A Smart Trajectory Model for Teacher Training

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EXECUTIVE SUMMARY

The chapter deals with the model of the trajectory of training teachers and a new approach to constructing a smart learning environment. The authors present a scheme of the smart trajectory, which outlines new approaches towards teaching students. The role of using interactive activity-based smart components is shown. The chapter depicts the results of the approbation of the model. The approbation revealed that the use of the smart trajectory allows to develop analytical competences, the skills of problem solving, creativity, the capacity to communicate with teams, groups, and individuals. The result of building up the smart trajectory consists in the creation of multi-format and personified educational space in an interactive environment enabling a person to study at any time and anywhere getting free access to content around the world.

INTRODUCTION

In connection with the modernization of pedagogical education, the application of smart learning trajectory is of current interest to teacher training. The teacher of the future must be flexible, mobile and ready to meet emerging professional challenges and problems in practice. Young teachers have difficulties in quickly adapting to the changing professional environment. Teachers who start their career are unable to carry out self-diagnosis in full, and to plan the process of professional development and pedagogical design. Therefore, it is particularly relevant at the present time to construct a smart learning trajectory in teacher training that would allow immersing students in real professional activity.

Development for smart learning implementation in higher education is still at the stage of reflection and searching of solutions, which hinders its extensive use in practice. Under these circumstances, it becomes necessary to develop and implement a model of smart learning trajectory in teacher training that will allow university teachers to apply it successfully in their activities and ensure a practice-orientation approach.

A key element in teacher training is the school that is a higher educational institution partner in the educational activity. The school is the main source of the most important components of the content of professionally oriented programs, which means the training trajectories.

Such partnership of educational organizations is possible due to the mechanisms of network interaction. Networking is becoming one of the significant components of the formula that leads to high quality of modern education. It involves the implementation of the goals and objectives of educational institutions through the organization of a system of mutually beneficial cooperation between various institutions of the education system.

The tasks of forming the undergraduate teacher's competencies are distributed among the participants of the network. The organizations of secondary and higher education within the framework of network interaction are mutually responsible for the result. The school may provide for professional competencies that are difficult for acquisition at a university.

Networking allows the student who is starting a career, to get the accumulated experience from the teacher who is the carrier of professional competencies.

Thus, students have an opportunity for professional development and reorganization of their educational and professional activities. It means trying on the role of the teacher, interacting with the teacher-supervisor in order to solve professional problems, establishing pedagogical communication and reflecting on their activities.

Participants in network interaction are students, supervisory teachers, and coordinating teachers. Each of the participants has a different role. The teacher advises the student, helping to overcome difficulties, and carries out an expert evaluation of educational and professional activities at all the stages of a smart learning trajectory.

The main task of the teacher is the coordination of actions to promote the student along the smart learning path. The teacher oversees the student's research activities, providing the scientific component for pedagogical processes and phenomena.

The key events in the smart learning path of teaching students on the pedagogical departments and providing for practical orientation are: modeling of educational and professional activities in the environment of teacher supervision; participation in cooperative work together with the teacher-supervisor and the teacher-coordinator; and upward movement along the smart learning trajectory on the cycle of reflection – diagnostics – design.

The system-forming component of the described model is an educational smart event. Smart event is a logically integral sequence of educational and professional activities, leading to a certain result: formation of competencies, and creation of products of intellectual activity. In particular, the student is given an opportunity to model future professional activity while preparing and conducting classes with classmates.

The model is based on the use of interactive teaching methods. A characteristic feature of the use of interactive technologies is the organization of training that takes into account the inclusion of all the students of a group without exception in the learning process. Joint activity means that each participant makes his or her own individual contribution, whereby in the course of work there is an exchange of