

Research on the Development of a Future-Oriented Core Competency Framework for Accounting Higher Education

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Abstract: Against the backdrop of clustered breakthroughs in digital technologies and profound transformations in the business environment, the professional ecosystem of accounting is undergoing systemic reconstruction. The traditional knowledge-transfer-focused model of accounting higher education faces challenges of adaptation. This study aims to develop a future-oriented core competency framework for accounting higher education to address the structural shift in professional competency demands. By reviewing the theoretical origins of accounting competency cultivation and clarifying the connotations, characteristics of core competencies as well as their distinctions from related concepts, the study establishes a theoretical foundation for framework development. Furthermore, it conducts an in-depth analysis of how changes in the professional ecosystem, driven by technological evolution and business model innovation, reshape the competency requirements for accounting professionals, revealing the need for iterative upgrades to traditional competencies and the necessity of emerging ones. Building on this, the study develops a core competency framework composed of multidimensional elements—including technological literacy, integrative thinking, communication and collaboration, and professional ethics—featuring a three-tiered structure of "professional tool application, contextual analysis and creation, and strategic leadership and innovation." Finally, it proposes implementation pathways for systematically integrating the framework into the educational system through curriculum restructuring, pedagogical innovation, and transformation of the assessment system. This framework provides a systematic reference for shifting accounting higher education from a knowledge-oriented to a competency-based paradigm.

Keywords: Accounting Higher Education; Core Competency; Competency Framework; Professional Ecosystem; Educational Transformation

Introduction

Accounting higher education, as the primary channel for cultivating specialized talent, directly determines whether the accounting profession can adapt to and lead future economic and social development. Currently, the technological revolution represented by artificial intelligence and big data is intertwining with deepened business-finance integration and the complex global business environment. This convergence is driving fundamental transformations in the roles, functions, and value-creation methods of the accounting profession, thereby imposing unprecedented new demands on the competency structure of accounting professionals. However, the existing educational system still exhibits significant shortcomings in the systematicity, foresight, and integrative nature of competency cultivation, urgently requiring a theoretically grounded, future-responsive, and pedagogically integrable core competency framework to serve as a blueprint for reform. Therefore, systematically researching and constructing a future-oriented core competency framework for accounting higher education holds not only pressing practical significance for enhancing the quality of accounting talent cultivation and ensuring the dynamic alignment between professional talent supply and occupational demand, but also important theoretical value for promoting the self-renewal of accounting educational philosophies and models. Following the logical sequence of "theoretical foundation-demand analysis-framework construction-pathway design," this study aims to provide a comprehensive solution to the aforementioned issues.

1. Theoretical Origins and Conceptual Definition of Core Competency Construction in Accounting Higher Education

1.1 Tracing the Theoretical Foundation of Accounting Competency Cultivation

The theoretical underpinnings of accounting competency cultivation are deeply rooted in multiple academic streams. The Taxonomy of Educational Objectives provides a classical paradigm for delineating competency hierarchies; by extending cognitive processes from remembering and understanding to applying, analyzing, evaluating, and creating, it establishes a cognitive psychology foundation for constructing a tiered accounting competency system. Human Capital Theory, from an economic perspective, elucidates the intrinsic link between educational investment and the enhancement of individual productive capacity, thereby offering an economic rationale for accounting higher education's investment in developing students' core competencies. Professional Socialization Theory focuses on how individuals internalize professional values, norms, and skills through the educational process to complete the role transition from student to professional accountant. This perspective emphasizes the necessity of integrating knowledge, skills, and professional identity formation during competency cultivation.

Furthermore, Constructivist Learning Theory emphasizes the learner's initiative in meaning construction, advocating that competencies should be developed through inquiry and collaboration within complex, authentic contexts. This provides direct guidance for shifting the focus of accounting pedagogy from knowledge transmission to competency cultivation. Together, these theories constitute a multidimensional theoretical foundation for accounting competency cultivation, pointing towards a comprehensive educational objective that transcends technical knowledge to encompass higher-order thinking, professional identity, and lifelong learning potential^[1].

1.2 Interpretation of the Core Competency Concept and Its Characteristics

Within the context of accounting higher education, the concept of "core competency" specifically refers to the foundational and transferable set of key abilities that accounting professionals must possess to adapt to complex changes in the professional environment, perform current and future specialized work competently, and achieve sustainable development. Its connotation transcends the traditional scope of skills primarily focused on specific accounting procedures and practices, and is oriented towards a comprehensive psychological construct that integrates knowledge, skills, attitudes, and values. Core competencies possess several distinct characteristics. The first is their foundational and universal nature; they form the cornerstone of an accounting professional's competency system and are applicable to diverse professional scenarios rather than singular tasks. The second is transferability; these competencies can be effectively transferred and applied across different work contexts and positions. The third is their hierarchical and developmental nature; core competencies are not static, as they contain internal gradations from basic to proficient levels and can be continuously deepened and expanded through accumulated experience and learning. The fourth is their integrative nature; they emphasize the organic fusion of technical abilities (such as bookkeeping and analysis) with non-technical abilities (such as critical thinking, professional judgment, and communication and collaboration). Clearly defining the connotation and characteristics of core competencies serves as the primary prerequisite for transforming them from an abstract concept into educational objectives that can be cultivated and assessed.

1.3 Differentiation of Concepts Related to Core Competency in Accounting Education

Within the field of accounting education, several concepts similar to or related to "core competency" are often used interchangeably. Precise differentiation among these concepts helps clarify the central scope of this study. "Accounting skills" typically refer to the procedural, operational knowledge and techniques required to complete specific accounting tasks (such as preparing financial statements or filing tax returns); their scope is relatively specific and leans towards the technical dimension. The concept of "professional competence" is broader; in addition to encompassing skills, it often includes the attitudes, behavioral standards, and ethical literacy necessary to work effectively within a professional environment, and is closely linked to the requirements for accounting professional qualifications^[2].

The "competency" model typically derives from an analysis of the behavioral characteristics of outstanding practitioners, outlining the combination of knowledge, skills, motivations, and traits

required to successfully perform the duties of a specific position, making its construction more targeted toward particular job roles. In contrast to these concepts, the "core competency" framework is conceived with greater foresight and educational orientation. It does not directly mirror existing job tasks but instead focuses on the long-term evolution of the accounting profession and individual lifelong learning, aiming to cultivate a foundational, transferable core of abilities that can adapt to future uncertainties. Therefore, the core competency framework constitutes the common foundation and central engine for the enhancement of accounting skills, the development of professional competence, and the cultivation of job-specific competency.

2. The Reshaping of Competency Demands by the Future Transformation of the Accounting Professional Ecosystem

2.1 Key Factors Driving the Transformation of the Accounting Professional Ecosystem

The profound transformation of the accounting professional ecosystem is driven by a series of interrelated technological and structural factors. The convergent breakthroughs in digital technologies constitute the most central force for change. The maturation and application of technologies such as big data, artificial intelligence, blockchain, and cloud computing are fundamentally reshaping the methods of generating, processing, auditing, and storing accounting information. Automated processes and intelligent systems are progressively taking over repetitive, rule-based bookkeeping and reporting tasks, forcing the focus of accounting work to shift from traditional information processing toward data interpretation, risk insight, and strategic support. Concurrently, the deepening integration of business and finance, along with increasingly blurred organizational boundaries, demands that the accounting function be more tightly embedded within business processes and management decision-making chains.

The dynamics of the economic environment and innovation in business models constitute another key dimension driving change. The deepening of globalization has rendered business activities and capital flows more complex, thereby raising higher demands for International Financial Reporting Standards (IFRS), cross-border tax planning, and risk management. The rise of business models dominated by the knowledge economy and intangible assets presents a challenge to the traditional accounting measurement and reporting system centered on tangible assets and historical cost. The growing prominence of sustainability issues is also driving the integration of Environmental, Social, and Governance (ESG) information into the realms of value management and reporting. These structural changes collectively shape a professional environment characterized by greater uncertainty, interconnectedness, and diversity, thereby necessitating a reconceptualization of the foundational competency requirements for accounting professionals.

2.2 Expansion of Professional Roles and Emergence of New Competency Demands

Technological evolution and business transformation are directly driving the continuous expansion and differentiation of the roles within the accounting profession. Accounting professionals are evolving from traditional "bookkeepers" and "reporters" into composite roles such as "Business Analysts," "Risk Forecasters," "Value Management Consultants," and "Systems and Data Governance Specialists." The core of this role expansion lies in the shift of the accounting function's value creation from backend recording that ensures information accuracy and reliability to a central node that supports strategic decision-making, optimizes resource allocation, and manages future risks. This role transformation requires accounting professionals to engage more frequently in cross-disciplinary collaboration with business, technology, and management teams. Consequently, their work outputs increasingly manifest as insights, recommendations, and solutions, rather than merely standardized financial reports^[3].

Alongside this role expansion, a series of emerging competency demands have become critically important. Data literacy has become a foundational requirement, encompassing the ability to acquire, cleanse, analyze, and visualize vast, multi-dimensional sets of business and financial data, and to extract patterns and trends meaningful for decision-making from them. Complementing this is Technological Quotient, which refers to the ability to understand the principles of key technologies, assess their business applicability, and communicate and collaborate effectively with information technology professionals. Strategic thinking and business acumen have become indispensable, requiring accounting professionals to transcend the accounting cycle, comprehend the organization's overall value chain, competitive landscape, and macro-environment, thereby interpreting financial

information within a broader business context. Furthermore, given the increasing prominence of ethical challenges posed by new technologies and complex transactions, the importance of advanced professional judgment, ethical reasoning, and fraud detection capabilities has also risen significantly.

2.3 The Iteration and Enhancement of Traditional Accounting Competency Requirements

While focusing on emerging competencies, it is essential to recognize that many traditional core accounting competencies are not being replaced but are instead undergoing a deepening of their connotation and an elevation of their level. For instance, specialized accounting knowledge retains its status as the cornerstone of the profession. However, the mode of its mastery is shifting from memorizing specific rules and provisions toward a profound understanding of the underlying logic and formulation principles of regulatory systems such as accounting standards and tax laws. This understanding enables professionals to exercise sound professional judgment in emerging business scenarios not explicitly covered by existing rules and to anticipate the potential evolution of regulations. The functions of financial reporting and analysis are also being upgraded. Their focus is shifting from compliance-driven preparation and retrospective performance review toward an emphasis on forward-looking forecasting, driver analysis, and integrated reporting.

The evolution of the auditing function also exemplifies the iteration of traditional competencies. Against the backdrop of automated processing of vast volumes of transactional data, the focus of audit work is shifting from sampling tests and verification toward the evaluation of system control effectiveness, data quality, the fairness of algorithmic models, and the identification of anomalous patterns. This demands that auditors possess stronger information technology audit capabilities, data analysis skills, and a deep understanding of business processes. Similarly, within management accounting, cost control and budgeting are transitioning from standard cost calculation and periodic budget preparation to dynamic cost-driver analysis, scenario planning, and real-time performance monitoring. These iterations collectively indicate that traditional competencies must deeply integrate with new technologies and mindsets to rejuvenate their vitality within higher-order complex problem-solving and value creation^[4].

3. The Dimensional Construction and Integration Mechanism of the Core Competency Framework for Accounting Higher Education

3.1 Multidimensional Elements Constituting the Future-Oriented Core Competencies

The future-oriented core competency framework for accounting higher education is an organic whole composed of multiple interrelated dimensions. Its foundational dimension is manifested as technological literacy and specialized proficiency. This encompasses a profound understanding and adept application of the continuously evolving accounting, auditing, taxation, and reporting standards, extending to the knowledge and operational capabilities concerning key digital technologies that impact accounting practice (such as data analysis tools, blockchain principles, and artificial intelligence application scenarios). This dimension ensures the technical accuracy and foundational efficiency of professional work. Building upon this, the integrative thinking and analysis dimension occupies a central position. It emphasizes the ability to interpret dispersed financial and non-financial information comprehensively within a macro business environment, specifically including critical thinking, complex problem-solving, business judgment, risk assessment, and the ability to extract strategic insights from data^[5]. This dimension serves as the critical bridge for the accounting function's transition from recording history to supporting future decision-making.

The third key dimension of the framework focuses on communication, collaboration, and influence. This involves the ability to clearly explain complex financial information and professional advice to stakeholders with diverse backgrounds, including through written reports, visual presentations, and oral communication. Also falling within this scope is the capacity to collaborate effectively within cross-functional teams, guide discussions, and build consensus, with the core objective of ensuring professional analysis translates into tangible management actions and value. The fourth dimension is professional ethics and integrity alongside lifelong learning. It encompasses ethical reasoning, a sense of integrity, an awareness of social responsibility, and the self-driven, endogenous capability to continuously update one's knowledge and skills system within a rapidly evolving professional field. These dimensions do not exist in isolation; rather, they interpenetrate and collectively support accounting professionals in fulfilling their diverse roles within a complex ecosystem.

3.2 The Hierarchical Structure and Internal Logic of the Core Competency Framework

A systematic competency framework requires a clear hierarchical structure to reflect the phased characteristics and inherent progression path of competency development. This framework can be constructed as a progressive three-tiered structure from foundational to advanced levels. The foundational tier is "Professional Tool and Rule Application Competency," primarily focusing on the mastery of core accounting discipline knowledge, proficient operation of basic bookkeeping and reporting skills, and the fundamental application of relevant regulations and technological tools. This tier serves as the entry-level cornerstone of professional identity, ensuring individuals can accurately execute standardized tasks. The intermediate tier is "Contextual Analysis and Value Creation Competency." It emphasizes the ability to comprehensively utilize multidisciplinary knowledge for financial analysis, risk identification, performance evaluation, and management recommendations within simulated or real-world complex business contexts, with its focus on problem-solving and providing insights^[6].

The top tier is "Strategic Leadership and Innovation Integration Competency," which refers to the ability, in environments of high uncertainty, to utilize forward-thinking to participate in or guide strategic planning, lead the transformation of accounting information system design, and drive financial digital transformation and the innovation of value management models. This tier represents the highest complexity of professional work. The internal logic of the framework follows a developmental progression of "from knowledge to practice, from compartmentalization to integration, and from compliance to innovation." The competencies across different tiers are not in a simple relationship of replacement but rather one of accumulation and sublimation. The cultivation of higher-tier competencies requires the support of lower-tier competencies, while the formation of higher-tier competencies, in turn, deepens the understanding and application of foundational knowledge and skills. This structure ensures that the framework can both meet the immediate employment requirements for graduates and reserve space and provide direction for their lifelong career development.

3.3 Systematic Pathways for Integrating the Competency Framework into the Educational System

Translating the theoretical competency framework into educational reality requires a systematic integration pathway that permeates curriculum design, teaching methodologies, and assessment feedback. The reconstruction of the curriculum system is the primary step, which entails breaking down the barriers of traditional disciplinary knowledge to design modular, interdisciplinary course clusters. For example, deeply integrating data analysis technology courses with content from management accounting and auditing; or embedding business strategy simulations and ethical dilemma case studies into advanced finance courses. Curriculum design must clearly define the cultivation objectives and contribution level of each course or module towards specific competency elements within the framework, ensuring that competency development is comprehensively and equitably represented within the curriculum map.

The innovation and diversification of teaching methodologies serve as the direct vehicle for cultivating competencies. Student-centered pedagogical approaches such as project-based learning, case teaching, scenario simulation, and action learning should be widely adopted to create complex learning tasks that approximate the authentic professional environment. This prompts students to integrate knowledge, exercise judgment, and develop collaborative abilities through the process of "learning by doing." Correspondingly, the assessment system must shift from evaluations focused on knowledge retention toward diverse assessments of the competency formation process. This includes introducing methods such as portfolio assessment, simulated project reports, peer review, and structured oral defenses, with a focus on evaluating the depth of analysis, logical rigor, innovative thinking, and communication effectiveness demonstrated by students during problem-solving. Ultimately, the data generated from these teaching and assessment activities should form a continuous feedback loop, used to dynamically adjust course content and teaching methods, thereby enabling the educational system to evolve in synergy with the requirements of the competency framework and changes in external professional demands.

Conclusion

Through tracing theoretical origins and clarifying concepts, this study has defined the foundational, transferable, and integrative characteristics of core competencies in accounting higher education. By

analyzing the driving forces and manifestations of change within the professional ecosystem, it has systematically revealed the future competency demands' intensified focus on dimensions such as technological literacy, strategic thinking, data insight, and ethical judgment. Building upon this foundation, the study has constructed an integrated core competency framework that incorporates multidimensional elements and possesses a clear internal logic with a three-tiered structure. This framework not only summarizes the set of competencies required to adapt to future professional scenarios but also delineates a dynamic pathway for competency development through its underlying logic of progression "from knowledge to practice, from compartmentalization to integration, and from compliance to innovation." To translate this framework into educational practice, the study further proposes a systematic integration mechanism centered on interdisciplinary curriculum restructuring, the application of contextualized teaching methodologies, and diversified competency assessment. In the future, this framework requires adaptive adjustments and empirical testing within different institutional contexts. The key directions for subsequent research and practical implementation will involve its deep integration with specific course syllabi, the support it provides for enhancing teachers' pedagogical capabilities, and its ongoing dynamic updating alongside technological evolution.

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