Next Scientists
European International Journal of Pedagogics

TYPE Original Research
PAGE NO. 129-134
DOI 10.55640/eijp-05-12-32

The Structure Of Educational Process Design Competence: Analysis Based On An Acmeological Model

Bayzakova Maftuna

2-nd year basic doctoral student at Jizzakh state pedagogical university, Uzbekistan

OPEN ACCESS

SUBMITTED 30 October 2025
ACCEPTED 25 November 2025
PUBLISHED 31 December 2025
VOLUME Vol.05 Issue12 2025

Abstract: Educational reforms, competency-based standards, and the expansion of inclusive and digitally mediated learning environments have made the ability to design the educational process a core professional requirement for contemporary educators. Yet “design competence” is often described either too narrowly as a set of planning skills or too broadly as a general indicator of pedagogical professionalism. This article offers an acmeologically grounded analysis of educational process design competence and proposes a structural model that explains its internal composition and developmental logic. The purpose of the study is to conceptualize the structure of educational process design competence through an acmeological lens that treats professional growth as movement toward sustainable mastery, reflexive self-regulation, and value-meaning maturity. The study is based on integrative theoretical analysis of pedagogical, psychological, and acmeological literature and on conceptual modeling that translates acmeological constructs into the functional tasks of educational design. The results present a structural interpretation of design competence as an integrative, multi-component formation that includes value-meaning orientation, conceptual-analytical knowledge, operational-technological capability, communicative-cooperative readiness, reflexive-evaluative regulation, and creative-transformative capacity. The model clarifies how these components interact in real design activity and how competence develops from reproductive planning to authorial, context-sensitive design supported by reflection and professional self-development. The discussion considers diagnostic implications, risks of formalization, and program design opportunities in teacher education and professional development systems. The article concludes that an acmeological

model enables both clearer operationalization of design competence and more humane, developmentally realistic pathways for cultivating it in future and practicing educators.

Keywords: Educational process design, design competence, acmeological model, professional development, reflection, pedagogical planning, instructional design, teacher education.

Introduction: The capacity to design the educational process has become a decisive marker of teacher professionalism in contemporary education systems. The educator is expected to work not only as a transmitter of content but also as an architect of learning experiences, a mediator of developmental environments, and a reflective decision-maker who aligns educational goals with learners' needs and institutional contexts. In early childhood education, general schooling, vocational training, and higher education alike, the quality of educational outcomes is increasingly connected to how competently the process is conceptualized, structured, and continuously improved. This shift has intensified attention to design competence as a target outcome of teacher education and professional development.

Despite its relevance, educational process design competence remains conceptually ambiguous. In some interpretations it is reduced to lesson planning techniques and documentation skills; in others it is expanded to an umbrella concept that overlaps with nearly every pedagogical competency. Both extremes weaken the practical value of the construct. A narrow interpretation risks turning design into a routine administrative action, while an overly broad interpretation makes competence difficult to diagnose and develop systematically. The challenge is therefore to define the internal structure of design competence in a way that captures its complexity without dissolving it into general professionalism.

An acmeological approach is promising in this regard because it treats competence not merely as possession of skills but as a developmental formation that integrates personal, cognitive, operational, and reflexive dimensions and unfolds across time. Acmeology studies the regularities, conditions, and technologies of reaching high levels of professional mastery, conceptualizing "acme" as a dynamic peak of maturity that enables further growth. For educational design, this perspective is valuable because design activity is inherently iterative and self-developing: educators design, implement, evaluate, revise, and redesign, learning from both success and difficulty. Consequently, the structure of design competence should be conceptualized not only as a set of elements but as a system with developmental dynamics that reflect movement from externally guided performance to self-regulated, authorial practice.

The present article addresses the problem of conceptualizing educational process design competence in a structurally clear and developmentally realistic manner. It argues that an acmeological model makes it possible to identify the core components of this competence, explain their interdependence, and describe how the competence grows toward professional mastery. The aim of the article is to analyze the structure of educational process design competence based on an acmeological model and to present a synthesized framework that can support curriculum development, practicum design, mentorship practices, and diagnostic assessment. The objectives are to clarify the conceptual boundaries of design competence, reveal its internal structure as an integrative system, and discuss implications for teacher education and continuous professional development.

The study uses an integrative theoretical approach that combines literature analysis and conceptual modeling. The literature base includes works on acmeology and professional development, psychology of activity and personality, pedagogical theory, competency-based education, and reflective practice. The analysis focused on conceptual definitions of competence and professionalism, descriptions of pedagogical design and instructional planning, and acmeological constructs related to subjectivity, self-development, reflexive regulation, and professional mastery. The selection strategy emphasized foundational and frequently cited works that provide stable theoretical positions rather than short-lived trends.

Conceptual modeling was applied to synthesize the reviewed positions into an acmeological structural model of design competence. The model was built by mapping the functional tasks of educational process design to psychological mechanisms of professional activity and to acmeological determinants of growth. This included identifying the value-meaning basis of design decisions, the conceptual-analytical knowledge required for contextual diagnosis and goal-setting, the operational-technological mechanisms of constructing learning scenarios, the communicative-cooperative dimension of design as a collaborative activity, and the reflexive-evaluative regulation that transforms experience into development. The result is a coherent structure that is not presented as a static classification but as a system of interacting components whose integration indicates maturity of competence. Because the article is conceptual, it does not report an empirical

intervention; nevertheless, the model is formulated in a way that supports subsequent operationalization through indicators and developmental levels.

The acmeological analysis suggests that educational process design competence should be understood as an integrative professional formation that enables an educator to construct, justify, implement, and improve an educational process in alignment with learners' developmental needs, curricular goals, sociocultural context, and available resources. In this interpretation, design competence is not limited to planning documents or methodological routines. It functions as a systemic capacity for purposeful construction of educational reality, supported by personal responsibility, reflective self-regulation, and continuous professional self-development. The competence becomes visible in the educator's ability to move from applying ready-made templates toward authorial, context-sensitive design that remains accountable to pedagogical values and evidence.

Within an acmeological model, the structure of design competence emerges from the logic of professional activity and from the developmental movement toward mastery. The first structural dimension is value-meaning orientation. Educational design always implies choices: what to prioritize, what to simplify, which methods to use, how to interpret learners' needs, and how to balance cognitive and socio-emotional aims. These choices are grounded in values, professional ethics, and a stable understanding of the learner as a developing person. Value-meaning orientation provides the internal criterion system that prevents design from becoming formalistic. In mature design competence, values do not remain declarative; they are translated into concrete design decisions about learning environments, interaction styles, inclusivity, differentiation, and assessment approaches.

A second dimension is conceptual-analytical preparedness. Designing an educational process requires an educator to diagnose conditions, interpret data about learners, and transform general standards into meaningful goals. This dimension includes knowledge of developmental and educational psychology, curriculum theory, didactics, and subject or interdisciplinary content, as well as the ability to analyze constraints and possibilities in a specific context. Conceptual-analytical preparedness is acmeologically significant because mastery presupposes not only doing but understanding. When educators understand the conceptual basis of their design decisions, they can justify, adapt, and improve them rather than simply reproduce familiar patterns.

A third dimension is operational-technological capability, which refers to the ability to translate conceptual intentions into workable designs. This capability includes constructing coherent sequences of learning activities, selecting methods and resources, planning communication and interaction, organizing learning environments, and anticipating potential difficulties. It also includes the practical know-how of aligning objectives, content, methods, and assessment in a consistent design logic. In an acmeological perspective, operational capability is not mechanical; it represents the practical embodiment of professional thinking. Its maturity is reflected in flexibility, efficiency, and the capacity to manage complexity without losing developmental appropriateness.

A fourth dimension is communicative-cooperative readiness. Educational design is rarely an isolated activity. It is shaped through professional dialogue with colleagues, mentors, administrators, and families, and it is influenced by the learner group itself. In many contexts, especially inclusive education, design requires collaboration among teachers, psychologists, speech therapists, and support specialists. Communicative-cooperative readiness therefore becomes a structural part of competence rather than an external condition. In mature design competence, an educator can negotiate shared goals, integrate different perspectives, and create coherence across participants without sacrificing professional responsibility.

A fifth dimension is reflexive-evaluative regulation. The acmeological approach emphasizes reflexivity as the mechanism that converts experience into professional growth. Design competence develops through iterative cycles: planned intentions are implemented, outcomes are observed, discrepancies are interpreted, and design is revised. Reflexive-evaluative regulation includes the ability to evaluate the quality of design, interpret evidence from learning processes, and identify reasons for success or difficulty. It also includes self-assessment of one's professional decisions and emotional responses, because educational design is inseparable from the educator's personal participation. The maturity of this dimension is expressed in the capacity to learn from both positive outcomes and failures, maintaining a constructive stance toward improvement.

A sixth dimension is creative-transformative capacity, which becomes especially important when the educator works in changing conditions or seeks to innovate responsibly. Creativity here is not arbitrary novelty but purposeful transformation of educational design based on learner needs, contextual demands, and pedagogical values. It includes the ability to generate alternative solutions, redesign learning experiences, and integrate new technologies or methods while preserving

developmental logic and ethical boundaries. In an acmeological model, creative-transformative capacity reflects the transition from competence as conformity to competence as authorship.

These structural dimensions do not function independently. Value-meaning orientation shapes the direction of analysis and selection of methods; conceptual-analytical preparedness ensures that values are operationalized through valid goals and content; operational-technological capability turns analysis into practice; communicative-cooperative readiness stabilizes design within social systems; reflexive-evaluative regulation sustains continuous improvement; and creative-transformative capacity enables growth beyond routine solutions. The integration of these components indicates movement toward professional maturity. When any component is underdeveloped, competence becomes fragile. For example, strong operational skills without reflexivity can lead to rigid routine; conceptual knowledge without operational capability can lead to theoretical planning disconnected from practice; creativity without value-meaning orientation can produce inconsistent or developmentally inappropriate designs.

The acmeological model also implies a developmental progression. At early stages, design competence often manifests as reproductive planning, where the educator applies templates and follows external instructions with limited contextual adaptation. As development continues, adaptive design emerges, characterized by informed adjustments based on learners' needs and feedback. With further growth, authorial design becomes possible, where the educator constructs coherent educational systems with a clear value basis, conceptual justification, operational precision, collaborative alignment, and sustained reflection. Importantly, in acmeological terms, this progression is not a linear accumulation of skills but a qualitative transformation of professional position: the educator increasingly becomes a subject of design rather than a performer of prescribed plans.

The proposed structural model clarifies why educational process design competence cannot be reduced to planning technique. Educational design is a form of professional activity that integrates cognition, values, communication, and reflection. The acmeological perspective strengthens this view by framing competence as a developing system whose maturity depends on integration and self-regulation. This offers an advantage over purely functional descriptions because it explains not only what components exist but why they matter for reaching sustainable professionalism.

The model also aligns with major traditions in teacher education research. The emphasis on reflexive-evaluative regulation resonates with theories of reflective practice, where professionals develop through continuous inquiry into their own actions and their consequences. At the same time, the acmeological lens adds a developmental and motivational focus: reflection is not only an intellectual procedure but also a self-developing mechanism supported by professional values and personal responsibility. This is particularly relevant in contexts where planning is traditionally treated as formal documentation. An acmeological model shifts attention to the educator's internal criteria and to the capacity to justify design decisions through both ethical meaning and developmental rationale.

From a teacher education perspective, the structural model suggests that cultivating design competence requires educational environments that promote subjectivity. Students must be placed in conditions where they design educational processes with increasing independence, receive meaningful feedback, and learn to evaluate their own decisions. If teacher education relies mainly on reproduction of lesson plans and compliance with templates, the value-meaning and reflexive dimensions remain weak, and competence tends to stagnate at a procedural level. Acmeological logic implies that the educational process should gradually transfer responsibility from teacher educators to students, while maintaining supportive mentorship that prevents anxiety and destructive perfectionism.

The communicative-cooperative dimension is especially important because educational design frequently fails not due to lack of knowledge but due to misalignment among participants. Teachers may design effective learning sequences, yet implementation can be disrupted by inconsistent expectations, lack of family engagement, or poor coordination with colleagues. When design competence includes cooperative readiness, educators are better prepared to create shared understanding and to negotiate realistic designs that can be sustained in institutional life. This suggests that teacher education should treat collaboration as part of design training rather than as an auxiliary "soft skill."

The acmeological orientation toward peaks of professionalism raises a crucial implementation issue. If "acme" is interpreted as a demand for constant maximum performance, it can generate pressure that undermines learning and well-being. Therefore, acmeological programs must emphasize sustainable mastery rather than perfection. In practical terms, this means fostering reflective resilience: the ability to learn from mistakes without losing professional confidence and to maintain child-centered values under stress.

Such resilience is supported when assessment practices are formative and developmental, focusing on growth trajectories and reflective justification rather than on punitive evaluation of errors.

Diagnostic implications follow from the structural model. If design competence is multi-component, assessment must capture both the quality of design products and the maturity of the educator's reasoning and self-regulation. A plan that looks formally correct may hide weak conceptual analysis or absent value justification. Conversely, an educator may show strong analytical thinking but struggle to operationalize it in coherent design. The acmeological model encourages multi-perspective assessment that considers the educator's capacity to articulate values, analyze context, construct operational designs, cooperate with stakeholders, and revise designs based on reflective evaluation. Such diagnostics, however, must be ethically implemented so that they guide development rather than label educators as "strong" or "weak" in a fixed manner.

Finally, the model offers a conceptual basis for integrating modern instructional design ideas with humanistic pedagogy. Digital technologies, adaptive learning tools, and data-driven decision-making can enrich educational design, but they require a stable value and reflective foundation. Without that foundation, technological design risks becoming instrumental and disconnected from the learner's development. The acmeological model helps maintain balance: it supports innovation while insisting that design decisions remain anchored in meaning, responsibility, and continuous self-development.

Educational process design competence is a central professional capacity that determines the coherence, developmental appropriateness, and effectiveness of teaching and learning. An acmeological analysis shows that this competence should be understood as an integrative formation that includes value-meaning orientation, conceptual-analytical preparedness, operational-technological capability, communicative-cooperative readiness, reflexive-evaluative regulation, and creative-transformative capacity. The maturity of design competence is revealed not by formal completeness of plans but by the educator's ability to design responsibly, justify decisions conceptually and ethically, collaborate within educational systems, and continuously improve practice through reflection.

The acmeological model contributes by providing a developmental logic that explains how design competence grows from reproductive planning to adaptive and authorial design supported by professional subjectivity and self-development. This framework can guide teacher education curricula, practicum organization, mentoring practices, and the design of formative diagnostics. Future research should focus on empirical validation of the model through diagnostic tools and longitudinal studies, as well as on developing program technologies that cultivate sustainable mastery without imposing perfectionist pressure.

REFERENCES

1. Деркач А.А., Зазыкин В.Г. Акмеология: учебное пособие. — СПб.: Питер, 2003. — 256 с.
2. Деркач А.А., Кузьмина Н.В. Акмеологические основы развития профессионализма. — М.: РАУ, 1993. — 32 с.
3. Кузьмина Н.В. Профессионализм личности преподавателя и мастера производственного обучения. — М.: Высшая школа, 1990. — 119 с.
4. Маркова А.К. Психология профессионализма. — М.: Международный гуманитарный фонд «Знание», 1996. — 312 с.
5. Зеер Э.Ф. Психология профессий: учебное пособие. — 2-е изд., перераб. и доп. — М.: Академический Проект; Екатеринбург: Деловая книга, 2003. — 336 с.
6. Леонтьев А.Н. Деятельность. Сознание. Личность. — М.: Политиздат, 1975. — 304 с.
7. Выготский Л.С. Мышление и речь. — М.: Лабиринт, 1999. — 352 с.
8. Сластенин В.А., Исаев И.Ф., Шиянов Е.Н. Педагогика: учебное пособие / под ред. В.А. Сластенина. — М.: Академия, 2002. — 576 с.
9. Хуторской А.В. Ключевые компетенции как компонент личностно-ориентированной парадигмы образования // Народное образование. — 2003. — № 2. — С. 58–64.
10. Зимняя И.А. Ключевые компетентности как результативно-целевая основа компетентностного подхода в образовании. — М.: Исследовательский центр проблем качества подготовки специалистов, 2004. — 40 с.
11. Шульман Л.С. Те, кто понимают: рост знаний в преподавании // Educational Researcher. — 1986. — Vol. 15, № 2. — P. 4–14.
12. Schön D.A. The Reflective Practitioner: How Professionals Think in Action. — New York: Basic Books, 1983. — 384 p.
13. Kolb D.A. Experiential Learning: Experience as the Source of Learning and Development. — Englewood Cliffs, NJ: Prentice-Hall, 1984. — 256 p.
14. Tyler R.W. Basic Principles of Curriculum and

Instruction. — Chicago: University of Chicago Press, 1949. — 144 p.

15. Taba H. Curriculum Development: Theory and Practice. — New York: Harcourt, Brace & World, 1962. — 526 p.

16. Wiggins G., McTighe J. Understanding by Design. — 2nd ed. — Alexandria, VA: ASCD, 2005. — 370 p.

17. Darling-Hammond L. Powerful Teacher Education: Lessons from Exemplary Programs. — San Francisco, CA: Jossey-Bass, 2006. — 419 p.

18. Bronfenbrenner U. The Ecology of Human Development: Experiments by Nature and Design. — Cambridge, MA: Harvard University Press, 1979. — 352 p.