

# Research on Optimizing Management Courses Based on the Competency Model

Yun Bai<sup>1</sup>, Dayong Jiang<sup>2,\*</sup>

<sup>1</sup>*Military Basic Education College, Engineering University of PAP, Xi'an, China*

<sup>2</sup>*College of Equipment Management and Support, Engineering University of PAP, Xi'an, China*

*\*Corresponding Author.*

**Abstract:** With the intensification of market competition and the evolving demands of organizational strategies, traditional management courses are revealing limitations in enhancing job competencies. To address the challenges in talent development and achieve a precise alignment between talent demand and supply, it is crucial to improve the effectiveness of talent cultivation. This research focuses on the optimization of management courses by addressing issues such as unclear course objectives, a mismatch between course content and job competency requirements, limited teaching methods, and the lack of scientific assessment approaches. Drawing upon the competency model, this study employs a literature analysis to explore the core theories and practical applications of the competency model. Six dimensions of competencies for grassroots managers are identified: professional ethics, self-efficacy, professional expertise, team leadership, execution capabilities, and interpersonal skills. Through a case study analysis, the existing courses are diagnosed and their shortcomings are identified. Action research is then utilized, integrating the competency model to design strategies for optimizing the courses. By precisely aligning the objectives of the courses with the requirements of job competencies, the knowledge, skills, and implicit qualities of managers can be enhanced. This approach aims to bridge the gap between course objectives and competencies, align course content with job requirements, diversify teaching methods, and introduce diverse assessment approaches. The ultimate goal is to shorten the talent development cycle, improve the adaptability of talents to their positions, and provide both theoretical support and practical pathways for the efficient cultivation of talents in management courses.

**Keywords:** Competency Model; Management Courses; Course Optimization; Teaching Methods; Assessment Evaluation

## 1. Introduction

In today's society, the dual challenges of "employment difficulties" and "recruitment challenges" persist simultaneously. Despite universities producing exceptional graduates, these individuals do not always transform into the outstanding talents sought by employers. The lack of precise alignment between talent demand and supply stands out as a pressing issue in higher education talent cultivation. It is clear that talents nurtured by educational institutions must synchronize with societal needs and elevate their job competency to unlock this conundrum. The cultivation of job competency requires an "incubator", with major higher education institutions serving as such incubators. Courses serve as the conduits for competency development, yet many courses currently fall short of meeting the demands of talent cultivation. From a transition towards knowledge-centric, skill-centric, to job-centric paradigms, there is a prevailing trend in the global education and teaching systems. By orienting course optimization around the competency model, it not only enables students to attain professional job competency levels during their university years but also provides a roadmap for their long-term development. This approach can be seen as a form of pre-employment training, which can shorten the talent generation cycle and facilitate the alignment between talent demand and supply.

## 2. Elaboration of Relevant Concepts

### 2.1 Competency Model

The concept of competency, initially proposed by the renowned American psychologist

McClelland in his work *Testing for Competence Rather Than for Intelligence* [1], has ignited a global surge of enthusiasm for theoretical and practical research on competency. This groundbreaking article emphasizes that traditional measures such as intelligence tests, score rankings, and general academic assessments fail to accurately predict the performance in complex jobs, high-level positions, or overall success in life. Instead, it advocates for a more pragmatic approach, delving into firsthand evidence to unearth the personal conditions and behavioral traits that genuinely drive job performance, thereby enhancing organizational efficiency and fostering individual career success. Subsequently, a multitude of scholars have conducted in-depth and concrete studies on competency, with notable perspectives including the trait view, behavioral view, and integrative view. These perspectives share common ground in three key aspects [2]: firstly, competency encompasses individual traits; secondly, these traits must be linked to performance outcomes; and finally, competency is context-specific, tailored to particular roles or tasks. Thus, competency represents a fusion of various personal attributes that propel individuals to achieve exceptional job performance. It encompasses the diverse knowledge, skills, personality traits, and inner motivation manifested in different ways by individuals. It serves as a vital aggregate of characteristics that discern and differentiate between individuals' performance quality, ultimately determining their ability to excel in a given job. By integrating the insights of scholars, a competency model can be constructed based on the analysis of the underlying potential capabilities required for professionals in different occupational categories. This model defines the cumulative level of required capabilities for practitioners in a specific job category, aligning with the demands of their respective fields [3].

## 2.2 Curriculum Optimization

Curriculum optimization, in the context here, refers to the enhancement of teaching models in management courses. The teaching model is a comprehensive design of the teaching purpose, content, strategies, and evaluation processes that are oriented towards specific learning outcomes [4]. The teaching model should be forward-looking and adaptable to the evolving

needs of the industry. With the development and changes in management theory and practice, the goals of talent development in management courses should also evolve. The teaching model needs to align with the current demands of management positions, incorporating relevant courses and teaching methods that are tailored to the knowledge and skills required by those positions, in order to cultivate highly competent and versatile professionals. Curriculum optimization, guided by the competency model, places the enhancement of students' future job competence as the teaching objective. In the process of instructional design, it fully considers students' future career needs and serves their talent development goals and future professional roles. It aims to cultivate and guide students in developing the right worldview, life perspective, and values, while also fostering their overall qualities and innovative capabilities.

## 2.3 Construction of Competency Model for Frontline Managers

The wide range of management courses share a common goal of developing students' managerial abilities. However, unlike the competency model constructed for specific job positions in organizations, the competency model that serves curriculum optimization exhibits stronger universality, specificity, and forward-thinking. Since graduates of management programs typically start their careers at the frontline, this article focuses on constructing a competency model for frontline managers. Through the utilization of literature research, text analysis, and behavioral event interviews, relevant competency indicators were extracted [5]. By analyzing the frequency and endorsement rate of competency factors, a set of 22 competency indicators for frontline managers was determined. A total of 102 valid questionnaires were collected through a combination of online and paper-based surveys. Exploratory factor analysis was then conducted on the valid questionnaires, including the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity, followed by principal component analysis. This process led to the identification of six key dimensions of competency for frontline managers: professional ethics, self-efficacy, professional competence, team leadership, execution capability, and interpersonal skills. Finally, the reliability and validity of the questionnaire were analyzed,

resulting in the preliminary construction of the competency model for frontline managers.

### **3. Curriculum Optimization Strategies**

#### **3.1 Outcome-Based Instructional Objective System**

Curriculum objectives represent the specific purposes and intentions that a curriculum seeks to achieve. They serve as the "guiding principle" for curriculum design. "To systematically and rationally study an educational plan, it is necessary to first determine the various educational objectives to be achieved" [6]. Curriculum objectives should reflect a focus on students' emotional attitudes, values, and ensure their holistic development in moral, intellectual, physical, artistic, and practical aspects. However, the current curriculum objectives often rely on an established knowledge system, emphasizing theoretical knowledge instruction, while lacking in the provision of practical courses and comprehensive development of students' professional competence. There is a need to address the development and improvement of students' career-related personal traits, in order to meet the future demands of job positions for talent. Based on the core competencies of "professional ethics, self-efficacy, professional competence, team leadership, execution capability, and interpersonal skills", the instructional objectives of management courses should be optimized and developed from the perspectives of fitting the position and understanding the position.

Firstly, from the perspective of "fitting the position", the optimization of instructional objectives in management courses aims to ensure that students are well-prepared for their future job positions. This foundational objective is crucial. To establish instructional objectives based on the core competencies, it is essential to utilize various methods and techniques to systematically identify and analyze the requirements, cognitive abilities, emotional abilities, and professional skills needed for different types of managers. By focusing on professional ethics, self-efficacy, professional competence, team leadership, execution capability, and interpersonal skills, students can align their actual state and job responsibilities with the defined core competencies, thereby achieving the instructional objective of being "fit for the position" [7].

Secondly, from the perspective of "understanding the position", the optimization of instructional objectives in management courses aims to ensure that managers have a clear understanding of the organization's strategic goals, enabling them to define their own job responsibilities. As a pivotal force within the organization, managers need to prioritize the overall development of the organization, think from a holistic perspective, and have forward-thinking instructional objectives. To achieve this, it is necessary to enhance managers' cognitive understanding of the organization's strategic goals, enabling them to "understand the position". The development of instructional objectives should be based on a comprehensive plan that takes into account the organization's strategic goals and the students' actual circumstances. It should consider the alignment between the instructional content and the organization's development direction, the degree of integration between the instructional methods and the managers' actual situations, and focus on students' personal growth and performance, in order to promote the rationality of instructional planning and achieve the instructional objectives.

#### **3.2 Optimization of Instructional Content Aligned with Demands**

The field of management is rapidly evolving, but the instructional content in schools often lags behind, lacking practicality. Within the constraints of class hours, students are exposed to a wide range of learning content, which may hinder the development of their problem-solving abilities and organizational coordination skills, among other professional competencies. The process of students progressing towards competency on the "track" of curriculum development is dynamic, continuous, and constantly adjusted, rather than achieved overnight [8]. To address the issue of weak alignment between instructional content and managers' professional competencies, it is important to analyze and optimize the instructional content of management courses from the perspective of professional competence.

Firstly, it involves differentiated selection of instructional content. By using the competency model, instructional content can be identified with a focus on professional competence, specifically in the areas of professional ethics,

self-efficacy, professional competence, team leadership, execution capability, and interpersonal skills. Based on the specific qualities required for different positions, the professional knowledge and skills that various types of managers need to possess can be identified, enabling the design of targeted instructional content. Therefore, in the selection of instructional content, priority should be given to content that aligns with the professional knowledge and skills required for different managerial positions. When there are differences in instructional content for different types of managers, the use of categorized instructional content can enhance its specificity, reflecting differentiated instruction.

Secondly, it involves the selection of content that addresses competency gaps. Using the competency model, instructional content can be determined by identifying the common competencies needed for specific positions and categorizing them. By analyzing the gaps in professional competencies among managers, the key instructional content can be determined accordingly. For example, Professor Katg from Harvard Business School has researched the optimal combination of skills for managers at various levels, which includes professional skills, humanistic skills, and conceptual skills. For instructional purposes, the focus can be placed on addressing the gaps in professional skills, humanistic skills, and conceptual skills, selecting appropriate instructional content.

### 3.3 Enhancement of Student-Centered Teaching Methods

Renowned British scholar Ashby once emphasized the significance of teaching methods in higher education, stating that the true measure lies not in merely imparting great truths, but in employing ingenious approaches to convey them. Thus, the "how" of teaching holds greater importance than the "what" [9]. In light of the existing issues in teaching, this study proposes improvements in teaching methods to better serve the delivery of professional content. By employing diverse instructional approaches such as "simulation-based teaching", "case-based teaching", and "off-campus training platforms", we can enhance the learning experience for students.

Firstly, simulation-based teaching is a method that involves the reenactment of past work practices during the teaching process. Through

"scene reconstruction" or "situation rebuilding", teachers guide students to assume different roles, enabling them to develop practical skills and adapt to the diverse demands of professional roles. For example, when considering the indicator of professional ethics in the competency model, it is evident that becoming an exceptional grassroots manager requires assuming multiple roles. Merely acquiring relevant knowledge is insufficient. Therefore, simulation-based teaching serves as a means to immerse students in these roles and enhance their ability to effectively navigate various professional responsibilities.

Secondly, case-based teaching is an approach that enhances students' comprehensive abilities in observation, listening, questioning, and critical thinking. Through the use of cases, teachers can recreate real-life management scenarios, present authentic management problems, and guide students in engaging in creative and analytical thinking. What sets case-based teaching apart from other methods is its utilization of simulated scenarios, enabling students to become familiar with specific professional experiences and skills within a contextualized environment. It also serves as a valuable tool for fostering students' ability to think critically and approach problems from different perspectives.

Lastly, off-campus training platforms provide valuable opportunities for students to integrate theoretical knowledge with practical work experience. These platforms, such as internships, allow students to work under the guidance of experienced professionals, familiarize themselves with common challenges encountered in the workplace, gain insights into the daily operations of their chosen field, and gradually develop the skills necessary to handle work-related tasks and unexpected situations. In addition to technical skills, comprehensive training in communication, adaptability, and organizational coordination should be emphasized. These off-campus training experiences should also incorporate the development of professional ethics, physical fitness, personal traits, self-awareness, and teamwork spirit, tailored to the specific requirements of different job positions.

### 3.4 Competency-Driven Assessment and Feedback

Assessment and feedback are crucial

components and the final stages of every course. However, the current common assessment practices either lack evaluation components due to the difficulty of measuring effectiveness, or heavily rely on written exams, failing to capture the comprehensive and long-term nature of the course. This approach lacks a process-oriented, systematic, and measurable multidimensional scientific evaluation framework. To address these issues, a scientifically designed evaluation mechanism is needed to measure the effectiveness of the course, making it both applicable and visible [10]. A diverse assessment mechanism is an essential part of this process, as it not only promotes teaching improvement but also validates the implementation results. The key indicators for evaluation include the evaluation content, evaluation subjects, evaluation methods, and evaluation functions. Firstly, the evaluation content should be diverse, encompassing overall design, implementation methods, and expected outcomes. The evaluation content serves as a prerequisite for measuring effectiveness and acts as a guiding light for a scientific evaluation system. By combining student performance and periodic testing, placing more emphasis on process assessment rather than just focusing on end results, it can stimulate teachers' reflection and improvement of the course and motivate students to actively participate in the implementation process.

Secondly, the evaluation subjects should be diverse, including students, course instructors, supervisory experts, and other relevant course teachers. The evaluation subjects in a scientific evaluation system should not rely on the efforts of a single individual but rather foster a collaborative approach involving all stakeholders, where different perspectives are taken into account.

Thirdly, the evaluation methods should be diverse, including quantitative and qualitative evaluation, peer and self-assessment, as well as process-oriented and summative assessment. The diversity of evaluation methods enhances the scientific rigor and accuracy of the assessment. By using performance-based, testing-based, process-based, and outcome-based indicators, the assessment methods can be flexibly selected based on the nature of the course, enabling a comprehensive and objective evaluation of the effectiveness. Increasing interactive and practical activities for students

allows for a comprehensive assessment of both the effectiveness of teaching and the learning outcomes. This is particularly important for the enhancement of six key competency qualities: professional ethics, self-efficacy, professional competence, teamwork leadership, execution capability, and interpersonal skills. Lastly, the evaluation functions should be diverse. Constructing an effective AI-based evaluation system can monitor the entire teaching process, including before, during, and after the class. By leveraging intelligent evaluation systems, teachers can promptly review and reflect on the teaching process.

#### 4. Conclusions

Traditional educational systems have often focused on teaching students explicit competency qualities such as job-related knowledge and skills, while neglecting the teaching of implicit competency qualities such as attitudes and values. Addressing the actual needs of students and orienting towards competency models can assist students in enhancing their overall qualities, meeting their educational needs to the fullest extent, improving their job competency, increasing student satisfaction with the learning process, and enhancing the quality of teaching provided by educators.

#### References

- [1] McClelland DC. Testing for competence rather than for intelligence. *American Psychologist*, 1973, 28:1-14.
- [2] Xu Hui. Research on the Optimization of Training System for Skill Personnel in HB Company Based on Job Competency Model. University of Electronic Science and Technology of China, 2021.
- [3] Ma Kuan. Construction and Empirical Study of Competency Model for Managers in Internet Companies. Zhejiang Normal University, 2016.
- [4] Gante, Schwab. Teaching: A Model Perspective. Jiangsu: Jiangsu Education Press, 2006.
- [5] Li Rui. Construction of Competency Model for Grassroots Managers in Manufacturing Enterprises: A Study Based on Behavioral Event Interviews. *Journal of Suzhou University of Science and Technology (Social Science)*, 2016, 33(02), 79-83.

- [6] Liao Zhexun, Tian Huisheng. New Perspectives on Curriculum. Beijing: Education Science Press, 2003.
- [7] Wei Yi. Optimization of Police Human Resources Management from Perspective of Competency. Journal of Sichuan Police College, 2022, 34(3), 77-83.
- [8] Shi Zhibin, Wang Baomin. Analysis and Enlightenment of Assignment Case Studies for Cultivating Computational Thinking in American Universities. Computer Education, 2020(1), 177-180.
- [9] Wei Yi. Optimization of Police Human Resources Management from Perspective of Competency. Journal of Sichuan Police College, 2022, 34(3), 77-83.
- [10] Tan Xiaoxi. The Framework and Characteristics of Assignment Design in American Universities——Taking Assignment Library as An Example. Studies in Foreign Education, 2021(5), 70-83.