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History and Main Content of the Competency Approach

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Abstract

This article examines the importance and necessity of determining personnel competence in modern production conditions and elucidates the essence and content of the competency approach, including the history of its emergence. It highlights the coexistence of American and European definitions of competence, with particular emphasis on the American concept. The article analyzes the research findings of David McClelland and Richard Boyatzis that aim to define the content of competence in terms of theoretical knowledge, experience, personal characteristics, and abilities.

Keywords: Competence; Competency Approach; Theoretical Knowledge; Experience; Personal Characteristics; Abilities

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INTRODUCTION

The modern production environment imposes new requirements on future specialists, demanding the development of innovative methods for assessing their abilities, theoretical knowledge, and practical skills. Today, a competence-based approach is increasingly applied in scientific research and practical reforms in the labor sector. It is implemented in vocational education, professional development, and retraining systems, and is aimed at enhancing and improving the skills necessary to operate under constantly changing economic and social conditions.

Changes in the forms, conditions, and content of production organization, as well as in the methods of human resource management, have led to a reconsideration of the traditional concept of professional qualification. As noted in a UNESCO report: "Employers are often not interested in skills associated solely with the ability to perform specific material operations, but in an individual's unique set of competencies characterized by teamwork capability, initiative, and readiness to take risks" [1]. Therefore, a competence-based approach provides the foundation for developing a system that integrates business requirements, human resource management, and the goals of modern education. The expansion and popularity of this approach are associated with several objective factors, the most significant of which is the rapidly changing production environment.

As innovation accelerates, workforce training is increasingly becoming an essential component of the business process. The rise of corporate education and the emergence of new requirements for employees are transforming the expectations placed on workforce preparation and the overall education system. In particular, the ideas of self-development and lifelong learning have become highly relevant in Europe, with special attention given to informal and non-formal learning. New systems for assessing competence levels are being introduced in the European accreditation framework and in personal skills portfolios. Modern competency assessment systems encompass not only the level and quality of education but also an employee's life experience, ability to learn independently, and capacity for self-improvement.

The competence-based approach reflects the transformation in the nature and content of labor as well as recent innovations in education. Its development is essential for ensuring the mobility of labor resources and for aligning educational processes with labor

market demands. This approach fosters the vertical mobility of future professionals — enhancing their career development — as well as horizontal mobility, which ensures inter-sectoral integration within a country and across the global labor market.

RESEARCH METHODS

The research employs analytical, predictive, comparative, and statistical analysis methods based on literature review, as well as surveys, observations, open-ended ideas, and an examination of experimental test results.

RESULTS AND DISCUSSION

The core concept of the competence-based approach is the term "competence." This scientific term was first introduced by the American psychologist Robert White in 1959. In his article *"Motivation Reconsidered: The Concept of Competence"*, he defined competence as "the organism's ability to effectively interact with the environment, characterized by motivation for efficiency. The feeling of efficacy arises when an individual recognizes their ability to influence the surrounding world" [2]. This motive is primarily directed toward understanding the nature and structure of the environment. Thus, the sense of effectiveness emerges as a result of one's awareness of their capacity to influence the external world [3].

It should be noted that along with the term "competence," the concept of "literacy" is also used in scientific literature and management practice. Initially, literacy was understood as the ability to read and write; however, today this concept has acquired a broader meaning. Literacy is increasingly linked to the idea of "basic skills" required for participation in modern society, including the ability to listen, speak, read, write, use scientific information, apply theoretical and practical methods effectively, and understand and transform reality. Under the influence of globalization and the emergence of the knowledge industry in the late 20th century, concepts such as "information literacy," "computer literacy," and "literacy as a life skill" also emerged [4].

Therefore, competence and competency can be viewed as specific forms of literacy applied to particular activities, including professional domains.

The active application of this term and the competence-based approach in management theory and practice began in the 1970s, initially in the United States and later in European countries.

The American Concept of the Competence-Based Approach.

The development and dissemination of the competence-based approach in the field of human resource management are associated with the research of David McClelland and Richard Boyatzis. The American psychologist David McClelland is considered the founder of the U.S. concept of the competence-based approach in human resource management. He studied the phenomenon of competence from a socio-psychological perspective.

According to him, in the *"pre-competence" period* of psychology (i.e., until the early 1970s), attempts to identify the conditions of successful human performance began with analyzing the job and the person separately, followed by efforts to "combine" them. Psychologists first identified the tasks required for the job, created tests to measure the skills needed to perform these tasks, conducted factor analysis on test-derived performance scores, and then attempted to link those factor scores to job performance. The use of IQ tests and academic records during recruitment interviews in the United States and many other countries is an example of this approach [3].

This understanding was challenged in the 1940s by a professor at Wesleyan University (USA), who questioned McClelland's view. He conducted a longitudinal observation of the careers and achievements of eight high-achieving and eight low-achieving university students. By the 1960s — twenty years later — he found almost no significant difference between their career achievements. All individuals had completed higher education in professions such as law, engineering, and medicine. The main difference was that high-achieving students enrolled in more prestigious universities after college; however, after graduation, they did not demonstrate substantially higher career success compared to lower-achieving students.

Based on this, McClelland concluded that:

"Intelligence leads to academic success during the educational process, but it is not directly related to job performance or success in life. Therefore, intelligence tests are useful for measuring academic achievement (knowledge) in a specific field, but they are not appropriate for predicting career success."

He argued that academic knowledge tests mostly require selecting correct answers from predefined alternatives, whereas in real-life situations, individuals rarely face such predetermined options [3].

McClelland also emphasized that traditional ability tests and subject knowledge examinations often create biased evaluations against minorities, individuals from low socio-economic groups, and women. In the approach proposed by McClelland, analysis begins with direct observation of a person while performing their job, without any preliminary assumptions about which characteristics are necessary for successful job performance. Then, through interviews, human qualities associated with success at work are identified. This variable-competence idea formed the basis of what became known as the "competence-based approach."

Within the competence-based approach, McClelland employed additional methods, including:

- using criterion samples, which consist of high-performing professional workers, contrasted against a sample of average or poorly performing workers (those who maintain only the minimum level required to avoid dismissal);
- identifying operant behavior — internal states (motives, attitudes, values) and specific actions leading to successful performance. These are revealed through behaviors and thoughts that naturally occur in open-ended, unstructured situations or through recollections of actions taken in similar past circumstances.

In his article *"Testing for Competence Rather Than for Intelligence"*, published in American Psychologist in 1973, McClelland analyzed which tests best predict success and high performance at work. He criticized the use of intelligence and psychometric tests in personnel selection, proposing competence as a more accurate indicator of employability and professional capability.

McClelland identified three core competencies as particularly essential:

1. Empathy
2. Self-discipline
3. Initiative

Employees who lack these qualities are more likely to hold low-level positions, experience low job satisfaction, and face dismissal during workforce reductions. He argued

that these traits contribute not only to job success but also to success in life more broadly, as individuals possessing them often become respected members of society. Competencies such as adaptability and leadership also correlate with successful career outcomes.

McClelland developed methods to diagnose and match competencies with specific job roles. These include the Behavioral Event Interview (BEI), which identifies visible indicators of relevant job behaviors by combining Flanagan's Critical Incident Technique and the Thematic Apperception Test (TAT). BEI remains widely used today as an effective tool for personnel selection and evaluation, as it enables the identification of individuals whose competencies align with the requirements of specific job positions [3].

McClelland also focused on the development of competencies. According to him, although competencies are to some extent innate, they can be modified and enhanced through education and training. Therefore, low-performing employees can be encouraged to improve their work performance and develop the competencies required for their jobs. McClelland's ideas were tested in the 1970s by McBer & Company in the selection of junior officers for the U.S. Department of State's Diplomatic Information Service. The core challenge in recruiting for the U.S. Foreign Service was that *"scores from a general ability test or a candidate's extensive vocabulary cannot reliably predict how effectively they will function in a place like Ethiopia."*

In the first stage of the study, two groups of diplomats were selected: a group of high performers — the most successful and efficient young diplomats — and a group of average performers. All participants were interviewed using the Behavioral Event Interview (BEI). The BEI required participants to provide brief reports on three outstanding achievements and three most serious failures. Questions included: *"What caused this situation? What were you thinking, feeling, and wanting to do at that moment?"*, among others. The results were analyzed using CAVE (Content Analysis of Verbatim Expression). Analysis of the BEI transcripts of the highest and lowest performers enabled the identification of behavioral characteristics that statistically differentiated the two groups [3].

The final step was verifying the validity of the resulting competency model — proving that the identified behaviors truly predicted which candidates would become successful employees. Based on the findings, the first competency model for diplomats in the Information Service was developed, which included:

• understanding cultural differences in interpersonal communication
• maintaining positive expectations in interactions with others
• the ability to act quickly in unfamiliar political environments

McClelland's research formed the foundation of the competence-based approach. It demonstrated that identified competencies are sensitive to organizational context and social environment. For example, the competencies of successful teachers were derived from what they actually do in small rural schools, rather than what psychologists and education specialists believed should lead to success.

The United States was particularly receptive to the competence movement. In 1979, the American Management Association (AMA) identified five competency clusters associated with effective management: resource-related, interpersonal, informational, system-related, and technological competencies.

The interrelationships and distinctions between these clusters, according to the developers of this approach, must be analyzed when modeling key success factors and assessing the level of development within each cluster [4].

McClelland's work, along with that of his colleagues at McBer consulting, received new momentum in 1981, when the American Management Association commissioned McBer consultant and emotional intelligence expert Richard Boyatzis to determine whether a general managerial competence model could be derived from individual models. Notably, Boyatzis was the first to formulate a clear definition of the term competence, describing it as:

"an underlying characteristic of an individual that is causally related to effective or superior performance."

Competence includes motives, skills, self-image, social role, and knowledge.

Expanding upon McClelland's ideas, Boyatzis linked competency to performance: he argued that

"Effective performance means achieving specific outcomes (success) through behaviors that maintain alignment with organizational norms, processes, and context."
"Competence enables a person to perform effectively."

However, competency is only a potential — a set of personal characteristics that reflect a person's capabilities. They represent what an individual can do, regardless of whether they actually do it. By defining competencies as the characteristics that distinguish

effective from ineffective performance, Boyatzis also identified traits important for the job but not linked to performance outcomes, and labeled them threshold competencies [5].

According to Boyatzis, behavioral motives, self-awareness, social role, and skills form an integrated hierarchy. They exist at different levels: motives and traits operate at a subconscious level, self-awareness and social role at a conscious level, and skills at the behavioral level — with capabilities strongly influencing the other elements.

Following a study of 2,000 managers occupying 41 leadership positions in 12 companies, Boyatzis proposed an integrated model of managerial competencies, demonstrating their relationship to management functions and internal organizational conditions. He identified 19 general (universal) managerial competencies — 12 differentiating and 7 threshold competencies. As a result of these studies, the competence-based approach gained public recognition in the U.S. and, since 1989, has become widely implemented in business schools as an advanced human resource management technology.

Lyle M. Spencer Jr. and Signe Spencer made significant contributions to further expansion of the competence-based approach. In 1989, they analyzed competency research conducted by McBer. By this time, the studies covered not only managers but also entrepreneurs, sales personnel, and service workers across multiple organizations. More than 100 researchers participated over two decades, developing 286 competency models — two-thirds coming from the United States and the remainder from other countries.

The Spencers compared these models and analyzed behavioral indicators. They compiled all indicators and identified approximately 760 behaviors, of which 360 were common enough to form 21 competency categories, covering between 80% and 98% of behaviors in each model [3].

In 1993, L. Spencer and S. Spencer summarized the results of 20 years of research in their book *"Competence at Work: Models for Superior Performance."* They defined competence as:

"any individual characteristic that can be measured or counted and that reliably differentiates effective from ineffective performance."

They also created a competency dictionary consisting of 21 competency groups and 360 empirical behavioral indicators, and provided examples of how competence-based approaches can be used across various HR practices [3].

CONCLUSION

The competence-based approach in the education system is a complex and multifaceted process, and remains an area that has not yet been fully explored. Today, the concepts of *"competence"* and *"competency"* are widely used in theoretical and practical research within the field of pedagogy, and the existence of different interpretations of these terms has led to noticeable variations in how scholars define them [7].

The term *"competence"* is used more frequently in the United Kingdom and refers to the evaluation of the results of a professional's work. Meanwhile, the term *"competency"* is widely used in the United States and denotes the abilities and personal characteristics that define an individual's professional behavior. It focuses on identifying which personal traits and abilities ensure success in a particular field of activity. Researchers consider these terms as complementary, defining both the expected learning outcomes in a specific educational domain and the personal and professional attributes formed during the learning process [8].

In the United Kingdom, the concept of *"competence"* is defined through measurable performance outcomes. In this context, the types of activities that enable a professional to achieve predetermined occupational results are considered the key components of competence — meaning that the employee must fully meet the requirements of their job responsibilities.

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