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REFLECTIVE ABILITY AS AN ESSENTIAL COMPONENT OF PEDAGOGICAL ACTIVITY

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ABSTRACT
This article examines the role of reflective ability in the professional training of prospective teachers from a theoretical-analytical perspective. It distinguishes among reflection, pedagogical reflection, and reflective competence as conceptually related but functionally distinct constructs. Through a comparative analysis of recurring features in the scholarly literature, the authors propose a working framework of reflective ability comprising six interrelated components: cognitive, evaluative, personal-meaning, regulatory, communicative, and prognostic. The article further considers the use of reflective journals, video-based lesson analysis, case-based tasks, peer observation, portfolios, and action research within a cyclical sequence of evidence collection, analysis, alternative action, testing, and reassessment. The proposed framework is presented as a theoretical model that requires further empirical validation.

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Keywords: *prospective teacher; reflection; pedagogical reflection; reflective ability; reflective competence; self-awareness; professional development.*

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Introduction

Contemporary educational environments require teachers to possess professional preparation that extends beyond knowledge of subject content and the application of methodological techniques. Unexpected situations arise during lessons, learners' needs vary, and a chosen method does not always produce the intended outcome. Under such conditions, a teacher must be able to explain the rationale for a decision, monitor its consequences, and, when necessary, modify subsequent action. In our view, reflective ability constitutes the professional foundation that enables this process to be organized consciously and systematically.

The Concept for the Development of the Higher Education System of the Republic of Uzbekistan until 2030 identifies the gradual transition from education oriented toward the transmission of theoretical knowledge to a system that develops practical skills, the qualitative renewal of educational content, and the training of competitive personnel as priority tasks (President of the Republic of Uzbekistan, 2019). This requirement implies that a prospective teacher should not only acquire practical experience but also be able to analyze that experience. Professional growth is secured not by the activity performed in itself, but by the reasoned conclusions drawn from it and the changes subsequently introduced into practice.

In pedagogical practice, reflection is sometimes limited to a general impression at the end of a lesson or a brief self-assessment such as "the lesson went well." Such an approach does not reveal what caused an error, which method proved effective, or what alternative course of action might have been

taken. Reflection in the scholarly sense requires interpreting observed evidence, distinguishing cause from effect, comparing alternative decisions, and determining subsequent action. From this perspective, the purpose of this article is to clarify the content and functions of reflective ability in pedagogical activity and to present, in an interconnected manner, methods that support its development in prospective teachers. The article explains the relationship among reflective ability, pedagogical reflection, and reflective competence and, on the basis of features identified in the literature, proposes six structural components of reflective ability as the authors' conceptual framework.

Literature Review

The pedagogical foundations of reflective thinking were articulated by Dewey (1933) through the unity of experience and its conscious reconsideration. Schön (1983) demonstrates that, in uncertain situations, professionals make decisions not solely by relying on ready-made rules but through analysis that emerges within the activity itself; he distinguishes between reflection during activity and reflection after activity. Stepanov and Semyonov (1985) classify reflection into intellectual, personal, communicative, and cooperative types, thereby substantiating that it cannot be reduced to mere self-observation. Taken together, these perspectives indicate that reflection is a complex phenomenon integrating thought, personal experience, and professional collaboration.

Developing Dewey's ideas, Rodgers (2002) interprets reflection as a systematic, collaborative, and relationship-based process through which meaning is made of experience. Larrivee (2000) emphasizes that critical reflection enables teachers to reconsider implicit beliefs and habitual expectations embedded in their practice. Korthagen et al. (2006) propose cyclical reflective models linking theory and practice, while Brookfield (2017) argues for examining a teacher's personal experience through the perspectives of learners, colleagues, and theoretical sources. In local research, increasing attention has also been paid to the reflective skills of prospective teachers (Guliyamov & Eshpo'latova, 2025). Nevertheless, the composition of reflective ability, its manifestation in practice, and its assessment criteria still require articulation within a unified logical framework.

Research Methodology

This study employed a theoretical-analytical research design. Perspectives presented in philosophical, psychological, and pedagogical sources were compared on the basis of three questions: What is reflection directed toward? What function does it perform in a teacher's activity? Through which indicators can its outcomes be observed? The units of analysis were the definition, object, function, type, developmental method, and assessment indicator associated with the concept. Recurring conceptual features identified in the sources were first grouped, after which their interrelationships were interpreted from the perspective of pedagogical activity (Bakholskaya et al., 2018; Brookfield, 2017; Dewey, 1933; Guliyamov & Eshpo'latova, 2025; Korthagen et al., 2006; Kuzmina, 1980; Larrivee, 2000; Machost & Stains, 2023; Rodgers, 2002; Schön, 1983; Stepanov & Semyonov, 1985). On this basis, a working structure comprising cognitive, evaluative, personal-meaning, regulatory, communicative, and prognostic components was formulated. This structure is not an empirical model; rather, it is regarded as a theoretical proposition to be tested in subsequent applied research.

Analysis and Results

The Scientific Meaning of the Concept of Reflection

The term "reflection" derives from the Latin reflexio, meaning "turning back" or "returning to." In the philosophical tradition, it denotes the subject's turning toward their own thinking and ways of knowing; in psychological interpretation, it refers to awareness of one's internal state, motives, and behavior. Dewey (1933) explains reflective thinking as the active, persistent, and careful consideration of the grounds supporting an existing belief or form of knowledge and of the conclusions to which it leads. This definition distinguishes reflection from merely recalling an event: in reflection, a person examines not only what they know, but also the basis on which a given knowledge claim or decision was reached.

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Schön (1983) distinguishes two interrelated forms of reflection in professional activity: reflection-in-action and reflection-on-action. In the first case, during a lesson the teacher observes students' reactions, task performance, or disruptions in communication and adjusts their actions within the situation itself. In the second case, after the lesson the teacher analyzes the outcome and its causes and draws a reasoned conclusion for the next session. These two forms complement one another: an immediate adjustment may remain an incidental decision if it is not examined through subsequent analysis, while delayed analysis may fail to contribute to professional development if it does not lead to practical change.

Although reflective ability, pedagogical reflection, and reflective competence are closely related in meaning, it is not appropriate to use them as identical concepts. Reflective ability denotes a person's capacity to analyze their own thoughts, feelings, actions, and the outcomes of those actions. Pedagogical reflection is the practical manifestation of this capacity when directed toward an educational situation. Reflective competence, in turn, is manifested through the integration of knowledge, skills, values, and experience and expresses readiness to analyze and improve a pedagogical situation. Thus, ability is a psychological capacity, pedagogical reflection is a mechanism of activity, and competence is their stabilized outcome in professional experience.

Structural Components of Reflective Ability

A comparison of the definitions and functions found in the reviewed sources showed that it is insufficient to explain reflective ability as a single skill. From the authors' perspective, its manifestation in pedagogical activity can be represented through the following interrelated components:

1) cognitive component – understanding the relationship among the pedagogical situation, the method applied, and the outcome achieved;

2) evaluative component – objectively assessing one's own activity on the basis of explicit criteria and evidence;

3) personal-meaning component – recognizing professional values, motives, emotional reactions, and one's personal position;

4) regulatory component – modifying one's mode of action and exercising self-regulation on the basis of an identified problem;

5) communicative component – understanding the perspectives of students and colleagues and accepting feedback;

6) prognostic component – anticipating possible consequences and designing subsequent pedagogical action.

Within the proposed structure, the components operate not separately but as a unified process. For example, a teacher may analyze a situation, but if they do not change their actions on the basis of the conclusion reached, reflection produces no practical outcome. Likewise, if evaluation is not grounded in explicit criteria, it remains at the level of subjective impression; if the perspective of a student or colleague is not considered, the situation is interpreted one-sidedly. Accordingly, the list of components is intended not merely to enumerate abilities, but to identify which link in the reflective process may be missing.

Types of Reflection and Their Pedagogical Functions

Stepanov and Semyonov (1985) distinguish cooperative, communicative, personal, and intellectual types of reflection according to the domain toward which reflection is directed. This classification is useful for analyzing pedagogical activity because it draws attention not only to the teacher's own experiences but also to modes of thinking, communication, and collaboration. The table below presents the authors' interpretation of how these types are related to pedagogical functions.

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Table 1.

Types of Reflection and Their Pedagogical Functions

Type of reflection	Core content	Function in pedagogical activity
Intellectual	Analysis of knowledge, modes of thinking, and problem-solving strategies.	Determining the alignment among lesson objectives, content, and method; reconsidering an ineffective approach.
Personal	Awareness of one's motives, emotional state, values, and self-image.	Recognizing one's professional position, regulating emotional reactions, and strengthening responsibility and the need for self-development.
Communicative	Understanding another person's perspective and how one is perceived by that person.	Adapting communication with students and enhancing empathy, feedback, and the effectiveness of pedagogical influence.
Cooperative	Analysis of roles, positions, and interaction in collective activity.	Coordinating collaboration with colleagues and organizing collective decision-making and mutual learning.

Source: Systematized by the authors on the basis of the classification by Stepanov and Semyonov (1985).

In practical situations, these types of reflection usually occur simultaneously. For example, when analyzing students' low level of participation in a lesson, a teacher intellectually evaluates the difficulty of the task and the extent to which the method corresponds to the lesson objective. At the same time, the teacher attends to their own communication style, attempts to understand how students perceived the situation, and exchanges views with a colleague. Such analysis makes it possible to view reflection not merely as internal observation, but as a means of connecting several layers of a pedagogical situation.

The Significance of Reflective Ability in Pedagogical Activity

The outcomes of pedagogical activity are not always immediately visible or unambiguous. The same method may produce different results in different groups, while a student's error may be associated not only with insufficient knowledge but also with the wording of a task, motivation, communication, or psychological state. Reflective ability enables a teacher to examine several possible explanations for a situation rather than hastily treating a surface indicator as the actual cause. In this respect, reflection does not complicate pedagogical decision-making; on the contrary, it brings such decisions closer to an evidence-based foundation.

The analysis indicates that reflection performs four interrelated functions in a teacher's professional development. The diagnostic function serves to identify the causes of success or difficulty, while the design function transforms the results of analysis into a plan for subsequent action. The regulatory function supports the adjustment of strategy during the lesson, whereas the developmental function converts individual experience into personal professional knowledge. Kuzmina (1980) emphasizes that the effectiveness of a pedagogical system should be evaluated through the interrelationships among its goals, content, means, and participants. Reflection enables the teacher to recognize these interrelationships in everyday practice.

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In contemporary interpretations, reflective practice is characterized by a teacher approaching their own experience with a specific question, collecting evidence, obtaining feedback, and developing a plan for change to be tested in the next cycle (Machost & Stains, 2023). It is therefore appropriate to understand reflection not as a one-time conclusion reached after a lesson, but as a recurring cycle of professional learning: observing the situation, collecting evidence, analyzing causes, selecting an alternative solution, testing it, and reassessing the outcome. Reflection becomes a force that changes practice only when each stage of the cycle provides a basis for the next.

Methods for Developing Reflective Ability in Prospective Teachers

Reflective ability cannot be developed through theoretical explanation alone. It requires regular tasks, evidence-based discussion, and a safe learning environment in which errors can be analyzed openly. Research devoted to the development of pedagogical reflection among students likewise demonstrates the importance of purposeful practice and feedback (Bakholskaya et al., 2018). In higher pedagogical education, the following methods can be used not as isolated activities but as stages of a unified developmental process:

Reflective journal – after a lesson or practicum, the student goes beyond simply recounting the event and records what occurred, which factors influenced it, what evidence supports the conclusion drawn, and what should be changed next time.

Video-based lesson analysis – enables specific episodes in a recording to be examined instead of relying on a general evaluation based on memory. Speech, questioning techniques, time allocation, student participation, and feedback are discussed on the basis of observable indicators.

Case studies and pedagogical situations – teach students not to search for a single "correct" answer, but to develop several solutions to a problem, compare their possible consequences, and justify the selected decision on the basis of criteria.

Peer observation and peer feedback – students observe one another's microteaching on the basis of criteria agreed in advance. Feedback is directed not at the person, but at the observed action, the conditions in which it occurred, and its outcome.

Reflective portfolio – brings together lesson plans, observation sheets, student work, the student teacher's self-assessment, and revised versions in one place. In this way, the focus is placed not on an isolated outcome but on the dynamics of development.

Action research – the student identifies a specific problem in practice, tests a small change, collects evidence concerning the outcome, and plans the next cycle on the basis of that evidence.

The value of the methods listed above lies not in their labels but in the questions on which the student works. For example, the question "Did you like the lesson?" leads only to the recording of a general impression. By contrast, questions such as "Which student behaviors showed that the selected method was effective?", "Which assumption influenced my decision?", or "How else might this situation be interpreted?" connect conclusions to evidence. It is important that reflection should not become a means of assigning blame or searching only for shortcomings. A reflective task contributes to professional development only when the student learns not to conceal an error, but to use it as information for subsequent action.

Criteria for Assessing Reflective Competence

It is difficult to assess the reflective development of a prospective teacher using only a general statement such as "is able to analyze their own activity." Assessment should examine whether the student describes the pedagogical situation using specific facts, distinguishes outcomes from causes, recognizes their own contribution and limitations, and takes the student's perspective into account. The ability to connect a theoretical concept with a practical episode, propose several solutions, formulate a verifiable next goal, and reassess the result of an introduced change may also serve as assessment criteria. Such criteria transform reflection from a personal impression into an observable professional action.

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On the basis of these criteria, descriptive, analytical, and critical-transformative levels can be distinguished. At the descriptive level, the student recounts what occurred but does not yet reveal the causes. At the analytical level, the student explains cause-and-effect relationships and supports conclusions with a theoretical concept or evidence. At the critical-transformative level, the student takes into account personal assumptions, situational conditions, and the perspectives of other participants and develops a specific plan for change. In our view, these levels are more effective when used to identify the student's next point of development rather than merely to assign a grade.

Discussion

The perspectives reviewed provide grounds for interpreting reflective ability not as an additional quality of pedagogical activity, but as an essential mechanism that supports its continuous improvement. It reduces the gap between theoretical knowledge and practical experience: the student does not merely memorize theory but uses it to explain a specific situation. Reflection also strengthens a prospective teacher's sense of responsibility for their decisions, because the student learns to understand the causes and consequences of a selected approach rather than simply reproducing external instructions. Communicative and cooperative reflection, in turn, create conditions for considering the perspectives of other participants and making decisions collaboratively.

However, not every form of self-analysis can be regarded as developmental reflection. Reflection without criteria may lead to subjective conclusions, while analysis focused exclusively on shortcomings may reduce self-confidence. Reflection acquires practical significance only when it is connected with evidence, theoretical concepts, constructive feedback, and a specific subsequent action. Therefore, in higher pedagogical education it is insufficient to teach reflection only as a separate topic; it should be embedded in methodology courses, pedagogical practice, and independent learning assignments. This conclusion also indicates the need to test the proposed six-component structure in practical situations and to refine the assessment criteria in subsequent research.

Conclusions and Recommendations

As a result of the theoretical analysis, reflective ability was interpreted as an integrative professional quality that enables a prospective teacher to become aware of their own thoughts, emotional state, pedagogical actions, and the consequences of those actions; to evaluate them on the basis of criteria; to take into account the perspectives of other participants; and to introduce purposeful changes into their activity. This ability is manifested in practice through pedagogical reflection and, when integrated with knowledge and experience, becomes a structural foundation of reflective competence.

To develop reflective ability in prospective teachers, reflective journals, video analysis, case studies, peer observation, portfolios, and action research should be systematically integrated with pedagogical practice. Each of these methods should lead to the collection of evidence, interpretation of the situation, selection of an alternative decision, and reassessment of the result. Under these conditions, reflection ceases to be a task performed merely for reporting purposes and instead develops the student's professional autonomy, responsibility, and need to improve their own practice.

Based on the results of the analysis and the identified issues, the following recommendations can be proposed:

1) in pedagogical education programs, reflective tasks should not be confined to a separate topic but should be incorporated into the assessment criteria of methodology courses and pedagogical practice;

2) reflective journals, video analysis, peer observation, and portfolios should be organized within a unified cycle consisting of evidence collection, analysis, selection of an alternative solution, testing, and reassessment;

3) an assessment rubric for students' reflective competence should be developed across descriptive, analytical, and critical-transformative levels, after which its practical usability and reliability should be tested under conditions of pedagogical practice.

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