3.3 Strategies to Incorporate Active Learning in an Online Course Design and Cyber Cheating Prevention

Findings

✓ Some of the strategies for implementing active learning in online learning are the following (Khan, Egbue, Palkie, & Madden, 2017):

- Creating a Community of learning: In the creation of the community, it is important to state clearly the expectations, create activities that encourage students’ critical thinking and effective communication.

- Engaging class through discussion: One of the reasons why it is important to engage discussion in online classrooms, it is the benefits of engagement in students, and the development of critical and communication skills. Additionally, the effectiveness of an online class is highly dependent on online discussions; three elements are considered as crucial for a successful online discussion (Dixon, 2014):
  - Pre-assessment: It refers to what students already know.
  - Relevance: It refers to how well the material is being covered as well as how this learning can be applied to real-world settings.
  - Assessment criteria: Similar to face-to-face classrooms formative and summative assessments can be useful for online settings as well.

- Effective Assessment Methods: One of the best methods of an effective assessment is to develop comprehensive rubrics that allow students to guide students on what it is expected in the class (Khan, Egbue, Palkie, & Madden, 2017).

✓ The performance expectancy has a significant positive influence on satisfaction and behavioral intention to use technology-based approaches (i.e., clickers). The study suggests that in Asian culture where the study took place students could potentially improve their performance and avoid failure by adopting educational technology (Chan, Cheung, Wan, Brown, & Luk, 2015).

✓ “Audio feedback seems to promote students’ emotional engagement” (p. 299) as well as it is beneficial for their learning. Additionally, the study found that the format preference for students to receive feedback is audio. Even though the audio feedback can sometimes be demanding it potentially help students’ learning (Rasi, & Vuoärvi, 2018).

✓ The exploration of different methods of interchanging feedback was analyzed in this study. Three methods were used to compare the effects and students’ preference. The first tool used is Socrative, it is an online tool similar to Hotseat and allow students to provide their answers. The second tool used was TodaysMeet that allows teachers to have a collaborative classroom and parallel conversations, and finally, Google drive that enables users to edit the same document. The participants for this study found these methods more effective than traditional feedback settings. As well as these digital tools provide multiple interactions, anonymity, fun, instant response, and record of the feedback. Some of the advantage and disadvantage are summarized in Table 3 (Zou, & Lambert, 2017).
The study identifies five methods that online students might use in a cheating situation (e-cheating) or plagiarism. These methods are indicated in the reference section. The study suggests a few methods of the reduction of cheating activities and plagiarism activities indicated below (Moten, Fitterer, Brazier, Leonard, & Brown, 2013):

**Strategies for reducing cheating**

- **Policy dissemination:** Prior studies have shown that a clear understanding of policies for cheating decreases the behavior of cheating. The accurate consequences of cheating should be thoroughly explained (Chiesl, 2007).
- **Strict test-taking timeline:** In an online test when students take “Incredibly short times are an indicator that dishonest behavior is may be taking place” (Moten, Fitterer, Brazier, Leonard, & Brown, 2013, p. 144). However, the student should have just the right amount of time where there is not enough time to look up answers. This can help students to not rely on cheating.
- **Cheating trap:** This refers to the creation of a website with wrong answers.
- **Class mole:** “The instructor could enroll as a student under a different name. When students discuss cheating amongst them, the dishonest students would be caught by the instructor while committing the offense (Christie, 2003)” (Moten, Fitterer, Brazier, Leonard, & Brown, 2013, p.144)
- **Randomized exam questions and responses:** “These procedures would decrease students’ ability to collude” (Moten, Fitterer, Brazier, Leonard, & Brown, 2013, p.144; Chiesl, 2007). The questions should be randomizing across different chapters.
- **Statistical analysis to detect common errors:** A statistical method developed by Harpp and Hogan (1993) examined errors in common and exact wrongs ratio. It allows to find similarities within students’ answers. An index was developed denominated EIC index which was modified furthermore by Nath and Lovaglia (2009).
- **Proctoring:** “Exam proctoring works well when an institution has a testing center where I.D.’s are checked and verified. However, when a student is in a remote location organized proctoring may be an issue.” (Moten, Fitterer, Brazier, Leonard, & Brown, 2013, p.144; Chiesl, 2007)

**Strategies for reducing plagiarism**

- **Similarity detection software:** The study suggests some websites that can help to detect plagiarism some of them are mentioned below:
  - Turnitin.com (http://www.turnitin.com)
  - WriteCheck.com (http://www.writecheck.com)
  - DupliChecker.com (http://www.duplichecker.com)
  - SafeAssign (Integrated into Blackboard)

**Instructional Design Recommendations**

1. For a successful integration of active learning, consider three main components mentioned above. The following are some strategies that can be implemented in practice:
   - State clear expectations, this can be done by use of a recorded welcome video to the course
   - Encourage critical thinking and thinking outside of the box. This can be done by developing activates such as (Khan, Egbue, Palkie, & Madden, 2017):
     - Debates
     - Role-Playing
- Drama
- Peer learning/teaching

2. Online courses need to be designed in a way that can help students activate intrinsic learning desires. One of the best ways to avoid plagiarism or cheating is when students want to learn and apply the knowledge that was acquired (Moten, Fitterer, Brazier, Leonard, & Brown, 2013).
Table 3: Advantage and disadvantage of feedback methods

<table>
<thead>
<tr>
<th></th>
<th>Advantages</th>
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<th>Disadvantages</th>
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<tbody>
<tr>
<td>Pen-and-paper</td>
<td>Convenient</td>
<td>37 (39.8%)</td>
<td>Not anonymous</td>
</tr>
<tr>
<td>questionnaires</td>
<td>Quick</td>
<td>21 (22.6%)</td>
<td>Outdated</td>
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<tr>
<td></td>
<td>Simple/easy</td>
<td>12 (12.9%)</td>
<td>Time-consuming</td>
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<tr>
<td>Oral reports</td>
<td>Speaking practice</td>
<td>49 (52.7%)</td>
<td>Not anonymous</td>
</tr>
<tr>
<td></td>
<td>Convenient</td>
<td>17 (18.3%)</td>
<td>Stressful</td>
</tr>
<tr>
<td></td>
<td>Quick</td>
<td>9 (9.7%)</td>
<td>Awkward</td>
</tr>
<tr>
<td>Digital technological</td>
<td>Fun/cool/not boring</td>
<td>92 (98.9%)</td>
<td>Access difficulties</td>
</tr>
<tr>
<td>platforms</td>
<td>Anonymous</td>
<td>88 (94.6%)</td>
<td>Disruptive</td>
</tr>
<tr>
<td></td>
<td>Multiple interactions</td>
<td>67 (72.4%)</td>
<td></td>
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<tr>
<td></td>
<td>Instant response</td>
<td>49 (52.7%)</td>
<td></td>
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<tr>
<td></td>
<td>Record of feedback</td>
<td>32 (34.4%)</td>
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