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THE CONTENT AND STRUCTURE OF THE PREPARATION FOR DEVELOPING SMART TECHNOLOGY USE SKILLS IN FUTURE ENGLISH LANGUAGE TEACHERS

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Abstract: The article examines the content and structure of pre-service English teachers' readiness to use smart technologies in the educational process. The pedagogical significance of integrating intelligent technologies, their role in developing students' linguistic competence, and their potential for organizing individualized learning trajectories are highlighted. The readiness of future teachers is analyzed through motivational, cognitive, and activity-based components. The indicators, structure, and levels of formation of each component are described. Special attention is paid to teachers' personal qualities, their preparedness for innovative activity, and the development of digital pedagogical competence. The study shows that readiness to use smart technologies is a complex, multidimensional, and stage-by-stage developing system.

Keywords: smart technologies, pre-service teacher, professional training, motivational component, cognitive component, activity component, pedagogical competence, innovative education.

Annotatsiya: Ushbu maqolada bo‘lajak ingliz tili o‘qituvchilarining aqlli (smart) texnologiyalardan foydalanishga tayyorgarligining mazmuni va tuzilishi tahlil qilinadi. Aqlli texnologiyalarni ta’lim jarayoniga integratsiyalashning pedagogik ahamiyati, ularning lingvistik kompetensiyani rivojlantirishdagi o‘rni hamda individual ta’lim trayektoriyalarini tashkil etishdagi imkoniyatlari yoritilgan. Bo‘lajak o‘qituvchilarning texnologik tayyorgarligi motivatsion, kognitiv va faoliyat komponentlari asosida ko‘rib chiqiladi. Har bir komponentning tarkibi, ko‘rsatkichlari va shakllanish darajalari tavsiflangan. Shuningdek, o‘qituvchining shaxsiy xususiyatlari, innovatsion faoliyatga tayyorligi hamda zamonaviy pedagogik kompetensiyalarni rivojlantirishdagi o‘rni asoslab berilgan. Tadqiqot natijalari aqlli texnologiyalardan samarali foydalanishga tayyorlik murakkab, ko‘p qirrali va bosqichma-bosqich rivojlanadigan tizim ekanligini ko‘rsatadi.

Kalit so‘zlar: aqlli texnologiyalar, bo‘lajak o‘qituvchi, kasbiy tayyorgarlik, motivatsion komponent, kognitiv komponent, faoliyat komponenti, pedagogik kompetensiya, innovatsion ta’lim.

Аннотация: В статье рассматриваются содержание и структура готовности будущих учителей английского языка к использованию смарт-технологий в образовательном процессе. Освещается педагогическая значимость интеграции интеллектуальных технологий, их роль в развитии лингвистической компетенции обучающихся и организации индивидуальных образовательных траекторий. Готовность будущего учителя анализируется через мотивационный, когнитивный и деятельностный компоненты. Описаны показатели, структура и уровни сформированности каждого компонента. Особое внимание уделяется личностным качествам учителя, его готовности к инновационной деятельности и формированию цифровой педагогической компетентности. Результаты исследования показывают, что готовность к использованию смарт-технологий представляет собой сложную, многокомпонентную и поэтапно развивающуюся систему.

Ключевые слова: смарт-технологии, будущий учитель, профессиональная подготовка, мотивационный компонент, когнитивный компонент, деятельностный компонент, педагогическая компетентность, инновационное образование.

The integration of smart technologies into the education system is having a significant impact at various stages, from management to the organisation of individual learning trajectories. Their effective implementation serves to enhance the competence of prospective teachers in designing and modelling the learning process. The information-educational environment is formed as a multi-component system, based on the integration of teaching, research, and assessment systems. Smart technologies are a key factor in developing students' linguistic competence, enabling the creation of learning paths tailored to their individual needs and the provision of immediate feedback.

Virtual and augmented reality, online simulators and cloud technologies enhance student collaboration and the effectiveness of interactive lessons. Additionally, the teacher can organise the educational process in a multifaceted and dynamic way by integrating various forms of information (audio, visual, text). However, to fully utilise these opportunities, prospective teachers must have adequate preparation in the effective use of innovative teaching tools, the understanding and resolution of didactic tasks, and the ability to employ modern methods.

In this process, the formation of digital pedagogical competencies is of paramount importance.

Modern science interprets preparation as a complex process that ensures an individual's adaptation and development for their future professional activity.

In this, not only theoretical knowledge but also psychological, moral, professional and ideological-political factors also play an important role. It is not sufficient to view preparation solely as a regulator (a controlling factor); it is a complex and integrative concept that entails the all-round development of the individual.

According to the research of N.A. Polovnikova in the 1960s–70s, preparation for independent cognitive activity consists of two main components: 1) the acquisition of necessary knowledge (cognitive content), 2) the methods of acquiring knowledge (cognitive methods). This approach serves to prepare the learner for independent thinking, self-directed learning, and the analysis of knowledge.

The concept of readiness has a comprehensive impact on the individual: it involves not only the acquisition of knowledge and skills but also an approach based on personal qualities. In V.V. Serikov's approach, preparation for effective work is based on three groups of personal qualities: professional, moral, and psychological readiness. This approach demonstrates the individual's multifaceted readiness for professional activity.

Readiness to work with smart technologies is an integral part of innovative pedagogical activity, determining the teacher's potential for applying modern methods, optimising the learning process, and increasing student engagement. As V.A. Slastenin emphasises, a teacher's technological readiness is an important criterion for their overall readiness for innovative activity. Thus, a teacher's readiness to work effectively with smart technologies serves as an important factor in assessing their readiness for innovative activity. According to V.A. Slastenin, the teacher's theoretical and practical preparation for carrying out pedagogical activity is of particular importance. The harmony of these two aspects plays a crucial role in shaping the future teacher's professional competence. A teacher's scientific-theoretical preparation, in addition to psychological, pedagogical and specialised knowledge, embodies the knowledge that forms part of their own pedagogical experience. This concept teaches what knowledge and skills a teacher possesses and how to apply them in practice. At the same time, Slastenin emphasises the need to pay special attention to the manifestations of theoretical preparation. Theoretical activity manifests itself in the prospective teacher's pedagogical thinking abilities, namely analytical, predictive, projective and reflective skills. These qualities

are of crucial importance for the prospective teacher in adapting and innovating the teaching process with modern technologies. A teacher's practical preparedness essentially denotes the system of skills and competencies required to carry out their pedagogical activity effectively.

These skills serve to develop the future teacher's ability to effectively convey subject knowledge to students, and their organisational and communication skills.

L.M. Popov,

B.F. Lomov and other researchers distinguish the following components of a prospective teacher's professional readiness: the professional 'I-concept', motivation, personal characteristics and qualities, and significant activity-related traits. These components are the main factors determining a prospective teacher's readiness to carry out their professional activity effectively. According to the approaches of researchers such as L. Yu. Subbotina and T. A. Kulikova, In the structure of a prospective teacher's professional readiness, the social-perceptual, motivational-value, cognitive-evaluative, organisational-personal and emotional-sensory components play a significant role. These components focus not only on the prospective teacher's pedagogical knowledge but also on their personal and professional qualities.

Thus, the practical preparation of a prospective teacher requires a comprehensive and complex approach, aimed at developing not only their pedagogical knowledge but also skills such as organisational, communicative and information technology skills. M.V. Klarin emphasises the link between a teacher's professional preparation and their personal experience, highlighting key conditions for determining the teacher's readiness for innovative activity. These conditions depend on the teacher's ability to use new technologies effectively and include the following: for a teacher to use new technologies effectively, they must possess innovative pedagogical knowledge. These knowledge will help the prospective teacher to renew their pedagogical practice and to apply new teaching methods and technologies effectively. A teacher should view technologies not merely as an instrument, but as a means of enriching and innovating the learning process. It is essential for a teacher to have practical experience in integrating new technologies into the educational process. M.V. Klarin emphasises the interconnection between personal experience and professional activity, as the challenges encountered in practice and the methods for resolving them develop a prospective teacher's knowledge and skills. A teacher's attitude towards technology and their experience in trying it out increases the effectiveness of the educational process. The teacher's ability to critically analyse new technologies and to continuously monitor their own practice is of great importance. This helps the teacher determine how to apply technologies effectively in practice and how to

optimise the available tools. Through critical thinking, the teacher is able to further improve their practice.

The readiness of a prospective English teacher to introduce new technologies and test them in practice is essential for success in innovative activities.

Being open to new ideas and ready to update one's practice ensures that a prospective teacher will succeed in innovative activities.

Flexibility and personal interest play an important role in the rapid adoption of new technologies and their integration into the teaching process. Adapting technologies to students' needs: When applying new technologies, the teacher must take into account individual needs and abilities. The teacher, by engaging students in the learning process, optimising their acquisition of knowledge, and directing technologies towards personal development, to spark students' interests and make the learning process more effective. Future English language teachers must be able to manage the educational process and make effective use of technology. The teacher must guide students correctly, apply technological tools effectively, and manage the educational process in line with each student's changing needs. Regularly monitoring students, assessing their results and making necessary adjustments during the teacher's management of technologies enhances the effectiveness of education. M.V. Klarin emphasises that teachers' readiness for innovative activity ensures their professional development and creates opportunities to implement innovations in the educational process. Analyses show that the concept of ‘teacher readiness’ is interpreted differently in pedagogy and psychology. However, many researchers distinguish motivational, cognitive and activity components when identifying the constituent parts of this concept.

These approaches serve to identify the key aspects that determine a prospective teacher's preparedness and their successful performance in the teaching process.

The preparedness of a prospective English language teacher to use smart technologies effectively in the educational environment can be interpreted as an integral characteristic, manifested in the harmony of stable motivation and personal qualities.

Components of the preparation:

1. Motivational preparation

The prospective teacher's motivation to use smart technologies signifies their interest in adopting and using new pedagogical technologies effectively.

This motivation, in turn, creates a positive psychological state aimed at enhancing the effectiveness of the educational process. Motivational readiness shapes a prospective teacher's

preparedness to adopt innovative pedagogical approaches and fosters their desire to continually update their knowledge and skills.

2. Cognitive Readiness

A prospective teacher's cognitive readiness is determined by their level of understanding of smart technologies and their knowledge of how to use them for pedagogical purposes.

It involves not only having knowledge of the principles behind how technologies work, but also possessing the necessary skills to apply them effectively in the educational process.

Cognitive readiness enables the prospective teacher to apply new technologies and teaching methodologies correctly.

3. Proactivity

A prospective teacher's proactive and positive approach to pedagogical activity is particularly important when using smart technologies. Their proactive attitude demonstrates a readiness to experiment with technologies in practice and to introduce new pedagogical methods. At the same time, this activity also signifies the teacher's success in implementing an individual approach to pupils and in organising the learning process in an interactive and collaborative manner.

The personal qualities of a prospective teacher – for example, openness to innovation, creativity, adaptability to change, and stable moral values – determine their readiness to apply smart technologies effectively in the educational process. These characteristics enhance the teacher's role not only academically but also in their interaction with pupils and in personalising the learning process. The motivational, substantive and technological aspects of readiness for using smart technologies serve to form the personal qualities of a prospective teacher.

This reflects the structural-functional components of a prospective teacher's readiness for the use of smart technologies.

The concept of readiness in pedagogy is multifaceted, manifesting in the following forms: functional and personal,

situational and stable, psychological and practical, theoretical and practical, general and special, as well as in the forms of mental and physical activity. This diverse approach allows for the preparation to be viewed as a complex, multi-layered phenomenon. In particular, the formation of readiness for the effective application of smart technologies in the modern educational process for prospective English language teachers is a complex, multi-stage pedagogical system. It incorporates motivational, content-related, technological and reflective components. For this system to function effectively, assessment mechanisms, criteria and

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indicators determining readiness must be developed in advance in a clear and well-founded manner.

The future English language teacher's ability to effectively master and apply smart technologies in a modern educational environment is formed on the basis of three main components: motivational, cognitive, and activity components. Each component serves as an important criterion for determining the prospective teacher's level of preparedness (Figure 2.1).

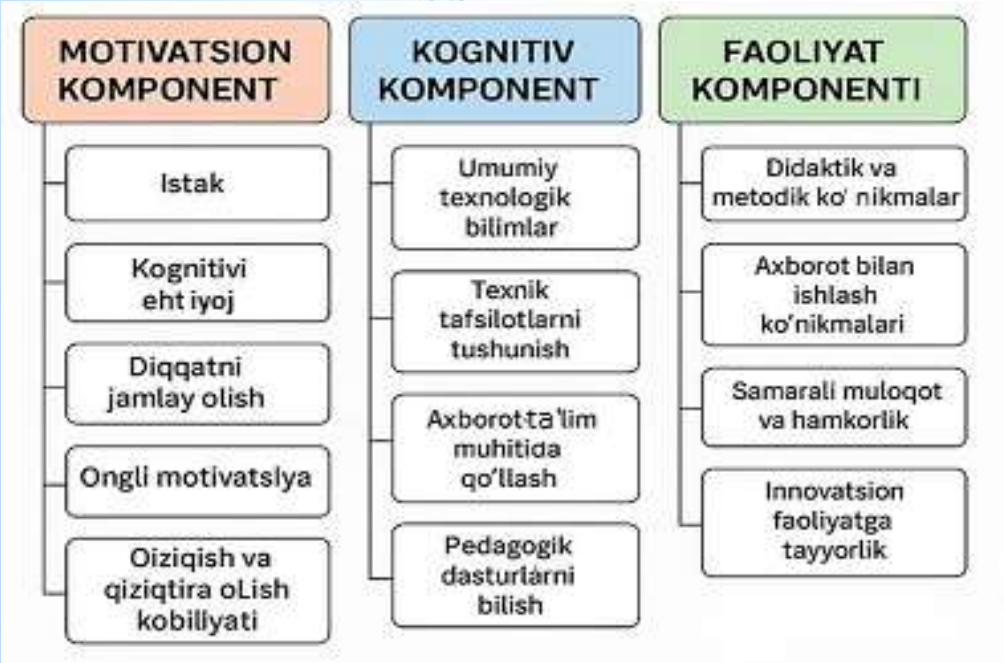

Figure 2.1. Structural-functional components of a prospective teacher's readiness to use smart technologies

1. Motivational Component

This component represents the prospective teacher's intrinsic need, professional interest, and conscious enthusiasm for mastering smart technologies. It is determined by the following indicators:

Desire – a high level of enthusiasm for mastering new technologies and applying them to the teaching process;

Cognitive need – an intrinsic drive to deeply study modern technologies and expand pedagogical knowledge;

Concentration – the psychological stability required for purposeful and conscious use of technologies;Conscious motivation – a sense of professional and personal responsibility in mastering technologies;

Interest and the ability to engage – a personal interest in technologies and the ability to convey this interest to students in an inspiring way;

Readiness for adoption – the ability to master new smart technologies and integrate them effectively into practical activities.

2. Cognitive Component

The cognitive component denotes the extent to which a prospective teacher possesses the necessary theoretical knowledge and understanding of smart technologies. It is formed on the basis of the following indicators:General technological knowledge – knowledge of the types, classification, and pedagogical possibilities of smart technologies;

Understanding of technical details – the mechanisms of operation, technical aspects, and functional capabilities of the technologies;Application in an educational environment – methods for adapting technologies to the teaching process;

Knowledge of pedagogical software – skills in working with modern platforms such as interactive whiteboards, LMS systems, mobile applications, and multimedia tools.3. Performance Component

The Performance Component represents the skills and experience of a prospective teacher to effectively apply smart technologies in practice. It is assessed based on the following skills:

Didactic and methodological skills – strategies for creating digital learning content, lesson planning, and the use of interactive technologies;

Information literacy skills – the ability to search for, store, process, and present information;Effective communication and collaboration – establishing interactive communication with students in online and offline environments;

Readiness for innovative activity – skills in integrating smart technologies, monitoring, and analysis in organising group work.

In conclusion, it can be said that the readiness of prospective teachers to use smart technologies is a complex and multifaceted system, formed on the basis of the integration of motivational, cognitive and activity components. This plays an important role in enhancing the teacher's professional success and the quality of education. A four-level system of stages has been developed to ensure the systematic development of future English language teachers' preparation.

This system is formed in the interplay between motivational and activity components:

Levels of motivational readiness: Minimal motivation – based on external incentives, using technologies only when necessary.

Intermediate motivation – there is an interest in technologies, but they are used only in certain situations. High motivation – there is a constant drive to learn and apply technologies.

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Maximum motivation – a drive to master innovative technologies and a readiness to teach them to others.

Activity readiness levels: Non-independent activity – relies on existing materials and has not yet sufficiently understood the technologies.

Semi-independent activity – can work independently at times but requires guidance. Independent activity – can fully integrate technologies into the learning process and quickly adopts innovations. The harmony of motivational, cognitive and activity components is crucial in developing prospective teachers' readiness to work with smart technologies. This readiness not only enhances the quality and effectiveness of pedagogical practice but also enables the successful implementation of innovative approaches in the teaching process. Taking into account the different levels of preparation serves to determine an individual development strategy for each teacher.

The readiness levels for working with smart technologies represent the stages in the systematic development of prospective teachers' motivation, knowledge, and practical skills. These levels depend on how they perceive, integrate and apply technologies effectively. Each level reinforces the ability to carry out didactic tasks.

The levels are formed continuously: moving to a higher level does not mean the loss of skills from the previous level, but rather their refinement. Motivationally, intrinsic motivation is strengthened, and knowledge and skills become more profound.