-F realizing an initial assessment of classes to determine their level of teaching. After processing the results we found that the IX E class level is slightly higher. After teaching the same scientific contents but by different ways, for IX E class we used traditional means of education, respectively for IX F class means of modern education, we have concluded through final evaluation that the results of IX F class are higher although its initial level was lower. This result was confirmed by the results of the remanence test, a test applied without announcing the students, after a certain period of time.

Keywords: Computer, Pedagogical Experiment.
INTRODUCTION

The computer is a mean of training that leads to a new approach of the instructive educational process. Therefore in this paper the teaching experiment consists into analyzing the effects due to the introduction of an independent variable: the introduction of computer-aided instruction.

In the catering industry the ensuring of competences of the program require many materials; the most effective are those that are closer to reality. To carry out the instructive educational process in an efficient way in technological laboratory hours and hours of practical instruction it is required the purchase of raw materials, which implies a considerable financial effort from the school. Students often have difficulty understanding actions or processes because the teacher is not able to simulate them.

Alongside education means of different generations such as: blackboard, textbook, slideshows, using student – machine interaction, computer appears as the most complex way of teaching. Using it somewhat disrupts traditional practices, involves a considerable financial effort, but at the same time it provides the ability to simulate inaccessible processes or phenomena. Also replaces the teacher's explanations allowing a complete perception thorough image, color and sound.

EXPERIMENT

Pedagogical experiment’s hypothesis: the use of computer with Power Point presentations and playing educational demonstration videos in the teaching and learning process, rather than traditional means, can increase the performance of subjects (students). This approach to teaching and learning process ensures achieving cognitive, psychomotor skills of forming the training skills and abilities.

Participants

In the experiment we included as subjects two classes of the ninth grade from a technological high school, service profile, the basic preparation: Tourism and Food, namely: IX-E class with a staff of 30 students and IX F class with a staff of 28 students.

The two classes present a similar level of teaching; the temporary average grade for the Food Basics module was at the end of the semester 6.97 for IX F class and 6.74 for IX E class.

Procedure

In order to implement the experiment it has been used the group technique (parallel classes), IX E class is the control group and IX F class is the experimental group.

Data processing is done by sorting, comparison and statistical processing, through tables and charts.

We applied this experiment like so:

Through an initial test in both classes was examined the level of skills achieved on a cognitive plan at the lessons taught in the unit: Animal raw materials: milk and milk products
- The role of milk in the diet
- Chemical composition of milk and milk products
- Classification of milk and milk products
After providing points to the initial test applied to both classes, were obtained the following results: average grade IX F class: 6.28 and average grade IX E class: 6.40.

Further in the experiment there were taught identical contents of the lessons of the teaching unit "Based dairy products dishes ", using various teaching means. For IX E class (control group) were used traditional means of education: manual, drawings, diagrams on the blackboard and for IX F class were used modern means of education: power point presentation, didactic educational videos by computer and projector.

RESULTS

After correcting the final test applied to both classes were obtained the following results: grade average IX F class: 7.00 and grade average IX E class: 7.21, although initially the IX E class level proved slightly higher.

In order to demonstrate that the effectiveness of computer-assisted instruction is obvious it was applied once more the final test (remanence test), at the end of the teaching unit, without announcing the students. After grading the test we found that also for remanence test the experimental class proved superior.

By analyzing, processing and interpreting data from pedagogical experiment we determined the following:

- Making comparative analysis of the initial test results, it is clear that the six and seven marks have the highest frequency. The results obtained by the two classes are similar; the difference between the average grades of initial test is 0.12.
- After making a comparative analysis of final test results it was found that the experimental class’ average grade is higher by 0.21 although the initial test results were weaker. It was also found that the percentages of grades like 8 and more than 8 is 50% for the experimental group and for the control group is only 40%, which is illustrated in the following charts:

By comparative graphical representation of the results of the three tests of the experiment it is shown that the given hypothesis was confirmed: the use of modern teaching ways, computer-assisted training, make the teaching approach to be more efficient and attractive. (See Appendix A for tests applied in the experiment).

CONCLUSIONS

The experiment conducted was intended to demonstrate that the use of learning methods based on CBT (computer-based training) delivers superior results of training activity.

The efficacy of using e-Learning is influenced however by processing, summarizing and interpreting of the provided information so that this new knowledge is adapted to students in conjunction with the existing knowledge in each class.

By this experiment it was observed that students, for the most part, do not possess the ability to understand a simple view of an image, be it even simpler. Here comes the teacher which will focus students' attention on key points in the information provided, depending on the purpose of education sequence.

By using computers in teaching lessons it was observed an increased student motivation, which caused their active participation in the teaching hours.
During the lesson the teacher can turn on to internet sources, can bring cutting-edge knowledge. The subjects taught with computer instruction spark students’ interest and the teacher can guide students to use the web addresses for further investigation of submitted information.

Through the experiment it was found that the performances of students in the experimental class were better in comparison to those from the control group. Students in the experimental class were more engaged and motivated to learn.

In conclusion CBT is a training method that facilitates teaching the didactic message. Using e-Learning, using modern teaching methods requires the teacher to adapt his teaching style, implies responsiveness to new information and a considerable effort towards documentation, in order to achieve tailored students educational software. Computer Training is a factor of progress, and by adapting to new situations, teacher’s training cannot be completed without research into the informing education issues.

REFERENCES


Appendix A

Chart no.1 Average grades of tests applied in the experiment