Challenge-Based Learning (CBL): Designing Active & Authentic Learning

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Faculty Discussants:

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Northeastern 2025 Imperatives

**Co-op and other experiences customized by design**

Northeastern 2025 will expand co-op and other experiential opportunities to be more flexible, open to a broader sector of our community—including alumni and working professionals—and more closely integrated with learners’ needs.

Northeastern will enlarge students’ capacity for resilience by expanding traditional notions of co-op to deliver accessible, flexible experiential opportunities that fit a wide range of learner needs.
CBL Design Approach

• CBL emulates experiential learning by placing the student in the role of protagonist in prototypical workplace scenarios that call upon the targeted skills and knowledge the course teaches.

• A CBL course consists of a thoughtfully curated sequence of challenges, each requiring the production of one or more authentic artifacts, designed to progressively build more advanced skills and reinforce previously learned ones.

• Assessment is ongoing and iterative as students’ progress through a challenge; students receive feedback on their artifacts from faculty who take on a primary role of an expert mentor or coach.
CBL Course Demo
Developing and Testing CBL: An Iterative Design-Based Approach to Refinement and Scale Up
## Scaling CBL Course Development

<table>
<thead>
<tr>
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<th>Spring 2018</th>
<th>Summer 2018</th>
<th>Fall 2018</th>
<th>Spring 2019</th>
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<tbody>
<tr>
<td>Unique courses</td>
<td>1</td>
<td>12</td>
<td>28</td>
<td>40+</td>
</tr>
<tr>
<td>Unique enrollments</td>
<td>25</td>
<td>350</td>
<td>750</td>
<td>1000+</td>
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Goals for CBL Cognitive and Attitudinal Impacts

• Help students to develop adaptive expertise that can readily transfer to real-world settings
• Emphasize students’ agency within authentic contexts and assessments to provide a learning environment that motivates students to construct knowledge that can be meaningfully applied in the future
• Foster enhanced student engagement through immediate relevance to their career advancement goals
• Help prepare learners for a more seamless progression into Experiential Network (XN) projects or co-op.
How is CBL perceived by learners and faculty?
CBL Challenge Surveys

Q3 - How much do you feel like you gained new skills and knowledge by completing this challenge?

<table>
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<tr>
<th>#</th>
<th>Answer</th>
<th>%</th>
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<tbody>
<tr>
<td>1</td>
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<td>56.41%</td>
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<td>29.49%</td>
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<tr>
<td></td>
<td>Total</td>
<td>100.00%</td>
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Response to Online Surveys

Was this challenge relevant to your career goals?

- Yes: 85
- No: 12

100% of all responses indicated that the challenge was relevant to their career goals.
Faculty Perceptions of CBL

- Faculty viewed CBL as a natural fit with either how they taught before or with their experience in the world of work.

- CBL was seen as essentially a kind of simulation of real-world situations. This was described as a meaningful improvement over the traditional textbook-based approach.

- The things we're teaching them they see the immediate relevance of in their day jobs a lot of the time.

- It's a simulation of a real-work situation. It replicates the real world, what's going to be demanded of them.

- It was a good fit with my ideas about work and learning. The course concepts are pretty immutable, but you need the exposure to really own and use the concepts.

- I'm trying to put the real-life spirit of the project into the course. They need to think of it as their job. I'm trying to make it real-world.

- I would rather see this as a kind of mini-co-op. The students will eat this up since it puts them into the context of doing a job. Put more flex in the objectives.
They just want to do the assignment. The students need to put the time in; when they put the time in, they do very very well. You got to have the passion.

The students are very engaged with the story of the course. We have to engage them very actively online, since there's no face-to-face.

My goal is to prepare them for that life [in a large corporation]. Work is demanding. They need to know that. Be a risk-taker! Push the envelope!

Some faculty report students were finding the course storylines compelling, while other faculty said students just want to do what's required.

There persist some assessment challenges, especially with regard to the assessment of soft skills such as collaboration or engagement.
Faculty reflection on the CBL experience

“Generally speaking though it’s been a positive experience. The students were perplexed at first but have fully acclimated to the approach. They are very inquisitive and I’m impressed by the amount of research and self-exploration they are employing. I believe that they are benefiting greatly as we progress. I treat them more as Web Developers than as students. We discuss, we negotiate, we discover. It’s a great environment. ...”

Instructor B email 3/14
Faculty Experience Teaching CBL

Discussants:

Mike Jackson, Associate Dean, Academic and Faculty Affairs

Monica Borgida, Assistant Teaching Professor
Key Takeaways

- We don’t ask learners to take it on faith that their effort will pay off at the end.
- CBL demonstrates relevance and value throughout the learning experience.
- CBL foregrounds the real-world experiences and expertise of our CPS faculty scholar-practitioners.
- CBL delivers on the NU2025 promise of accessible, flexible experiential opportunities that fit a wide range of learner needs.
Thank you!

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