Competency Based Learning: Outcomes, Curriculum, Perceptions, and Learning

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The purpose of this exploratory case study is to focus on (1) building competency-based learning models for course(s), specifically online courses and (2) understanding the role of faculty, and (3) recognize the outcomes and perceptions of students.
Competency Based Learning

- Develop Competencies
- Process
- Not Product
- Mastery of Skills
## Traditional Education vs Competency-Based Education

<table>
<thead>
<tr>
<th>School Culture</th>
<th>Students have a range of learning experiences at school, online, and in the community. Diverse partners create individual learning pathways to accommodate student interests and learning styles.</th>
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<tr>
<td>Learning Progression</td>
<td>Students are expected to master competencies aligned to college and career ready standards with clear, transferable learning objectives.</td>
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<td>Learning Pace</td>
<td>Students receive customized supports both in-school and out-of-school to ensure they stay on pace to graduate college and career ready.</td>
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<td>Instruction</td>
<td>Educators work collaboratively with community partners and students to develop a unique learning plan for every student based on interests, learning styles, and real-time data.</td>
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<td>Assessment System</td>
<td>A comprehensive assessment system is an essential part of the learning system. Formative assessments guide daily instruction. Summative assessments show mastery; taken when ready and multiple chances to demonstrate mastery.</td>
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Every classroom has one teacher who designs and delivers instructional program with very little differentiation.

Assessments at set times to evaluate and classify students. One opportunity to take the summative assessment at the end of the year.

Grades are norm-referenced, reflect course standards, are typically based on weighted quarters and a final exam.

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Provide flexibility in the way that credit can be earned or awarded.

Provide students with personalized learning opportunities.

Online and blended learning, dual enrollment, and early college high schools.

Leads to better student engagement as the content is relevant to each student and tailored to their unique needs.

Leads to better student outcomes because the pace of learning is customized to each student.

United States Department of Education
Competency-based strategies
COMPETENCY-BASED EDUCATION: WHAT IS IT?

Competency-based education is an organizational or systems approach to schooling and learning where students move ahead primarily based on the demonstration of what they know and can do, rather than time spent in class.
American Institutes for Research (AIR)

The National Survey of Postsecondary Competency-Based Education (NSPCBE) is an annual, web-based survey of postsecondary institutions in the United States, geared toward assessing the state of the CBE field, including both institutions that are interested in adopting CBE and those already on the adoption pathway.

Source: American Institutes for Research, 2019
Motivations for adoption: Institutions see CBE as a way to serve nontraditional students and improve workforce readiness.

Scope of adoption: Many institutions’ adoption activities fall short of full CBE programming.

Scale of enrollment: Most CBE programs currently serve relatively small numbers of students.

Faculty role: Faculty are still fulfilling a broad range of roles in active CBE programs.

Future of CBE: Most institutions are optimistic about the future of CBE.

Barriers to implementation: Perceived barriers to CBE implementation represent both internal and external factors.

Source: American Institutes for Research, 2019
Hypothesis and Research Questions

HO: THERE IS A POSITIVE RELATIONSHIP BETWEEN COMPETENCY BASED LEARNING AND STUDENT LEARNING

H1: THERE IS NO CORRELATION BETWEEN COMPETENCY BASED LEARNING AND STUDENT LEARNING
Hypothesis and Research Questions

RQ1: What are the advantages of learning in the competency based model?

RQ2: How was it different in terms of mastering concepts when compared to the traditional learning model?

RQ3: Would you like the competency based learning model in both on-ground and online classes?

RQ4: What are the differences between the two learning models?
Methodology
Data Collection 1

Individual Interviews

Semi-structured observations & Field Notes

Other Sources
Methodology- Data Collection 2
Interviews & Interview Process

- Formal consent of the participants for the interview.
- Standardized open-ended interviews with a few Likert-style questions.
- Interviews at a mutually convenient time and place (Lynn University).
- Time frame: 3 weeks
Exploratory case study methodology

Answering ‘how’

Discovering ideas

Developing insights

Gillham (2000) suggests that qualitative methods focused primarily on the kind of evidence (what people tell you, what they do) that would enable one to understand the meaning of what is going on. The great strength of such methods is that they can illuminate issues and turn up possible explanations; they are essentially a search for meaning as is all research (Gillham, 2000, p. 10).
Methodology - Sample Description

Subjects:
• Undergraduate students of Lynn University. All participants are older than 18 years with no known mental or physical disabilities.

Student Group:
• Undergraduate students of enrolled in the College of Business and Management at Lynn University, taking at least one CBE course.

Faculty:
• Faculty from the College of Business and Management that are implementing the CBE in their course. Faculty are included in the sample for the reason that they are more knowledgeable about the benefits of CBE and thus they act as the bridge between the students and their expectations.
Outcomes

The research focuses on the opportunity for the faculty to re-examine and innovate the philosophy of delivering content with meaningful and creative tools and empower students with advancement linked to their respective competencies. This technique will improve the learning outcomes and achievements of students.
CBE in Online Class

- Each chapter is set up a one module
- Module video
- Learning resources
- Case studies
- Quiz
  - Mastery paths
  - Assignments
Professor assigned way to many assignments at one time, expectations should be realistic if most folks attending online have full time jobs and kids.

Awesome course!

I would just like to add some appreciation for this instructor. The workload was perfect. I was never overly stressed with the amount of work but did have to put in the time and effort. The teacher was very engaging and helpful. She made sure you understood what was being asked in order to achieve a good grade. The teacher is also very knowledgable and I can't wait to take another class from her.
Competency Based Learning USA: Mohammad M. Megahed
Professor, Faculty of Engineering, Cairo University. Retrieved from ResearchGate