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Technology for compiling supporting abstracts in the organization of students' independent work

Технология составления опорных конспектов в организации самостоятельной работы студентов

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Abstract

In the conditions of modern Russian reality, higher educational institutions are faced with the need to train a highly qualified specialist capable of active independent activity. Speaking about independence, we note that this is one of the main features of a modern student and a future specialist, since the labor market needs employees who are fully prepared to solve professional problems, able to join professional activities immediately after graduation from higher school. Based on this need, higher education institutions try to build a learning process that can form a competent graduate who creatively applies his knowledge in practice. To do this, various innovative methods and tools are introduced into educational process. The purpose of the article is to analyze the experience of implementing the technology of making reference notes in the organization of independent work of students. The article presents an overview of the concept of "reference abstract" and "independent work", reveals the importance of independent work and features of its organization using reference notes. The study shows the possibilities of reference notes in the process of training students of pedagogical universities. The study revealed the performance

Аннотация

В условиях современной российской действительности высшие образовательные учреждения столкнулись с необходимостью формирования высококвалифицированного специалиста, способного к активной самостоятельной деятельности. Говоря о самостоятельности, отметим, что это одна из главных черт современного студента и будущего специалиста, поскольку рынок труда нуждается в сотрудниках, полностью подготовленных к решению профессиональных задач, способных включиться в профессиональную деятельность сразу после выпуска из высшей школы. Опираясь на данную потребность, высшие учебные заведения стараются выстроить процесс обучения, способный сформировать компетентного выпускника, творчески применяющего свои знания на практике. Для этого в образовательный процесс внедряются различные инновационные методы и средства. Цель статьи заключается в анализе опыта реализации технологии составления опорных конспектов в организации самостоятельной работы студентов. В статье представлен обзор понятия «опорный конспект» и

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of control and experimental groups in a professional course, one of the fundamental in the training of students of pedagogical universities. Using the questionnaire, the students' assessment of the reference abstract technology influence on the independence was revealed. The implementation of the technology of reference notes in the organization of independent work of students allows you to expand the possibilities of training a modern highly qualified specialist.

Key Words: competencies, supporting synopsis, professional education, independent work, students.

Introduction

The modern stage of vocational education development has set new goals. In the context of competence-based approach, the main task of higher education institutions is the development of the competence of future specialists (Smirnova et al., 2019). New trends have appeared, among which one can note the continuity of education, humanization and technologicalization (Smirnova et al., 2018). These and other areas in educational process develop student's personality, his needs and characteristics (Ilyashenko et al., 2019a). Focusing on educational goals and these trends, higher education institutions strive to create an independent creative personality of students (Vaganova et al., 2019a).

The training of students of a pedagogical university, future teachers of vocational training in particular, is of a specific nature which has its own characteristics. Professional activities of teachers are associated with constant analysis of a large amount of data, selection of relevant material and its transfer to students. Therefore, there is a need to search for the most effective ways of memorizing and reproducing it. In this regard, we single out the technology of the reference abstract. The development and use of a supporting abstract allows students to

«самостоятельная работа», раскрыта значимость самостоятельной работы и особенности ее организации с использованием опорных конспектов. Проведенное исследование показывает возможности опорных конспектов в процессе подготовки студентов педагогического вуза. Исследование позволило выявить успеваемость контрольной и экспериментальной групп по профессиональной дисциплине, одной из основополагающих в подготовке студентов педагогического вуза. С помощью анкетирования была выявлена оценка студентами влияния технологии опорного конспекта на формирование самостоятельности. Реализация технологии опорных конспектов при организации самостоятельной работы студентов позволяет расширить возможности подготовки современного высококвалифицированного специалиста.

Ключевые слова: компетенции, опорный конспект, профессиональное образование, самостоятельная работа, студенты.

systematize the content, highlight the existing relationship between its elements and develop a holistic picture of the course being studied (Rakhimbayeva, et al 2019). Supporting notes contribute to the development of a systematic perception of the studied material, which in turn facilitates the process of self-study of the course (Klinkov et al., 2019), successful assimilation of the material and activation of the student's active position. Activation of independent work is a prerequisite for modern student preparation (Ivanova, et al 2019). This is due to changing teacher's role in the educational process. Its activities are advisory in nature. Teachers do not give ready-made knowledge, but contribute to student's need for his independent search. A modern teacher only guides the learning process, controls knowledge assimilation (Ilyashenko, et al 2019b). As the amount of data is constantly increasing and students need to process a large amount of content, teachers are introducing ways to make this process more interesting and intense (Nikonova, et al 2019b). Supporting abstracts systematize the studied content (Ihnatenko, et al 2018). Its use is advisable both when familiarizing with the course, and to consolidate the studied material.

In this article, we consider the possibilities of a supporting abstract in the organization of independent work of students. For students of pedagogical universities, whose future professional activity involves constant self-education, the study of new content in connection with its constant updating, the ability to present it in a condensed form is extremely important. This contributes to faster memorization and, as a result, in the future easier recovery in memory. The technology of supporting synopsis allows you to activate internal cognitive motives, encourages self-improvement. Mastering the technology of the supporting abstract allows the future teacher of vocational training to effectively prepare for classes with students of secondary vocational schools.

Theoretical framework

The vocational education system for a long time used the technology of supporting abstract (Vaskovskaya et al., 2018). However, with the change in the educational paradigm, the development of a competency-based approach, it began to acquire new aspects of implementation that need to be considered (Garnevska et al., 2018).

It is generally accepted that the development of the technology of supporting abstracts began with the research of the domestic scientist V.F. Shatalov who explained this concept as a model for the visualization of educational content in a compressed form.

Various researchers disclose the concept of a supporting abstract as a synoptic schematic image reflecting the main content of the material, as a visual diagram, the elements of which are interconnected, reflecting the data to be remembered (Andrienko, et al 2019a).

The supporting synopsis is also presented as a detailed plan, which contains diagrams, figures, names, main surnames, cause and effect relationships, which allows for a consistent and concise presentation of the answer in a particular topic (Kamenez et al., 2019). The means of presenting data in the abstract are drawings, graphs, drawings, diagrams, symbols, colors, and other techniques that facilitate the perception of material (Pichugina et al., 2019).

Features of the supporting abstract are presented in the works of T.S. Panin. A.A. Gin highlights the techniques for implementing a reference note in student preparation. D.G. Levites examines the steps involved in compiling supporting abstracts.

The reference summary provides the following features:

- organization and use of various educational material (Koshechko et al., 2018);
- freedom of choice of means and methods of completing educational tasks (Abramova et al., 2018);
- developing the ability to evaluate and analyze ways of organizing one's learning activities (Nikonova et al., 2019a);
- A visual representation of the material being studied (Vaganova et al., 2019c);
- development of reflection skills (Sedykh et al., 2019);
- focusing on particular, especially complex parts of the training material (Vaganova et al., 2019e).

The technology of the supporting abstract develops analytical, logical, critical thinking, develops course, the ability to work independently in a group and individually (Markova et al., 2018). There is no single definition of the concept of “supporting synopsis”, but common features can be identified from each definition we analyzed (Vaganova, et al 2019d). The supporting synopsis is a plan (Denysenko et al., 2018), containing a brief indevelopment about the phenomenon being studied, presented in the form of drawings, diagrams, drawings or graphs that help to structure indevelopment for faster memorization (Chirva et al., 2018).

Methodology

We conducted a study among students of a pedagogical university, which consists in identifying the performance of students in the professional course "Pedagogical Technologies". Among the participants were students studying in the field of training "Vocational training (by industry)", studying in the field of "Law and Law Enforcement" in the amount of 48 people (2 groups: 25 and 23 people). A questionnaire was also conducted in topic “The influence of the supporting abstract on the development of independence”. In the process of statistical calculation, a standard deviation was revealed, which made it possible to establish a change in the values with the introduction of supporting abstracts in the training of students. A comparison was made of the obtained indicators in the control and experimental groups. The calculation was carried out in 2018.

Results and discussion

We conducted a study to identify student performance. The grades for the exam in the course "Pedagogical technologies" were checked. The study involved 48 people (2 groups of students). The control group (25 people) and the experimental group (23 people). The control group, like the experimental group, was acquainted with the technology of the reference abstract. However, the technology was not fully implemented. It was used to study individual issues. In the experimental group, students actively used the supporting notes throughout the entire period of studying the course "Pedagogical technology."

For an initial acquaintance with the supporting synopsis and the process of its use by students, the teacher highlighted the rules. (Vaganova, et al 2019b). First of all, students needed to familiarize themselves with the text proposed for the abstract, to highlight the main terms and concepts (Vaganova, et al 2019f). Further, students had to determine the sequence of presentation of the material and identify the relationship of concepts, choose the form of the image of indevelopment in the abstract (Markova

et al., 2019). Next, they analyzed the work done for consistency of presentation and ease of perception, after which they presented the work to the teacher (Bulaeva et al., 2018). At the subsequent stages of studying the course, students made up supporting abstracts on their own.

Organization of independent work using supporting abstracts was based on the following provisions. Before starting work, students had to select a reference signal, a symbol that is the key in any topic. They further highlighted a pattern that could be easily reproduced in memory. The color was determined (for example, the main thing stood out in red, the secondary stood out in blue). The compilation of the compendium obeyed the principles: visibility, diversity, brevity (conciseness) - the compendium should not be overloaded with content.

After completing the study of the course "Pedagogical technologies" in the control and experimental groups, the grades received by students for the exam were calculated.

Figure 1 shows the ratio of estimates (%) in the control and experimental groups in the course "Pedagogical technology".

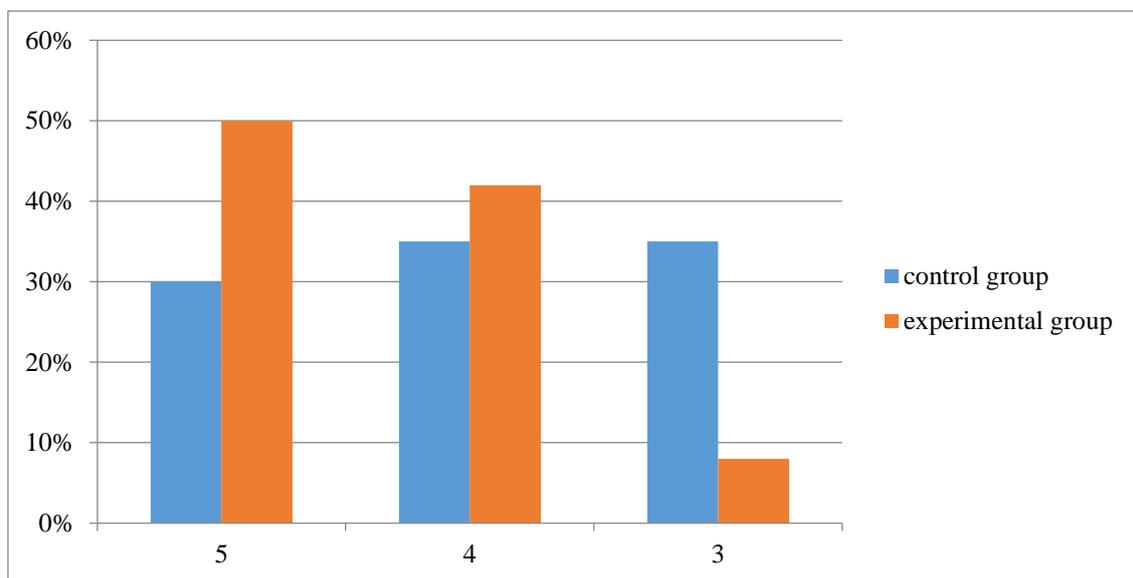


Fig. 1. Examination results of the control and experimental groups in the course "Pedagogical technology"

Grades for the exam in the control group are significantly lower than the experimental results. We can observe that in the control group 65% of students have positive results. In the experimental group, this percentage is 92%.

In the experimental and control group, a questionnaire was conducted in the "Influence of the supporting abstract on the development of independence" at the end of the study. The questionnaire is presented in table 1.

Table 1. Questionnaire "The influence of the supporting abstract on the development of independence."

	Question	Answer
1	In your opinion, is supportive abstract technology necessary in the preparation of university students?	Yes / no
2	Do you think that the technology of the supporting abstract develops the independence of decision-making?	Yes / no
3	Does the technology of the supporting abstract contribute to the independent development of the material?	Yes / no
4	Would you like to use the technology of the reference abstract in the study of professional courses?	Yes / no
5	Enjoyed if you use the reference notes ?	Yes / no

Figure 2. shows the results of the survey among students in the control group. Each digit has a question number.

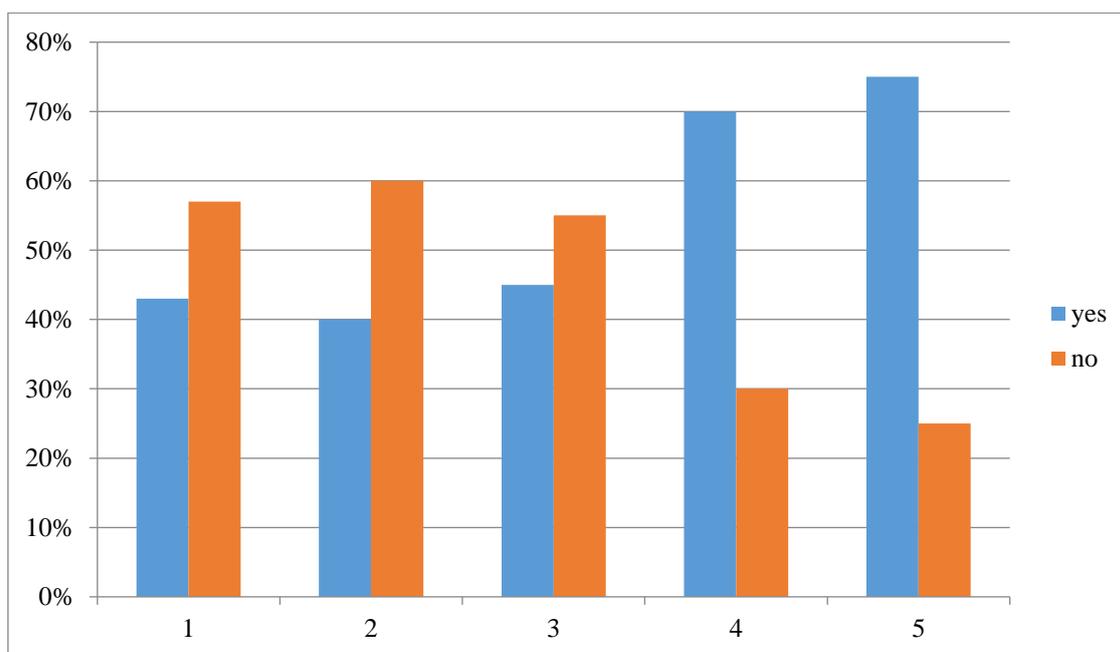


Fig. 2. Student survey questionnaire

As we can observe, a larger number of students consider it necessary to use the technology of the reference abstract. In addition, they like to use it in their activities and they would like to use the technology of the reference abstract in the study of professional courses. However, a larger percentage of students say that the technology of

the supporting abstract does not affect independence. The situation in the experimental group looks different. Students in whose work it was actively used note its great influence on the development of independence. The results of the questionnaire of the experimental group are shown in Figure 3.

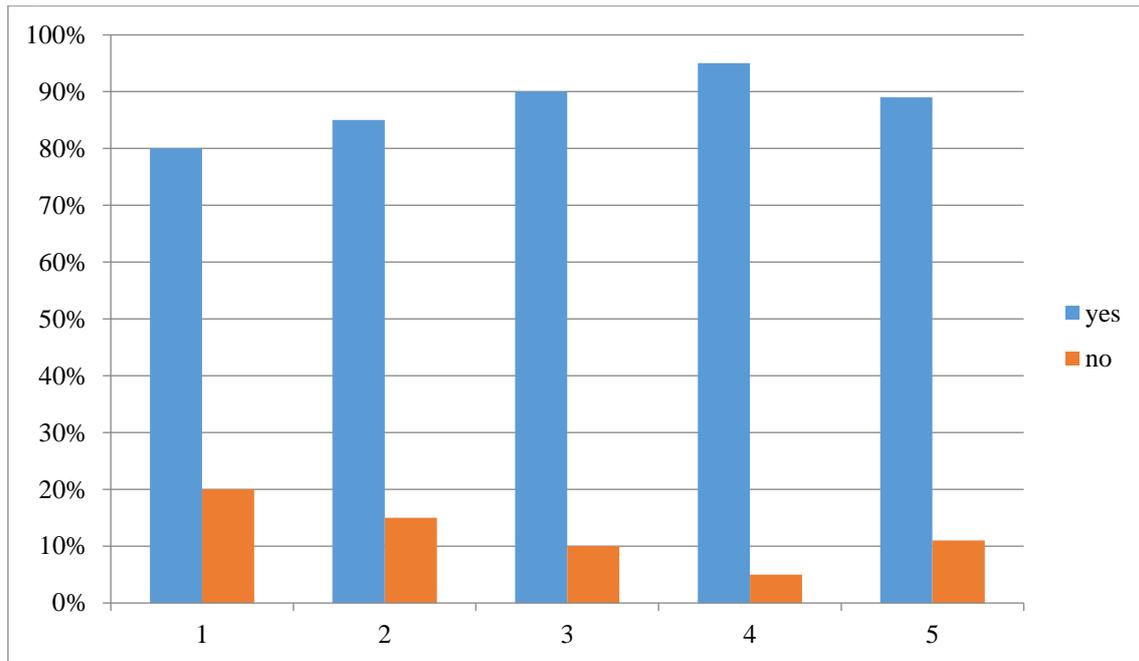


Fig. 3. Experimental Questionnaire Results

Most students note the importance of supporting abstracts in shaping their independence. They note that supporting synopses help them memorize more content and easily reproduce it, so they would like to use technology in further study of courses. If in the control group the percentage of students who rated the positive impact of the supporting abstract on self-development of the material is 45%, then in the experimental group it is 90%.

Conclusions

We have achieved the goal: an analysis of the experience in implementing the technology for compiling supporting abstracts in the organization of students' independent work. The study showed a positive impact of the technology of supporting abstracts on the development of students' independence. Thanks to supporting notes, students form the skill of systematizing content, which contributes to the self-organization of students and the construction of their activities. In addition, the use of supporting abstracts allows future teachers of vocational training to prepare for the implementation of professional activities. The grades for the exam in the control group, where the technology of the reference abstract was used fragmentarily, are significantly lower than the experimental results. We can observe that in the control group 65% of students have positive results (30% of the marks are "excellent" and 35% of the marks are

"good"). This percentage is 92% (50% and 42%, respectively) in the experimental group.

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