Best Practices and Frameworks for Online Doctoral Programs

Jacki Soister

University of Colorado - Denver

INTE 6720: Research in Learning Design and Technology

Revised: March 16, 2021

Best Practices and Frameworks for Online Doctoral Programs

In preparing to launch an online doctoral program, it is important to consider effective methodologies, structures, and strategies that have the greatest potential for ensuring success. This study conducted by N. Chipere (2015) identifies such best practices and integrates them into a workable framework for establishing doctorate level online programs. This came with the added understanding that online delivery would, and should, have different characteristics from programs designed with in-person classes. Chipere's study can be categorized as a meta-analysis as it involves data synthesis and charting of multiple scientific studies addressing the topic. However, Chipere's literature analysis, data representation, and overall conclusions result in a unique theoretical framework. While each piece of literature reviewed offered data about various elements of conducting online doctoral programs, Chipere's eventual framework and best practices provide practical and actionable steps toward a program's overall development.

Synopsis

The reason behind conducting such a comprehensive meta-analysis was to address four challenges faced by the University of the West Indies (UWI) and its online doctoral programs, specifically: student attrition rates, adjunct faculty turnover, supervision workload and quality, and high online delivery costs (Chipere, 2015, pp. 122-123). Chipere uses a seven-step research process including: scholarly literature search and selection; data collection, coding, and formatting; and data analysis and synthesis (p. 126). Two focal "objects" are designated as pertinent across all 24 research articles and 32 studies eventually selected: *student* and *programme* -- hereafter referred to as 'program' (Figure 2, p. 136). Chipere identifies, classifies, and codes 72 variables evident across all of the research literature that most affect the two objects of study, influencing both the experience of the online *student* and the performance of the

doctoral *program*. The 72 variables listed in Appendix III (pp. 151-154) include factors such as GPA ranges, social integration, or collaborative cohorts (impacting the student) and instructor quality, coordinator-supervisor conflict, or technical infrastructure (impacting the program).

After identifying an interrelationship between many of the variables, as well as establishing the potential effects upon the student and program, Chipere (2015) analyzes the data in order to determine five best practices for designing an online doctoral program. These best practices take into consideration the variables that most impact the program's effectiveness and, thereby, influence the students' success and retention rates; namely, "*student organisation, supervisor organisation, programme structure and content, the use of the learning management system and the compilation of a database of student information*" (Chipere, 2015, p. 141).

Chipere elaborates on ways to implement each best practice. For example, student organization includes the formation of student cohorts; supervisor organization entails setting up supervisory teams; the LMS is utilized to reduce delivery costs; and the student database allows for interventions to decrease attrition (pp. 143-146). Finally, Chipere synthesizes these best practices into a proposed overall framework for program design and development and presents it visually as a five-component network (see image below, p. 7) which addresses all four of the UWI challenges (Figure 6, p. 142).

Strengths

A key strength of the study is that it goes well beyond the theoretical and provides concrete and applicable steps for developing online doctoral programs. Chipere's research (2015) is also shown to be worthy of review and serious consideration because the challenges which UWI faces are clearly relevant to many higher education online programs. In addition, the literature review, data collection, and data analysis are comprehensive and thorough, and this supports the validity of Chipere's concluding five best practices and overarching framework. It is notable that as many as 75 potentially relevant articles and studies were examined prior to Chipere conducting the study with the final 24 articles and 32 studies chosen.

Additionally, the high number of variables identified (72 variables) strengthens Chipere's (2015) argument that all possible influencers have been factored in and assessed (Appendix III, pp. 151-154). These 72 variables are then meticulously networked and narrowed down to eight variables most affecting each of the objects: *student* and *program* (p. 141). An important determination that Chipere includes is which of these variables are within an institution's control and can be truly implemented by a program's developers. Finally, the eight variables are effectually synthesized into the five recommended best practices (listed in Synopsis above) that can have the most impact upon initial online program design or change and improvement.

Critique

Since there is such an extensive pool of research studies evaluated, it is reasonable to deduce that the 24 articles (encompassing 32 studies) eventually chosen are the most applicable and trustworthy. One compelling reason is that Chipere (2015) applies four well-defined and reliable criteria in the literature selection process (p. 130). Even so, he himself identifies that a "weakness of the results is that none of the studies establish causation; at best, they only establish correlations between variables" (p. 132). Therefore, for the sake of accuracy, Chipere replaces 'causation' or 'causal relationship' with 'prediction' and 'predictive relationship' between variables. This clarification in terms raises a question about the degree of direct cause-and-effect influence each of the 72 variables has upon the two objects (student and program).

The high quantity of variables that Chipere (2015) identifies are both wide-ranging and comprehensive; so it is a realistic assumption that these 72 are those that assert the most

influence upon any degree program, whether or not it is online or is at graduate level. But with this large number comes difficulties of clear data representation. Chipere (2015) presents the objects and their corresponding variables as complex networks in figures that lack readability (see images below, p. 7; also Figure 1, p. 133, Figure 2, p. 136); so they have limited value in demonstrating data results. A clearer way to illustrate each data set might have been using a Venn diagram, where the variables could be shown to intersect upon either of the objects (student or program) rather than presented in such a complicated pattern or matrix.

Another concern arises if the reader were to stop reviewing the study at the naming of the five best practices (Chipere, 2015, p. 141), in which case they would find the results too broad and far-reaching. For example, the categories of *student organization, supervisor organization,* and *program structure* fail to describe practices that can be practically applied; they encompass too large a range of possible interventions. However, if the reader progresses through the study to where Chipere makes specific recommendations for carrying out each best practice, one discovers courses of action that can actually be implemented. For example, the more general 'best practice' of *student organization* can be achieved by forming *student cohorts*; and one enacts *supervisor organization* by establishing *supervisory teams*. Therefore, a more direct and useful approach might be for Chipere to offer his concrete suggestions (e.g. student cohorts or supervisory teams) as the best practices in and of themselves.

Finally, Chipere (2015) identifies the need for validation of his proposed framework for developing online doctoral programs (p. 147). He acknowledges that his model requires testing. He points out that with an analysis of an actual application of the framework and its best practices could provide a benchmark for evaluating future programs. Chipere notes that UWI already had plans to implement and assess his framework. However, as of February 2021, there were no research studies published about this undertaking or its results.

Best Uses

Chipere's extensive literature search and selection process (2015, pp. 129-130) offers the reader high returns in time and effort since much of the research work has already been done. Chipere investigates articles using keywords and phrases that other scholars would no doubt use to find the most pertinent literature and research studies, e.g. 'online research supervision'; 'online doctoral programs' and 'best practices in online doctoral programming' (p. 129). Also, Chipere's strict criteria for selection adds additional validity to the final 24 articles chosen.

In addition, as has been mentioned, Chipere's study (2015) provides practical and immediately actionable steps for the formation or development of an online doctoral program, and this in and of itself gives it significant value. It is worthy of note that an institution need not apply all five of the best practices in order to instigate change and improvement. Even more, other than a learning management system which the majority of higher education online programs already utilize, there are no high expenses or capital budget requirements to implement the framework. On the contrary, Chipere presents best practices that reduce delivery costs.

For institutions that are concerned with faculty development, it is notable that Chipere's framework (2015) has promise for reaching beyond the improvement of the student experience or program functionality. Although *faculty* is not named as a core object along with *student* and *program*, Chipere shows in the study how the framework's programmatic changes ultimately benefit the faculty experience as well. This has a further positive ripple effect upon secondary faculty challenges that online programs face, such as adjunct faculty turnover.

In his conclusion, Chipere notes that his framework does not suggest novel applications but "is consistent with established e-learning principles and practices" (2015, p. 146). All in all, Chipere's study is valuable for many online programs even beyond those with doctoral degrees.



Figure 1. Network of Predictor and Response Variables.



Figure 2. Generic Objects.



Figure 6. Proposed Framework for Online Doctoral Programming.

References

Chipere, N. (2015). Developing online doctoral programmes. *International Journal on E-Learning*, 14(2), 121-161. Retrieved February 8, 2021 from https://www-learntechlib-org.aurarialibrary.idm.oclc.org/primary/p/41493/