Alumni's Satisfaction and Experiences with an Online Master's Program

Klavdija Zorec
University of Hawai'i at Mānoa USA
zoreck@hawaii.edu

Curtis P. Ho
University of Hawai'i at Mānoa, USA
curtis@hawaii.edu

This study examined student satisfaction and experiences with online education. With creation of online learning environments in higher education, research has recognized the importance of quality distance education in promoting college students' academic success and meeting their needs and expectations. However, aspects of online programs that influence students' professional development and the student-generated recommendations for program improvements remain elusive. A focus group and survey were conducted with alumni, who graduated between the years of 2011 and 2017 from an entirely online master's program in learning design and technology. Qualitative data analysis yielded four themes: satisfaction with the program; highlights of the program; challenges of the online learning environment; and suggestions for program improvements. Alumni discussed effective and ineffective practices and approaches in the program that enhanced and inhibited their professional development and satisfaction with the program. They also provided practical recommendations for program improvements.

Keywords: Student satisfaction, academic and professional development, online learning, higher education

Introduction

In higher education, delivering the entire education online transformed the traditional, classroom teaching and expanded opportunities for academic and professional development of college students across the diverse academic disciplines (Platt, Raile, & Yu, 2014). Literature suggests several benefits of online education for college students, including flexibility and the ability to overcome geographic distances and work obligations (Dyrbye, Cumyn, Day, & Heflin, 2009). Online delivery approaches, however, have their unique challenges as well, such as (a) lack of instructor visibility and availability (Fedynich, Bradley, & Bradley, 2015), (b) ineffective use of online communication tools (Moallem, 2015), and (c) lack of face-to-face interactions and meeting the diverse needs of online learners (Dyrbye et al., 2009). Scholars proposed many strategies for how to enhance of students' experiences with online education and "create a learning environment that is paramount in achieving quality learning outcomes, ... meet a wide range of educational needs and achieve a wide variety of desirable outcomes" (Garrison, Anderson, & Archer, 2000, p. 92). However, little is known about the alumni's satisfaction and professional development from entirely online graduate programs that consist of both synchronous and asynchronous courses. Additionally, few studies have explored alumni-generated approaches to enhance the academic and professional development of online college students.

This study sought to explore graduates' experiences with an online master's program and the ways online learning influenced their satisfaction and professional development. We interviewed and surveyed alumni who graduated from the online Masters of Learning Design and Technology (LTEC) program at the University of Hawai'i at Manoa (UHM). The LTEC online master's program is offered at the UHM, a public and research intensive university with a high culturally diverse student body. Briefly, the program is part of the well-established College of Education that offers undergraduate, graduate, and certificate degrees. Started in 2006, the online LTEC program "welcomes professionals from the neighbor islands and the mainland United States as well as international students who hold a bachelor's degree and find time and distance constraints of furthering an on-campus degree too difficult." (UHM College of Education, n.d.). The program is designed to be completed in two to three years, including coursework and completion of a thesis or final project. A majority of the program courses include weekly topics with assigned reading, online discussion, and collaborative group work. Between the years of 2011 and 2017, the online platforms used in the program courses were Illuminate, Blackboard, Laulima[1], and Canvas Instructure, with most professors relying on the use of all platforms.

---

[1] Laulima is the University of Hawaii's online learning and collaboration system that can be accessed at https://laulima.hawaii.edu/portal.

Our goal was to determine the positive and negative aspects of the program that enhanced and/or inhibited the alumni's satisfaction with the program and their professional development experience. The study was driven by four broad research questions: (1) How satisfied are graduates of the LTEC online master's program? (2) What aspects of the program did enhance their satisfaction and professional development? (3) What aspects of the program did inhibit their satisfaction and professional development? (4) What, if any, challenges of the program do the graduates perceive and what are their recommendations to overcome these challenges? This study focused on online graduates' perceptions of effective and ineffective practices in the LTEC online master's program and incorporated alumni-generated program solutions for enhancing learning and professional development of online college learners. Practical recommendations for improvements of online learning and teaching in higher education are provided for program and course designers, faculty, and online students.

Background of Study

Research suggests a wide range of aspects that influences online students' perspectives of distance higher education. The ways online students perceived their online learning experiences in college varied and were associated with characteristics of online learning format and the quality of social interaction and communication. For example, consistency in delivering online courses and the use of a variety of online resources and tools positively influenced student performances (Platt et al., 2014) and satisfaction with distance education (Ferguson & DeFelice, 2010; Ralston-Berg, Buckenmeyer, Barczyk, & Hixon, 2015). Online learning activities that included exchange of ideas and experiences facilitated online students' career development and helped them clarify their professional plans (Phillips, 2013). Conversely, when instructional delivery methods included only textbooks, or one-way discussion postings, students completed assignments without transferring and assimilating the knowledge from textbook to their own (Yang & Cornelious, 2004). However, students' experiences and satisfaction with online education, including the perceptions of learning gains, vary with the length and intensity of student exposure to online learning environments (Fedynich et al., 2015; Ferguson & DeFelice, 2010; Phillips, 2013).

Literature also shows the importance of social interaction and communication in online student learning. For instance, the availability and presence of the online instructor played a critical role in how students perceived online learning environments (Lowenthal, Bauer, & Chen, 2015). Students rated the importance of having quality student-instructor interactions in online learning with, as a greater significance than peer-interactions (Fedynich et al., 2015; Reupert, Maybery, Patrick, & Chittleborough, 2009). Online instructors who provided descriptive and timely feedback positively enhanced students' perceptions of social interactions and learning gains (Mortagy & Boghikian-Whitby, 2010). Conversely, a lack of immediate and concrete feedback negatively impacted students' experiences and led to difficulties to develop quality online interaction (Dyrbye et al., 2009). Well-aligned rubrics that clearly combined online course objectives and student assignments enhanced students' understanding of performance expectations, thereby increasing their satisfaction (Ralston-Berg et al., 2015).

Methods

Research Design and Procedures

We employed a mixed-method research design to investigate the alumni's satisfaction and experiences with the online LTEC program. We first sent out a survey in the spring of 2017 to all alumni who graduated from the program between the years of 2011 and 2017. Taking part in the survey was voluntary and anonymous. Alumni were excluded if they completed the program before the year of 2011. An email stated the purpose of the research project and a second mailing was sent to non-responders. The questionnaire included structured and open-ended items, yielding a mix of qualitative and quantitative data.

Two online group interviews or focus groups were conducted (i.e., one in the fall of 2017 and another one in the spring of 2018) with participants who completed the survey and volunteered to participate in the focus groups. Among all survey respondents, 9 participants volunteered to participate in the online focus group interviews. We sent those participants an invitation email to engage in online group discussions and four participants volunteered to participate in the follow-up step of the study. Participation in the group interview was voluntary and all four participants signed a consent form. Two online group interviews were conducted with two participants in each group. We facilitated the group interviews with 10 semi-structured questions. The questions included various aspects of experiences in the program, such as satisfaction with the program, meeting expectations, positive and negative aspects of the program, and suggestions for program improvements. The group interviews were audio-recorded and transcribed.

We used basic descriptive statistics to analyze the responses to the quantitative items in the survey. Responses to the

qualitative items in the survey and group interviews were analyzed using a constant comparative analysis approach (Strauss & Corbin, 2015). Additionally, to reduce the information and find patterns in the participants' responses, we coded the qualitative information, created categories, and generated common themes and subthemes. *In-vivo coding* (Strauss & Corbin) or utilizing the exact expressions employed by the participants was used to keep the data true to the exact statements of the participants. Pseudonyms or fake names were created for participants who took part in group interviews.

Results

Of the 65 alumni who received the survey, 24 completed the survey (response rate 37%). Table 1 shows the years when the respondents graduated from the online master's program, along with their self-evaluated computer skills and the number of online courses they took before starting the program.

Table 1
Descriptive Statistics for Year of Graduation, Number of Previous Online Courses, and Computer Skills of Alumni of LTEC Online Master's Program.

Variable	24 Graduates No. (%)
Year of graduation	
<2013	8 (34)
2013-2015	13 (54)
>2015	3 (12)
Number of previous online courses	
0	10 (42)
1-2	5 (21)
3-5	2 (8)
6 or more	7 (29)
Computer skills	
Poor	0
Fair	0
Satisfactory	7 (29)
Very good	9 (38)
Excellent	8 (33)

Data analysis of the qualitative items in the survey and group interviews resulted in creation of four main themes. These included: (a) satisfaction with the online learning; (b) highlights of the program; (c) challenges of the online learning environment; and (d) suggestions for program improvements.

Satisfaction with the Program

All alumni were satisfied with online learning experiences in the program and appreciated the flexibility of being able to work and study simultaneously, as well as the skills and knowledge that one can obtain from the program. Several participants reported satisfaction with the course content and learning gains, while also perceived graduation from the program as a rewarding experience. However, a few participants experienced the program as difficult and "time-consuming" yet, they reported that "it was all worth it" (Brian). As another respondent said that "anybody who wants to develop a curriculum, anyone who wants to use technology on the cutting edge kind of thing, should go with this program." A few alumni also reported that they had recommended the program to others, who then became LTEC online master's students themselves. Alumni's satisfaction with the program was associated with alumni's perceptions of whether and how the program met their expectations. Opportunities for professional development and career advancement were alumni's major expectations when entering the program. For the majority of participants, the program met their expectations, which, in turn, enhanced their satisfaction with the program.

Highlights of the Program

Participants expressed a variety of opinions about the positive aspects that they experienced in the program. From analysis of the responses, three subthemes were identified: (a) the relationships with faculty; (b) course format and the instruction delivery; and (c) opportunities for professional development.

Social interactions. Participants had positive perceptions of social interactions in the program, including opportunities for collaboration with instructors and other students. Majority of alumni appreciated the academic support and professional guidance that they received from the program faculty. For example, one participant was grateful for "the time and commitment that the faculty put into making it such a flexible program" to support students in their academic and professional development. The supportive and understanding relationships between students and faculty created the program "the most nurturing learning environment" (Dylan).

Many alumni appreciated the faculty's mentoring, including the guidance and advising in planning graduate studies and opportunities to learn from professors (mentors). This helped establish a safe online environment and caring online relationships between faculty and students. Many participants also discussed the positive experiences of group work in the program. Those participants reported that group conversations and collaborative projects enhanced their knowledge and skills in the field. For example, one participant said: "I like group assignments, because just working in groups, I might not think of what my teammate would think of, and so I learned a lot from some of my classmates."

Course format and the instruction delivery. The online learning format provided flexibility that enabled alumni to overcome constraints that would otherwise have prohibited their pursuits of a master's degree. Participants positively experienced both asynchronous and synchronous course formats. The asynchronous format provided convenience and helped balance jobs and education, while the synchronous enabled effective communication to "touch bases with the classmates" (Dylan). Participants also appreciated the practicality and applicability of the course content. They found the course topics very informative which enhanced their curiosity and motivation to learn more. One participant reported that she "loved this program because of its applicability and practice orientation."

Participants positively experienced the use of robust media tools and platforms in the courses. Incorporating different platforms, such as Blackboard Collaborate a video conferencing system used for synchronous sessions, helped participants balance their jobs and graduate education. Laulima was perceived as an effective venue to deliver the course content and share feedback. Interactive media tools, such as Skype and Google Drive, helped meet the students' needs of different learning styles and preferences. Rigorous course curriculum and highly interactive course deliveries represented a "good exercise in learning what online education is and can be" (Brian).

Opportunities for professional development. Participants discussed the practical benefit of the skills and knowledge from the program. For Susan, an online learning specialist, the program helped her learn

> a plethora of information on how to develop, create, and maintain interactive and engaging e-learning environments as well as best practices in online learning, and a plethora of skills and strategies in assisting both students and faculty in how to develop more engaging online courses.

Similarly, Dylan, an information technology specialist, said that learning about educational technology theories and concepts helped him "consider ways to interact, to look at possible ways to teach people via websites and the skills they need to use the technology in education." Simone, an elementary teacher, said that the program helped her to "improve learning for her students, motivating them, and enhanced the communication between anybody involved, like parents and the students." Participants who had teaching-based careers reported the effective integration of technologies used in the program into their own practice. Authentic learning experiences enhanced participants' knowledge and skills, including how technology can be used and support students who are at different levels of understandings. For instance, Simone used a variety of media tools and technology in different course fields, including math and reading. She reported that her effective use of technology in the classroom enhanced the scaffolding in her teaching and led to more concrete and ongoing feedback and support of students. For other participants, the program helped them deepen their knowledge and skills about online learning methods and instructional design, such as creating screen casts, online presentations, delivery techniques, or designing instruction using videos or pictures with text. For instance, Brian developed and implemented an online application for learning and teaching in high-school, and designed instructional resources when technology issues arise.

Participants reported that the selection of readings and textbooks in the courses helped them better understand their own professional practice and how to apply different theoretical concepts to real-settings. They also appreciated having (a) a timeline for the coursework, (b) a separate course for writing a master's thesis, and (c) the opportunity to present their projects online to the faculty and other students in the program. As one participant described, "the fact that writing our thesis was an actual class and they put us on a timeline to get ready, so that we could present our whole project at that annual online event was brilliant!"

Challenges of the Online Learning Environment

Participants discussed a variety of opinions about challenges encountered while being students in the LTEC online master's program. The majority of barriers include group work and the content delivery.

Group work. Participants discussed challenges of working in groups. Their perceptions varied and were associated with participants' learning styles and preferences. Participants who preferred independent and practice-oriented learning activities "didn't like group work because they got stuck with people that just wanted to debate" (Dylan). Some participants were "a dominant kind of people ... and lone wolfs and so the group projects were not matched with their personality" (Susan). Other participants reported negative experiences when being matched with "some lazy group members" who were not prepared for the assignment or project" yet, "they would talk forever" (Brian). Additionally, participants had negative experiences with assigned pairing when they were paired or teamed with classmates who did not "typed more than two sentences in the whole project, but it showed that they all worked together" (Dylan).

The content delivery. Participants reported that they struggled in their learning in the courses that required specific and more fragmented skills. They also discussed a lack of connection of the course content with their professional practice. An alumna, who was not a teacher neither had prior teaching experiences, discussed times in the program when she felt "odd not to be a practitioner in the classes because the assignment and projects were teacher-oriented" (Susan). Other participants experienced a content inconsistency and reported that in some courses, "there seemed to be a little discontinuity with some of the content being shared and information being shared" (Dylan). Other participants reported imbalanced workload and assignments and said that "in some classes, there was tremendous amount of work to do in the first month and a half, and then things got really slow" (Simone). A few participants also said that they had incomplete information about the opportunity to pursue a master's thesis in the program. Therefore, they "never really got off the ground with that" (Dylan).

Suggestions for Program Improvements

Participants offered insights into overcoming obstacles in the program. The majority of suggestions focused on how to improve: (a) course content and curriculum, (b) consistency in the learning process, (c) group work, and (d) communication.

Course content and curriculum. Participants' suggestions for modifying course content and curriculum in the program were dichotomous; some of them recommended increased hands-on learning activities and practice-work, while others suggested more opportunities to learn theories and theoretical models. The practice-oriented insights included "more technical content in the curriculum," or "I wish there was more technical content," or "offer more courses for tech integration in K-12 education." Conversely, theory-oriented insights suggested more grounding in the theoretical concepts and place-based education. For instance, Susan was particularly interested in learning theories that can be applied to the local context of education, and suggested "more attention to specific theory and pedagogy related to Hawai'i and Hawaiian learners, and how those different theories might impact educational technology." Participants also recommended updating the existing course content and creating more elective courses that can reach the diverse professional interests and needs of online graduate students.

Consistency in the learning process. Participants offered suggestions for creating the course deliveries and coursework more effective. Recommendations included scaffolding the assignments and consistency in the learning process. Participants suggested giving "more attention to detail" and "making sure that the content and materials are all on the same page in relation to the course expectations" (Simone). Other recommendations included "more fidelity in the delivery and use of technology" (Brian). To enhance the flexibility and accessibility of the learning material, participants recommended the use of online learning materials across the program rather than hard-copy textbooks.

Group work. Alumni suggested that the program should maintain collaborative projects and team-work. However, they offered insights into overcoming some of the obstacles of working in groups, including students serving as co-creators of the teams and effective communication of expectations and assessments relating to working in groups. Participants recommended that the program instructors may devote "more time and attention to the importance of the group work in the program, at least for first-year students" (Simone). One participant also suggested that although "collaboration is a good skill to have, it may have been overemphasized compared to its place in the workforce" (Brian).

Communication. Participants addressed the importance of communicating clear and complete information about different learning opportunities that exist in the program, as well as creating more opportunities for first-year students to interact face-to-face "to build a solid collaborative effort from the start" (Simone). Given the program's entirely online nature, participants suggested "more opportunities to get to know each other more personally" (Dylan).

Discussion

This study identifies specific reasons for the popularity of distance learning in higher education, including its flexibility and the ability to overcome geographic distances. For many participants who had full-time jobs while being in the program, the online learning format provided them the opportunity to obtain a master's degree that might not otherwise existed. Our study identified several highlights of the program that positively influenced alumni's satisfaction. These include supportive and caring online relationships with instructors and other students and the use of robust social media tools and applicability of course topics. The data suggest that hands-on learning in online education as well as group projects enhanced the alumni's conceptual understandings and skills to apply the contents into their own careers. However, some alumni with non-teaching positions struggled with effective integration of coursework and careers.

Prior studies suggested that the use of robust media and visibility of online instructors in distance education fostered online social relationships (Reupert et al., 2009) and helped meet the needs and expectations of online learners (Marzano & Allen, 2016). In this study, we found that the use of robust and interactive platforms, collaborative course assignments, and supportive and cordial relationships across the program enhanced the alumni's satisfaction with the program and fostered their professional development. Our results revealed that the highly interactive online learning environment established a foundation for alumni's meaningful engagement in the learning process. This fostered participants' satisfaction with the program and their both academic and professional development.

Pearls to Support Online College Learners

In our study, alumni identified challenges of the program and offered strategies to overcome them. The results suggest that modifying the existing courses with more robust curriculum, or developing new (elective) courses that build on both practical and theoretical groundings, would foster students' academic and professional development. Scaffolding the learning process, including the student workload, would enhance the course consistencies and provide more frequent instructors' feedback on students' performances. The use of online readings across the program would enhance the flexibility and accessibility of the learning material. Integration of mobile technologies into distance learning and more intense use of social media software, such as Facebook or Twitter may open new opportunities for more personalized interaction in online education (Ferguson & DeFelice, 2010; Picciano, 2015) and contribute to consistency of learning (Kumar Jena & Pokhrel, 2017), as well. Creating more opportunities for face-to-face interaction inside and outside of the formal educational settings would enhance student satisfaction with social interaction in the program. Increased face-to-face interactions can also increase the LTEC online students' feelings of belonging to the program in particular, but the UHM campus in general. The results suggest that greater attention to place-based education or relating the course curriculum to local educational contexts would enhance the applicability of the program and might enrich the learning process as students' experiences could serve as another source of curriculum.

Findings of this study suggest that first-year online students, especially those who are new to distance education, may not be as adapted to the idea of online group work. It would be important to communicate the expectations related to working in groups at the very beginning of student online experiences, when learners are typically more engaged in the learning process (Feeler, 2012). Additionally, effective and consistent communication of learning opportunities (i.e., pursuing a master's thesis) that exist in the program and individual and group assessment of student performances in working in groups may increase student satisfaction with the program. Opportunities for students to choose team-members for themselves would increase the quality of teamwork and students' satisfaction with the group work. Moreover, the use of more robust media technologies in group work and online discussions in the program might better support teaching more specific and complex subject areas (i.e., Means, Toyama, Murphy, Bakia, & Jones, 2010).

Prior research reveals that instant messaging in both asynchronous and synchronous online formats can enhance student engagement and fosters ongoing and tangible online feedback (Dyrbye et al., 2009). Additionally, individual messaging and responding rather than group messaging can foster the student-faculty connection and increases student performance (i.e., Kumar Jena & Pokhrel, 2017). The results of this study suggest that more proactive (timely and consistent responding) approach to individual online messaging would help instructors to better identify online students' needs and expectations. This would foster scaffolding in the learning process and consequently, lead to more personalized support of online graduate students. Additionally, student self-evaluations of their own performances at the beginning and the end of their online course experiences would enhance instructors' understanding of their students' needs.

Limitations

There are several limitations to this study. First, generalizability of the results may be limited to the sample population. Specifically, limited number of alumni who graduated from the LTEC master's online program between the years of 2011 and 2017 participated in the survey and focus group portion of this study. On the other hand, the consistency of the study's results with existing literature about the nature of online education and student's experiences with online learning environments supports its validity and generalizability. Second, with a specific set of survey and group interview questions, alumni had a limited flexibility in expressing their satisfaction and experiences from the program. The advantages of this research approach included constant comparison of participants' responses which helped reduce the data and create common themes and subthemes that explained the ways in which the program influenced the alumni's satisfaction with the program and their academic and professional development. Finally, at the time of the study, both researchers were employees of the department that offers the LTEC online master's program and therefore, may have interpreted certain responses based on their own experiences, or sought to confirm their own perceptions. Responses were coded by the first investigator with a deliberate effort to minimize her biases and assumptions. Member checking and triangulation with the survey and group interviews and the existing research enhanced trustworthiness of the results.

Conclusion

This study provides alumni-generated solutions to the online educational environment. The study findings have practical implications those creating (i.e., online instructor designers) and implementing (i.e., online instructors and faculty) distance-based programs and courses in higher education. We uncover more ways in which online learning in college influences students' satisfaction with distance education and their professional development. This study also offers solutions how higher educational institutions, and the structures within them, can better support the academic and career enhancement of online graduate students. We believe that our results are relevant beyond the UHM Masters of Learning Design and Technology online environment.

Given the fast increase of distance learning in higher education over the last decade, new formats of online teaching and needs of online learners are likely to grow. More research is needed to meet the needs and expectations of existing and future online students. Conducting the study with a larger group of a master's program graduates and students can shed more light on highlights, barriers, as well as opportunities that exist in distance instructional formats.

References

Corbin, J., & Strauss, A. (2015). *Basics of qualitative research (4th ed.)*. Thousand Oaks: Sage.

Dyrbye, L., Cumyn, A., Day, H., & Helfin, M. (2009). A qualitative study of physicians' experiences with online learning in a master's degree program: Benefits, challenges, and proposed solutions. *Medical Teacher, 31*(2), 40-46.

Fedynich, L., Bradley, K. S., & Bradley, J., (2015). Graduate students' perceptions of online learning. *Research in Higher Education Journal, 27*, 1-13.

Feeler, W. G. (2012). Being there: A ground-theory study of student perceptions of instructor presence in online classes. *Educational Administration: Theses, Dissertations, and Student Research.* Paper 122. Retrieved from http://digitalcommons.unl.edu/cehsedaddiss/122

Ferguson, J. M., & DeFelice, A. E. (2010). Length of online course and student satisfaction, perceived learning, and academic performance. *International Review of Research in Open and Distance Learning, 11*(2), 13-84.

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education, 2*(2-3), 87-105.

Kumar Jena, A., & Pokhrel, K. (2017). Effects of collaborative m-learning and individual e-learning on the academic performance, attention benefit and consistency of learning. *The Online Journal of Distance Education and e-Learning, 5*(1), 35-46.

Lowenthal, P. R., Bauer, C., & Chen, K-Z. (2015). Student perceptions of online learning: An analysis of online course evaluations. *American Journal of Distance Education, 29*(2), 85-97.

Marzano, M. P., & Allen, R. (2016). Online versus face-to-face course evaluations: Considerations of administrators and faculty. *Online Journal of Distance Learning Administration, 19*(4).

Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices in online learning A meta-analysis and review of online learning studies.* Washington, DC: US Department of Education.

Moallem, M. (2015). The impact of synchronous and asynchronous communication tools on learner self-regulation, social presence, immediacy, intimacy and satisfaction in collaborative online learning. *The Online Journal of Distance Education and e-Learning, 3*(3), 55-77.

Phillips, M. S. (2013). Instructor and student perceptions of online courses: Implications of positioning theory. *Electronic Theses and Dissertations.* Paper 2300. Retrieved from http://dc.etsu.edu/etd/2300

Picciano, A. G. (2015). Planning for online education: A systems model. *Online Learning, 19(5).*

Platt, C. A., Raile, A. N. W., & Yu, N. (2014). Virtually the same? Student perceptions of the equivalence of online classes to face-to-face classes. *Journal of Online Learning and Teaching, 10*(3), 489–503.

Ralston-Berg, P., Buckenmeyer, J., Barczyk, C., & Hixon, E. (2015). Students' perceptions of online course quality: How do they measure up to the research? *Internet Learning, 4*(1), 38-55.

Reupert, A., Maybery, D., Patrick, K., & Chittleborough, P. (2009). The importance of being human: Instructors' personal presence in distance programs. *International Journal of Teaching and Learning in Higher Education, 21*, 47-56.

University of Hawai'i at Manoa (UHM), College of Education (n.d.). *Learning Design and Technology (LTEC).* Retrieved from https://coe.hawaii.edu/academics/learning-design-technology-ltec

Yang, Y., & Cornelius, L. F. (2004). Students' perceptions towards the quality of online education: A qualitative approach. *Association for Educational Communications and Technology, 27*, 861-877.