

## استخدام التعليم القائم على الكفاءة (CBE) للتركيز على قدرة الطلاب على إظهار إتقان

### مهارات محددة في التعليم العالي

أ.م.د. سناء سلمان شندي

جامعة بابل / كلية الإدارة والاقتصاد / قسم الاقتصاد / فرع المدرسين الاقتصاديين

[sana.shendi@uobabylon.edu.iq](mailto:sana.shendi@uobabylon.edu.iq)

**المستخلص:** تتناول هذه الدراسة تطبيق التعليم القائم على الكفاءات في التعليم العالي، مع التركيز على إتقان كفاءات محددة بوضوح بدلاً من التدريس القائم على الوقت. اعتمدت الدراسة منهجاً كمياً، وشملت عينة مكونة من 20 أستاذاً جامعياً من مختلف التخصصات في جامعة بابل. استُخدم التحليل الإحصائي الوصفي، الذي غطى المحاور التالية: تصميم المناهج، وممارسات التدريس، وممارسات التقييم. تشير النتائج إلى الحاجة إلى تطوير مهني ودعم مُوجّه لتحسين إدارة أنشطة التعليم والتعلم.

**الكلمات المفتاحية:** التعليم القائم على الكفاءات، التقييم، تصميم المناهج.

## Using the Competency-Based Education (CBE) to focuses on students' ability to demonstrate mastery of specific skills in higher education

Assistant Professor Sanaa Salman Shindi (PhD)

University of Babylon / College of Management and Finance/ Department  
/of Economics / Branch of Economic Teachers

### Abstract

This research examines the application of competency-based education in higher education. It focuses on mastering clearly defined competencies rather than time-based teaching. The study employed a quantitative design, with a sample of 20 university professors from various disciplines at the University of Babylon. Descriptive statistical analysis was used, encompassing the following axes: Curriculum Design, Teaching Practices, and Assessment Practices. The results indicate a need for targeted professional development and support to enhance the management of teaching and learning activities.

### Introduction

Competency is the ability to solve problems, and the focus on competency in higher education supports students in developing skills that enhance their employability and adaptability in the labor market. A key element

of this shift is the formulation of clear learning outcomes when planning a learning unit. Learning outcomes describe what students are expected to know, understand, and be able to do by the end of the unit, ensuring alignment between curriculum objectives, teaching activities, and appropriate assessment criteria. Expressing these outcomes in precise, observable, and achievable terms ensures that instruction is thoughtfully designed to develop the targeted competencies and guides both teaching and assessment in a consistent manner (Nguyen, 2023: para 2). Focusing on student learning requires that faculty members in higher education possess a fundamental understanding of learning theories relevant to the subject matter and context. Thus, each academic becomes an expert in their academic field and an expert in learning alike. Indeed, the more these professors have to deal with teaching innovations and the pressure to use new media, the more important this information becomes (Sturgis, 2018: p.20). Educators have varying concepts of teaching performance due to their diverse opinions and perspectives on it. (Adeline, 2024: p.15) define it as: “A series of procedures, measures, and practices carried out by the teacher before and during the classroom lesson, including planning, implementation, evaluation, classroom management and control, the teacher’s personal behavior, and the reciprocal relationship between him and his students within the classroom”.

Bouchrika, 2026: p. 23 defines it as: “A purposeful educational process that tests the degree of teaching efficiency, based on quantitative specifications and standards, in preparation for evaluating this efficiency, and judging its value and effectiveness in achieving the desired national/educational goals”. It is noted that the previous definitions that dealt with the concept of teaching performance focused on the performance of the teacher and students, educational activities and the diversity of teaching strategies, but these definitions neglected to specify how to observe this performance, and how to measure it objectively. Learning is the acquisition of knowledge in all fields, not limited to school or university students (Miller, 2020: p.75).

The change in higher education institutions in terms of encouraging instructors to shift from teaching to learning is a qualitative shift from content- and information-based teaching to competency-based learning. Learners are encouraged to discover content and factual knowledge independently and to consolidate their understanding through collaborative group discussions. In the context of contemporary learning theories and the competencies required in a knowledge-based labor market, scholars generally agree that effective learning occurs when instruction is aligned with learners’ prior experiences and knowledge. Additionally, meaningful learning takes place when learners are provided with opportunities to connect new knowledge with existing

knowledge, exchange ideas with others, and acquire knowledge independently within authentic and practical contexts (Shawer, 2017: p. 3).

### **Competence**

The concept of competence forms the theoretical foundation of Competency-Based Education (CBE). Competence generally refers to an individual's ability to effectively apply knowledge, skills, and attitudes to solve problems and perform tasks in specific contexts. In higher education, this concept has led to the development of competency-based approaches that focus not only on what students know but also on what they are able to do with their knowledge in real-world situations (Boahin, 2018: p.25).

Competency-Based Education is an instructional framework that organizes teaching, learning, and assessment around clearly defined competencies that learners must demonstrate (Sullivan & Downey, 2015: p.10).

Furthermore, the transition from knowing something to being able to apply it in practice requires continuous practice and experience. Practice plays a crucial role in strengthening competence because it enables learners to apply theoretical knowledge in real or simulated contexts. In addition to possessing the necessary skills, students must also be motivated and willing to apply what they have learned in practical situations (Oyugi, 2015: p.75).

To support a competency-based approach and place greater emphasis on the student learning process, it is essential to clarify the roles of both students and faculty members. In this model, students are expected to take an active role in their own learning, while faculty members act as facilitators who guide and support the learning process. Consequently, achieving competency-based learning requires a change in performance and responsibilities from both professors and students. (Hida, assouni, Jbari, Al Ibrahmi, 2025: p.225), as shown in Table (1).

| <b>As a student, you do...</b>                                | <b>As a professor, you do...</b>                                                                                                                                                                        |
|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Promoting problem-based learning and learning about a topic.  | Formulating learning outcomes that are relevant to your students.<br>Discovering what learners already know in order to establish appropriate connections between existing knowledge and new knowledge. |
| Transforming into an active, self-directed learner. You learn | Creating a suitable learning environment that initiates and manages learning processes. This includes                                                                                                   |

|                                                                                                                                          |                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| independently and actively participate in the learning process.                                                                          | discussing the search for new information, the structuring process, and the transition to application.                                                        |
| Discover new topics on your own.<br>Form a learning community in collaboration with other students to acquire and develop new knowledge. | Launching group activities that guide and direct participants by suggesting collaborative learning methods and presenting specific problem-solving scenarios. |
| Engaging with the content and adopting a skeptical approach                                                                              | Promoting problem-based learning                                                                                                                              |
| Possessing the ability to assess your learning competencies and achievements.                                                            | Stimulating metacognition.                                                                                                                                    |
| Understanding the requirements of the certificate courses.                                                                               | Take the institutional context into account during your teaching                                                                                              |

**Competency-Based Education (CBE)** is an educational approach that shifts the focus from **time spent in class or covering content** to **students demonstrating mastery of clearly defined competencies** (skills, knowledge, behaviors). In CBE:

- Learners **advance only after proving competency**, not just completing credits or seat time.
- Learning outcomes are **explicit, measurable, and tied to real-world tasks**.
- Learning is **student-centered**: pace, pathways, and evidence of mastery are personalized ( EdTech ,2026).

#### **Philosophical foundation:**

- Moves assessment from traditional grading to **demonstrable performance**.
- Emphasizes education that supports **actual capability and workplace relevance** rather than theoretical exposure.

- Reflects a broader shift toward **lifelong learning** and recognition of prior learning experiences (Brodersen, Yanoski, Mason, Apthorp, Piscatelli, 2017).

## Research Methodology

- **Methodology:** A quantitative approach
  - **Data Collection Tools:** Questionnaires.
  - **Study Population:** Professors from various departments at the University of Babylon (English Department, College of Education; Civil Engineering Department, College of Engineering; Economics Department, to ensure a diverse sample.
  - **The research sample :** consisted of 20 professors
  - **Sampling method:** Random (volunteer)
  - **Data analysis:** Quantitative analysis of questionnaires

### 1. Sample Overview

- Total professors surveyed: **20**

### 2. Descriptive Statistics

- **Domain 1: Curriculum Design**
  - As shown in Table (1).

| Domain 1: Curriculum Design |                                                    |      |        |      |         |
|-----------------------------|----------------------------------------------------|------|--------|------|---------|
|                             | Item                                               | Mean | Median | Mode | Std Dev |
| 1                           | I align course outcomes with program competencies  | 3.74 | 3      | 3    | 0       |
| 2                           | I design learning activities based on competencies | 2.25 | 2      | 2    | 0.43    |
| 3                           | I use real-life tasks in course design.            | 2.75 | 2.5    | 2    | 0.74    |
| 4                           | Course content reflects professional skills.       | 3.00 | 3      | 3    | 0       |
| 5                           | I regularly update competencies in my courses      | 3.10 | 3      | 3    | 0.89    |

- **Items 1 and 4 show— 100% Agree**

- **Item 2** shows (75%).
- **Item 3** shows 75%
- **Item 5** (80% Agree/SA), but with some neutrality (20%).
- **Domain 2: Teaching Practices**
- **As shown in Table (2).**

| <b>Domain 2: Teaching Practices</b> |                                                               |             |               |             |                 |
|-------------------------------------|---------------------------------------------------------------|-------------|---------------|-------------|-----------------|
|                                     | <b>Item</b>                                                   | <b>Mean</b> | <b>Median</b> | <b>Mode</b> | <b>Std. Dev</b> |
| <b>6</b>                            | I use active learning strategies.                             | 2.90        | 3             | 3           | 0.90            |
| <b>7</b>                            | I focus on skill application rather than memorization         | 3.40        | 3             | 3           | 0.99            |
| <b>8</b>                            | I provide individualized learning opportunities.              | 3.00        | 3             | 3           | 0.0             |
| <b>9</b>                            | I allow students to progress at their own pace when possible. | 2.80        | 2.5           | 2           | 1.14            |
| <b>10</b>                           | I integrate practical experiences into teaching.              | 3.50        | 3.5           | 4           | 0.5             |

- **Item 1 Competency Alignment**  
Most respondents *agree* that course outcomes align with program competencies (80% positive).
- **Item 2 Learning Activities Based on Competencies**  
75% positive — a strong consensus that instructional design is competency -based, though about 15% disagree.
- **Item 3 Use of Real-Life Tasks**  
Everyone responded *neutral*. This suggests *unclear or underdeveloped perception* of real-life integration — possibly an area for professional development.
- **Item 4 Professional Skills Content**  
Responses are spread across neutral and positive, with 55% agreeing or strongly agreeing. This indicates general satisfaction, but with diverse perspectives.
- **Item 5 Updating Competencies**  
Completely positive — half agree and half strongly agree — indicating a strong practice of refreshing competencies in courses.

- **Domain 3: Assessment Practices**
- **As shown in Table (3).**

| <b>Domain 3: Assessment Practices</b> |                                                                       |             |               |             |                 |
|---------------------------------------|-----------------------------------------------------------------------|-------------|---------------|-------------|-----------------|
|                                       | <b>Item</b>                                                           | <b>Mean</b> | <b>Median</b> | <b>Mode</b> | <b>Std. Dev</b> |
| <b>11</b>                             | I use performance-based assessments.                                  | 1.72        | 2             | 2           | 0.96            |
| <b>12</b>                             | I provide multiple opportunities for students to demonstrate mastery. | 3.30        | 3             | 4           | 1.35            |
| <b>13</b>                             | I use rubrics to assess competencies                                  | 1.24        | 1             | 1           | 0.99            |
| <b>14</b>                             | Assessment tasks reflect real-world applications.                     | 3.25        | 3             | 3           | 0.78            |
| <b>15</b>                             | I provide continuous feedback to students.                            | 2.50        | 2.5           | 2.3         | 0.5             |

- **Item 5:** 100% agree or strongly agree — instructors consistently update competencies.
- **Item 4:** 85% agree or strongly agree — course content aligns well with professional skills.
- **Items 1 & 3:** 65% positive — alignment with program outcomes and use of real-life tasks are viewed positively, though a significant *neutral* group exists.
- **Item 2:** Only 55%

### **Conclusion**

Competency-oriented and student-centered higher education means that planning a learning unit should begin by focusing on how to formulate learning outcomes. It should not depend on what the professor can provide, but rather on the appropriate objectives for the student. Designing more innovative learning arrangements will contribute to supporting the shift from teaching to learning. In a knowledge-based society, lifelong learning is essential. Therefore, competencies such as self-directed and collaborative learning should be integrated into the teaching and learning process. Research indicates that faculty members agree that curriculum design based on competencies, professional skills content, teaching methods, assessment methods, and making content relevant to professional contexts are effective practices.

## References

1. Adeline, D. Wambui. (2024). Competency-Based Education: Shifting Focus from Grades to Skills, *Research Output Journal of Arts and Management* 3(3):13-18, 2024.
2. Boahin, P. (2018). COMPETENCY-BASED CURRICULUM: A FRAMEWORK FOR BRIDGING THE GAP IN TEACHING, ASSESSMENT AND THE WORLD OF WORK. *International Journal of Vocational and Technical Education Research*. Vol.4, No.3, pp.24-37, November 2018.
3. Bouchrika, I. (2026). Competency-Based Education Guide: Benefits & Differences To Traditional Education for 2026, [EDUCATION](#)
4. Brodersen, R. M., Yanoski, D., Mason, K., Apthorp, H., Piscatelli, J. (2017). *Overview of selected state policies and supports related to k-12 competency-based education*. (REL 2017–249). Washington, D.C.: U. S. Department of Education, Regional Educational Laboratory Central, & Marzano Research.
5. EdTech (2026). Competency-Based Education: Revolutionizing Learning for the Modern [Future Education Magazine](#)
6. Hida, M. Ben Ouahi, T. Hassouni, M. Jbari, E. Al Ibrahmi. (2025). COMPETENCY -BASED APPROACH IN HIGHER EDUCATION. Issue 63 Volume 17 Number 2. *International Journal on Technical and Physical Problems of Engineering*. Published by International Organization of IOTPE.
7. Nguyen, Nhi. (2023). A beginner's guide to competency-based education. <https://feedbackfruits.com/blog/a-beginners-guide-to-competency-based-education>.
8. Miller, S. (2020). Competency-based Education: Mastery Learning and Skill-based Assessment.. [JASES](#) , Vol. 2 (2020) , Issue 3 (September).
9. Oyugi, J. L. (2015). Rational and challenges of competency-based education and training: The "wickedness" of the problem. *Journal of Education and Practice*, 6(14), 74–78.

10. Shawer, S. F. (2017). Teacher-driven curriculum development at the classroom level: Implications for curriculum, pedagogy and teacher training. *Teaching and Teacher Education*, 63, 296-313. doi.org/10.1016/j.tate.2016.12.017.
11. Sturgis, C., & Casey, K. (2018). Levers and logic models: A framework to guide research and design of high-quality competency-based education systems. <https://www.inacol.org/resource/levers-and-logic-models-a-framework-to-guide-research-and-design-of-high-quality-competency-based-education-systems/>
12. Sullivan, S. C., & Downey, J. A. (2015). Shifting educational paradigms: From traditional to competency-based education for diverse learners. *American Secondary Education*, 43(3), 4–19. Retrieved January 1, 2018 from EBSCO OnlineDatabaseEducation <http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=108991086&site=ehost-live>