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PEDAGOGICAL CONDITIONS FOR FORMING SKILLS TO WORK WITH ARTIFICIAL INTELLIGENCE IN FUTURE TEACHERS

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ABSTRACT

This in the article preschool education studying in the field of future in educators artificial intellect with work skills of formation pedagogical conditions illuminated. Modern digital education in the environment artificial intellect from technologies pedagogical for purposes reasonable and effective use future educators professional of preparation important structural to the part around is going on. In the article artificial of intellect preschool in education opportunities, future in educators formation necessary was main skills and to them to be placed pedagogical requirements analysis also, artificial from the intellect of use pedagogical, methodological, informational safety and academic honesty aspects attention focused on. Future educators artificial intellect literacy in development practical tasks, problematic situations, project activity and reflexive from the approach of use importance based on given.

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Keywords: *artificial intellect, future educator, preschool education, digital competence, digital literacy, pedagogy competence, artificial intellect literacy, innovation technologies, education technologies, professional preparation.*



Introduction

Today on the day digital of technologies intense development education system all in stages pedagogue to the activity wearable of requirements to the update reason Especially artificial intellect technologies wide popularity pedagogical activity planning, educational materials working exit, children individual features into account to receive, pedagogical the process analysis to do and education quality monitoring to do for new opportunities to the surface is bringing. This point in terms of modern from the educator not only traditional pedagogical knowledge and skills, but digital technologies, especially artificial intellect from the means pedagogical for purposes use to the competence has to be also demand is being done (President of the Republic of Uzbekistan, 2019).

Preschool education in the system this issue is separate importance profession Because preschool aged children with take to go education process child's young, psychological and individual features deep into account to take demand Artificial intellect tools to the educator training for didactic materials, creative tasks, games, questions and answers, fairy tales and pedagogical situations working on the way out help to give possible. However this from technologies use in the process pedagogical to the goal compatibility, child security, information reliability, personal information protection to do and pedagogical responsibility such as aspects into account to take necessary.

Uzbekistan In the Republic education system digitalization, modern information and communication from technologies use and education recipients digital competencies develop state education of the policy priority from directions one as manifestation In particular, education quality education, pedagogue personnel modern professional competencies with arm and innovative technologies education to the process current to grow according to done increasing reforms future educators digital in the environment activity to conduct preparation the issue further is updating (President of the Republic of Uzbekistan, 2020a).

Artificial from the intellect use his/ her skills only certain program or from the platform technician use ability as interpretation to do to the goal appropriate not. This skill teacher's artificial intellect opportunities understand, from him relevant pedagogical task solution in the process of use, taken information critical analysis to do, artificial intellect by created of the content accuracy and pedagogical value assessment and from it responsible use also cover takes. This because of future educators preparation in the process artificial intellect with of work technician aspects with one in order, pedagogical, methodical and moral aspects also formation important.

Future in educators artificial intellect with work skills of formation pedagogical conditions When you say, first of all, the highest education in the institution modern digital education environment create, students artificial intellect about theoretical knowledge practical activity with linking, pedagogical to situations directed from assignments use, independent and creative activity encouragement and the results evaluation clear criteria working exit understood. This in process to students artificial intellect from the means ready materials blindly acceptance to do not, maybe from them creative and critical use culture formation separately importance For example, the future educator artificial intellect using preschool aged children for didactic game working output possible. However of the game content child's to age compatibility, development opportunities, security and preschool education to the methodology compatibility in terms of pedagogue by again analysis to be done This is necessary. artificial intellect with work of the habit simple technician from literacy high level professional competence that shows.

So, the future in educators artificial intellect with work skills formation modern preschool education system digital transformation under the circumstances current scientific and pedagogical problem This is problem scientific in terms of study and effective pedagogical the conditions determination future educators professional readiness improve them modern digital education in the environment effective activity to conduct preparation opportunity gives.

Literature Analysis

Future educators digital education in the environment professional to activity preparation issue last in years pedagogy science current from directions to one is turning. Foreign in research artificial of intellect education in the process opportunities, educators digital competence develop and artificial from the intellect responsible use to the issues separately attention In particular, UNESCO in education artificial from the intellect use with related pedagogical competencies, ethics standards, data safety and human in the center approach important directions as shown.

Artificial of intellect in education opportunities learned researchers this technologies for individual learning support, educational content creation, pedagogical the process planning and education recipients activity to increase service to do possible They emphasize. With this together, artificial from the intellect use as a result wrong or unreliable information to get, academic honesty violation, personal of information protection and pedagogical decisions to technology too much outside tie such as problems to the surface arrival possibility record done.

Scientific and pedagogical education in literature digitization, educators information and communication from technologies use competence development, innovation education technologies pedagogical to the process current to grow issues wide research This research future of educators digital competence develop for practical to activity directed education, independent education and innovative

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pedagogical from technologies use importance shows. However preschool education in the direction of education taking future in educators exactly artificial intellect with work skills of formation pedagogical conditions systematic accordingly study issue enough research not yet arrived.

Literature analysis this shows that artificial intellect with work skill technician from tools use with information without limitation search, analysis to do, critical evaluation, prompts effective use, created the content pedagogical in terms of adaptation and from technology boot use also covers competencies to receive It is necessary. Therefore this in the article future educators artificial intellect with to work preparation pedagogical conditions to determine separately attention is focused.

Research Methodology

In the study future in educators artificial intellect with work skills of formation theoretical and practical aspects determination for the purpose pedagogical, psychological and scientific and methodological literature analysis to do from the method used. Research in the process artificial intelligence, digital competence and future of educators professional to prepare related scientific views comparative-analytical basically studied. Also, the future educators artificial from the intellect use activity in evaluation observation and conversation from methods use opportunities seeing was released. In the study systematization, generalization and pedagogical modeling methods through artificial intellect with work skills structural components marked. Obtained theoretical conclusions based on future in educators this skills of formation effective pedagogical conditions was determined.

Analysis and Results

Artificial intellect technologies education to the process enter arrival teacher's professional activity content and to her wearable competency-based requirements fundamentally is changing. This in process future educators artificial intellect tools with to work preparation issue not only technological, maybe pedagogical and methodological and moral problem also manifested as UNESCO 's announcement in 2024 In the document “AI Competency Framework for Teachers” artificial intellect in education replacing the traditional “ teacher - student ” relationship with a “ teacher - artificial "intellect - student " relationship take coming record (UNESCO, 2024). This situation future educators artificial from the intellect of use technician sides only with not, maybe from it pedagogical in terms of targeted and responsible use to arm with the necessity shows.

Future in educators artificial intellect with work skills to form one how many mutual related components based on organization to grow to the goal according to. Research the results generalization based on this your habit motivational-value, cognitive, practical-operational, creative and reflexive-ethical from components consists of structure offer to grow possible.

Motivational-Value Component

This component future educator artificial intellect from technologies to use was interest, his pedagogical opportunities understanding and new technologies own professional to the activity integration to do readiness The student has an “ artificial intellect educator instead "occupies" look not, but "artificial" intellect educator pedagogical activity supportive "tool" approach formation UNESCO is also an artificial from the intellect in use human in the center approach main from principles one as defines (UNESCO, 2023).

Cognitive Component

This is the future educator artificial of intellect essence, main capabilities, performance principles, generative AI tools, data and algorithms about elementary knowledge own inside UNESCO students for competence within the framework of “AI foundations and applications” direction as determined and from educators artificial of intellect main concepts knowledge, education for suitable AI tools choice and them practical try required to see (UNESCO, 2021). At this point from the perspective of, before school education direction to their students artificial of intellect complicated technician mechanisms deep from

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teaching according to him pedagogical opportunities to understand directed practical knowledge to give more efficient is considered.

Practical-Operational Component

This component artificial intellect from the means directly use skills In particular, the correct prompt formulation, pedagogical to the task suitable AI tool selection, training development, didactic game, task, question and answer, fairy tale, picture description or educational situation create and taken the result pedagogical in terms of again work this component to the composition UNESCO students competence within artificial from the intellect use according to Competencies are developed through the “Acquire – Deepen – Create” stages. based on development This approach is shown in future educators preparation use in the process (UNESCO, 2023). For example, a student may be asked to “5–6 years old in children the colors distinction her skills developer didactic game working "exit" task is given. Student initially artificial intellect to the tool pedagogical task clear gives a prompt that represents, then taken the result preschool aged children's psychological features, educational goal and methodical requirements based on analysis does.

Necessary cases created by AI the material changes, simplifies or again working The result is student artificial from the intellect ready answer to take tool as not, maybe pedagogical product in creation help giver tool as use learns.

Creative Component

Artificial from the intellect effective use future educator creative opportunities expansion possible. With the help of AI different pedagogical situations, didactic games, creative exercises, fairy tales plots, roles games and visual materials for ideas working exit possible. However this in process ready the content straight away application not, maybe her teacher's creative again performance UNESCO also defines students' AI competencies as "Understand – Apply – Create" levels. through describes (UNESCO, 2024). This three step by step approach future educators artificial intellect with work skills methodological in development basis become service to do possible.

Reflexive-Ethical Component

Research point from the point of view the most important from aspects one by AI created information critical assessment and from it responsible use is a habit. Artificial intellect created every how information absolute truth as acceptance to do pedagogue for dangerous to be possible. Therefore for future The tutor's AI response substantive accuracy, age to the characteristics compatibility, pedagogical to the goal compatibility and moral in terms of acceptability check UNESCO 's 2023 Generative AI in the manual human central, safe, fair and meaningful use necessity emphasized.

Preschool in education this demand is further is important. Because using tutor AI children when creating material for child's personal information, photos or other identification doer information to open AI platforms from placement caution to be UNESCO also works with generative AI related in matters information confidentiality protection to do important from directions one as shows.

Research the results generalization based on future in educators artificial intellect with work skills formation for following pedagogical the conditions can be separated:

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Table 1

Pedagogical Conditions for Forming Artificial Intelligence Work Skills

Pedagogical condition	Description
Digital-educational the environment create	High education in the institution students artificial intellect tools try vision and pedagogical tasks in execution from them use for practical opportunity creation necessary.
Education content with AI enrichment	Preschool education methodology, pedagogy, psychology and other specialty sciences within artificial from the intellect to use related practical assignments current to grow necessary.
Practical activities directed approach	Students about AI only theoretical information without taking, real pedagogical situations based on from it use studies need.
Prompt Engineering elements to teach	With AI for the student communication in doing task clear, consistent and pedagogical to the goal appropriate expression his/ her skills formation necessary.
Critical evaluation develop	Student created AI the answer check, errors determination, reliable sources with compare and pedagogical in terms of again to work teaching necessary.
Ethics and safe use culture formation	Academic honesty, authorship right, personal information protection to do and AI capabilities responsible use principles practical training through absorption need.
Creative projects organization to grow	Helping students with AI preschool education for didactic game, exercise development, educational situation, fairy tale or multimedia material create according to project assignments to give effective result gives.

UNESCO Teachers of the Year 2024 AI competency for circle such as "human- centered mindset", "ethics of AI", "AI foundations and applications", "AI pedagogy" and "AI for professional learning" five direction defines.

This directions preschool to education adaptation as a result future educators artificial intellect with work competence of formation whole model to the surface comes. Analysis as a result future with the tutor's AI work competence " know - apply - analyze" to do – to create – to be responsible use " sequence based on develop to the goal appropriate that was determined. In this initially student artificial of intellect opportunities knows, later from it simple pedagogical tasks in execution uses, next by AI in stages created the results analysis does and improves, high in stages and independent pedagogical product creates. This of the process final result as student's artificial from the intellect safe, ethical, critical and creative use competence is formed.

So doing research results artificial intellect with work skills to form future educators professional preparation additional direction not, maybe modern digital pedagogical competence structural part as look the necessity shows. Especially before school AI tools in education use child's interests, age and psychological characteristics, pedagogical goal and security requirements submission On this basis organization done education process future educators digital literacy increase with one in a row, their critical thinking, creativity, pedagogy decision acceptance to do and professional to develop independence opportunity gives.

Conclusion

Take visited theoretical analysis results this shows that artificial intellect technologies education to the process intense enter arrival future educators professional preparation content modern requirements based on improvement requirement is doing. Before school education in the system artificial from the intellect use educator instead pressing not, maybe her pedagogical activity support, creative and methodical opportunities to expand service doer tool as consideration necessary.

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Research during future in educators artificial intellect with work skills formation motivational-value, cognitive, practical-operational, creative and reflexive-ethical components mutual harmony based on organization to be to the goal compatibility was determined. This components formation students artificial intellect opportunities understand, from it pedagogical tasks in execution use, created the results critical analysis to do, creative products create and from technology responsible use competence develops. Future educators artificial intellect with to work in preparation education process practical to activity redirect separately importance has. To students artificial intellect using preschool aged children for didactic games, creative assignments, training developments, fairy tales and pedagogical situations create of tasks to be given in them theoretical knowledge practical activity with tie opportunity gives.

Also, from AI tools use in the process of information reliability examination, academic honesty, authorship right, personal information protection to do and child's safety provision to the issues separately attention focus necessary. Therefore future educator artificial intellect competence only technician skills sum not, maybe pedagogical, digital, critical, creative and moral competencies integrated shape as consideration necessary.

In general, the future in educators artificial intellect with work skills formation "Know - Apply - Analyze" process to do – to create – to be responsible use "sequence based on organization to grow effective pedagogical approach as manifestation will be. Such approach future educators modern digital education to the environment adaptation, professional independence, creativity and pedagogical activity efficiency to increase service does. From the above come out below recommendations working output :

1. Preschool education direction training to the process artificial intellect with to work related practical training integration to do and students using AI didactic games, training developments, creative assignments and other pedagogical materials create according to assignments system working exit recommended.
2. The baby in educators artificial from the intellect responsible and critical use competence formation Create a prompt for, AI created of information reliability examination, academic honesty, authorship right and personal information protection to do related special methodical training organization to grow appropriate.
3. The baby educators artificial intellect with work competence evaluation criterion and indicators working exit and them experiment in the process application recommendation is being done. In this about the student's AI knowledge, practical use skill, creativity approach, critical thinking and boot responsibility main assessment criteria as to be determined possible.

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