



International Journal of Multidisciplinary Research and Growth Evaluation



International Journal of Multidisciplinary Research and Growth Evaluation

ISSN: 2582-7138

Received: 30-07-2021; Accepted: 16-08-2021

www.allmultidisciplinaryjournal.com

Volume 2; Issue 4; July-August 2021; Page No. 863-866

Scenario of using Movie Maker, in the service of the 4th didactic module "multimedia applications in our lives", of the course "Introduction to the Principles of Computer Science"

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Abstract

In this scenario, students will work with environments that utilize multimedia building blocks such as video editing, audio, and audio synthesis. A popular video editing and creation program is Movie maker. Students are introduced to the critical discussion and organization and expression of

views by stimulating a topic that concerns their time. Finally, they are given the right equipment so that they can express by creating a film not only the "recording" of their personal photos and periods of their lives but also their views on issues of their time.

Keywords: Video, image, sound, audio composition

Introduction

This activity uses a didactic scenario that aims to introduce students to the basic concepts and techniques related to video editing, as well as to introduce them to a video creation software through a video creation and editing software, the «Movie Maker». Movie Maker was chosen among many software for the development and editing of video creation mainly because it is very simple to use without special computing power requirements. The proposed scenario concerns the teaching of the course "Introduction to the Principles of Computer Science" of the A' and B' class of the Vocational High School, with, preferably, a basic knowledge of video and audio editing ^[1].

According to the present curricula in Informatics this didactic scenario is primarily intended for the laboratory course "Multimedia Applications" of the 3rd grade of the Vocational High School. For the most complete and effective processing it is suggested to be taught after the video and audio processing courses. It can also be taught to students of the General Lyceum in the course "Introduction to the Principles of Computer Science", but also to students of A' and B' class of the Vocational Lyceum, to any Orientation Group within the course "Computer Applications". In this case, some adjustments to the structure of the goals and the distribution of time would be useful. This scenario is involved in fields such as Informatics, Sociology, Learning Theories, Directing, Humanities with critical analysis on issues related to the digital age and Research ^[1].

Finally, it presupposes knowledge of students such as:

- Search of images and audio with a search engine,
- Comprehension of text in English,
- Translate text through a website that provides English translation,
- Basic elements of Movie Maker environment,
- Upload files to YouTube ^[2].

Description of educational scenario

The title of this scenario was "Digital technological developments with Movie Maker" and was implemented within the course "Introduction to the Principles of Computer Science" of the 2nd Grade of Vocational High School. The estimated duration for the implementation of this course was 2 teaching hours and the course took place in the school computer lab. The students worked both individually on each computer (to complete the Worksheet activities) and in groups of two. The steps for the creation of the educational scenario that were set from the beginning were a) the study - discussion about the changes of the young people of the digital age, b) the creation of a scenario for the expression of views and the collection of appropriate material for the creation of a film, c) the creation of a film and d) the posting of the film on the internet ^[3].

The purpose of the scenario is for students to use the environment of Movie Maker and to cultivate the synthetic ability to present conclusions and reflections using a scientific publication.

At the level of knowledge: The trainees search, collect and organize appropriate material (for the specific scenario) from the internet in the form of an image.

At the skill level: The trainees create videos of a specific scenario with Windows Movie Maker utilizing the structural elements of the multimedia, post videos in the space they use daily (youtube) taking into account their security. Also with the design they create a simple video.

At the level of attitudes: The trainees express their views in the form of a scenario on a topic of their time, reflect on the basic concepts and techniques of video, feel that creating video requires patience and perseverance but it is also something that can be achieved, they are encouraged to engage in video creation and handle video creation programs with ease ^[4].

Required logistical infrastructure

The implementation of this scenario required a computer lab with internet access to be able to search for images on the internet, Windows Movie Maker (usually already installed with windows) installed to create the movie, and a microphone and speakers (or headset) per PC. It was suggested that they have a video projector in order to solve any questions that may arise about the Movie Maker environment ^[5].

The following teaching material was used

- Article published on young people in the digital age,
- Small (one page) Google search guide,
- Small manual for the basics of Movie Maker (two pages),
- Three page activity sheet,
- Evaluation sheet,
- Teacher observation sheet.

The reflection made it possible to redefine the timeline of the scenario and to anticipate further difficulties.

Cognitive areas involved

According to the present curricula in Informatics this didactic scenario is primarily intended for the laboratory course "Multimedia Applications" of the 3rd grade of the Vocational High School. For the most complete and effective processing it is suggested to be taught after the courses of image and sound processing. It can also be taught to students of the General Lyceum in the course "Introduction to the Principles of Computer Science", but also to students of the A' and B' class of the Vocational Lyceum, in any Orientation Group within the course "Informatics Applications". In this case, some adjustments to the structure of the goals and the distribution of time would be useful. This scenario is involved in areas such as Informatics, Sociology, Learning Theories, Directing, Humanities with critical analysis on issues related to the digital age and Research ^[6].

Prerequisite knowledge of students

- Search images and audio with a search engine,
- Comprehension of text in English,
- Translate text through a website that provides English translation,

- Basic elements of Movie Maker environment,
- Post a file on YouTube.

Objectives

The purpose of the scenario is for students to make use of the Movie Maker environment and to cultivate the synthetic ability to present conclusions and reflections using a scientific publication.

At the level of knowledge, the trainees: search, collect and organize appropriate material (for the specific scenario) from the internet in the form of an image.

At the skill level, learners: Create scenario-specific videos with Windows Movie Maker using multimedia building blocks. They post videos on the site they use daily (youtube) taking into account their safety. They design and create a simple video.

At the level of attitudes, the trainees will be able to

- Express their views in the form of a scenario on a topic of their time,
- Reflect on the basic concepts and techniques of video,
- Feel that making a video requires patience and perseverance, but it is also something that can be achieved,
- Be encouraged to get involved in video creation
- Handle video creation programs with ease.

Additional Teaching material used as an aid

- Article published on young people in the digital age,
- Small Google One-Page Search Guide,
- Small guide to the basics of Movie Maker (two pages),
- Three page activity sheet,
- Evaluation sheet,
- Teacher observation sheet.

Duration

The estimated duration for the implementation of this course is 2 teaching hours

Content analysis

The main knowledge that the students will acquire concerns the collection and organization of the structural elements of the multimedia as well as the use of software for the creation of a film. Posting student groups' films on the internet is new knowledge, but discussing the dangers of any publication on the World Wide Web is expected to improve their knowledge of protecting themselves from the Internet.

The most critical points of the above knowledge are the search for appropriate audio-visual material for the creation of a film according to the scenario that has emerged from the collaborative activity of creating a script, but also the protection from the internet that will be the trigger for the next lesson, which will focus on internet security ^[2].

Alternative perceptions of students

It is expected to raise concerns about how a video is created. It is not only done with the video camera but also with consecutive images. In addition, their daily involvement with YouTube for downloading files and posting daily moments carries risks that they do not realize! A relevant video triggers the concern and the vigilance for their safety from posting videos on the internet ^[4].

Correlation with the Curriculum

The present scenario is part of the elective course "Introduction to the Principles of Computer Science" and

according to Government Gazette 401 / 19-4-1999, in the 4th section "multimedia applications in our lives". Particularly:

Table 1: Course content

Contents	Knowledge acquired by the student	Skills acquired by the student	Instructions - Remarks
Uses of multimedia applications	<ul style="list-style-type: none"> Reflect on the implications of the global dissemination of information in the form of multimedia. Gain a clear picture of the areas of use and effectiveness of multimedia applications. 	<ul style="list-style-type: none"> To discuss with students about current - recent developments in multimedia technology, its applications and the effects and changes it causes in various areas of human activity. To discuss the possibilities they offer in the learning process. To assign relevant tasks. 	

Table 2: Course content of multimedia applications

Class	B' Vocational High School
Sector	General Education
Speciality	Informatics
Lesson	25/1/2020
Didactic Unit	Chapter 4
Didactic hours	2

Class organization

The lesson will take place in the school computer lab. Students will work both individually on each computer (to complete the Worksheet activities) and in groups of two.

Teacher Role

- The teacher determines the composition of the groups,
- Presents the modern collaborative environment that will be used for standard teaching,
- Summarizes the basic concepts of number systems,
- Describes the task assigned to students,
- Asks each group to be divided into subgroups of two students,
- Assists students with possible questions on topics during the standard teaching.

Limitations

The teacher takes care to define groups of the same capacity, to encourage communication between group members.

Role of Students

Students are divided into groups of four. Each group will convert numbers from the decimal system to binary.

Role of a group of students

The way the team works is described below.

Role of members of each group. Students who form a group take on specific roles. They work in pairs on the same computer. One student operates the computer while the other supervises the work and intervenes constantly. They alternate between these roles at regular intervals. Each of the two pairs of students in a group undertakes a part of the design.

Limitations

The student who operates the computer each time, has increased responsibilities in relation to the other, so that he can provide solutions to any problems that arise within the group [6].

Didactic approaches and strategies

The teacher introduces the environment to the students initially as an extension of the painting program and not only, that they have been taught in high school. This scenario enhances the possibility of directing and / or aesthetic education for the presentation of opinions and concerns. Students come in contact with a valid and credible article and realize the meaning of information as a result of research. Finally, students' reflection based on the areas of change of young people in the digital age promotes their personal development in terms of:

- Knowledge of English since the article is in English,
- The ability to translate online using appropriate online tools,
- The provision of knowledge through the internet that should be reliable and valid (eg international conference article with reviewers or journals),
- Expressing their views and organizing their thinking,
- The creation of digitized alternative material,
- Posting on the internet after content evaluation.

In the present teaching scenario the students are actively involved experimenting with the structural elements of the multimedia. During the execution of the scenario it is estimated that there will be no significant problems in relation to the operating speed of the PC - Software. Therefore, there will be no software startup problems or glitches that will affect the course (teaching noise). Also, the teaching contract is not expected to be overturned because the activity sheet is simple. Thus, the students are led step by step to the smooth collection of the structural elements of the film and to the creation of a film with Movie Maker after collecting appropriate material that they will include in their film, which, however, they have chosen after critical discussion. It is expected that problems and difficulties will be created in the creation of a scenario that will express their views and not by simply stitching images since they are not used to this kind of composition of opinions. Dealing with this type of teaching noise will be overcome with the help of the teacher although the number of students makes it difficult to solve these problems.

The didactic approach of Informatics and its application in the educational process follows a factual approach which is also referred to as a realistic approach since Informatics continues to be an autonomous subject while organizing the gradual application of computer and network technologies as a means of teaching, research and learning throughout the

spectrum of the Curriculum. The teaching approach adopts the basic ideas of Piaget and Papert: "The teacher must create appropriate conditions for students to build their knowledge". The scenario is based on the learning theory of constructivism because the student builds his knowledge by detecting, exploring, interacting and creating a scenario in a digitized form (film).

According to the curricula, once the timelessness and value of the knowledge provided is questionable, it becomes necessary to search for skills acquired through the teaching of specific subjects. For this reason, the course "Introduction to the Principles of Computer Science" is organized based on the approach of teaching methodologies and organizing information and development of project type work and not learning specific software packages. Thus, the possibility of acquiring timeless skills corresponding to other courses of the Curriculum is successfully supported. With this scenario, it is possible for the teacher, from a body of knowledge, to become a guide and coordinator of the students' learning activities. The computer lab is for the student a place of study (with the study of a valid scientific publication), active participation (with discussion, critical analysis and project creation), and collaboration (with both the teacher and the other classmates), in order to encourage interactive learning, self-action and the research approach to knowledge [2].

Scenario implementation stages

The teaching scenario was implemented as follows:

- a. Study - discussion on the changes of young people in the digital age,
- b. Creation of a scenario for the expression of views and the collection of appropriate material for the creation of a film,
- c. Film making,
- d. Posting the film on the internet.

Includes

- Diversity by enhancing many different digitized formats,
- Personalization by facilitating students to express their views through the introduction of photographs and music, recording voices, and graphic representations,
- Possibility of revealing & exploratory learning, enhancing students' interest in laboratory practice and
- Developing additional skills and awareness of the dangers posed by posting material online.

In the context of multiple frames of presentation or representation, students are invited to

- a. Create a scenario that expresses their views,
- b. Make a film,
- c. Capture their thoughts and conclusions in a digitized form based on a scenario,
- d. Return and evaluate the steps they have taken and their way of thinking.

This teaching scenario focuses on the 4th teaching unit "multimedia applications in our lives" of the course "Introduction to the Principles of Computer Science". In particular, students will use the basic tools of Movie Maker environment in order to express the results of discussion and reflection on the changes of young people in the digital age based on their experiences and the conclusions of a research article (Prensky 2004).

Conclusions

Upon completion of the implementation, the students were able to express their views in the form of a scenario on a topic of their time, to search, collect and organize the appropriate material (for this scenario) from the Internet in the form of image and sound. They created a video of a specific scenario with Windows Movie Maker utilizing the building blocks of the multimedia and posted it on the space they use daily (youtube) taking into account their security.

The interest of their students was aroused by the screening of films related to the central idea of the film but also the scientific validity of an article that concerned them. Creating a script caused a negative reaction initially which later turned into a creative project. With the constant urge that through Windows Movie Maker they will be able to create their own movies with photos of moments (school, family, vacation, holidays) and the integration of photos in a scenario, the introduction to the role of director / screenwriter began.

The cooperation between among the students was exemplary throughout the teaching without problems, since the roles within the group alternated harmoniously.

The design clearly helped in the implementation and the effort of keeping the schedule but also the confrontation of the difficulties. The implementation identified the impossibility of the design as well as any difficulties.

References

1. Bruner JS. The art of discovery, Harvard Educational Review, 1961.
2. Eick CJ, Reed CJ. What Makes an Inquiry Oriented Science Teacher? The Influence of Learning Histories on Student Teacher Role Identity and Practice. Science Teacher Education, 2002.
3. Brown M. Experimental Animation Techniques. Papert, S.A. (1990). Constructionist learning. In Idit Harel (ed), Cambridge, MA: MIT Media Laboratory, 2010.
4. Piaget J. The construction of reality in the child. New York: Ballantine Books, 1954.
5. Prensky M. Digital game-based learning. McGraw-Hill, 2001.
6. Suchman JR. Developing Inquiry (Inquiry Development Program), Science Research Associates, Chicago, 1966.