Conditions And Opportunities Of Organizing Independent Creative Works Of Students Of The Direction Technology In Higher Education

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Abstract: The following article deals with the theoretical foundations of the organization of independent creative works of students in the direction of Technology in Higher Education, and was issued the dynamics of their level of development based on the indicators of independent work of students and the skills of their independent work creativity.

Index Terms: independent thinking, creativity, creative approach, thought, development, knowledge, skills, qualification.

INTRODUCTION

At the new stage of development of education in the Republic of Uzbekistan, the main task of higher education institutions is to educate specialists capable of adapting to the rapid world-changing conditions, not just to acknowledge the volume of information provided, but instead to develop creative thinking, approach and independent thinking. Therefore, Technology field of education in higher educational institutions is also a discipline that encourages students to take a more independent approach. Technology direction focuses on students’ desire for the profession, the ability of being active, on their imagination, the moral qualities of a person (persistent, purposeful, creative, independent, responsible, hardworking, disciplined and critical thinking) and the on ability to develop to defend their views and beliefs based on evidence as well [1]. The methods and techniques of human thinking in the study of technology include induction and deduction, generalization and refinement, analysis and synthesis, abstraction, analogy, classification and systematization too. In addition, students acquire the ability to express their thoughts clearly and concisely, to understand, systematize, and enforce professional secrets as well. Also, it develops logical thinking about the objects of technological thinking and their practical implementation, generates feedback and develops logical thinking. Several researchers of the Republic conducted researches, as U.N. Nishonliev investigated the historical development and personal qualities of the teacher of labor education, N.Saidahmedov wrote about preparation of students of secondary schools for effective labor management; A.R. Khodjabaev has researched such problems as teaching and methodological support of professional training of the teacher of labor education. The research work of the pedagogical scientist S. Matjonov is devoted to the organization of independent work of students, where the issues of the organization of oral and written creative work of students are studied. After all, creative work and independent work in the formation of a spiritually mature generation requires free thinking. A student who does not have an independent mind cannot be a creator and operate independently [2].

The majority of pedagogical scholars consider the issue of activation of the process of organizing independent learning as a common problem. In particular, a part of the work in this regard is the individual approach to organizing students’ independent learning. At the same time, independent learning is considered as an important factor in the formation of an active, educated, and socially responsible person to pursuit of high results in education and professional development. In order to organize an independent learning, you need not only an interest in a particular profession or area of activity, but also the ability to do that. Given that self-education is governed by the individual, that can freely choose the resources and use the goals, the means and the content at any time. Autonomy in independent learning is the ability to identify and select learning objectives, principles, content, methods and means without difficulty and without external influence. [3] It is also desirable to give the definition independent thinking as it is directly linked to independent learning. According to: “Independent thinking is the use of one’s own intellectual abilities through a variety of ways, methods and means, based on one’s own knowledge and life experience, defining the goals and objectives of a person’s problems regardless of the level of mental activity [4].

Typical independent work is performed according to the samples. An independent work sample contribute to the mastering of learning materials, but does not stimulate students’ creative activity:

- Reconstractive - variative independent studies not only provide a practical description of knowledge, but also the content of knowledge requires their practical use in
solving a problem;
- Problems raised in lectures, labs, workshops, seminars in
  heuristic (partially creative) independent works;
- In creative research the student independently seeks out
  and researches ways to solve the problem. Such tasks
  include piloting, designing equipment, models and tools.

Independent research in the form of creative research gives
students the ability to see the problem, and as a result, they
can independently express the problem and develop a plan for
their solution. Independent learning activities of students in the
field of Technology education accelerate learning and practical
activities, the process of selecting technological processes and
technical objects, creative thinking, and form independent
and active thinking as a prerequisite for high intellectual
development. Formation of skills and abilities to work
independently in the preparation of undergraduate teachers in
the field of Technology education is organized in the following
ways:
- Cognitive skills that play an important role in the study of the
  human being, enriching their life experiences, learning the
  means of impact on the environment, and at the same time
developing their abilities.
- Students acquire the necessary knowledge, skills and
  abilities in the practical activity, in this process the teacher
  learns to observe, test their observations by experience,
  work with the educational literature and use the information
  in the daily life.

Technology teaching techniques should be used to determine
the level of students’ self-education skills. They can be
conditionally named as:
1. The ability to distinguish between the common and the
   specifics of the learning materials and the organization of
   independent work processes (distinguishing skills).
2. Ability to choose technological processes and technical
   facilities, to carry out independent work, to draw technical
   drawings, schemes (ability to create).
3. Ability to organize independent work in the classroom,
   outside the classroom, in the classroom and at home. 4. Independent Thinking Skills (Thinking Skills)
4. Self-control skills (control skills) when studying material.

There are given indicators of acquiring skills and abilities of
independent students. Also was issued developmental skills of
independent work of students in the classroom and off-site, as
well as indicators of independent activity of students, the
dynamics of their level of development.

Students Independent learning indicators

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<th>№</th>
<th>Qualifications of independent learning</th>
<th>Indicators of independent learning</th>
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<tr>
<td>1</td>
<td>Ability to distinguish private property from study material and to organize independent work.</td>
<td>Effective and quick separation of key features of the learning material from the main content. Rely on your own knowledge, skills and teacher support in choosing technological processes and technical facilities.</td>
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<tr>
<td>2</td>
<td>Selecting, reading, writing, drawing, schemes, design of technological processes and technical objects during</td>
<td>Having a good understanding of technological processes from a scientific point of view, having a high level of experience in</td>
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In the table above is given indicators and features that
students should acquire for achieving independent learning
degrees. There are many different ways in which technology
students can be trained to work independently. The organization of independent learning in the preparation of
students in Technology education in higher education is a
holistic pedagogical process, which is carried out in the
following order:
- Defining students’ perceptions of independent learning,
analyzing theoretical and practical learning activities, and
providing them with information on the socio-pedagogical
importance of independent learning based on the skills and
abilities of independent learning;
- To study students’ need for independent learning and
psychological factors influencing them, development of
independent learning content;
- Determining the limits of teaching loads and time limits for
independent learning both in and outside the classroom
based on the content of independent learning;
- Selection of organizational forms, effective methods and
tools of independent learning with the aim of implementing a
didactic process;
- Development of tasks, recommendations on specific topics,
taking into account the interests and needs of students in
independent learning for the purpose of education;
- Development of criteria for determining the degree of
formation of students’ independent learning skills and skills;
- The organization and implementation of independent learning
of students;
- Evaluation of the formation of students’ skills and abilities of
independent learning.

The above algorithm of organizing students’ independent
learning defines the content of the research. Self-management
is an ability to organize creative process, ability to control
one’s thoughts in the right direction, to seek sources for new
solutions and ideas, to create conditions for independent creative activity, to identify and monitor professional development opportunities. Assessment and skills of using modern technology in independent learning.

Increasing the effectiveness of independent learning sometimes depends on the availability of student learning tools. In the above structure, it is stated that the purpose of the list of tools is to study, analyze and then determine the purpose of each topic's content. The specific conditions, manuals, methods, tools and systems for mastering the disciplines presented in the curriculum have been developed and implemented. To sum up, it is important pedagogically to learn the features of organizing independent work in educational processes that are based on the involvement of all disciplines to explore the world. On this basis, the importance of forms of self-employment, such as technology education, expands the range of information that will be gained during the course as an optimal way to organize the learning process. Organizational bases of preparation for independent learning are pedagogical, psychological, technical and technological concepts. Pedagogical-psychological and technical-technological concepts have an active impact on the development of categories and components of research and evaluation. Thus, in preparing students for independent learning, it is important to develop students’ theoretical thinking skills. The realization of such training is to train the imagination and re-imagining of tasks with pedagogical, technical and technological problems, which reflects in the concepts with all the important connections, that is, to carry out a certain intellectual activity.

REFERENCES