Applying Socio-Cultural Theoretical Lenses to Strengthen Problem-Based Learning: Collaboratively constructing recommendations

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Contextualization

A collaborative group of experts has intellectual capital that can be collected and shared to increase its impact. The purpose of today’s Inspire Session is to leverage this community of experts, researchers, practitioners, and critical thinkers.

You bring with you all the knowledge bodies you have embedded yourself within. Let’s combine our expertise to support instructional design around problem-based learning. By the end of the session, we should have a discussion artifact consisting of a list of instructional design recommendations for both in-person and distance learning related to PBL.
Problem-based learning (PBL) is an educational approach in which a collaborative group takes a complex problem and works its way through the problem, guided by a facilitator.

In this definition, there are three focal elements: 1) A group of learners is brought together to share perspectives and to reason through a problem. 2) A complex problem or case is used. 3) The process is facilitated.

The problem or case should include room for nuance, where rich points in the problem are identified and perspective sharing can develop.
Activity Instructions

● In your groups, say hello and get to a place you are ready to work together

● Identify someone in the group to write down ideas and someone in the group to keep the conversation flowing and aligned with our goals.

● Use the conceptual lens from your group to reflect on problem-based learning, collect areas that interrelate with the lens and PBL.

● After you have identified intersecting concepts, as a group, try to determine the big ideas that align these ideas together.

● From these big ideas, determine instructional design recommendations that relate. (In-person or online recommendations are both encouraged).
Organizing Tool

<table>
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<tr>
<th>What aspects of the conceptual lens relates to PBL for you?</th>
<th>What are the big picture ideas?</th>
<th>What recommendations would you make?</th>
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Dialogic Learning

Dialogic learning is a socio-cultural constructivist approach to learning that examines the role of talk in meaning-making. This dialog consists of multiple elements. First, it involves the learners’ personal worldviews. This includes their multiple identities, cultural perspectives, and points of view. Second, it involves the interaction between elements personal and academic, between multiple perspectives, and between collaborators. This is defined as emergent intertextuality. The third element necessary for dialogic learning is that there must be rich points that provide a juncture between the dialogic interaction to reveal contradictions, complexities, and interrelationships that define the conceptualization. Learning constructed using these elements is seen as an authentic way to create meaning from dialogic interaction. This perspective is associated with situated learning (Green, Yeager, & Castanheira, 2008).

Cultural Border Crossing

The theory of cultural border crossing relates to how students bridge traditional and academic information. It posits that a student’s success and achievement in learning is determined by how well the student can cross the border from one realm of understanding to another. This border crossing is done by overcoming contradictions brought about by differences in worldviews. In this framework, the role of instruction is to help the student overcome those contradictions. This perspective is based on identifying the aspects of the learner’s culture that will support integration of the two worldviews and developing instructional tools that allow them to do so.

Collateral learning is a cognitive interpretation of socio-cultural elements related to cultural border crossing. It examines what happens when conceptual information being learned is in conflict with other knowledge held in a similar cognitive schema. Collateral learning categories are designated by the degree of conceptual interaction and the degree of conflict resolution in the unit of interest. When the information has little interaction and little to no resolution, it is said to be “parallel” collateral learning. The other end of the collateral learning spectrum is “secured” collateral learning. In “secured” collateral learning, the learner combines the information being learned and the information currently held. Conflicting schemata intentionally interact, and the learner resolves conflicts between the two. In this form of collateral learning, one idea can be modified to include the other, or instruction can promote their mutual reinforcement.

Recommendations by Lens

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<th>Cultural Border Crossing</th>
<th>Collateral Learning</th>
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