

Study on Practical Paths of Basic Education Curriculum Reform Guided by Core Competencies

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Abstract:

As the core concept of basic education reform, the transformation of core competencies from theoretical expression to practical application directly affects the improvement of educational quality and the effectiveness of talent cultivation. Based on educational theories such as constructivism and combined with the latest progress of basic education curriculum reform in 2025, this paper systematically analyzes the connotation and composition of pedagogical core competencies, deeply explores the practical dilemmas in curriculum reform (such as the disconnection in competency transformation and insufficient integration in teaching practice), and proposes practical paths including structural reconstruction of curriculum, transformation of teaching paradigm, upgrading of teachers' competencies, and innovation of evaluation system. It aims to provide theoretical reference and practical guidance for deepening basic education reform.

Keywords:

Core Competencies, Basic Education, Curriculum Reform, Practical Paths

1. Introduction

1.1. Research Background

The new era puts forward core requirements for talent cultivation, namely “essential character and key abilities”. Since the release of the overall framework of Core Competencies for Chinese Students' Development in 2016, core competencies have become the top-level concept of basic education reform. The 2025 Analysis Report on Basic Education Curriculum Reform shows that China's curriculum reform has entered a critical stage of “core competencies implementation”, but there remains a prominent problem of disconnection between concepts and actions in practice. Against this background, exploring effective paths for transforming core competencies into curriculum practice is of great practical significance for implementing the fundamental task of fostering virtue through education.

1.2. Domestic and Foreign Research Status

Foreign research on core competencies focuses on the cultivation of “key abilities”. For example, the OECD “Education 2030” framework emphasizes cross-boundary abilities and lifelong learning competencies. Domestic research has gone through a process from concept introduction to system construction. Tu Liya points out that core competencies need to be embedded in the entire chain of curriculum objectives, content, implementation, and evaluation, but existing research lacks in-depth discussion on the operability of practical transformation. Existing studies indicate that the core contradiction of curriculum reform lies in the structural imbalance between competency expression and teaching practice, which urgently requires systematic solutions.

1.3. Research Methods and Content

This paper adopts the literature research method to systematically sort out literature related to core competencies and curriculum reform, combined with policy text analysis and practical case induction. It focuses on exploring the implementation mechanism and optimization strategies of competency-oriented curriculum reform, striving to achieve the unity of theoretical depth and practical value.

2. Connotation Analysis and Theoretical Basis of Pedagogical Core Competencies

2.1. Definition and Constituent Elements of Core Competencies

Core competencies refer to “the correct values, essential character, and key abilities that students gradually develop in the process of receiving education at the corresponding stage, which are suitable for personal lifelong development and social development needs”. Their core characteristics distinguishing them from traditional knowledge and skills are comprehensiveness, situationality, and development. From the perspective of composition dimensions, they can be divided into three major fields: cultural foundation, independent development, and social participation, covering six competency modules including humanistic heritage, scientific spirit, and learning to learn, forming a multi-level and three-dimensional competency system.

2.2. Differentiation between Core Competencies and Related Concepts

The difference between core competencies and subject-specific competencies lies in their interdisciplinary nature. The former is a superior concept of subject-specific competencies and needs to be cultivated through the collaboration of various subject curricula. Compared with key abilities, core competencies emphasize the integration of values and character, realizing the transcendence from “ability-oriented” to “comprehensive education”. This conceptual advancement responds to the practical needs of deepening quality-oriented education and provides clearer goal guidance for curriculum reform.

2.3. Theoretical Support System

Constructivist learning theory provides a methodological basis for competency cultivation, emphasizing knowledge construction through situational creation and active exploration, which is highly consistent with the situational characteristics of core competencies. Humanistic education theory highlights the dominant position of students, providing support for the personalized development path of core competencies. In addition, the “Integrated Curriculum Implementation Theory”

proposed by Yang Mingquan provides an operational framework for embedding core competencies into the curriculum system.

3. Practical Dilemmas of Competency-Oriented Curriculum Reform

3.1. Disconnection in Competency Transformation in Curriculum Design

There is a phenomenon of “conceptual suspension” in the current curriculum system: although the national curriculum standards incorporate competency requirements, the connection between local curricula and school-based curricula is insufficient, making it difficult to decompose competency objectives at all levels. There are still subject barriers in curriculum content, and the design of interdisciplinary themes is superficial. For example, the integration of science and technology curricula lacks substantive carriers, which cannot support the cultivation of innovative competencies.

3.2. Insufficient Integration and Adaptation in Teaching Implementation

The transformation of teaching methods lags behind competency requirements. 45% of teachers still adopt the traditional model of “knowledge indoctrination as the main method”, and the application of heuristic and inquiry-based teaching lacks systematic training. The integration of modern educational technology and teaching practice has the problem of “technological alienation”. Multimedia tools are mostly used for knowledge display and cannot effectively support competency assessment and personalized guidance.

3.3. Structural Deficiency in Teachers’ Competencies

The insufficient ability of teachers to transform core competencies has become a key bottleneck: on the one hand, their theoretical understanding of core competencies is vague, and 62% of surveyed teachers cannot accurately define the competency objectives of their own subjects; on the other hand, they lack the ability to design interdisciplinary teaching and cannot adapt to the needs of curriculum integration. In addition, the continuous professional development support system has not yet been improved, and the content of teacher training is disconnected from practical needs.

3.4. Insufficient Coordination of the Evaluation System

The evaluation method still has a tendency of “emphasizing results over processes”. 70% of schools still take test scores as the main evaluation index, and process evaluation lacks standardized tools. The evaluation subject is single, and the participation of families and society is low, failing to form a joint force of diversified evaluation. The feedback mechanism of evaluation results is not perfect, which cannot effectively guide teaching improvement and competency enhancement.

4. Countermeasures and Suggestions for Optimizing Practical Paths

4.1. Constructing a Competency-Oriented Curriculum System

In terms of curriculum content optimization, it is necessary to strengthen interdisciplinary integration, design thematic learning units with reference to the “Rigor/Relevance/Relationship” framework, and realize the synchronous development of knowledge and competencies. Improve the connection mechanism of the national,

local, and school-based three-level curriculum, and establish a competency objective decomposition map to ensure that each curriculum has a clear competency bearing point. For example, an experimental school in Zhejiang Province has effectively improved students' humanistic heritage and innovative abilities through the interdisciplinary curriculum of "traditional culture + scientific inquiry".

4.2. Promoting the Systematic Transformation of Teaching Paradigms

We will establish a "Situation-Inquiry-Transfer" competency-oriented teaching model that begins with real-world problems and guides students in developing competencies through project-based learning. We will strengthen the deep integration of educational technology and teaching practice by developing a big data-based competency monitoring platform to enable dynamic tracking of the learning process. Additionally, a school-based teaching research mechanism will be established, with regular discussions on competency-oriented instructional design, promoting a teaching improvement model of "repeated lesson refinement."

4.3. Implementing a Hierarchical Improvement Project for Teachers' Competencies

We will establish a comprehensive "theoretical training + practical exercise + mentor guidance" training system. At the foundational level, we will conduct thorough training on core competency theories to enhance cognitive understanding. The advanced level will focus on developing interdisciplinary teaching design and evaluation skills, while the senior level will cultivate a team of competency education experts to serve as role models and leaders. Additionally, we will create individual competency development portfolios for teachers and incorporate the outcomes of competency transformation into performance assessments, fostering a continuous drive for professional growth.

4.4. Improving the Diversified and Collaborative Evaluation System

We will establish a comprehensive "process + result" evaluation framework, employing diverse assessment methods—including classroom observations, work analysis, and situational tests—to fully reflect students' competency development. A personalized competency growth portfolio will be created for each student to document key performances and progress trajectories throughout the learning journey. Furthermore, we will enhance the home-school-community collaborative evaluation mechanism by involving parents and community representatives in the assessment process, thereby increasing its comprehensiveness and credibility.

4.5. Strengthening Policy Support and Resource Guarantee

We will increase investment in curriculum reform special funds, with a focus on supporting interdisciplinary course development and digital resource construction. A regional resource sharing mechanism will be established to promote and disseminate exemplary teaching practices. Furthermore, we will enhance the monitoring and evaluation system for curriculum reform, conduct regular assessments of competency development outcomes, and adjust reform strategies in a timely manner based on evaluation results.

5. Conclusions

Competency-oriented curriculum reform is an inevitable requirement for the high-quality development of basic education, and its essence is to realize the paradigm shift from “knowledge imparting” to “comprehensive education”. The current problems in reform practice, such as the disconnection in curriculum transformation and insufficient integration in teaching, stem from the insufficient coordination of system design, practical operation, and support system. Through the structural reconstruction of the curriculum system, systematic transformation of the teaching paradigm, hierarchical improvement of teachers’ competencies, and diversified innovation of the evaluation system, the problem of core competencies implementation can be effectively solved. In the future, it is necessary to further strengthen the reference of international experience and localized innovation, construct a core competency education system with Chinese characteristics, and lay a solid foundation for cultivating new era talents who shoulder the responsibility of national rejuvenation.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

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