



USE THE GRAP TECHNOLOGY IN TEACHING PHYSIOLOGY COURSES AT THE UNIVERSITY OF CULTURAL, SPORTS AND TOURISM TO MEET THE CURRENT INTERNATIONAL INTEGRATING NEEDS

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ABSTRACT

The innovation of teaching methods in university teaching is an inevitable trend of the education industry in our country and the world. Transforming the achievements of much different science and technology into teaching is an effective problem that creates strength for modern teaching technology. Notably, the transformation of achievements of mathematics and information technology into teaching. Grasping the innovative trends in teaching methods in the world and the country, the author would like to propose the Grap method in teaching which is considered to be effective for the physiology courses taught at the University. Thanh Hoa Culture, Sports and Tourism are suitable for social needs in the current international integration conditions.

KEYWORDS

Methods, teaching methods, physiology, social needs, active teaching methods.

Introduction

Thanh Hoa University of Culture, Sports and Tourism was established 10 years ago (July 22, 2011 - July 22, 2021), since its establishment, the school has always focused on professional development and improvement. Pedagogical skills for young lecturers. Regularly send lecturers to participate in pedagogical training courses, all classroom lecturers have university teaching certificates... regularly change to perfect the curriculum framework, change detailed outlines subjects, changing exam questions and answers every 2 years. Conduct professional activities to provide effective teaching methods or methods suitable for each student of the disciplines. The school improves the quality of all aspects, focusing on improving the quality of training, in which the innovation of teaching methods is a key step to ensure the teaching process of self-assessment and towards external assessment this year. Thanks to the above investment mechanisms and policies, the development of teaching modules has achieved initial achievements in terms of content and teaching methods, including the physiology course. The professional development for these modules is always carried out regularly and continuously and is the vital task of the lecturers to keep up with the development of the school and the integration needs of today's society. One of the important and urgent contents for the development of the course is the need to innovate teaching methods to create an active and democratic position for learners while meeting the new needs of today. The issue of innovating what is in the teaching method to suit the students at the school needs to be carefully considered to achieve high efficiency even in the early stages of school development. The article is as a presentation, the personal support of a lecturer who is directly teaching to students of Preschool Education and Sports, to provide physiological knowledge to meet the needs of students. Requirements of teaching, thereby improving the professional qualifications of students after graduation to meet the output standards.

I. Some problems of innovation in university teaching methods in our country today

In the current situation of extensive international integration and development in all aspects; The explosion of information caused by the revolution in science and technology requires that Vietnamese education need to be radically and comprehensively reformed. One of the important contents of the comprehensive reform of education is the innovation of higher education, which specifically for each lecturer is the innovation of teaching methods [1]. In higher education innovation, innovating teaching methods to create an active and democratic position for learners while meeting social needs, integration needs and international cooperation is an important task. teacher's most important [2] Regarding the current teaching trends, the following features can be mentioned:

1. According to Prof. Nguyen Ngoc Quang has mentioned 3 basic characteristics of the trend of innovation in teaching methods. + Innovating teaching methods in terms of objectives (MT), content (ND) and methods (PP), creating flexible, versatile and effective teaching systems. + The transformation of scientific and technical methods into teaching methods, through pedagogical handling. This is the promising world trend of creating new teaching systems and new teaching methods. + The systems approach has been penetrating education as an effective methodological tool. The innovation of teaching methods is always associated with and governed by the objectives, content and organizational form of teaching.

2. Some other authors, when it comes to teaching trends, also often revolve around the following issues: Student-centered, the method of "putting and solving problems". All of the above

trends focus on solving contemporary problems: Meeting the requirements of the labor market; equal education for all; quality productivity and efficiency.

To solve the above problems, the systematic approach is often used, which is the concretization of the dialectical cognitive method, which is the method used to study the object whose object is a complete system, a systematic whole. The system approach requires considering the research object as an integral system that dynamically develops, has a definite structure, and is transported by the interaction of the system's elements according to their own rules. Thus, when studying an object, it is necessary to apply system analysis to find out the structure and function of the system, thereby stating the integrity quality (ie nature) of the research object. The teaching process is a system consisting of many interacting elements, operating in the educational environment of the school and the socio-economic environment. It is a complex whole system. Therefore, recently many researchers have used the systems approach to discover its nature to create many new teaching systems in the optimal unification of many elements such as technology. teaching and learning are student-centered.

3. The trend of teaching innovation in terms of goals, content, and methods and means, and organizing flexible teaching systems operating according to new principles.

The specificity of this teaching method is that the teaching content is divided into many blocks of knowledge and using the knowledge Mondunization technology, this type of teaching ensures that each student can choose their appropriate learning process. Following their own abilities and conditions, thereby acquiring the knowledge of each part and the whole of a particular course.

According to knowledge module technology, knowledge is divided into large content arrays, in this large content is divided into smaller containers. Finally, the relationship between the contents to form a unified whole and its position in the training program is pointed out.

Currently, many countries in the world such as North America, Europe and Southeast Asia, including Vietnam, have used knowledge modularization technology in university teaching. The type of Knowledge Modularization applies as a credit training system and in the teaching method of each module.

4. Today, with the rapid development of science and technology, the rapid change of the market economy and strong international exchanges, it is necessary to design a flexible and flexible teaching system, easily adapt to the labor market and be effective. This teaching system is called the personalized teaching system or the Keller plan.

Fred S.Keller and his associates created it in the late sixties of the twentieth century. Since then, this teaching system has been strongly developed in Western countries and spread to the whole world. It has brought great achievements. The nature of this teaching system is "self-study - individualization - guided" and the main role of guidance here is played by the textbooks compiled according to the Module and other teaching means. The teacher will be optimally used in compiling documents, helping students learn and checking them when necessary. The main information contained in the material acquired by students by self-study will be the source of information. Lectures followed by self-study help in answering questions, summarizing and applying knowledge, stimulating learners to be more active and proactive on the way to conquering scientific truth.

In addition to implementing PP innovation based on innovating the teaching environment

and teaching methods, taking advantage of the strengths of each method and focusing on the coordination of methods, there is also a new and clearer approach that is: of scientific-technical methods into teaching methods through pedagogical processing: such as Grap, algorithm, module, simulation,...

5. The trend of student-centered teaching (teaching is student-centered). To say that teaching is student-centered, it must be understood that teaching is student-centered. The content of learner-centered teaching ideas can be concretized into basic attributes:

First, pay attention to the following aspects: existing experience and knowledge level, cognitive characteristics of learners and specific abilities and working conditions.

+ Second, find all different methods and forms to stimulate learners' interest in cognitive positivity

+ Third, find ways to make learners think for themselves, have the will to overcome difficulties, explore independent cognitive activities.

+ Fourth, to increase the personalization of learning activities, it is necessary to pay attention to applying new achievements of science - engineering and modern technology such as Module, Grap, ...

+ Fifth, in the assessment test, pay attention to the ability of learners to self-assess their results.

To implement learner-oriented teaching, it is required that MT, ND, PP, PT, training organization, etc., during the design and construction process, must be directed at learners to create the best conditions for them. Promote the potential to achieve productivity, quality and efficiency in the acquisition of scientific knowledge and personality formation, specifically:

+ MT focuses on practical skills to apply knowledge, ability to detect and solve problems.

+ PP uses active teaching methods, attaches importance to the self-study method.

In student-centered teaching, the active and creative role of learners is promoted, but the role of the teacher is not lowered, but on the contrary, has much higher requirements. Teachers must have deep professional qualifications, skilled pedagogical qualifications, creative and sensitive minds to be able to play the role of an initiator, helper, guide, motivator, and advisor in the teaching and learning activities. independent activities of learners, awakening potential capacity in learners, preparing them to integrate and participate in community development.

6. Technological trends in teaching (learning technology is used as educational technology in a broad sense).

In a broad sense, educational technology (CNGD) is understood as a coherent set of methods, techniques and techniques according to the goals pursued and related to the content of instruction and the interests of the students. Learner. For teachers, using an appropriate curriculum means knowing how to organize the learning process and ensure its success. Education (in a broad sense) has several characteristics:

+ The core ideology of the education industry is to create a sustainable process to ensure the implementation of the teaching environment.

+ Educational technology must be a system of elements of the teaching process that is closely organized, linked together into a unified whole, programmed when implemented, applicable to learners with the spirit of promoting initiative, active self-study, cooperation in group, class and collective activities; can be controlled to evaluate each stage and then synthesize to evaluate the whole process; technical means can be used as supporting parts that are organically attached to the stages of the teaching process, thus having high efficiency.

It can be said that education technology is a direction to improve teaching effectiveness, based on the basic concepts of Scientific organization of the teaching process; rational use of technical means of teaching, treating learners as active and creative subjects in carrying out the teaching process under the guidance, advisors and referees of the teachers.

Above are some of the main trends of modern teaching, which is also the trend of future education and is an important starting point for innovating teaching methods in universities.

II. Some advantages of the GRAP chemistry method in teaching physiology

Module Human Physiology is a specialized science that studies the functioning of cells, organs, and organ systems about each other and between them and the impact of the living environment. At the same time, we also study the influence of nurturing care (in the content of the child physiology module) or exercise training (in the exercise physiology module) on the change The structure and function of the organs in the body and the whole body through which the best care and nourishment and training measures are given. Although the human body physiology course is arranged into chapters, lessons and cross-sectional content, it contains a lot of logically related knowledge, so the acquisition of knowledge faces many difficulties for students. Therefore, it is recommended to use graphing in teaching, learners quickly acquire knowledge, easy to inculcate. Teach students how to organize to create learning maps in the minds of learners; promoting the process of self-study and self-research, especially training students' capacity to systematize knowledge and creativity.

In the lesson preparation stage, the lecturer relies on the content graph to set up the active graph. In the stage of lesson implementation, the lecturer uses the activity graph to organize for students to set up the content graph according to scientific logic. Human body physiology is usually anatomical knowledge, it often describes the shape and structure of organs and parts in the human body. These knowledge graphs are often tree-shaped or directed. At the vertices of the graph, students often present the structure in the directions that often show the effects of sports training of athletes, or taking care of children of preschool teachers... through these peaks and directions, students gradually acquire knowledge for teaching and child care in the future.

Example: Graph of the composition of the blood system:

Blood is a loose connective tissue made up of 2 main components: free cells or intercellular substances. Free cells make up 45% of blood volume including red blood cells, white blood cells and platelets. The intercellular substance makes up 55% of the blood volume, which is plasma. We help students remap the content and point out the function of the element wall, the influence of dietary care and nutritional components on each element in the system...

Next, the lecturer builds for students to use the graph in researching new documents. Depending on the goal, content and student audience, graphs can be used in teaching this course at different levels. The way to do this is that the lecturer explains the knowledge and makes graphs of the content of a lesson or a combination of knowledge through which students listen to the lecture and observe the graph and acquire knowledge.

For the stage of consolidating and perfecting knowledge. For example, to reinforce the chapter "digestive system" the teacher gives some graphs missing some vertices and asks students to fill in those missing vertices. To do this exercise, the teacher will ask some small prompting

questions. Through this teaching implementation, students not only deepen their knowledge of the Digestive system but also gain knowledge about the influence of diet in preschool and at home on children's digestion and vice versa. (for students majoring in Kindergarten) or the most effective mode of exercise and sports competition (for sports management). In addition, the above teaching is also the basis for Students to apply Graph and inculcate knowledge of human physiology after graduation, creating momentum for the lifelong learning process.

Some notes when using the method to teach the course of human physiology.

First: avoid formality in creating and using graphs. The use of graphs to solve the content of knowledge closely should be analyzed specifically so that students do not memorize machines, only see the external relationship but do not understand the inner nature of knowledge, do not see The relationship between knowledge components cannot be established, the relationship between known knowledge and new knowledge to be acquired cannot be established.

Second: Avoiding overuse of Graph means that we see the graph as a support tool for a large number of logical knowledge content that needs a system, we still use visual media such as pictures, models, specimens, experiment...to bring knowledge to students. And finally, use a combination of other teaching methods reasonably and effectively to bring real excitement when studying this module.

Incorporating teaching media appropriately into each active teaching method. The content of the human body physiology module covers anatomy - physiology and the interplay between body physiology and good care at preschool or sports training. To deal with the content that is not small, each lecturer must know how to proficiently use supporting tools such as projectors, movies, images, diagrams, tables, models, study cards... to choose the results. logically integrated into the solution of the lesson content, then each lesson is an interesting discovery instead of the boring, confusing lessons existing in the knowledge content of the course.

IN SUMMARY:

There is no universal method, but only teachers who love their job, work hard, seriously, with certain experiences on learners can create an effective teaching method. a active teaching method for learners. The individual's use of the above Grapification method in teaching the responsible part still has limitations, but I believe that with the enthusiasm of the teaching profession, the responsible way of working will find a way to combine effective methods. More effective in the not too distant future, helping the students of the 4.0 era to meet the current new needs.

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