



Improving The Criteria, Indicators, And Diagnostic Tools For Assessing Learning Outcomes In The Course “Foundations Of National Education”

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Abstract. This article addresses the improvement of criteria, indicators, and diagnostic tools for assessing learning outcomes in the course “Foundations of National Education”. The problem is relevant because assessment in value-oriented disciplines cannot be limited to testing factual knowledge; it must also capture students’ value orientations, cultural understanding, practical application, and reflective judgement. A qualitative theoretical-design methodology was used, combining analysis of formative assessment research, rubric-based evaluation, student self-assessment, and the educational aims of national education. As a result, a five-criterion diagnostic framework is proposed: axiological-motivational, cognitive-cultural, communicative-social, practical-behavioral, and reflective-evaluative. Each criterion is operationalized through observable indicators and matched with complementary diagnostic tools, including tests, situational cases, analytical essays, observation rubrics, e-portfolios, self-assessment, and expert assessment.

Keywords: national education, learning outcomes, assessment criteria, indicators, diagnostic tools, formative assessment, rubric, portfolio, self-assessment, teacher education.

Assessment is a central component of teaching because it determines what evidence is considered sufficient to demonstrate learning and how that evidence is used to improve instruction. In the course “Foundations of National



Education”, the assessment problem is especially complex. The course is expected to develop not only knowledge about national history, traditions, cultural heritage, moral norms, and educational ideas, but also students’ value orientations, ability to interpret socio-cultural situations, responsible behavior, and reflective attitude toward their future professional role. If assessment is reduced to conventional knowledge tests, a significant part of these intended outcomes remains invisible. Contemporary assessment theory supports a broader understanding of learning evidence. Black and Wiliam demonstrated the importance of formative assessment and feedback for improving classroom learning. Brookhart emphasizes that effective rubrics should contain criteria directly related to learning and clear descriptions of performance quality. Andrade, reviewing research on student self-assessment, shows that self-assessment is most educationally meaningful when it functions formatively and supports self-regulated learning. These positions are directly relevant to national education, where the student must not only reproduce information but also interpret, evaluate, and apply values in meaningful contexts.

A methodological difficulty arises from the relationship between criteria, indicators, tools, and levels. A criterion should express a significant dimension of the learning outcome; indicators should make that dimension observable; diagnostic tools should collect evidence corresponding to the indicators; and achievement levels should describe differences in the quality and independence of performance. When these elements are poorly aligned, assessment becomes formal: one indicator duplicates another, tools measure only factual knowledge, or level descriptors remain too abstract to support reliable judgement.

The study employed a qualitative theoretical-design approach. The analytical base included research on formative assessment, rubrics, self-assessment, and feedback, as well as the educational aims and content logic of the course “Foundations of National Education”. The analysis was guided by four requirements: construct alignment, observability, methodological complementarity, and formative usefulness. Construct alignment means that every criterion must represent a meaningful course outcome. Observability



requires indicators that can be identified in student performance. Methodological complementarity requires the use of several evidence sources for complex outcomes. Formative usefulness means that the result of assessment should provide information for improvement rather than merely produce a grade. The framework was developed in three stages. First, the intended outcomes of national education were grouped into value-related, knowledge-related, communicative-social, practical, and reflective domains. Second, each domain was translated into two or three observable indicators. Third, diagnostic instruments were matched to the type of evidence required. Knowledge tests were retained for conceptual understanding, but complex outcomes were assigned performance-based tools such as situational cases, analytical essays, project tasks, observation rubrics, portfolios, self-assessment, and expert assessment. This procedure follows the principle that no single method is sufficient for diagnosing a multidimensional educational result.

The analysis resulted in a five-criterion diagnostic system. The first criterion is axiological-motivational. It characterizes the student's interest in national-cultural values, the personal significance attributed to them, and motivation to apply these values in educational and social contexts. It is not sufficient to ask whether a student "supports" a value; the assessment should identify the quality of reasoning, stability of position, and willingness to connect value judgements with responsible action. The second criterion is cognitive-cultural. It reflects the completeness, accuracy, and contextual understanding of knowledge about national education, cultural heritage, traditions, educational ideas, and their relationship with contemporary social life. The third criterion is communicative-social. It concerns the ability to discuss culturally sensitive issues respectfully, justify one's position, listen to alternative viewpoints, and participate constructively in collaborative tasks. The fourth criterion is practical-behavioral and evaluates the student's ability to apply national-educational principles in cases, projects, pedagogical situations, and professional decisions. The fifth criterion is reflective-evaluative and captures



the ability to analyse one's own attitudes and actions, identify strengths and difficulties, and plan further personal and professional development.

Table 1.

Proposed criteria, indicators, and diagnostic tools for assessing learning outcomes

Criterion	Key indicators	Diagnostic tools
Axiological-motivational	Interest in national values; reasoned value choice; motivation for responsible application	Value dilemmas; questionnaire; reflective essay; interview
Cognitive-cultural	Accuracy and completeness of knowledge; contextual interpretation; ability to connect concepts	Knowledge test; concept map; analytical questions; source analysis
Communicative-social	Respectful dialogue; evidence-based argument; cooperation and social sensitivity	Discussion rubric; peer assessment; observation; group case
Practical-behavioral	Application in pedagogical situations; decision-making; design of value-oriented activities	Case study; project task; microteaching; portfolio evidence
Reflective-evaluative	Self-analysis; justified self-evaluation; identification of progress and improvement needs	Self-assessment rubric; reflective journal; e-portfolio; expert feedback

The table demonstrates the principle of diagnostic correspondence: every criterion is linked to indicators and evidence sources that are capable of revealing the intended outcome. For example, an objective test can reliably support the cognitive-cultural criterion but cannot by itself establish the stability of value orientation or the quality of reflective judgement. Conversely, a



reflective essay can reveal personal meaning and reasoning but should not replace a structured check of essential concepts. Therefore, a combination of instruments is methodologically preferable. For practical use, three achievement levels are proposed. At the high level, the student demonstrates systematic knowledge, independently interprets cultural and pedagogical situations, provides reasoned value judgements, transfers principles to new contexts, communicates responsibly, and conducts evidence-based self-evaluation. At the medium level, knowledge and value orientation are generally stable, but application and reflection require occasional teacher support; arguments may be correct but insufficiently contextualized. At the low level, knowledge is fragmented, value judgements are situational or weakly justified, transfer to practice is difficult, and reflection is mostly descriptive rather than analytical. These levels are pedagogical descriptors rather than labels of personality and should be applied only to demonstrated learning evidence.

The proposed system also introduces triangulation as an important improvement. A final judgement should be based on at least two different evidence types for multidimensional criteria. For example, practical-behavioral performance can be verified through a case solution and project evidence; reflective-evaluative performance can be supported by self-assessment and teacher feedback. Where results diverge, additional evidence should be collected instead of mechanically averaging scores. This procedure increases interpretive validity and reduces the risk that one task format disproportionately determines the result.

A rubric-based approach is recommended for complex tasks. Each rubric should contain criterion-relevant descriptors rather than vague words such as “good” or “poor”. Performance descriptions should indicate the quality of interpretation, independence, transfer, argumentation, and reflection. Such rubrics can be shared with students before task completion, which turns the assessment criteria into learning guidance. Brookhart stresses precisely this learning-centered function of rubrics, and Andrade shows that criteria-based self-assessment can support self-regulation when used formatively.



The proposed framework changes the logic of assessment from single-dimensional control to multidimensional diagnosis. This is important for “Foundations of National Education” because the course combines knowledge, values, communication, action, and reflection. An assessment system that privileges only factual recall may produce apparently precise scores while underrepresenting the actual educational aims. By contrast, the five-criterion structure allows different aspects of the outcome to remain analytically distinct and therefore prevents the criterion from simply repeating the indicator. The framework is consistent with formative assessment theory. Black and Wiliam argue that assessment becomes formative when evidence about learning is used to adapt teaching and learning activities. In the proposed model, diagnostic results can identify whether a student’s difficulty is primarily cognitive, motivational, practical, communicative, or reflective. This distinction matters pedagogically: a student who understands concepts but cannot apply them requires a different intervention from a student whose knowledge is fragmented or whose reflective skills are weak.

The role of self-assessment also requires careful interpretation. Self-assessment should not be treated as an independent final grade; rather, it should be used as evidence of reflective capacity and as a mechanism for helping students compare their work with explicit criteria. The review by Andrade supports greater attention to the cognitive and affective mechanisms of formative self-assessment. Therefore, self-assessment in national education can be organized through reflective questions such as: Which value did I apply in this case? What evidence supports my judgement? What alternative interpretation did I consider? What should I improve in a similar professional situation?

A further advantage is the possibility of integrating digital assessment without allowing technology to define the construct. Online quizzes may support the cognitive criterion; e-portfolios can accumulate project and reflection evidence; learning management systems can record formative feedback; and digital rubrics can make evaluation more transparent. However, automated scoring should be used cautiously for value-based and reflective outcomes,



because contextual interpretation and ethical reasoning require professional judgement. The principal limitation of this study is that the framework is theoretical and has not yet been validated through a large-scale empirical experiment. Future research should examine inter-rater agreement for rubric-based tasks, internal consistency where appropriate, relations among criteria, and sensitivity of the diagnostic system to changes produced by instruction. Pilot studies should also verify whether the proposed indicators are understandable to teachers and students and whether the combination of tools is feasible within ordinary course time.

Improving assessment in the course “Foundations of National Education” requires a clear alignment among learning outcomes, criteria, indicators, diagnostic tools, and achievement levels. The proposed five-criterion system axiological-motivational, cognitive-cultural, communicative-social, practical-behavioral, and reflective-evaluative provides a structured basis for diagnosing both knowledge and value-oriented educational results. Its methodological strength lies in the use of observable indicators, complementary diagnostic tools, rubric-based performance descriptions, and triangulation of evidence. The three proposed levels high, medium, and low describe the quality and independence of demonstrated learning rather than fixed personal characteristics. The framework can therefore support formative feedback, transparent grading, course improvement, and future experimental research aimed at validating diagnostic instruments for national education.

REFERENCES

1. Andrade H. L. A Critical Review of Research on Student Self-Assessment // Frontiers in Education. – 2019. – Vol. 4. – Article 87.
2. Black P., Wiliam D. Assessment and Classroom Learning // Assessment in Education: Principles, Policy & Practice. – 1998. – Vol. 5, No. 1. – P. 7–74.
3. Brookhart S. M. How to Create and Use Rubrics for Formative Assessment and Grading. – Alexandria, VA: ASCD, 2013.
4. Biggs J., Tang C. Teaching for Quality Learning at University. – 4th ed. – Maidenhead: Open University Press, 2011.



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5. Boud D., Falchikov N. (Eds.). Rethinking Assessment in Higher Education: Learning for the Longer Term. – London: Routledge, 2007.
6. Sadler D. R. Formative Assessment and the Design of Instructional Systems // Instructional Science. – 1989. – Vol. 18, No. 2. – P. 119–144.
7. Tursunov A. Theoretical and Methodological Foundations for Organizing National Education among Students // European Journal of Interdisciplinary Research and Development. – 2025. – Vol. 41. – P. 74–79.
8. Tursunov A. Y. Content of Teaching the Course “Foundations of National Education” // Ta’lim va taraqqiyot. – 2026. – No. 1. – P. 258–264.