

## INDIVIDUAL EDUCATIONAL TRAJECTORY BUILDING AS A SUCCESSFUL TEACHER SKILL IN THE DIGITAL AGE

Artem Yurchenko<sup>1</sup>, Pavlo Mulesa<sup>2</sup>, Olena Semenikhina<sup>3</sup>

<sup>1</sup>Ph.D. (Pedagogical Sciences), associate professor, Department of Computer Sciences, Makarenko Sumy State Pedagogical University, Sumy, Ukraine, e-mail: a.yurchenko@fizmatsspu.sumy.ua, ORCID: <https://orcid.org/0000-0002-6770-186X>

<sup>2</sup>Ph.D. (Technical Sciences), associate professor, Department of Cybernetics and Applied Mathematics, Uzhhorod National University, Uzhhorod, Ukraine, e-mail: pavlo.mulesa@uzhnu.edu.ua, ORCID: <https://orcid.org/0000-0002-3437-8082>

<sup>3</sup>Dr. (Pedagogical Sciences), professor, Department of Computer Sciences, Makarenko Sumy State Pedagogical University, Sumy, Ukraine, e-mail: e.semenikhina@fizmatsspu.sumy.ua, ORCID: <https://orcid.org/0000-0002-3896-8151>

### Citation:

Yurchenko, A., Mulesa, P., & Semenikhina, O. (2023). Individual educational trajectory building as a successful teacher skill in the digital age. *Pedagogy and Education Management Review*, (2), 64–72. <https://doi.org/10.36690/2733-2039-2023-2-64-72>

Received: June 02, 2023

Approved: June 21, 2023

Published: June 22, 2023



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**Abstract.** Young people often face the problem of a lack of formed skills in independent learning activities, setting achievable goals, and having the ability to choose methods, forms, and means of training. They often have insufficiently developed the ability to reflect on personal achievements and take responsibility for decisions made. This actualizes the need for individual training and development of their educational path. The article aims to analyze the construction of the IET to realize a particular educational trajectory as a skill of a modern teacher. To achieve the goal, theoretical methods of scientific knowledge were used: terminological analysis to clarify the research thesaurus, content analysis, and detailed comparison of the construction of an individual training plan for implementing a particular educational trajectory. The authors discuss the fragmented nature of scientific findings and their implications for developing a customized curriculum. They introduce the concept of an individual plan and highlight the importance of teachers establishing realistic objectives. The paper offers general recommendations for effectively setting goals when designing a personalized curriculum, suggesting creating a specific educational path. It comprehensively explains the process involved in developing a unique curriculum and implementing a personalized academic trajectory. The authors clearly explain SMART goals, which are defined as specific, measurable, attainable, relevant, and time-bound. They emphasize that SMART goals should include observable indicators, a well-balanced timeframe for achievement, and criteria for assessing student progress. The practical significance of the work is in justifying the recommendation to follow the idea of individualized learning, which will contribute to the formation of skills of independent activity, as well as awareness of learning goals, increasing responsibility for their learning. The article opens directions for further research. These are using digital technologies and tools for individual professional training; implementation of professional development courses for teachers, coaches, and tutors on the development of SMART goals when developing unique training programs or personal development.

**Keywords:** individual educational trajectory, SMART goals, professional teachers training, teacher learning, digital technology.

**JEL Classification:** I21, I23, I26, I29

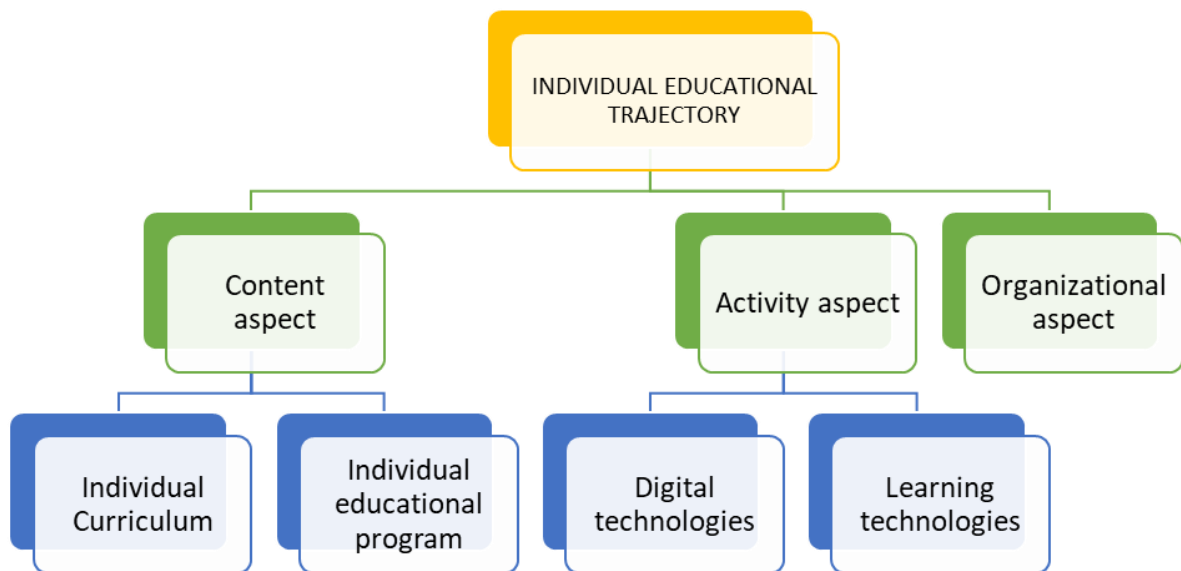
**Formulas:** 0; **fig.:** 4; **tabl.:** 0; **bibl.:** 31

**Introduction.** One of the most promising models of individualizing educational activities in the digital age is implementing an individual educational (academic) trajectory (IET) as a model of an asynchronous learning format. Development/selection/tutorship within the IET today is perceived as a specific activity. Still, it is becoming increasingly popular among young people who want to build their career and their future independently but often face problems associated with ignorance of the specifics of the sphere of the chosen future professional activity and the lack of formed skills of independent learning activities, setting achievable goals in their education and their corresponding tasks, ability to select methods, forms, and means of training, the ability to reflect on personal achievements and take responsibility for decisions made.

**Literature review.** At the end of the XXth century, the issues of humane pedagogy became actualized, which should comprehensively influence the development of individual personality traits through various methods, forms, and means of teaching. Variable education was considered a process focused on expanding the range of human capabilities in choosing a professional (life) path for self-development. It was emphasized that it was not the system of educational institutions that restricts a person's freedom of choice. Still, the person consciously chooses an individual educational path on his interests, desires, and abilities.

The term "individual educational trajectory" has recently been often used in scientific and popular science publications. However, its interpretation remains ambiguous. On the one hand [17], the individual development trajectory is based on the need to adapt to the demands of adults and be creative to find solutions. And at the same time, acquiring new individual experiences (new knowledge, new methods, new actions) is important. In other words, it is essential to form a mechanism for self-organization and self-realization of the individual within the framework of student-centered education. On the other hand, it creates the concept of the individual educational route as an opportunity for pupils/students to master a certain level of education according to a certain pre-developed educational program [5]. Analyzing the interpretation of these and related concepts (personalized learning, individual academic route, individual trajectory), it should be noted that they have a common basis – orientation of content, forms, and teaching methods to students' personal qualities and, to a greater extent, self-learning.

The need for individualization and variability of the educational process is mentioned in regulatory documents (the Law of Ukraine "On Education," 2017; the Law of Ukraine "On Higher Education," 2014; Concept New Ukrainian School, 2016; Concept of Teacher Education, 2018), and the works of various scientists-teachers. Analysis of scientific and pedagogical literature [1; 3; 23; 26] identified several directions for the implementation of an individual educational trajectory: substantive, activity and organizational (Fig. 1).



**Figure 1. Directions for the implementation of an individual educational trajectory**

*Source: own*

The research [25] touches on the possibilities of informal learning using digital platforms and therefore reveals the content and activity aspect. The articles [8] present individual approaches to learning as an activity aspect. Research [20] unlock the potential of social networks, thus highlighting the organizational element.

Systematization of the results of these and other scientific studies makes it possible to specify the advantages provided by IET:

1. implements the ideas of the student-centered, allowing you to systematically represent the student's independent learning activities aimed at achieving a personally significant goal;

2. allows you to individualize and differentiate the educational process, offering a variety of goals, content, methods, and means of educational activities;

3. contributes to the gradual assimilation by the student of a subjective position in their educational activities;

4. makes it possible to integrate various educational technologies into the classroom and extracurricular work;

5. enriches the educational environment, thereby expanding the range of influences on pupils/students;

6. leads to the strengthening and expansion of educational needs and values of subjects of learning and their achievement of integrative academic results (key and subject competencies).

The generalization of publications indicates the presence of scientific results that emphasize the need for an individual approach in teaching computer science [31], inclusive learning [24], developing individual information hygiene skills [10; 11; 16], as well as career opportunities [21] and its development [4]. These and other scientific investigations emphasize that there are many tools and mean to provide or develop an individual learning path. Therefore, there is reason to assert that the use of

IET in the educational process meets the requirements of different approaches and is a promising direction in education in the context of youth development, and at the same time that there is a fragmentary nature of scientific results explaining the construction by the teacher. Teacher/student of an individual educational plan.

**Aims.** The article aims to analyze the construction of the IET to realize a particular educational trajectory as a skill of a modern teacher.

**Methodology.** To achieve the goal, theoretical methods of scientific knowledge were used: terminological analysis to clarify the research thesaurus, content analysis, and detailed comparison of the construction of an individual training plan for implementing a particular educational trajectory.

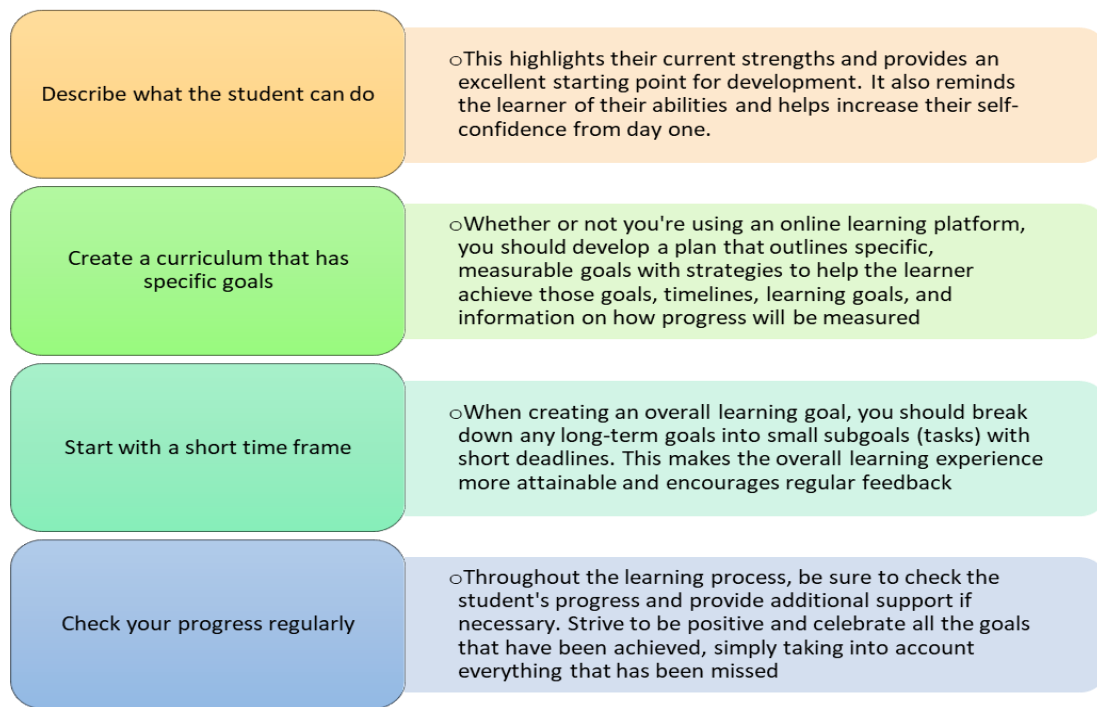
**Results.** An individual education plan is a plan that outlines the academic or personal goals of a student. Intents are specified (narrowed) to particular tasks and regularly checked to help the student understand what success looks like and how what steps it is achieved. Setting goals and objectives is decisive in a person's educational growth and personal development. The student's awareness of what is expected of him becomes the basis for the learning subjects to know where to concentrate their efforts. They feel more motivated to achieve the desired academic achievement level. This correlates with reasoning [22] regarding instructional goals' importance and timely formulations.

Additional benefits of setting goals and objectives in a unique curriculum are: raising awareness of your strengths and weaknesses; increasing self-esteem and self-confidence; a sense of success and achievement; clarification and perspective vision of the future path; the ability to prioritize; formation of independence and responsibility for learning; improving the decision-making process. This is consistent with the findings of a study [2] on the feasibility of keeping diaries when making decisions and fixing plans.

What is important is the ability of teachers/teachers to set achievable goals. Therefore, based on the results of the content analysis of various Internet resources related to the individualization of learning, building educational trajectories on open educational resources, and inclusive learning, we present generalized recommendations (Fig. 2), which are somewhat consistent with the reflections on the professional development of the trainee teacher presented in [29].

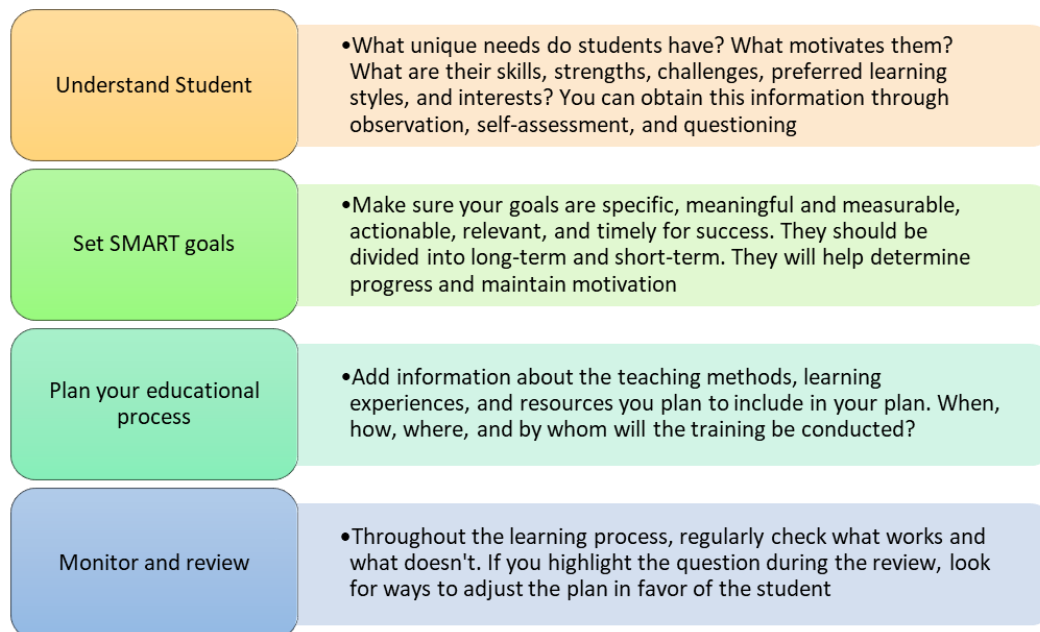
The following recommendations relate to the creation of a unique curriculum from the standpoint of an individual approach (Fig. 3). Individual approach is leading in the development of a unique curriculum, as discussed in the paper [6], which addresses the links between learning outcomes and the development of cognitive and motivational factors on the average grade.

In the context of creating a unique curriculum, it is important to understand the concept of SMART goals: these are goals that are specific, measurable, consistent, relevant, and limited in time. This type of goal is mentioned in the paper [18]. The author emphasizes the importance of early goal setting and, among the findings, says that it is important to start goal setting early, set short-term goals, provide visual tools, make goal setting personal, and focus on student choice. Similar results are presented in papers [9; 13].



**Figure 2. Generalized recommendations for correct goal setting in the construction of an individual curriculum**

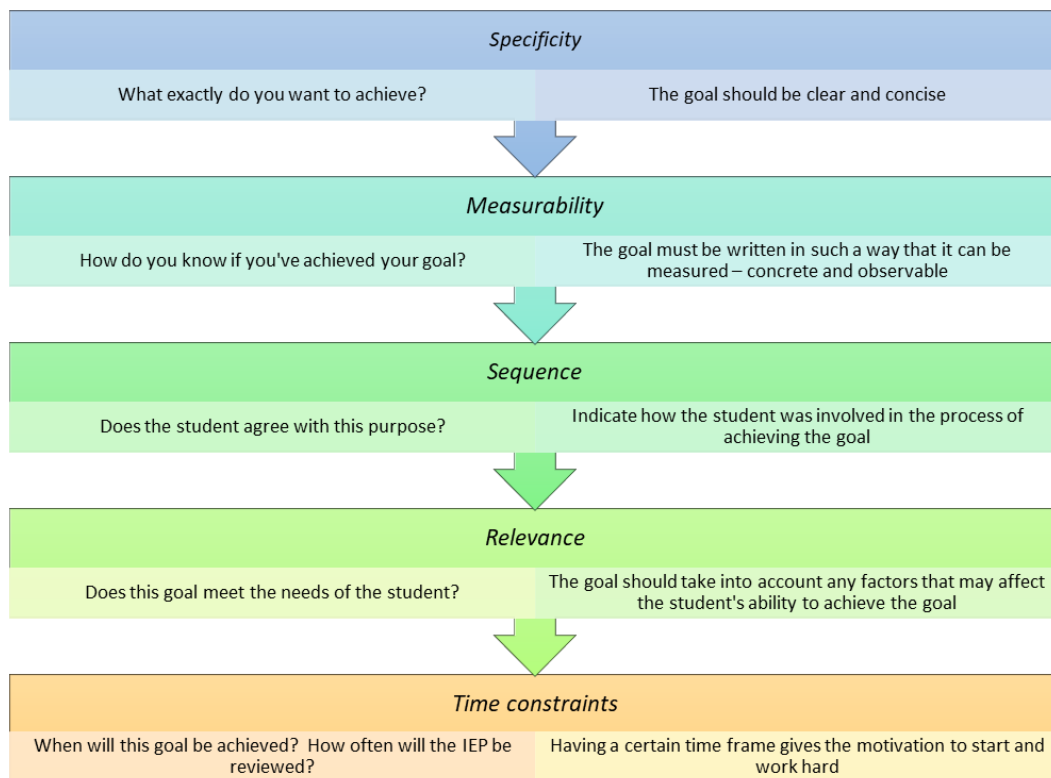
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**Figure 3. Tips for creating an effective IEP**

Source(s): own

Such goals should be described so that they include observed measures, a balanced time frame for their achievement, and criteria for measuring the degree of achievement for the student (Fig. 4).



**Figure 4. The concept of SMART goals**

Source(s): own

**Discussion.** The problem of individualization of education is not new and is raised not only by Ukrainian scientists.

The research [15] raises the problem of analyzing individual trajectories of learning students who drop out of school or do not do well in formal training curricula. The authors note that this is a negative factor for the university's overall development.

A different perspective on the issue of individual learning is offered in research [28]. The authors investigate the algorithms of work in distance electronic learning systems and their demands by students. The dependence on learning mobility and the choice of educational trajectory is emphasized. The issue of tracking students' behavior (their learning activity) during their online courses [19] is also raised.

Identical studies concerning modeling similar educational trajectories among students [30] and modeling proven trajectories of learning some material [12].

Important are the results that link training in a particular subject within formal educational and professional programs. For example, programming learning [14] is modeled as an academic trajectory following well-defined steps. The authors emphasize the importance of forming students' skills to set step-by-step goals themselves, which will contribute to the development of their ability to develop and execute projects step by step. At the same time, in these works, incomplete results are related to universal recommendations for developing individual educational trajectories of students.

**Conclusions.** Modern learning technologies and the development of digital technologies, in general, have become the basis for individual education and the

demand for the product of individual educational trajectories. The analysis of publications presented in the article made it possible to allocate several directions for implementing a separate IET: substantive, activity, and organizational. Each of these areas requires the construction of a unique curriculum, the detailing of which is presented as the author's work. The recommendations for setting goals and objectives illustrated in the article are decisive for implementing an individual educational trajectory. Moreover, important for the teacher who carries out educational accompaniment is: clarification of what the student can do; development of a training program that includes SMART goals (goals specific, meaningful and measurable, effective, relevant, and timely for success); allocation of short time frames; regular (systematic and systematic) monitoring of implementation (tracking the progress of the IEP). Important in this case are: perception of the personality of the student; dividing SMART goals into long-term and short-term; planning of the educational process (choice of forms, methods, means, resources); monitoring of the course of training and its results.

The main advantages of following an IEP from the perspective of a student include awareness of both learning objectives and the process of achieving them; increasing responsibility for their learning and development; increased self-confidence; understanding their strengths and weaknesses and how to use them to achieve success; focusing on flexibility and unique needs of students.

The purpose of the study has been achieved, but it opens up directions for further research. These are explorations related to individual trajectories of separate subject learning; using digital technologies and tools for individual professional training; introducing advanced training courses for teachers, coaches, and tutors to develop SMART goals in developing unique training programs or personal development.

**Author contributions.** The authors contributed equally.

**Disclosure statement.** The authors do not have any conflict of interest.

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