

## TEACHING OF SCIENCES IN HIGHER EDUCATION ON THE BASIS OF INNOVATIVE TECHNOLOGIES

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**DOI: 10.5958/2278-4853.2022.00368.8**

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### ABSTRACT

*This article shows the theory and practical information about HobkiHe improving the efficiency of training module "Special teaching method for a native language." Namely, the use of SMART technology in the formation of the goal of classes and creating electronic resources for modules.*

**KEYWORDS:** *Deaf and Weak Children, Interactive Methods, Lessons and Exercises.*

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### INTRODUCTION

Today, Uzbekistan is moving to a new stage and image in every field. Higher education is a link of continuing education that has an incomparable impact on the state's development, and a number of reforms are being implemented in this area. Because the more the emerging personnel are ready for the labor market, the more the welfare of the people and the active participation of families in socio-economic relations will be ensured.

Decree of the President of the Republic of Uzbekistan No. PF-4947 of February 7, 2017 "On the Strategy of Actions for Further Development of the Republic of Uzbekistan", No. PQ-2909 of April 20, 2017 "On Measures for the Further Development of the Higher Education System" and No. 5 of 2018 Resolutions of June PQ-3775 "On additional measures to improve the quality of education in higher education institutions and ensure their active participation in comprehensive reforms implemented in the country" and 2019 No. PF-5847 of October 8 "On approval of the concept of development of the higher education system of the Republic of Uzbekistan until 2030" issue of raising higher education to a new level both in terms of content, organization and pedagogy, and international cooperation is defined as a special task in the Decree. In particular, the task of applying innovative, especially digital technologies to the teaching process of science modules in higher education has been chosen as an urgent direction. The urgency of this task is related to the optimization of the continuous education system in our country with international trends and standards, the implementation of effective methods in the pedagogical process in order to ensure the quality and competitiveness of the personnel training process in higher education.

In the Strategy of Actions for further development of the Republic of Uzbekistan, urgent tasks such as "stimulating research and innovation activities, creating effective mechanisms for their implementation, establishing specialized scientific and experimental laboratories, high

technology centers and technology parks at higher educational institutions and research institutes" specially acknowledged.

Training of personnel in the field of defectology is carried out in a number of HEIs of our republic. In particular, personnel are being trained in Nizamiy TDPU, Ko'kan, Chirchik, Jizzakh, Namangan, Fergana, Nukus state pedagogical institutes. There are 4 independent departments of defectology, which are Oligophrenopedagogy, Surdopedagogy, Speech therapy and Typhlopedagogy. From these departments, educational plans for Oligophrenopedagogy, Deafpedagogy, and Speech Therapy have been developed and personnel are being prepared. Targeted admission has not yet been introduced in the field of pedagogy. The field of deaf pedagogy deals with the training of specialists in the field of education of deaf and hard of hearing children. This direction has its own development history and methodological foundations. TDPU named after Nizamiy is the base institution for the preparation of curriculum, educational programs and working programs in the field of sign language pedagogy.

It is known that speech is an important social factor in the development of deaf and hard of hearing children. The earlier attention is given to these children's speech development, the more effectively these children will be prepared to learn at every stage of the continuum. Speech development in them is carried out on the basis of the laws of the native language. That is, whichever language is the child's mother tongue, the child's speech should be developed based on the characteristics of this language. [4,18 p.]

Therefore, the "Special Methodology of Mother Tongue Teaching" module occupies a particularly important place in the training of personnel in this field. Because a specialist has mastered the methodology of teaching a language to a deaf and hard of hearing child, it is one of the factors that have a social impact on the quality organization of the educational process in special educational institutions and the socialization of these children. The necessity and structure of teaching the subject "Special Methodology of Teaching the Mother Tongue" comes from the specific features of the current era, which is undergoing fundamental and innovative changes. Currently, in connection with the scientific work plan of Ko'kon DPI, pilot-testing of scientific research work is being carried out on the topic of "Technologies for improving the effectiveness of teaching the module "Special Methodology of Mother Tongue Teaching" in higher education".

As a result of the first analytical works within the framework of the research, it was concluded that it is necessary to include innovative technologies in the teaching process of this module, in particular, educational tasks designed to use computer technologies in organizing students' independent work. Therefore, we have developed recommendations on the use of SMART-technologies in the development of methodical sets of topics and goal setting in the teaching of the subject "Special Methodology of Mother Tongue Teaching". In addition, through experimental work, it was determined that there are a number of problems that hinder the teaching of subjects and the organization of independent work of students at HEIs. For example, in the teaching of "Special Methodology of Teaching the Mother Tongue", the subjects studied are studied in the form of small texts and general pictures, and they are not logically connected and not systematized by blocks. Integrative approaches in mother tongue learning and teaching are important. The use of an integrative approach in the pedagogical process of higher education is carried out by the mutual harmonization of internal and external related areas of a system or a

single department. An integrative approach to the training of a defectologist is used to ensure the integrity of the formation of professional knowledge, skills and competencies, as well as the use of professional training-pedagogical techniques, verbal and non-verbal communication. The pedagogue responsible for teaching the module is required to be based on "SMART" technology when setting goals for each lesson.

The term "SMART" was first introduced in 1954 by the scientist and pedagogue Peter Ferdinand Drucker, in 1965 by Paul J. Meyer, and in 1981 by George T. Doran in his scientific works. SMART is represented by the initials of the English words "Specific", "Measurable", "Attainable", "Relevant", "Time-bound". Ji-SeongJeong, Mihye Kim and Kwan-HeeYoo. A Content Oriented Smart Education System based on Cloud).

The tools necessary for the teaching of the subject "Special method of teaching the mother tongue" are as follows:

Web tools. There is a great need for online electronic information-educational resources about science. In practice, it was observed that the teachers and students of defectology used only the database of Russian Internet addresses and resources in this direction. In the future, work is being done on the formation of a list of national resources in this direction.

Enrichment of web tools provides a wide opportunity to acquire knowledge during practical training and independently. We intend to structure this tool based on the following content: 1. The working curriculum of the educational module "Special Methodology of Teaching the Mother Tongue" - 110000 - provides an opportunity to get acquainted with the requirements for the level of competence of students in the specialty based on the state educational standard of the field of pedagogy and 5111900-Defectology (Deaf pedagogy) undergraduate education. This module includes curriculum, program, BKM and competencies, qualification requirements.

2. "Pedagogical skill" or "Expert pulpit" module. Various forms of mastering the module are provided. They are: web lectures, seminars, "Master classes", practical exercises, trainings, animated videos, electronic albums, media files, audio, video materials, slides of electronic presentations, web documents illuminating visual materials are uploaded.

3. Media corner. Materials that create an opportunity to effectively acquire theoretical and practical knowledge of the educational module. These types of materials include: a lecture text or a set of theoretical materials, electronic presentations, electronic textbooks, electronic training manuals, electronic teaching-methodical manuals, a collection of exercises and problems.

4. Glossary or glossary - specific to the learning module

5. Additional materials. Encyclopedias, references, dictionaries, normative-methodical and normative-technical documents.

6. Current, mid-term and final control - a set of control questions, practical work or test assignments on the topics specified in the curriculum or a complete educational module.

2. "Future specialist pulpit". Students upload media resources tailored to the content of the subject. Especially videos, professional advertisements, booklets prepared during professional practice.

3. Online assessment-interactive system. Students are given assignments here. An opportunity for self-assessment will be created for them. Most importantly, prepared tests and assignments are required for each topic.

In conclusion, it can be said that the pedagogue responsible for teaching the module is based on the "SMART" technology in setting goals for each lesson, which allows to improve the quality of professional training of future professionals and to effectively forecast and monitor the results.

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