3.1 Faculty Preferences and Suggestions for Online Course Design

Findings:

✓ The study found that the **skills faculty members need to develop for designing online courses** are not only in the uses of technology but also in four crucial elements. These four practices are as follows: a) content development, b) learning activities, c) teaching strategies, and d) assessment. This study provides a set of rubrics that allows faculty members to identify what level they are by providing three levels of expertise and criteria. These three levels are represented in Figure 5 (Arinto, 2012).
✓ The study follows four phases guided by the design-research based approach. The selection of literature to support the development of a framework with elements of authentic learning shown in Figure 6 was the initial step for this study. The study’s findings suggest that components such as social, cognitive, and teaching presence can contribute to developing an effective, authentic online community of learning experience; these components are explained below (Parker, 2017):

- Community of learning development: It can be assisted by selecting activities that support communication and collaboration.
- Developing cognitive engagement: This is enhanced by selecting real-life tasks.
- Giving students the opportunity to construct knowledge through collaboration activities by providing access to technologies and open educational resources. The collaboration activities that allow students to share ideas that help students to “assimilate new information and construct personal meaning” (p.351).

The study provides a redefined framework denominated Authentic Online Community of Learning (AoCoL) model (See Figure 7). This model considers six principles for creating an authentic online community; a) Learners needs, b) Authentic task, c) Community of inquiry (CoI), d) Authentic learning environment, e) Meaningful learning with technology, and f) Open Educational resources.

✓ The likelihood of a faculty member to utilize online technological tools was examined in Jackson’s study (2017). The study employed a two-level Hierarchical Gender Linear Model (HGLM) to identify the odd ratios and further cover the probabilities of likelihood. The study evaluated five models of factors that might influence faculty members in the use of technological tools (Jackson, 2017):

1. First model: This model evaluated if faculty member gender will affect the likelihood of using technological tools. The results suggest that there is “only 46% chance that a male would utilize an online technological tool.” (Jackson, 2017, p. 279).
2. Second model: This model evaluated the role that faculty member age has in other to predict the use of technological tools. The results show that faculty who is less than fifty years old is more likely to use online technology with 51.72% of chance.
3. Third model: This model indicates the likelihood of the probability that the years of experience in the field will play a role in the use of online tools. The study found that faculty members with less than thirty years of experience will have a 50.37% chance of using technological tools.
4. Fourth model: This model evaluated the significance of the years that faculty members have been in their current position. The results indicated that there is 51.75% chance. Additionally, faculty with less than ten years in their position will be likely to use technological tools.
5. Combined model: This model combines all four models previously mentioned. The results suggest that female faculty members will be more likely to use online tools. On the other hand,
once it was compared the third and fourth model, the results suggest that years of experience and year on the current position were no longer significant on the faculty likelihood to use online technological tools.

This study implemented and evaluated a Distance Education Mentoring program (DEMP). This program was designated to assist faculty members in developing high-quality courses in a four-stage model (See Figure 8) The study’s findings suggest that institutions with similar approaches for faculty development should consider, the following aspects (Hixon, Barczyk, Buckernmeyer, J. & Fieldman, 2011):

- “Make relevant information easily available to participants” (Hixon, Barczyk, Buckernmeyer, J. & Fieldman, 2011, para. 39).
- “Encourage suggestions and feedback from participants” (Hixon, Barczyk, Buckernmeyer, J. & Fieldman, 2011, para. 39).
- Ensure participants feel connected to their mentor and other program participants
- Encourage participants to work as a team.
- Help participants find process-based solutions to problems encountered, rather than using quick fixes.

The findings from An, Kim, and Kim’s work (2008) affirmed that one of the factors for facilitating or limiting a successful completion of online groups’ tasks is the individual accountability. It reaffirms previous studies’ findings were this phenomenon was a result of what is denominated as “social loafing.” Social loafing refers to the decreased effort in students when the work is in groups. Students tend to anticipate that the work in groups would be less. The lack of individual accountability can be addressed by assessing performance and providing feedback to each member while developing collaborative learning activities (An, Kim & Kim, 2008, p. 25).

In order to improve tutoring skills, “tutors must be able to monitor the quality of their work” (Hrastinski, Cleveland-Innes, & Stenbom, 2018, p. 128). The study provides an example of a digital badge (Digital badge is “a representation of an accomplishment, interest or affiliation that is visual, and available online” (Gibson, & Ostashewski, 2015)) in Table 2. This example can be used to encourage reflection and development of online tutoring skills (Hrastinski, Cleveland-Innes, & Stenbom, 2018).

**Instructional Designer recommendations:**

1. “When designing group assignments, it is important for online instructors to provide not only a clear description of the assignment itself, including the way the work will be assessed, but also guidelines for how the group work will be facilitated in order to meet the necessary goals” (An, Kim, & Kim, 2008, p. 25).
2. The digital badge can help online tutors to understand in more detail their tutoring process or difficulties in their process for teaching online courses, a tool is represented in Table 2.
Figure 5 Framework of developing ODeL skills

Taken from: Arinto, P. (2012). A framework for developing competencies in open and distance learning. The International Review of Research in Open and Distance Learning, 14 (1), 167-185
Figure 6 Draft framework-Authentic online learning (AOL)
Figure 7 Authentic online learning (AoCoL) model. 
Figure 8 Four-stage model of the Distance Education Mentoring Program.
Taken from: Hixon, E., Barczyk C., Buckernmeyer, J. & Fieldman, L. (2011). Mentoring university faculty to become high quality, online educator. Online Journal of Distance Learning Administration, 15 (5)
**Table 1: Implications of Cognitive Load Theory**


**Table 2: Examples of online tutoring skills**


<table>
<thead>
<tr>
<th>Tutor skill</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage discussion</td>
<td>Math coach conversations are recommended to emphasize discussion rather than direct instruction/lecturing. Common approaches for encouraging discussion include asking questions and giving the students time to explain their ideas. Submit an example of a chat transcript as a Word or PDF file that illustrates how you encouraged discussion.</td>
</tr>
<tr>
<td>Encourage reflection</td>
<td>Math coach conversations are recommended to conclude with reflection. During the reflection, the coach encourages the student to reflect on what she/he learnt during the conversation. Submit an example of a chat transcript as a Word or PDF document that illustrates how you encouraged a student to reflect on what s/he learnt during the conversation.</td>
</tr>
<tr>
<td>Provide emotional support</td>
<td>Math coach conversations commonly include emotions. For example, a student might be frustrated because they have homework or a test the next day. Submit an example of a chat transcript as a Word or PDF document that illustrates how you encouraged a student to turn frustration into a productive conversation.</td>
</tr>
</tbody>
</table>