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A DIAGNOSTIC-CRITERIAL MODEL FOR ASSESSING STUDENTS' ACADEMIC CULTURE IN PEDAGOGICAL HIGHER EDUCATION

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academic culture; diagnostic model; criteria; indicators; teacher education; academic literacy; reflective assessment; pedagogical transfer

ANNOTATSIYA:

The article presents a diagnostic-criterial model for assessing academic culture among students of pedagogical higher education institutions. The relevance of the study is determined by the need to move from a declarative understanding of academic culture to observable, measurable, and pedagogically interpretable indicators. The aim of the article is to operationalise academic culture through components, criteria, indicators, diagnostic materials, and levels of formation. The research used theoretical analysis, categorisation, conceptual modelling, and criterion-based pedagogical interpretation. The results indicate that academic culture can be reliably assessed when five components are considered: information-source literacy, written scientific-speech competence, scientific-communicative activity, reflective-regulative maturity, and professional-pedagogical transfer. Each component is linked to a specific criterion and a set of observable indicators. The proposed model distinguishes low, medium, and high levels, allowing educators to diagnose not only formal academic rule compliance but also the quality of academic action. The model is useful for

monitoring student development, designing feedback, and planning differentiated methodological support in teacher education.

Introduction

Academic culture is frequently discussed as a value-oriented phenomenon; however, in educational practice it must also be diagnosed, monitored, and improved. A pedagogical higher education institution cannot develop academic culture effectively if it does not have a clear system of criteria and indicators. Without operationalisation, academic culture remains a desirable but vague quality that is difficult to assess or purposefully form.

The need for a diagnostic-criterial model is especially relevant in teacher education. Future teachers are expected to demonstrate academic integrity, write and speak in a scientifically justified manner, engage in respectful discussion, regulate their learning, and transfer academic norms into future pedagogical activity. These qualities cannot be reduced to a single anti-plagiarism indicator or a formal written assignment. They require a multidimensional assessment framework.

The aim of this article is to develop and substantiate a diagnostic-criterial model for assessing students' academic culture in pedagogical higher education. The central research question is: how can academic culture be translated into components, criteria, indicators, diagnostic materials, and levels that are usable for pedagogical monitoring?

Materials and Methods

The study used theoretical analysis, categorisation, criterion-based modelling, and pedagogical interpretation. The conceptual material consisted of research on academic literacies, formative assessment, peer assessment, reflective learning, and teacher education. The practical material was derived from the structure of students' academic activity in pedagogical higher education: source work, written assignments, seminars, presentations, peer review, reflective portfolios, and practice-oriented tasks.

The modelling procedure included four steps. First, the components of academic culture were separated according to dominant student activity. Second, each component was matched with a criterion that expresses the quality of that activity. Third, each criterion was translated into observable indicators and diagnostic materials. Fourth, three levels of formation were described: low, medium, and high. This procedure followed the logic of pedagogical assessment, where a construct must be linked to observable evidence and interpretable levels of performance.

The model was designed for use in both formative and summative assessment. Formative use includes feedback, self-assessment, portfolio analysis, and revision. Summative use includes determining the level of academic culture after a training module, a semester, or a pedagogical practice cycle.

Results

The diagnostic-criterial model includes five components. The first component is information-source literacy. It reflects the ability to search for, select, verify, compare, and organise academic sources. Its criterion is the quality of information-source competence. The main indicators are purposeful source selection, reliability assessment, information systematisation, bibliographic accuracy, and relevance to a learning or research task.

The second component is written scientific-speech competence. It reflects the student's ability to formulate a thesis, build an argument, use evidence, preserve logical coherence, apply terminology accurately, and follow an academic genre. Diagnostic materials include essays, reviews, course paper fragments, analytical reports, and revised drafts.

The third component is scientific-communicative activity. It is expressed in seminar participation, oral argumentation, question formulation, presentation, micro-defence, debate, and peer review. The criterion is the quality of evidence-based communication. Indicators include the relevance of questions, argument quality, ability to respond to alternative positions, and constructive feedback.

The fourth component is reflective-regulative maturity. It concerns goal-setting, self-assessment, error analysis, use of feedback, revision planning, and construction of a personal academic development trajectory. The main diagnostic materials are reflective portfolios, learning diaries, self-assessment sheets, feedback responses, and revision notes.

The fifth component is professional-pedagogical transfer. It is specific to pedagogical higher education because it assesses whether the student can transfer academic experience into teaching practice. Indicators include adapting source work to lesson content, converting academic writing into methodological design, using discussion formats in classroom communication, and applying reflective analysis to lesson evaluation.

Table 1. Diagnostic-criterial structure of academic culture

Component	Criterion	Observable indicators	Diagnostic materials
Information-source literacy	Information-source competence	Purposeful source choice; reliability check; systematisation; bibliographic accuracy	Annotated bibliography; source map; analytical notes
Written scientific-speech competence	Quality of academic writing and argumentation	Thesis-evidence coherence; structure; terminology; academic style	Essay; review; course paper fragment; revised draft

Scientific-communicative activity	Evidence-based academic communication	Question quality; oral argument; response to opposing views; constructive peer review	Seminar protocol; presentation; peer-review sheet
Reflective-regulative maturity	Reflective self-regulation	Goal setting; self-assessment; error analysis; feedback use; revision plan	Reflective portfolio; diary; self-assessment sheet
Professional-pedagogical transfer	Professional transfer of academic experience	Adaptation to lesson design; methodological product; teaching task; practice analysis	Lesson plan; microteaching plan; assessment rubric; practice report

The model distinguishes three levels. At the low level, academic actions are mainly externally regulated; source selection is random, writing is reproductive, dialogue lacks evidence, reflection remains descriptive, and transfer to teaching practice is episodic. At the medium level, basic operations are present, but they are not stable or sufficiently independent. At the high level, the student selects sources according to academic criteria, produces evidence-based written work, participates in scientific discussion, uses feedback for revision, and consciously transfers academic experience into pedagogical products.

Discussion

The proposed model responds to a common limitation in academic culture assessment: the dominance of negative control indicators, especially plagiarism detection. While academic integrity is indispensable, assessment cannot be limited to identifying violations. A student may avoid plagiarism but still fail to analyse sources, build arguments, engage in meaningful discussion, or transfer academic norms to professional teaching contexts.

The model is aligned with the academic literacies approach, which views academic practice as a complex interaction of epistemic, communicative, and institutional norms (Lea & Street, 1998). It also corresponds to formative assessment theory, according to which assessment should provide information for further learning rather than simply classify performance (Black & Wiliam, 1998; Carless & Boud, 2018). In this sense, the diagnostic-criterial model is both evaluative and developmental.

The inclusion of professional-pedagogical transfer is the main distinctive feature of the model. General university assessment usually focuses on writing, citation, participation, and

independent work. In pedagogical higher education, however, academic culture must also be assessed through future teaching functions. This requires evidence such as lesson plans, microteaching scenarios, assessment rubrics, and practice reports.

Another important implication is that the model enables differentiated methodological support. If a student has strong source skills but weak oral argumentation, the teacher can assign discussion-based tasks. If a student writes adequately but cannot transfer academic logic into a lesson, the teacher can require transformation of an academic text into a methodological product. Thus, assessment becomes a basis for targeted development.

Conclusion

The article substantiated a diagnostic-criterial model for assessing students' academic culture in pedagogical higher education. The model includes five components: information-source literacy, written scientific-speech competence, scientific-communicative activity, reflective-regulative maturity, and professional-pedagogical transfer. Each component is linked to criteria, indicators, diagnostic materials, and three levels of formation.

The model makes academic culture observable and pedagogically manageable. It allows teachers to move from general statements about academic culture to concrete diagnostic evidence. Its practical value lies in formative feedback, portfolio assessment, monitoring of independent learning, and evaluation of pedagogical practice. Further research should test the reliability of the model across different teacher education programmes and refine rubrics for each component.

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