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DIAGNOSTIC CRITERIA AND INDICATORS FOR ASSESSING CREATIVE THINKING IN PRIMARY SCHOOL STUDENTS THROUGH TEXTS BASED ON NATIONAL VALUES

Ziyodullayeva Zuhro Faxriddin qizi
Master's Student, Termez State Pedagogical Institute
E-mail: zuhroziyodullayeva4@gmail.com
Scientific Supervisor: Shabbazova Dilfuza Ruzikulovna
Doctor of Philosophy (PhD) in Pedagogical Sciences, Professor

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creative thinking; diagnostics; primary school; national values; assessment criteria; originality; flexibility; culturally responsive assessment; text-based tasks.

АННОТАЦИЯ:

This article develops a diagnostic framework for assessing creative thinking in primary school students through texts based on national values. The study uses a theoretical-methodological design integrating contemporary creativity assessment, higher-order thinking assessment, culturally responsive pedagogy, and text-based learning. No experimental sample or fabricated statistical findings are presented; the results consist of a diagnostic construct, task architecture, scoring criteria, and performance levels intended for subsequent empirical validation. Five diagnostic criteria are proposed: idea fluency, cognitive flexibility, originality with contextual appropriateness, elaboration and transformation, and reflective justification. These criteria are operationalised through open-ended tasks such as generating alternative endings, proposing multiple solutions to culturally situated dilemmas, changing narrative perspective, creating analogies, and adapting a national value to a contemporary context. A four-level analytic rubric is presented to distinguish low, basic, proficient, and advanced performance. The framework emphasises that creative thinking should not be scored solely by the number of unusual responses; novelty must be evaluated together with relevance, cultural-semantic coherence, and the learner's ability to explain choices. The proposed methodology offers a

foundation for diagnostic instruments that connect creativity assessment with culturally meaningful primary-school reading

INTRODUCTION

Creative thinking has become a significant educational outcome because contemporary learners must be able not only to reproduce established knowledge but also to generate possibilities, adapt ideas, improve solutions, and respond constructively to unfamiliar situations. The OECD conceptualises creative thinking as the competence to engage productively in generating, evaluating, and improving ideas that can result in original and effective solutions or expressions [2, 3]. This formulation is especially useful for education because it treats creativity as a developable and assessable cognitive process rather than as a rare talent possessed by a small number of individuals.

In primary education, creativity is often associated with drawing, storytelling, or artistic activity. These forms are important, but a diagnostic methodology requires more precise constructs. A pupil may produce many ideas, shift between categories, transform a narrative perspective, make an original but contextually meaningful connection, elaborate an initial idea, or justify why one solution is more suitable than another. Such behaviours can be observed and assessed when tasks are deliberately designed to elicit them.

Texts based on national values provide a distinctive context for such diagnosis. Folk narratives, proverbs, culturally significant episodes, family and community practices, historical stories, and value-oriented contemporary texts contain characters, dilemmas, symbols, relationships, and open possibilities that can be transformed through creative tasks. The cultural familiarity of the material may reduce unnecessary contextual barriers while allowing learners to recombine known meanings in new ways. At the same time, culturally responsive assessment warns against treating one culturally dominant response pattern as the only legitimate demonstration of competence [5].

The diagnostic problem is therefore twofold. First, creativity must be operationalised through observable indicators rather than intuitive teacher impressions. Second, originality must not be confused with randomness. A response can be unusual yet irrelevant to the text, culturally incoherent, or unsupported. A sound diagnostic model should therefore balance novelty with appropriateness, flexibility, elaboration, and reflective explanation.

The purpose of this study is to develop criteria, indicators, task types, and performance levels for diagnosing creative thinking in primary school students through texts based on national values. The research asks: Which dimensions of creative thinking can be reliably elicited through text-based tasks? How should culturally meaningful prompts be designed? How can responses be scored without reducing creativity to a single correct answer?

MATERIALS AND METHODS

The research employed a theoretical-methodological design. The unit of analysis was not a group of pupils but the structure of a prospective diagnostic instrument. Accordingly, the article reports a construct and rubric rather than empirical effect sizes. This distinction is necessary to preserve research integrity: statistical reliability, validity, and normative thresholds can only be claimed after actual administration to an adequately described sample.

The framework was developed through conceptual synthesis of creativity assessment literature, the OECD creative-thinking framework [2, 3], formative creativity assessment [4], higher-order thinking assessment [7], revised cognitive taxonomy [8], sociocultural learning theory [9], and culturally responsive pedagogy [5]. The synthesis focused on dimensions that are both theoretically meaningful and observable in written or oral responses by primary-school pupils.

Diagnostic tasks were designed according to six principles: openness to more than one acceptable response; age-appropriate linguistic demand; explicit connection to the source text; opportunity to produce more than one idea; possibility of changing perspective or category; requirement for some elaboration or justification; and cultural-semantic appropriateness. Tasks that merely ask pupils to reproduce a proverb, retell a story, or identify a predetermined moral were excluded because they do not adequately elicit creative production.

For future empirical use, scoring is proposed as an analytic rubric rather than a single holistic impression. Each criterion is rated separately on a four-point scale from 0 to 3. A total score can therefore range from 0 to 15, but interpretation should retain the criterion profile because two pupils may obtain the same total through different cognitive strengths. Any future cut-off points for population-level classification should be calibrated empirically rather than assumed in advance.

RESULTS

The methodological synthesis resulted in five diagnostic criteria. Together they represent productivity, variation, novelty, development, and metacognitive control of ideas.

Criterion	Operational indicator	Diagnostic evidence
Idea fluency	Produces several relevant possibilities within the task constraints.	Number of distinct, text-relevant ideas after duplicates and trivial variants are removed.
Cognitive flexibility	Shifts between perspectives, categories, strategies, or narrative possibilities.	Ideas belong to different meaningful categories rather than repeating one pattern.
Originality and appropriateness	Produces uncommon or non-obvious ideas that remain coherent with the text and task.	Novel response is contextually plausible and semantically connected to the cultural situation.

Elaboration and transformation	Develops, extends, combines, or restructures an initial idea.	Adds consequences, details, relationships, or a transformed narrative structure.
Reflective justification	Explains why an idea was selected, improved, or considered suitable.	Provides reasons linked to the text, value, audience, or anticipated consequence.

Five task families are proposed. First, alternative-generation tasks ask pupils to produce several possible endings or solutions. Second, perspective-shift tasks require retelling or solving a situation from another character's position. Third, transformation tasks ask pupils to change one condition in the text and predict how the narrative should be reorganised. Fourth, analogy and transfer tasks require connecting a national value represented in the text with a new school, family, or community situation. Fifth, improvement tasks present an initial weak solution and ask pupils to make it more effective, fair, or culturally appropriate.

Task family	**Illustrative prompt**	**Primary criteria elicited**
Alternative generation	Give three different ways the characters could resolve the disagreement while preserving mutual respect.	Fluency; flexibility; appropriateness
Perspective shift	Retell the key event from the viewpoint of the younger character. What might this character notice differently?	Flexibility; elaboration
Condition transformation	If one important custom in the story were absent, how would the events change?	Transformation; causal creativity
Value transfer	Create a new school situation in which the same value is important but appears in a different form.	Originality; transfer; elaboration
Idea improvement	A character proposes one solution. Improve it so that it is fairer and explain your changes.	Elaboration; reflective justification

Each criterion is scored from 0 to 3. The descriptors below are intended as provisional content-validity descriptors and must be tested for inter-rater agreement before formal use.

Score	**General descriptor**
0 - Low	No relevant creative response, direct copying, or response unrelated to the task.
1 - Basic	One relevant but conventional idea; limited variation or development; minimal explanation.

2 - Proficient	Several relevant ideas or a meaningful shift in perspective; some originality and elaboration; understandable justification.
3 - Advanced	Multiple differentiated and contextually appropriate ideas; non-obvious transformation; detailed development; clear reflective justification.

For classroom diagnostics, criterion-level profiles are more informative than a total score alone. For example, a pupil may show high fluency but low flexibility, producing many versions of essentially the same idea. Another pupil may generate only two ideas but display strong originality and elaboration. The diagnostic conclusion should therefore describe the structure of performance rather than attach a fixed personality label to the child.

A practical diagnostic session may include one age-appropriate national-value-based text and three to five open tasks completed individually after comprehension has been checked. Teachers should avoid giving examples that effectively supply the creative answer. Oral responses may be permitted for younger pupils if writing skill would otherwise confound the construct. Scoring should be conducted with anonymised response samples during instrument validation, and at least two raters should independently score a subset of responses to estimate agreement.

DISCUSSION

The proposed framework is consistent with the view that creativity assessment should examine processes and products that can be developed through education rather than treating creativity as an unchangeable trait [2, 4]. Its distinctive contribution is the integration of creative-thinking diagnostics with culturally meaningful text work in primary education.

The inclusion of appropriateness alongside originality is methodologically important. Novelty without relevance can reward random answers. Conversely, excessive emphasis on conformity can suppress creativity. The rubric therefore asks whether a response is both non-obvious and coherent with the textual and cultural context. This balance allows pupils to reinterpret a value creatively without requiring them to reproduce one predetermined formulation.

Another important feature is the separation of fluency and flexibility. Counting ideas alone may inflate scores when pupils repeat the same pattern with minor lexical changes. Flexibility requires categorical or perspectival movement. This distinction is consistent with established creativity-assessment traditions and with educational frameworks that emphasise generation, evaluation, and improvement of ideas [2, 3].

Cultural responsiveness also affects administration and interpretation. A pupil's familiarity with a custom, proverb, or historical reference may influence performance independently of creative capacity. Therefore, texts should be understandable from the information provided and should not require specialised family or regional knowledge that some pupils may not

possess. The diagnostic aim is to assess creative thinking through cultural material, not to convert cultural exposure into a hidden prerequisite.

The framework has several limitations. It has not yet undergone empirical validation, so reliability coefficients, factor structure, grade norms, and cut scores cannot be asserted. Future research should conduct expert content validation, cognitive interviews with pupils, pilot administration, inter-rater reliability analysis, exploratory or confirmatory construct analysis where sample size permits, and examination of convergent relationships with other measures of creative thinking. Grade-specific versions may also be necessary because writing ability and abstract reasoning change substantially across the primary-school years.

CONCLUSION

Diagnosing creative thinking through texts based on national values requires more than asking pupils to write an unusual ending. A defensible methodology must specify what creativity means, design tasks that elicit the intended processes, and score responses through transparent criteria. The framework developed in this study identifies five dimensions: fluency, flexibility, originality with appropriateness, elaboration and transformation, and reflective justification. It further proposes task families and a four-level analytic rubric suitable for subsequent empirical validation. By linking creativity assessment with culturally meaningful reading, the approach offers a pathway for evaluating higher-order thinking without detaching it from the linguistic and value context of primary education.

REFERENCES

1. Anderson, L. W. A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom’s Taxonomy of Educational Objectives / L. W. Anderson, D. R. Krathwohl (eds.). - New York : Longman, 2001.

2. Brookhart, S. M. How to Assess Higher-Order Thinking Skills in Your Classroom / S. M. Brookhart. - Alexandria : ASCD, 2010.

3. Facione, P. A. Critical Thinking: What It Is and Why It Counts / P. A. Facione. - [S. l.] : Insight Assessment, 2015.

4. Gay, G. Culturally Responsive Teaching: Theory, Research, and Practice / G. Gay. - 3rd ed. - New York : Teachers College Press, 2018.

5. Lucas, B. Progression in Student Creativity in School: First Steps Towards New Forms of Formative Assessments / B. Lucas, G. Claxton, E. Spencer // OECD Education Working Papers. - No. 86. - Paris : OECD Publishing, 2013.

6. OECD. PISA 2022 Assessment and Analytical Framework [Elektron resurs] / OECD. - Paris : OECD Publishing, 2023. - URL: https://doi.org/10.1787/dfe0bf9c-en (murojaat sanasi: 31.10.2026).

7. OECD. PISA 2022 Results (Volume III): Creative Minds, Creative Schools [Elektron resurs] / OECD. - Paris : OECD Publishing, 2024. - URL: https://doi.org/10.1787/765ee8c2-en (murojaat sanasi: 31.10.2026).

8. Paul, R. The Miniature Guide to Critical Thinking Concepts and Tools / R. Paul, L. Elder. - [S. l.] : Foundation for Critical Thinking, 2019.

9. UNESCO. Reimagining Our Futures Together: A New Social Contract for Education / UNESCO. - Paris : UNESCO, 2021.

10. Vygotsky, L. S. Mind in Society: The Development of Higher Psychological Processes / L. S. Vygotsky. - Cambridge : Harvard University Press, 1978.