



## **METHODOLOGICAL RECOMMENDATIONS FOR PRE-SERVICE TEACHERS: USING RUBRICS IN STUDENT ASSESSMENT**

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### **Abstract**

In modern education, the assessment of students' knowledge, skills, and competencies is no longer merely a process of control or assigning grades. It is increasingly becoming an integral part of the teacher's didactic and educational strategy. Fair, transparent, and accuracy-focused assessment systems are gaining critical importance in ensuring the quality of education.

### **Introduction**

From this perspective, the use of rubrics—i.e., criterion-referenced and level-based assessment tools—should be recognized as a key pedagogical instrument in preparing prospective teachers for their professional practice. A rubric is an assessment tool that evaluates student work based on clearly defined criteria and tiered descriptors. It ensures fair, transparent, and systematic evaluation. Rubrics were first introduced into pedagogy as assessment tools by Paulson & Meyer (1991), and later scientifically developed and expanded by Sadler (2005) and Andrade (in the 2000s). Currently, issues such as ambiguity, subjectivity, and arbitrariness are often observed in teachers' assessment of student activities. This undermines the fairness and objectivity of the assessment process, decreases student motivation, and leads to a loss of trust in the grading system. Such challenges are particularly evident among novice teachers (i.e., prospective teachers), who often fail to pay sufficient attention to the clarity of criteria, the quality of analysis, and the effectiveness of feedback when designing assessment tools. This situation necessitates a solid understanding of didactic tools like rubrics and the development of competencies to use them effectively in practice. The present article addresses this pressing issue by analyzing how rubric-based



assessment systems can be effectively integrated into teacher education, and how criterion-referenced evaluation contributes to the formation of fair and transparent assessment practices. The article also sets out to develop methodological guidelines for training future teachers in rubric-based student assessment and to substantiate their practical relevance. The study aims to analyze the didactic essence and significance of rubrics in student evaluation; identify key challenges in developing assessment competencies among prospective teachers; develop methodological recommendations for the use of rubrics; and test the proposed approaches in practice to evaluate their effectiveness.

## **LITERATURE REVIEW**

The idea of using rubrics in assessing students' knowledge and competencies has become increasingly intertwined with the development of assessment culture in education over the past decades. This approach—namely, criterion-referenced and level-based assessment—is particularly distinguished by its practical relevance in international pedagogical research. In particular, Paulson & Meyer [1] present rubrics as transparent and comprehensible tools for student self-assessment and self-regulated learning. Sadler [2] analyzes how rubrics enhance students' trust in and acceptance of grades, placing special emphasis on the communicative relationship between the assessor and the assessed. Andrade's [3] research demonstrates that the use of rubrics positively influences students' learning strategies—especially in terms of justification of thinking, creativity, and metacognitive reflection. Within the European education system, studies by Panadero [4] and Andrade [5] highlight the effectiveness of rubrics in fostering self-regulated learning, frequently noting improvements in learning outcomes. Furthermore, Brookhart [6] conceptualizes rubrics not merely as assessment tools but as instructional tools, arguing that they help shape learners into active and critically thinking individuals. In the local (Uzbek) context, the issues of assessment culture and criterion-referenced approaches have also been explored. N. Kh. Kholbekov [7] and A. R. Rajabov [8], in their analyses of modern assessment technologies in education, characterize rubrics as a means of systematizing assessment and ensuring it is conducted on the basis of clearly defined criteria. S. S. G'ulomov [9] emphasizes the didactic power of criterion-based assessment tools, including rubrics, in ensuring transparency and fairness



and in addressing subjectivity in evaluation. In her research, M. Sh. Normurodova [10] draws attention to teachers' attitudes toward assessment, the role of trust in grades, and motivation, presenting rubrics as instruments for achieving pedagogical balance. Despite this body of literature, there is still a notable gap regarding comprehensive methodological guidelines aimed specifically at equipping prospective teachers with the skills to design, apply, and use rubrics in classroom practice, including peer assessment. Many existing studies remain theoretical or address general principles of assessment without providing practice-oriented solutions. Therefore, the present article aims to fill this gap by offering applied and methodological guidance on the use of rubrics in the professional training of future teachers. The distinctive feature of our approach is the interpretation of rubrics not simply as technical tools for assigning grades, but as pedagogical instruments that foster learner-centered, constructive, and reflective assessment practices. This perspective contributes significantly to improving educational quality, strengthening trust in assessment, and enhancing meaningful communication between students and teachers.

## **RESEARCH METHODOLOGY**

In traditional approaches, rubrics are often viewed merely as technical tools—tables designed to simplify assessment or systematize the process of assigning grades. However, it is important not to overlook the fact that a rubric also serves as a significant didactic instrument that fosters learner-centered, constructive, and reflective assessment culture. The constructivist approach serves as the foundation of this methodology. According to the constructivist perspective, assessment is not only a means to measure outcomes but also a tool that encourages students to engage actively in their learning, understand themselves, and strive for growth. Therefore, the use of rubrics is interpreted as a mechanism that transforms the learner from a passive object of assessment into an active subject of evaluation. Through rubrics, students can not only understand why they received a particular score, but also gain insight into how they can improve and develop at the next stage. Methodologically, the research is grounded in the constructivist paradigm and includes three phases: theoretical-analytical, practical-experimental, and reflective monitoring.



- During the theoretical-analytical phase, international and local literature was analyzed to examine the culture of assessment, the role of rubrics in education, and their didactic potential. The role of rubrics in enhancing student motivation, promoting critical thinking, and encouraging self-assessment was clarified.
- The practical-experimental phase involved a series of trial workshops conducted with student respondents [11]. In this process, students independently developed rubrics, practiced peer assessment, gave feedback, and gained experience in analyzing performance using rubric-based tools. Each rubric was constructed based on clear criteria, levels, and descriptors and applied to practical learning tasks.
- In the reflective monitoring phase, students' written reflections and self-justification narratives were analyzed. This analysis helped identify the development dynamics of students as assessors, the formation of fairness and responsibility, and their readiness for professional-level evaluation.

In addition to qualitative analysis methods, the research employed quantitative statistical approaches to detect measurable changes. Content analysis, surveys, and comparative analysis methods were applied based on specially designed evaluation sheets and reflective writings.

The findings revealed that the rubric, as a multifunctional didactic tool, effectively enables:

- The implementation of learner-centered assessment,
- The formation of a culture of peer assessment and constructive feedback,
- And the establishment of mutual trust-based communication between teachers and students.

## **ANALYSIS AND RESULTS**

Sample scenarios for practical workshops on designing rubrics applicable in the teaching of the subjects “Qualimetry” and “Pedagogical Mastery” were developed. These sessions are aimed at pre-service teachers and serve to foster assessment culture, reflective thinking, constructive feedback, and criterion-referenced evaluation skills.

### **1. Practical Workshop Scenarios**

Workshop 1: “What is a Rubric? How is it Constructed?”

- Subject: Pedagogical Mastery



- Type: Interactive Seminar
- Objective: To explain the structure, function, and pedagogical significance of rubrics in teaching practice

Session Flow:

- Opening question:  
When you assess students, what are the most common situations of unfairness or misunderstanding you encounter?
- Mini-lecture (10 minutes):
  - Definition of rubrics, types (analytic and holistic), components: criteria, levels, descriptors.
- Group activity (25 minutes):
  - Task: “Design a simple rubric to assess a student’s oral response.”
  - Requirements: 4 criteria, 3 performance levels, descriptors for each level.
- Group presentation & discussion (20 minutes):
  - Each group presents its rubric; peers provide feedback.
- Reflection (5 minutes):
  - “What did I learn today? What was challenging?”

Workshop 2: “Designing Rubrics for Learning Tasks”

- Subject: Qualimetry
- Type: Practical Workshop
- Objective: To teach students how to define assessment criteria and write descriptors for rubrics

Session Flow:

- Introduction (10 minutes):
  - Discussion: What tools support fairness and clarity in assessment?
  - Short video example: Application of rubrics in international education (Panadero’s model)
- Task 1 (20 minutes):
  - Students individually create a list of assessment criteria for a selected project or presentation task in their subject area.
- Task 2 (25 minutes):
  - In groups, students design a 3-level rubric (high, medium, low) based on 4 chosen criteria. Descriptors are written for each level.



- Peer Evaluation (10 minutes):
  - Each group evaluates another’s rubric using a “rubric evaluation form” (Are the criteria clear? Are levels coherent?).
- Reflection (5 minutes):
  - “What is the most important aspect of rubric construction?”

### Workshop 3: “Peer Assessment and Giving Constructive Feedback”

- Subjects: Qualimetry + Pedagogical Mastery (integrated session)
- Type: Peer Review-Based Assessment
- Objective: To practice giving constructive feedback using rubrics

#### Session Flow:

- Students write a lesson plan or a methodological recommendation (as homework or based on a prior workshop).
- Each student is assigned a peer’s work and evaluates it using a rubric.
- A special “Rubric Evaluation Sheet” is used, with 3 criteria: Structure, Didactic Foundation, Practicality.

#### Writing Feedback (15 minutes):

Each student provides structured feedback using prompts:

- “What I liked – ...”
- “What could be improved – ...”
- “My suggestion – ...”

#### Discussion and Final Reflections (15 minutes):

- How has your view of assessment changed?
- What level of responsibility is required in assessment as a teacher?

#### Additional Recommendations:

- Prepare rubric templates, sample feedback forms, and evaluation sheets in advance for each workshop.
- At the end of each session, student rubrics are uploaded to electronic portfolios and receive formative evaluation from the instructor.

## 2. Rubric Template (Sample Format)

- Task Type: Lesson Plan Design
- Assessor: \_\_\_\_\_
- Student Being Assessed: \_\_\_\_\_
- Date: \_\_\_\_\_



Assessment Criteria	High Level (3 points)	Medium Level (2 points)	Low Level (1 point)	Score
<b>Logical Structure of the Lesson</b>	Structure is complete, logically consistent, and stages are well integrated	Structure is partially coherent, with some weak connections	Structure is unclear, stages are disorganized	
<b>Clarity of Learning Objective</b>	Fully aligned with SMART criteria	Objective is partially defined	Objective is vague or general	
<b>Use of Active Methods</b>	Two or more innovative methods applied	One active method used	Limited to traditional methods	
<b>Relevance of Assessment Tools</b>	Rubrics/descriptive criteria are used	Basic point-based system, assessment rationale is present	Assessment method is unclear or lacks explanation	
<b>Organization of Reflection and Feedback</b>	Students are given opportunities for self-assessment and expression	Feedback is present but superficial	No reflection or feedback is organized	

Below are methodological recommendations, instructional guidelines, and practical materials on using rubrics in student assessment (based on teaching the subjects of Qualimetry and Pedagogical Mastery) for pre-service teachers. These tools aim to foster an assessment culture among prospective teachers, develop rubric design and application skills, and support the practical implementation of formative assessment strategies.

### Methodological Recommendations

- Provide theoretical understanding of the rubric’s content and components (criteria, levels, descriptors);
- Analyze existing rubrics (both international and national examples);
- Engage students in designing their own rubrics to gain personal experience;
- Promote an interdisciplinary approach to rubric use.

Rubrics should not be viewed solely as tools for pedagogical assessment, but rather as a comprehensive educational technology linked to didactics, communication, and reflection. To encourage reflection and peer assessment, it is recommended to include self-assessment and written feedback based on rubrics as a mandatory step following every practical session. In teaching demonstrations and simulated classroom scenarios, students should actively use the rubrics they have developed.



This process supports the creation of a methodological portfolio, where each student compiles their personal rubrics, assessment sheets, feedback comments, and reflective writings into a comprehensive “Assessment Portfolio.”

Instructional Guide (based on a brief outline)

- Subjects: Qualimetry and Pedagogical Mastery
- Topic: “Using Rubrics in Student Assessment”

Intended Learning Outcomes:

Students will:

- Analyze the components of a rubric;
- Design appropriate rubrics for instructional tasks;
- Conduct peer assessments and provide constructive feedback;
- Apply the principles of fairness and transparency in assessment.

### Practical Stages:

Stage	Activity
1. <b>Explanation</b>	Core concepts about rubrics (theoretical block)
2. <b>Analysis</b>	Analyzing existing rubrics (case study examples)
3. <b>Design</b>	Creating a rubric related to one’s subject (group and individual work)
4. <b>Implementation</b>	Assessing a simulation or presentation using the rubric
5. <b>Reflection</b>	Providing feedback on the assessment process, analyzing challenges

### Methodical Materials (Sample Formats)

#### Sample 1: "Rubric for Assessing a Lesson Plan"

Task: Develop a lesson plan on a topic for primary school students.

Criteria	High (3)	Medium (2)	Low (1)
<b>Coherence of Structure</b>	Lesson stages are clearly defined and logically connected	Stages are present but lack coherence	Lesson plan is disorganized and lacks explanation
<b>Clarity of Objectives</b>	Fully aligned with SMART criteria	Objective is partially clarified	Objective is vague or too general
<b>Assessment Tool</b>	Includes rubric and peer assessment	Only scoring is provided	No assessment tool indicated



### Sample 2: "Peer Assessment Sheet"

- Assessing Student: \_\_\_\_\_
- Assessed Student: \_\_\_\_\_
- Task Type: Didactic Game Project

No	Assessment Criteria	Yes (✓)	Partially (-)	No (X)	Comments
1	The game serves a didactic/educational purpose				
2	Content is clear and age-appropriate				
3	Assessment criteria are clearly defined				
4	Innovative approach is present				

### Activity 3: "Reflection Form"

Written Reflection Based on Guiding Questions:

- What new insights did today's assessment activity bring me?
- What was the most difficult part of designing a rubric?
- Did I consider myself a fair assessor? Why or why not?
- What aspects will I pay more attention to in future assessments?

## CONCLUSION AND RECOMMENDATIONS

The research findings indicate that the use of rubrics in the assessment process can serve as an essential tool for developing key elements of assessment culture among pre-service teachers, such as fairness, objectivity, and a learner-centered approach. The clarity of criteria, performance levels, and well-defined descriptors in rubrics facilitates transparent communication between students and teachers, enabling reflective practices, peer assessment, and self-assessment. Based on the experimental results, it can be emphasized that rubrics should not be treated merely as technical tools but rather as constructive and pedagogical instruments. Teaching and applying rubrics from this perspective creates a meaningful shift in the professional development of pre-service teachers. It deepens their assessment-related skills and cultural competence.



Considering the above, the following recommendations are proposed:

- A dedicated module on rubric development and use should be integrated into teacher education programs. This module should include hands-on tasks focused on constructing, analyzing, and applying rubrics in real instructional contexts.
- Integrated lessons combining Qualimetry and Pedagogical Mastery should be designed, allowing students to not only construct rubrics but also implement them in simulated or real classroom scenarios to gain practical experience.
- Each pre-service teacher should compile an assessment portfolio that includes their own rubrics, peer-assessment records, reflective writings, and analytical notes.
- Methodological guides, digital templates, and sample rubric forms should be widely disseminated. Developing these materials in digital formats will make them more adaptable to pedagogical practice.
- In-service teacher training courses should include sessions on cultivating a culture of rubric-based assessment, as the foundation of assessment culture in the classroom begins with the teacher's own approach to evaluation.
- To enhance transparency and fairness in assessment, it is recommended to adopt practices that incorporate student voice through rubrics, emphasize feedback on grades, and recognize individual progress and achievements.

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