

INTEGRATIVE MODEL FOR THE DEVELOPMENT OF CRITICAL AND CREATIVE THINKING IN PEDAGOGY AND PSYCHOLOGY

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Introduction

Modern society is marked by the dynamics of globalization, digital transformation, and the rapid advancement of science and education. Under these conditions, the formation of an individual capable of independent analysis, decision-making, generating new ideas, and practicing critical reflection becomes a key educational priority. Consequently, the concepts of *critical thinking* and *creative thinking* are increasingly viewed in the scholarly literature as fundamental competencies of the twenty-first century (Facione, 1990, pp. 12–13).

Pedagogical practice demonstrates that traditional teaching methods, primarily oriented toward reproductive knowledge acquisition, are insufficient to fully develop these competencies. A transition toward integrative models is required—models that combine cognitive, communicative, and cultural aspects of learning. One of the most promising directions in this regard is the synthesis of critical and creative thinking within a unified educational paradigm.

Theoretical and Methodological Foundations of the Study

The Concept of Critical Thinking

According to the *Delphi Report* of the American Philosophical Association, critical thinking is defined as “purposeful, self-regulatory judgment” that encompasses interpretation, analysis, evaluation, and inference (Facione, 1990, p. 12). This definition highlights the metacognitive nature of critical thinking and its indispensability for inclusion in the educational process.

The Concept of Creative Thinking

E. Torrance defines creativity as the ability of an individual to generate original ideas, flexibility, and elaboration of thought. His *Torrance Tests of Creative Thinking (TTCT)* have become an international benchmark for diagnosing creative potential (Torrance, 2018, pp. 25–29).

Integrative Approaches

Contemporary pedagogy shows growing interest in the CLIL (*Content and Language Integrated Learning*) model, developed by D. Coyle, P. Hood, and D.

Marsh. This model organizes learning around four core components: content, communication, cognition, and culture (Coyle et al., 2010, pp. 12–14). Alongside CLIL, the EMI (*English Medium Instruction*) approach, in which subjects are taught through English, has become widespread. EMI fosters not only linguistic competence but also students' cognitive skills (Macaro, 2018, pp. 57–61).

The Integrative Model of Critical and Creative Thinking Development

The proposed model combines elements of both classical and contemporary theories. Its foundation consists of:

1. **Cognitive Component** — development of analysis, synthesis, comparison, and reasoning skills.
2. **Creative Component** — fostering the ability to generate ideas, flexibility, and originality.
3. **Integrative Component** — application of CLIL and EMI as tools for uniting cognitive and creative strategies.
4. **Psychological and Pedagogical Component** — reliance on L. S. Vygotsky's cultural-historical theory and J. Dewey's ideas on experiential learning (Dewey, 1910, pp. 45–50).

Thus, the model is designed to promote the synchronous development of critical and creative skills through the integration of disciplines, multilingual practice, and intercultural interaction.

Practical Mechanisms of Implementation

- **New types of learning tasks:** debates, case analyses, project-based and problem-oriented assignments.
- **CLIL methods:** organization of interdisciplinary lessons involving a foreign language.
- **Diagnostic tools:** WGCTA (*Watson–Glaser Critical Thinking Appraisal*) and Torrance's TTCT, adapted to the local educational context.
- **Interactive technologies:** digital simulations, online discussions, and collaborative projects.

Discussion and Scientific Novelty

The scientific novelty of this study lies in the creation of a comprehensive integrative model in which critical and creative thinking are not treated separately but considered in close interaction. Unlike existing approaches, this model emphasizes the complementarity of cognitive and creative strategies.

The practical significance of the study is defined by the potential to implement the model in teacher training universities and professional development programs. The use of CLIL and EMI, combined with diagnostic

methods such as WGCTA and TTCT, provides new opportunities for an objective evaluation of students' developmental levels.

Conclusion

The development of critical and creative thinking is a strategic priority for modern education. The integrative model proposed in this study enables the comprehensive formation of these competencies while taking into account the requirements of the twenty-first century and international educational standards.

The findings can be applied in the design of curricula, the creation of new academic courses and programs, and in teaching practices within the humanities and pedagogical disciplines.

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