Using Project Based Learning in a Multi-Access Learning Environment

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INTRODUCTION/BACKGROUND

JIBC is well known for the opportunities that the institution provides faculty, staff and students to innovate and adapt to new approaches to enhance teaching and learning (JIBC Relevant Focused Ready- Strategic Plan 2015-2020). Various research supports the value of interdisciplinary programs. However, despite its recognized value, there are relatively few interdisciplinary programs in our institution at the undergraduate level of studies. The learning environment at JIBC is changing rapidly and students are demanding increasing flexibility, mobility and shorter time periods to complete their credentials. The purpose of conducting this action research is to examine the teaching methods (pedagogies) used in the BUS-3110 course where both face-to-face students take the course at the same time as remote students. The research also examines the student’s level of learning experiences and engagement.

METHODS

This research adopted an interpretive case study approach (Creswell, 2009, Stake, 1995). A survey was distributed via email to all 33 students in the BUSN-3110 course from two program areas—Law Enforcement and Emergency Management and Security. A total of 10 questions focusing on learning experiences, project management skills, access and engagement. Reflections from the instructor and observations from community sponsors were also captured.

FRAMEWORK 1

Project-based learning (PBL) is a comprehensive approach to teaching and learning that is designed to engage students in the investigation of authentic (real life) problems. Learning experiences are designed to move students beyond lower cognitive levels to reaching the higher cognitive levels of thinking skills of problem solving and evaluation, while at the same time improving professional skills such as critical thinking, teamwork and communication. PBL Framework: (Krajcik J & Blumenfeld, P, 2006) identified improving professional skills such as critical thinking, teamwork and thinking skills of problem solving and evaluation, while at the same time (real life) problems. Learning experiences are designed to move students learning that is designed to engage students in the investigation of authentic and situated inquiry exploring the problem and applying project management tools/concepts. Active Learning - Engaging in inquiry and research involves activities normally beyond their ability and scaffolding takes place. Collaborations - Teams, peers, instructor and sponsors. Outcomes - The process results in the creation of project documentations, artifacts and presentations. Reflection - Opportunities for reflection and transfer of knowledge during presentations and debriefing sessions. Role of Faculty - Advisor, guide and coach how to utilize tools and concepts at all phases of project management life cycle.

FRAMEWORK 2

Multi-access learning model is defined as framework for enabling students in both face-to-face and online contexts to personalize learning experiences while engaging as a part of the same course - Irvine, (2010: Irvine, Code, & Richards 2013). From the student perspective – multi-access learning environment requires that both on campus students and remote students interact and access the same course materials and resources. From the instructor’s perspective – multi-access learning environment implies teaching two different audiences simultaneously – in class and remotely.

RESULTS

Students response included:

- Project Idea - A concern, issue, problem or research question driving the project idea pitched by sponsors.
- Process - Authentic and situated inquiry exploring the problem and applying project management tools/concepts.
- Active Learning - Engaging in inquiry and research involves activities normally beyond their ability and scaffolding takes place.
- Collaborations - Teams, peers, instructor and sponsors.
- Outcomes - The process results in the creation of project documentations, artifacts and presentations.
- Reflection - Opportunities for reflection and transfer of knowledge during presentations and debriefing sessions.
- Role of Faculty - Advisor, guide and coach how to utilize tools and concepts at all phases of project management life cycle.

In your opinion, what has been...

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<tr>
<th>5 Most Positive Learning Experiences</th>
<th>5 Challenges</th>
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<tr>
<td>Acquired new/enhanced skills in project management.</td>
<td>Lack of knowledge of how to use the project management methodology.</td>
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<tr>
<td>Acquired new/enhanced knowledge about project management.</td>
<td>Completing the group assignment.</td>
</tr>
<tr>
<td>Practiced the skills in completing project management documentation using real life problems or issues.</td>
<td>Amount of time and commitment.</td>
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<td>Connected students to experts in the field.</td>
<td>Fostering interdisciplinary collaboration.</td>
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<tr>
<td>Practice research skills/Exposed to various issues within public safety.</td>
<td>Working with my group.</td>
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DISCUSSION

Students benefited from the different interdisciplinary project ideas with public safety focus presented to them by their sponsors however, students have a strong preference in self-selecting their group members and a strong preference of working with students from their own disciplines. Real-time interaction and collaborations are often considered essential in a multi-assess learning environment in order for students to engage and interact with each other however, this was challenging because of remote students work schedules. A number of key themes were not considered in this research such as: Class size, workload and support.

CONCLUSIONS

Exposing students to developing generic and transferable skills that are applicable in any career in public safety is beneficial. More research is required to promote and provide opportunities for interdisciplinary group learning/collaborations using technology so remote and on campus students can work together. Further to fostering engagement and collaboration it is important to design pedagogy that are inclusive - for e.g., move discussions online, create groups that includes on-campus students and remote students to work on certain activities together.

REFERENCES


JUSTICE INSTITUTE OF BRITISH COLUMBIA