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INDIVIDUAL EDUCATIONAL NEEDS OF STUDENTS IN THE CONTEXT OF PERSONALIZED LEARNING

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Education is considered a key factor in ensuring the sustainable development of society. In accordance with the United Nations Sustainable Development Goals, providing inclusive and equitable quality education for all (Goal 4) is a necessary condition for human progress (United Nations, 2023). In this context, personalized learning emerges not as a "technological trend" but as a strategic approach to improving the quality of education – one that enables aligning the goals and content of learning with each student's actual capabilities, resources, and needs. International framework documents (UNESCO Education 2030, analytical and conceptual materials from the OECD) emphasize the need for educational models that support the progress of every student, considering the diversity of starting opportunities and learning contexts (OECD, 2006; UNESCO, 2015). At the same time, the practical implementation of personalization requires a theoretically clear answer to the question: what exactly is subject

to personalization, and on what basis does a teacher make decisions regarding an individual learning trajectory. Central to this is the concept of a student's individual educational needs (IEN)-a concept that, in Ukrainian discourse, is often used intuitively without sufficient conceptualization.

The article aims to propose a coherent pedagogical-psychological understanding of students' individual educational needs, outline their structure, possible levels of manifestation, and indicators relevant to the construction of a personalized learning model.

In pedagogy and psychology, the term "needs" is traditionally associated with internal states that motivate activity, define its direction, and shape the choice of modes of action. In the educational context, "needs" should be distinguished from: interests (stable orientations toward particular content or types of activity); abilities (psychological prerequisites for success in a given activity); educational deficits (gaps in knowledge or skills); and educational demands (conscious formulations of "what I want / what I need"). The concept of "individual educational needs" has been actively studied in pedagogy, psychology, and special education with notable contributions from H. Kostiuk among others, who laid the theoretical foundations of the individual approach to learning, emphasizing the age-related and psychological characteristics of students, and S. Kirk, who introduced the term "learning disability" and developed a classification system for children with special needs.

Unlike the narrow understanding of IEN as "special support needs," the contemporary vision of personalized learning calls for a broader interpretation: needs arise in every student because of a unique combination of abilities, motivation, prior experience, context, and learning goals (OECD, 2006). In this context, individual educational needs may be appropriately defined as a dynamic system of each student's unique requirements for the content, conditions, and methods of learning necessary for the fullest realization of their potential. This definition maintains a balance between the psychological core (motivation, self-regulation, the experience of difficulty and success) and pedagogical implementation (organization of the learning environment, tasks, support, and feedback). The dynamic nature of individual educational needs stems from the fact that they may change over the course of an academic year, during transitions between levels of education, in connection with psychophysiological maturation, and under the influence of pedagogical interventions. Therefore, in the context of personalization, individual educational needs should be regarded as an "evolving profile" rather than a fixed characteristic of a student established once and for all.

In international strategic documents, personalization unfolds as a response to the growing complexity of educational systems and the increasing role of student agency. The OECD report *Personalising Education* emphasizes that the driving force behind personalization is the recognition that universal models fail to account for the diversity of student trajectories and resources (OECD, 2006). Subsequent OECD frameworks (*Learning Compass 2030*) emphasize student agency and co-agency – the shared responsibility of students, teachers, parents, and the community for shaping the learning trajectory (OECD, 2019). This implies that individual needs cannot be reduced merely to "diagnosing abilities"; they manifest as an interaction between personal characteristics and the opportunities afforded by the environment.

UNESCO, within the framework of Education 2030 (the Incheon Declaration and Framework for Action), reinforces this logic by requiring the provision of quality education for all and support for the progress of every learner, recognizing the multiplicity of educational contexts (UNESCO, 2015). The European Digital Education Action Plan (2021-2027) further highlights the potential of technology in enabling flexible, personalized learning trajectories and access to quality content (European Commission, 2020). Taken together, these frameworks effectively raise the question: what specific needs must be taken into account so that personalization does not reduce to a superficial "adjustment of pace" or the provision of "different task variations."

In the Ukrainian context, an important methodological foundation may be found in the ideas of child-centrism (as a value framework) and contemporary approaches to science education, which emphasize the significance of individual trajectories in the development of interests, inquiry skills, and learning autonomy (Kovalova et al., 2025).

For the purposes of personalization, it is appropriate to consider IEN as a multi-component structure, with each component having pedagogical "points of influence." At the outset of the study, it is also necessary to outline indicators, which should be formulated as theoretical markers that may subsequently be operationalized (transformed into measurable items for observation tools, surveys, or work analysis). We propose the following integrative model in Table 1.

For pedagogical practice, it is useful to distinguish between the levels at which IEN manifests and may be "read":

1). The declarative level (self-report), when a student verbalizes: "I find this difficult," "I am not interested," "I want more practice," "I understand better through examples." This

is an important but not always reliable level, as it depends on the capacity for reflection, a culture of self-assessment, and trust.

*Table 1. The Structure of Students' Individual Educational Needs
in the Context of Personalized Learning*

№	Component name	Component description	Indicators
1.	Cognitive-Content	Encompasses needs related to the manner of processing information, deep understanding, intellectual load, and the pace of acquisition. At the school level, this manifests as a need for a different pace, visualization, additional scaffolding, increased complexity, or, conversely, the step-by-step introduction of content.	Imbalance between oral comprehension and written performance; dependence of achievement on the type of information presentation; need for scaffolding, diagrams, or step-by-step sequencing.
2.	Motivational-Value	Encompasses needs related to meaning, autonomy, attainability of goals, and recognition of progress. Without this dimension, personalization easily reduces to a purely "technical" adaptation of tasks. In international frameworks (OECD Learning Compass 2030), the motivational dimension is supported by the idea of student agency and their participation in goal and learning method choice.	Decreased initiative in the absence of choice; need for a short feedback cycle; preference for practice-oriented tasks as a condition for engagement.
3.	Emotional-Volitional	Describes needs related to emotional safety, support in the face of errors, overcoming assessment anxiety, and resilience in long-term projects. In crisis contexts (war, displacement, loss), this component becomes one of the most critical, as it determines the student's ability to engage in activity and maintain a learning stance.	Avoidance of assessment situations; sharp instability in work capacity; need for a "safe" format for making errors (drafts, repetition, alternative demonstration of results).
4.	Regulatory-Metacognitive	Reflects needs related to the development of self-regulation: planning, goal setting, monitoring, and correction of one's own learning. It is this component that makes personalization sustainable: the student gradually acquires tools to manage their own learning, while the teacher shifts from "adjustment" to "developing autonomy."	Difficulties with goal setting and planning; need for external structure (checklists, micro-steps); limited capacity for self-assessment without a reference point.
5.	Social-Communicative	Encompasses needs related to interaction: the format of group work, communication support, team roles, and feedback from adults. In personalization policies, it is increasingly recognized that an individual trajectory does not imply isolation – on the contrary, personalization presupposes an optimal configuration of collaboration and support.	Sharp increase or decrease in productivity during group work; the need for clearly defined roles within a team; the need for an individual support channel with the teacher.
6.	Environmental-Organizational	Encompasses needs related to the physical conditions of learning and the organization of space and schedule: lighting, noise, temperature, workstation ergonomics, sensory load, accessibility of materials and technical resources, occupational hygiene, and break schedules.	Manifests as sharp fluctuations in performance, fatigue, or behavioural responses when the environment changes, and decreases with the introduction of simple adaptations.

2). The behavioral level (learning patterns). This manifests in the way tasks are completed: whether the student plans their work, how they respond to errors, how they switch between activities, whether they complete tasks, and how they interact in a group.

3). The outcomes level (achievement and progress profile). This refers not only to "grades" but to the consistency of progress, typical errors, the ability to transfer knowledge, the quality of reasoning, and the depth of understanding.

4). The contextual level (conditions). Needs are often "activated" or intensified by context: changes in the learning environment, resource shortages, family circumstances, changes in the language of instruction, or frequent interruptions. This level aligns particularly well with the international logic of Education 2030, which recognizes the multiplicity of educational contexts and the need for flexible solutions (UNESCO, 2015).

Thus, students' individual educational needs should be regarded as a multidimensional phenomenon at the intersection of psychological characteristics and pedagogically organized learning conditions. The theoretically grounded structure of IEN (cognitive-content, motivational-value, emotional-volitional, regulatory-metacognitive, social-communicative and environmental-organizational) makes it possible to avoid reducing personalization to mere "pace adjustment" or the provision of "individual tasks." The proposed indicators may serve as an initial framework for subsequent research stages: the development of assessment criteria, student typologies, and a personalized learning model. The distinction between levels of need manifestation (declarative, behavioral, outcomes-based, and contextual) provides a foundation for further operationalization and the construction of data collection instruments. In a broader sense, theoretical clarity regarding IEN supports contemporary international strategic frameworks – such as Education 2030 and the OECD Learning Compass 2030 – in their vision of a sustainable, flexible, and learner-centered education that ensures the progress of every student in the face of change.

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DIGITALIZATION IN THE PROCESS OF STUDYING THE ENGLISH LANGUAGE

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Digitalization is the defining characteristic of the current stage of global economic and social development. Higher education, as one of the most important forms of human activity, cannot remain aloof from this process, which embodies the main trends of digitalization. The latter is based on the digital presentation of information, which, on the scale of the world's economic and social life, increases economic efficiency and improves the quality of life.

The issue of digitalization is quite new in science. First of all, this concept is associated with the creation in Ukraine at the end of 2019 of the Ministry of Digital Transformation as a central executive body responsible for the formation and implementation of state policy in the field of digitalization, open data, national electronic information resources, interoperability – interaction of network systems based on unified interfaces or protocols,