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CULTURAL-HISTORICAL MONUMENTS OF KARLOVAC COUNTY (a presentation of teacher team work in Grabrik Primary School in Karlovac)

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***Summary** – This paper presents the possibilities and shows the importance of e-learning by using teaching techniques of demonstration and model preparation. The example shows e-learning, i.e. the use of computer and the Internet in a science lesson in the third grade of primary school. The methodological model is the result of team work between young learners' teacher and a computer science teacher, and it was carried out in two third grade classes in Grabrik Primary School in Karlovac. 46 pupils participated in this lesson.*

According to the evaluation sheets results, the pupils have shown a high level of motivation and interest in such mode of learning.

***Key words:** e-learning, computer, science lesson, museum, museum department*

INTRODUCTION

We have been witnessing a quick pace in information technology development. Information technology has found its application in all spheres of human activity and has become an indispensable part of the contemporary life. Our edu-

cational system has to make adjustments to social changes and information technology development as well. This demand arises from the basic aim of educational system, and that is the preparation of children for life and successful participation in social changes in the adult age. In order to achieve success in that task, an efficient and appropriate approach to education should be taken in order to meet the needs of a developing society.

The question arises as to how to use information technology in the teaching process most efficiently. The first requirement is to actually own information technology equipment.

When discussing this topic there are terms which are frequently used, such as: the Internet learning, e-learning, distance learning... We will explain the first two terms which refer to this type of learning.

Internet learning is defined as a type of learning in which the teaching content is presented via the Internet. In order to make it possible, it is necessary to own a computer with an Internet connection. The Internet is "the network of all networks", i.e. the network of computers from all over the world which enables access to information 24 hours a day.

E-learning is a wider term than the Internet learning. It presupposes the acquisition of teaching content and taking an active part with the help of electronic technology according to the already prepared plan. The teaching content is presented, acquired and reinforced by using computers and other electronic equipment such as cameras, digital cameras, and recently even mobile phones. E-learning enables a pupil to solve problems and to find information quickly. It cannot replace a teacher, but it is a tool which can improve the teaching process. To the teacher, the computer becomes an aid in covering the teaching content in all teaching instances, from motivation to assessment. The teacher becomes an organizer, a person who gives basic guidelines, and pupils take an active part, read, do research, work.

In lower grades of primary school, special attention should be given to the first contact that pupils have with a computer at school. Although the majority of pupils have a computer at home, this fact should not mislead the teacher into thinking that they know how to use it as a tool. Every teacher ought to have a clear picture of what they want to achieve during the pupils' first contact with a computer. It is certainly most appropriate to use the technique of demonstration and model preparation (Vizek Vidović, Vlahović-Štetić, Rijavec, Miljković, 2003, p. 341; according to Bandura, 1986) in which a teacher actively presents what a pupil should do in order to solve a problem actively and successfully. This technique requires a thorough preparation for the teacher, a good understanding of the nature of the problem which he sets forth to pupils, as well as practice before demonstration in the class in order to make a model as successful as possible.

This paper presents a practical example which took place on 22nd and 23rd February in a computer classroom in Grabrik Primary School in Karlovac, with

two classes of the 3rd graders (46 students altogether), over one school period (45 minutes).

A VIRTUAL WALK AROUND THE CITY MUSEUM

As a part of the science teaching unit *The history of Karlovac*, the third graders at Grabrik Primary School in Karlovac revised their knowledge of cultural-historical monuments and took a “virtual walk” around the departments of the City Museum which they had planned to visit.

The aims of the teaching topic:

- *Preparing the visit to the City Museum*
- Introduction to the City Museum departments
- Research skills development
- Collecting the information during the research stage
- Practising the presentation of research results
- Improvement of team and group work skills
- Improvement and practice of oral presentation
- Building the pupils’ self-esteem


The stages of the teaching process:

1. Introduction
2. Lead-in
3. Lesson development
 - 3.1. Task assignment
 - 3.2. Group formation
 - 3.3. Computer science teacher’s demonstration
 - 3.4. A virtual tour of the museum
4. Presentation
 - 4.1. Practical demonstration of presentation technique (the teacher’s report on her task)
 - 4.2. Students’ reports on their tasks
5. Homework assignment
6. Filling-in of evaluation sheets

In the introductory part of the lesson the teacher and pupils revised the knowledge they have gained about cultural-historical monuments, institutions where old artefacts are being kept, and then the City Museum was singled out as an institution which would be the object of research. After that she mentioned a walk for which pupils would not need scarves, jackets, sneakers – a virtual walk. The pupils easily explained the meaning of the word ‘virtual’ as something unreal, simulated. The teacher emphasized where the walk was going to take place – the City Museum and asked the pupils to be attentive and hard-working in order to make the walk interesting and useful.

After that, a task assignment followed, i.e. *research sheets* were chosen by pupils. The number of sheets equalled the number of pupils in the class, allocated to various museum departments. Each pupil had to read the task carefully, especially the name of a museum department in which his ‘virtual walk’ was going to take place.

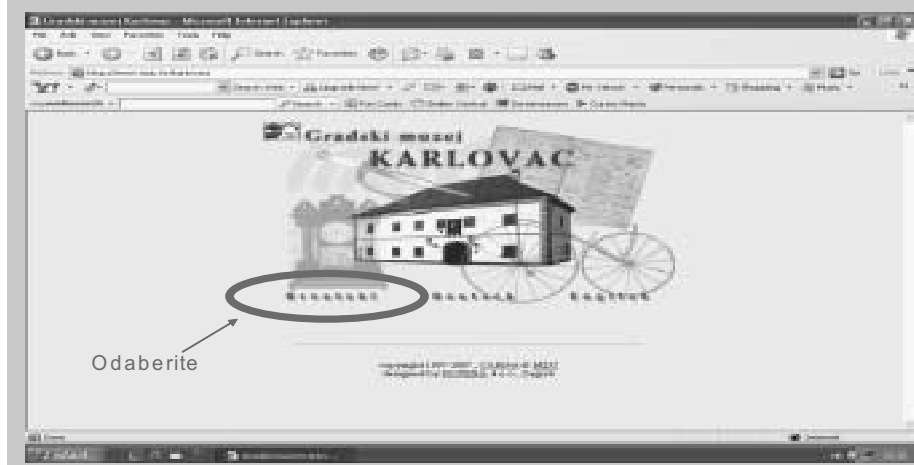
Research sheet layout

Name and surname:	
Museum department: CULTURAL –HISTORY DEPARTMENT	
	
Artefact:	
Dating from:	
Who made the chair?	

The pupils formed groups corresponding to the museum departments which they have chosen as their task and there were 6 groups: *archaeological, ethnographic, cultural-historical, historical, natural science group, ‘Vjekoslav Karas’ art gallery*. Pupils in each group introduced themselves to the others saying the name of their department. We concluded that museum consisted of departments. The groups sat at computers, two pupils sharing one computer.

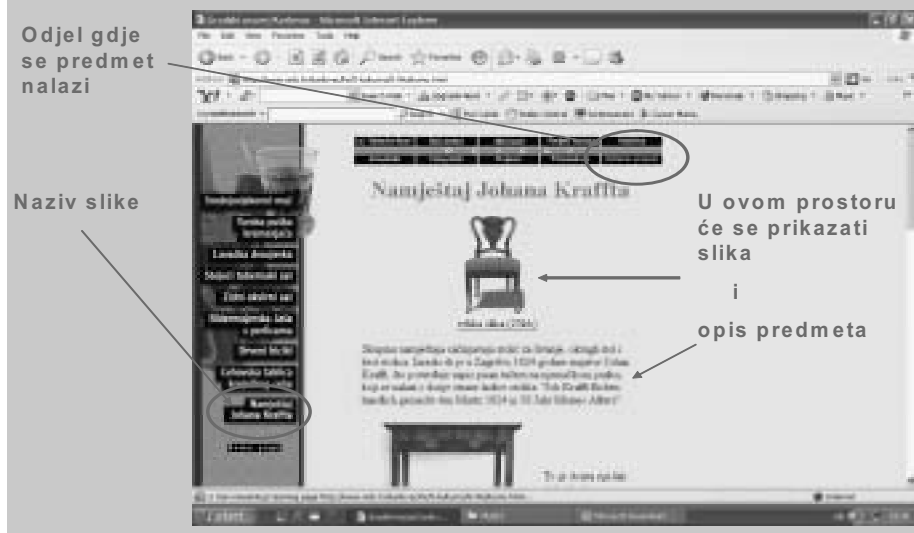
The computer science teacher used the projection screen to show each step in the process of solving the tasks on their sheets. The aim was to find a picture of and collect the data about the object shown on the research sheet, and then to write the data on research sheets.

Izgled stranice muzeja www.mdc.hr/karlovac



LAYOUT OF MUSEUM WEBPAGE (www.mdc.hr/karlovac)
Choose

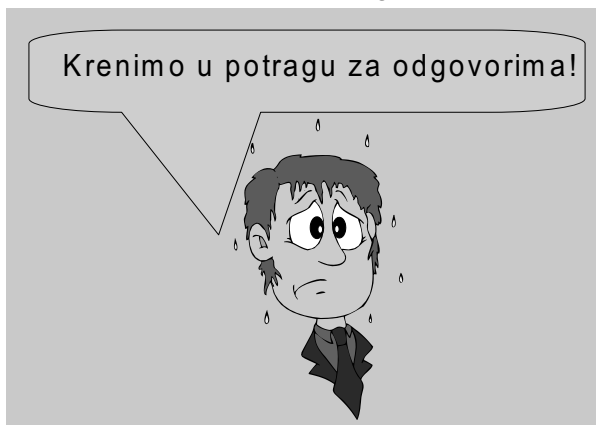
Izgled stranice na kojoj tražimo podatke o slici



LAYOUT OF THE PAGE ON WHICH WE SEARCH FOR INFORMATION
ABOUT THE PICTURE

Department where the object is kept Here the picture and description of the
picture artefact will appear

After her demonstration, the teacher invited the pupils to do their research. On the projection screen there was suddenly a picture and the teacher's comment: Are we going to sweat as much while searching for the answers?



LET'S START SEARCHING FOR THE ANSWERS!

The pupils switched on the monitors on which the museum webpage had already been opened and started their research. When a pupil finished his task, he was supposed to help his colleague from the department if he needed any help, or to "take a walk" around other museum departments and think of a few sentences about the artefact they have done research on. The teachers were monitoring the pupils, making sure that everybody would complete the task successfully.

Presentations followed. The teacher was the first one in order to demonstrate how to present the information properly. The computer science teacher used Power Point presentation on the projection screen to show the artefact that the teacher was doing research on.



When the artefact was shown on the screen, the teacher presented the information she had found, paying special attention to clear articulation and word stress:

I found this artefact in the *archaeological department* of the City Museum. Its title is *A Bottle from Vrlovka* dating from *2500 BC*. It was found in a *cave near Kamanje, Ozalj*.

After her report, information about the artefact appeared on the projection screen and everyone could check whether the presented information was correct or not. The teacher's information was compared to the information on the screen. If it was correct, the teacher was applauded. If it was not correct, she would have to make another presentation with additional information. That is the way to applaud every presenter.

Bočica iz Vrlovke

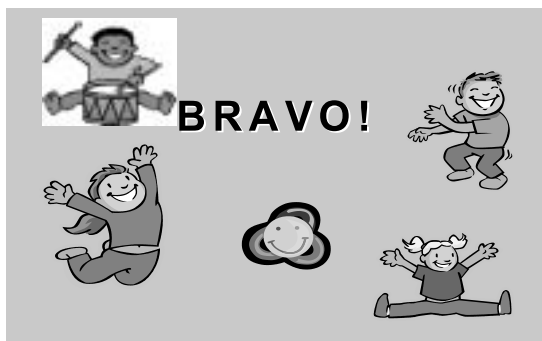


- **Potpuno sačuvana** kulna svečka u obliku bikonične bočice. Ukrašena je bijelim inkrustiranim ukrasom.
- **Datacija:** oko 2500. godine prije Krista - Lasinjska kultura.
- **Visina:** 9 cm.
- **Nalazište:** spilja Vrlovka kod Kamanja blizu Ozlja.

A Bottle from Vrlovka

- Completely preserved biconical bottle. Decorated with white encrusted pattern.
- **Dating** from 2500 BC – Lasinje culture
- **Height:** 9 cm
- **Site:** found at Vrlovka cave near Kamanje, Ozalj

So, the artefacts were presented one by one. Each student presented his artefact. Everyone had a chance to speak and control the presented information. In the end they were rewarded with a great ...



Pupils had to glue the research sheets into their notebooks.

On the homework assignment sheet the pupils were supposed to write down the answers.

Homework assignment sheet

1. What is a museum? _____
2. What is kept in it? _____
3. How do museum employees get the artefacts? _____

4. What do museum artefacts bear witness to? _____

5. Say how you reported on the artefact you had done research on?

6. What was the most interesting artefact to you? Why?

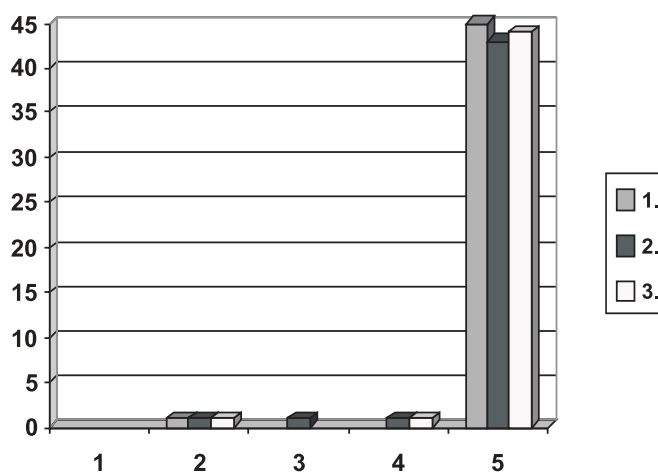
7. Draw an artefact that somebody else had done research on, but you liked very much!

Filling-in of evaluation sheets followed.

1. Circle the mark you would give for work during the previous lesson! 1 2 3 4 5
2. Circle the mark which shows how you felt then. 1 2 3 4 5
3. Circle the mark which shows how interesting it was to you to work in this way. 1 2 3 4 5
4. Write whatever you would like to write (comment, appraisal, advice, wish, criticism...)

What did the pupils say?

N=46	Grades					
	1	2	3	4	5	
1	0	1	0	0	45	
2	0	1	1	1	43	
3	0	1	0	1	42	



Comments:

- Bravo! You have done your job really well.
- Thanks, it was great.
- It was fun!

- I would like you to continue in the same way.
- Thank you for such an interesting lesson.
- I would like to do this again.
- I would like to have a chain like that.
- It was interesting because I have found out about many interesting things.
- Bravo

CONCLUSION

E-learning develops communicative skills, independent learning, managing new situations, search for and application of information, team work skills and information exchange.

In order to implement e-learning, some requirements have to be met, such as material requirements like computers with the Internet connection, or computer classroom. Equally important is the need to offer teachers additional courses in computers to make them competent to employ e-learning technique. Without teachers there is no e-learning. The teacher is a major link between a pupil and his future knowledge. Computers are merely tools which would make this link more efficient, knowledge acquisition more interesting and development of social skills necessary for future more successful.

Those who are expected to educate and raise future leaders of social changes must have proper working conditions and they must be given an opportunity to accept social changes without fear, which is possible only through development of competences necessary for that kind of work.

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