EUROPEAN JOURNAL OF LIFE SAFETY AND STABILITY (EJLSS)
ISSN2660-9630
www.ejlss.indexedresearch.org Volume 19, July-2022 ||

Methods of Using Media Technologies in Organizing Laboratory Trainings in Zoology Sciences

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Abstract: *This article has been about methods of using media technologies in organizing laboratory trainings in zoology sciences. The concept of methods is widely used in scientific circles in our country. In addition, Uzbek alternatives such as method and style, teaching way are used side by side with it. A method is a method used to achieve a goal. In fact, we use it in every field, every second, in our daily life. The use of media technologies as a method in laboratory training in the teaching of zoology is a means of acquiring new knowledge in the field of science. Methods are widely understood as a collection of countless methods used in teaching processes. The use of various forms of media technologies as a method in zoology laboratory activities is to achieve creative thinking through the analysis of various processes.*

Keywords: *Zoology, method, media technology, laboratory training, science, authentic environment, animals life, analyze, skill, ability.*

Date of Submission: 01-7-2022 ***Date of Acceptance: 01-8-2022***

INTRODUCTION

Amalgamating several disciplines and using many techniques, zoology has developed slowly over the centuries since prehistory. Historically, the first scientific reflections on zoology that were transmitted by Aristotle. Since that time, numerous attempts have been made to classify animal species, and these have been revised frequently.

The boundary between zoology, the study of animals, and botany, the study of plants has been and remains a matter of controversy. Some living beings thought to be plants turned out to be animals. For some others as early as the dawn of the 21st century, have been discussed. For these untypical living beings, the affiliation to a particular science has been changed due to technical or scientific advances and discoveries (including microscopy or DNA analysis).

Zoology is the science of the study of animals, which is a branch of biology. Zoology studies scientific classification or taxonomy, embryology, entomology, herpetology, mammalian biology, physiology, anatomy, ecology, behavioral biology or ethology, animal distribution, evolution, and many other countless fields. 16th Swiss naturalist Konrad Gessner is highly respected for his book Historiae animalium as it marked the beginning of modern zoology. However, after Aristotle and Galen, the field of zoology developed as separate from biology. The work of Carl Linnaeus was instrumental in correctly classifying animals into prominent kingdoms and types. The blockbuster presentation of Charles Darwin's On the Origin of Species in 1859 established the fields of paleontology and embryology as it provided new opportunities for the study of everything related to

biology and zoology. According to the mainstream understanding of zoology, animals are organisms that can move around in the physical environment, and this ability to move in itself has attracted the attention of scientists through behavioral biology. No one could ever understand the natural world with feeling and interest without studying animals.

Since the field of zoology is so spacious, most learners take training that lets them specialize in a particular way of the science.

Zoology skills contain an ability to think critically, or use sound reasoning, to draw conclusions from test results and scientific observations. They also need to find the best solutions to disease, habitat loss and other wildlife threats. They must apply logic to find the strengths and weaknesses in ideas. They must combine different sources of information to draw conclusions and evaluate the costs and benefits of an action.

Learners of Zoology need to concentrate while they conduct studies, and they have to think of new ideas for solving old problems. They call on deductive reasoning, or the ability to apply general rules to specific problems, to find sensible answers. They also use inductive reasoning, or the ability to combine pieces of information to draw general conclusions.

The use of high-level media technology tools in educating the younger generation for the formation of zoological knowledge and skills gives effective results.

In zoology, media technology as a means of communication refers to all the tools, channels or forms of information transfer that learners use to carry out the communication process by sharing knowledge about science. Nowadays, highly qualified teachers are effectively using media technology tools as a method tool.

LITERATURE REVIEW

Media technologies enrich the educational process, make learning more effective, involve in the process of perceiving educational information most of the emotional components of the student.

Today, media technologies are one of the promising directions of informatization of the educational process. There are prospects for the successful use of modern information technologies in education for zoology teachers in the improvement of software and methodical support, material and technical base, as well as compulsory professional development.

Media technology is the interaction of visual and audio effects under the control of interactive software using modern technical and software tools, which combine text, sound, graphics, photos, and videos in one digital image.

According to G.Kirmayer, the percentage of material learned when using interactive media technologies in the educational process can be up to 75%. This may be a clearly optimistic assessment, but it was known long before the advent of computers that the effectiveness of mastering educational material was known when visual and auditory components were involved in the process of perception. Multimedia technologies have transformed educational visualization from static to dynamic, that is, it became possible to observe the learning processes over time. Previously, only educational television had this capability, but this field of view lacks the aspect of interactivity. Modeling processes that develop over time, interactively changing the parameters of these processes is a very important didactic advantage of multimedia educational systems. In addition, if many educational goals are related to the fact that it is not possible to show the studied phenomena in the classroom, in this case multimedia tools are the only possible today.

According to Bransford et al., media technologies can help learners and teachers develop the competencies and abilities needed for the 21st century education. These authors indicate that the technologies' interactivity facilitates the creation of environments, in which students can "learn by

doing", receive feedback regarding their activities, continuously improve their knowledge, and understand their difficulties.

Several scientific researchers have analyzed the ways by which ICT can be applied in the field of education. These contain, Braten and Stromso (2006), Chuang and Tsai (2005), González-Gómez et al. (2012), Hung et al. (2010), Jesus et al. (2014), Kao et al. (2011), Kerr et al. (2006), Lee and Tsai (2011), Maor and Fraser (2005), and Won et al. (2015).

These researchers explored the perceptions of students and teachers regarding multimedia programs, interactive games, internet-based learning environments, and social media technologies, among others. They also assessed new instruments especially questionnaires in assessing the users' opinions about the learning processes mediated by technology.

According to Nascimento and Garcia, media technology can also help teachers motivate their students in the process of learning zoology, a subject in which they show a lack of interest. The meaningful learning of zoology presupposes the students' active attendance, their correlation, and co-operation.

Scientist Chronaki said that, the learning strategies supported by computer based learning environments can be described as active, reflective, mindful, selforganizing, and socially oriented.

RESULT AND DISCUSSION

Requirements for using media technologies in zoology laboratory trainings are analyzed below:

1) During the organization of laboratory lessons using multimedia presentations are held in computer classrooms using multimedia projectors, resident references, automated learning systems, video recordings of various programs, etc.;
2) a separate computer should be allocated to each student during practical training, in which case it is appropriate to create a personal folder with the class code and the student's last name;
3) an individual approach, including individualized training programs, a bank of multi-level tasks (for practical training and laboratory work) should be widely used;
4) it is desirable to conduct a significant part of training in the form of business games; as tasks, multifaceted and non-set tasks in real life should be given, especially those that graduates will encounter in their professional activities;
5) the project method should be widely used, within which the principles of consistency and continuity should be observed; therefore, one global task must be consistently performed, completed and expanded in all practical (laboratory) and computational and graphic work, embodied in a harmonious integrated system;
6) it is necessary to ensure the possibility of parallel and concentric study of the main sections of the program; it allows students to learn more and more about each section as they master the course, without losing the integrity of the presentation of the entire material;
7) it is necessary to rely on the following interrelated principles: knowledge motivation; multifaceted perception; "input" system-information analysis;
8) It is necessary to use the problem-based teaching method more widely, to ensure the development of real programs (documents, tables, databases) that can be used by students in the educational process.

Results show that, the use of media technologies as a method in zoology laboratory training has the following advantages over traditional education:

- Allows the use of color graphics, animation, sound, hypertext;
- Allows constant updating;
- It has low costs for publication and reproduction;
- Allows you to host interactive web elements such as quizzes or workbook;
- Allows you to copy and transfer parts for quotation;
- Due to the large number of hyperlinks, it allows the transition of the material to be non-linear;
- Hyperlinks to additional literature in e-libraries or educational sites.

Media technologies allow zoology learners to combine verbal and visual-sensory information, which helps motivate students and create an authentic environment for learning.

There some types of media technology types which used a method:

1. Tablet PCs
2. iPad programs
3. Table scanner
4. multimedia projector
5. MacBook and etc.

Nowadays in foreign countries natural sciences teachers will use several laboratory tools for example: Tecnoteca. Tecnoteca is an innovative laboratory that holds many types of special classes designed to motivate the students. This educational environment is also a conducive place for digital inclusion as it provides opportunities for students from different economic backgrounds to become familiar with the new technologies.

CONCLUSION

Organizing lessons in the classroom using media technologies in zoology laboratory activities allows saving time by using very simple tools available to any student, thus enabling the presentation of educational material. During the lesson, students themselves can create a colorful learning and playing environment, visualized to the limit, which will literally have a revolutionary effect on the perception of the science of "Zoology". Undoubtedly, media technologies enrich the educational process, make the educational process more effective, and involve most of the emotional components of the student in the process of perceiving educational information.

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