



International Journal

of Online Graduate Education

Creating Engaging Virtual Annual Program Review Experiences to Evaluate Current Online Graduate Education Practices

Chelsea E. Overholt, PhD
Capella University

Kelly M. Torres, PhD
The Chicago School

Volume 7, Issue 1 (Winter, 2024)

Abstract

Although graduate academic institutions implement diverse annual review processes, their overall intent is focused on ensuring continuous improvement of program quality (National Institute for Learning Outcomes Assessment, 2020). Through program review processes, university leaders (e.g., department chairs, program leads) analyze student performance and department procedures to inform future actions and policies. This mixed-methods case study examined an online campus's program review structure. Specifically, a description of how administrative faculty (i.e., department chairs and associate department chairs) reported their program's strengths, challenges, and future directions and the collaborative scholarly interactions that resulted from these sessions are discussed. Findings from all study participants revealed that administrative faculty perceived program review processes as beneficial and provided a unique opportunity for collaboration across diverse university programs.

Keywords: *program review; higher education; online education; online, leadership*

**Creating Engaging Virtual Annual Program Review Experiences
to Evaluate Current Online Graduate Education Practices**

Online education has continued to experience increases in student enrollment. Higher percentages of university and college students are enrolling in online courses each year with an annual increase of 3% (Dixon, 2017; Glazier et al., 2019; Schwam et al., 2020). In fact, the National Center for Education Statistics (2018) reported six million students enrolled in distance education courses at degree-granting postsecondary institutions. They further reported that approximately 56% of graduate students are completing exclusively online programs. Students provided various rationales for enrolling in online coursework that ranged from being unable to attend on-campus courses to their preferred program of study only being offered through an online program (Bustamante, 2020). Essentially, the continuous increase in online student enrollment reflects a notable shift in higher education, with a significant portion of students choosing online courses for reasons such as convenience and program accessibility.

As institutions grapple with these changes, effective program reviews become pivotal in ensuring continuous quality improvement, facilitating departmental enhancements, and strategically allocating institutional resources. Particularly, an integral aspect of the program review process is deciding how to best promote student academic success and service. As described by the University of Pittsburgh (2022), program reviews allow for creating appraisal of a program's strengths, weaknesses, goals, and future directions. Basically, when executed effectively, annual program reviews provide support for department improvements, institutional planning, and optimal utilization of institutional resources. Wiemers et al. (2018) described program review processes as resulting in continuous quality improvement. Program review processes can vary across institutions and encompass many different formats and focuses. For

example, program leaders may be required to conduct presentations of their annual review reports to institutional leadership and/or at the campus/college/department level. Institutions also vary in how frequently departments are required to program review reports (e.g., annually, three-year cycles). Institutional approaches to program review may also differ for on-ground versus online programs of study. For instance, institutional approaches to program review can vary significantly between on-ground and online programs. Distinctions encompass assessment methods, with traditional programs emphasizing in-person evaluations and online programs utilizing digital tools. Differences also extend to student engagement, technology infrastructure, faculty training, accessibility considerations, resource allocation, quality assurance practices, and pedagogical strategies. Recognizing these nuances is essential for institutions to conduct effective program reviews that address the unique characteristics and challenges associated with each mode of program delivery.

Online Education

The implementation of online education has generally been perceived positively in providing a dynamic learning landscape that allows for flexibility, adaptability, and responsiveness to change. For example, online education provides many opportunities for stakeholders along with innovative models of learning (Joshi et al., 2020; Kumar et al., 2017). Researchers have highlighted that the advancement of innovative technologies (e.g., artificial intelligence integrated into augmented reality) and global adaption of the internet has provided easier access to online education and has intensified workforce training in the digital economy (Galoyan & Betts, 2021; Palvia et al., 2018). Additionally, there are complexities surrounding program competency measurement in higher education is the growth of online learning. Particularly, the popularity of online learning modalities has continued to increase over the last

decade. For example, the number of students completing online courses increased to 32% in 2017 (United States Department of Education, NCES, 2017). Moreover, in 2020, approximately 75% of all students enrolled in at least one online course, and 44% of students exclusively enrolled in distance education (National Center for Education Statistics, 2022). Regarding graduate online education, Wallenstein (2022) reported that enrollment increased by 63% from 2019 to 2020.

In 2020, the COVID-19 pandemic had a profound impact on the education sector, with many colleges and universities having to temporarily close their doors and transition to remote learning. More precisely, the majority of universities and colleges worldwide had to quickly pivot to online learning in order to continue delivering education to students. While this allowed for continuity of education, faculty and administrators were required to develop and conduct further professional development centered on curricula enhancements, incorporation of innovative technologies, and best practices in online instruction (Masalimova et al., 2022). Online education has played a critical role in ensuring that students can continue their studies despite the disruptions caused by the pandemic. In fact, the United Nations (2020) reported that the COVID-19 pandemic has led to the largest disruption of education systems in history, affecting nearly 1.6 billion students globally. The pandemic impact further accelerated the shift to online learning and highlighted the significance of effectively utilizing educational technology in supporting online learners.

According to Kebritchi et al. (2017) and Dumford and Miller (2018), online education impacts all aspects of higher education teaching and learning. Online education opportunities have flourished across institutions as increased numbers of distance learning students are electing to enroll in these types of programs. Institutions have been receptive to this rapid growth because

they perceive it as innovative in increasing student enrollment (Andrade et al., 2019; Lee, 2017; Tate & Warschauer, 2022). Further, Florence et al. (2023) shared that institutions have designed online programs to accommodate graduate students who are typically different from traditional learners given a higher percentage of them are full time working professionals. Students have expressed that their online courses have provided higher quality learning experiences in comparison to their on-ground coursework (Duffin, 2019). However, the rapid increase in online enrollment has led to questions regarding its overall educational quality. Specifically, the rapid increase in online enrollment has triggered a broader discourse on the overall educational quality of virtual learning platforms (Salta et al., 2022). As technology continues to advance and educational institutions embrace online formats, concerns arise about whether the traditional markers of educational excellence are maintained in virtual environments. Stakeholders, including faculty, administrators, and students, are questioning how well online education measures up in terms of instructional effectiveness, student engagement, and the development of critical thinking skills. Issues such as the adequacy of virtual resources, the quality of instructor-student interactions, and the ability of online platforms to foster a sense of community and collaboration are central to this discussion (Salta et al., 2022). The challenge is to ensure that the surge in online enrollment aligns with a commitment to maintaining and, if possible, enhancing the quality of education, addressing these concerns head-on and leveraging the advantages of technology to create a robust and effective online learning experience.

Academic Program Review

With such a demand for online learning, it is essential that higher education institutions provide academic programming that meets student learning needs. Andrade (2020) expressed that concerns resulting from return on investment, measurements of quality, and accountability

have resulted in universities further considering how they utilize review and evaluation processes to transform the revision and development of curricula. Along with program development, institutions must also systematically review their curriculum and academic offerings on a continuous basis to ensure high-quality education is provided to their students. Focusing on engagement, completion, and assessment are key ways to improve student learning experiences in online programs (Bergdahl, 2022; Carnovale et al., 2016; Dumford & Miller, 2018; Pakpour et al., 2021). Universities also engage in self-assessment practices to better understand retention and graduation rates. The University of Illinois (n.d.) explained that academic program review is integral to the assurance of institutional quality and promoting goal setting. Further, according to Saint Louis University (n.d.), academic program review involves:

- identifying and prioritizing actions for program improvement.
- finding opportunities for program growth.
- determining potential interdisciplinary collaborations.
- explaining investment needs and resource re-allocations.
- describing program strengths and weaknesses.

Measuring acquired competencies in higher education has been regarded as a widely neglected area of research (Joshi et al., 2020; Zlatkin-Troitschanskaia et al., 2013). If academic goals are not aligned with the curriculum, the relevance of the educational program would be called into question (Carnovale et al., 2016; Ingstrup et al., 2021; Wijngaards-de & Merx, 2018).

Assessment of student outcomes and learning goals has become an essential aspect of determining the quality of online education (Carnovale et al., 2016; Gopal et al., 2021). The existing research deficit is caused by the complexity that embodies the academic competencies of undergraduate, graduate, and doctoral students studying under diverse education models,

structures, and teaching performances (Ward & Brennan, 2020; Zlatkin-Troitschanskaia et. al., 2013).

Wickham et al. (2017) postulated that one integral element of education is quality; however, how *quality* is articulated can be complex. In order to ensure student competencies and academic program quality is measured in this complex field, many higher education institutions implement program review structures. Through program review processes, administrators can demonstrate quality and identify areas that need improvement (Wickham et al., 2017). One example is the integration of stackable credentials. Institutions that embrace stackable credentials can attract a more diverse student body, including working professionals seeking specific skills or those interested in shorter-term educational commitments (Bozick et al., 2021). Further, they can determine components of program success and determine future curriculum focuses. Particularly, institutions can evaluate a program's efficacy in meeting established goals and examine data focused on a program's academic activities. This data also provides support for the curriculum appropriateness of adequately preparing students for the workforce. Wickham et al. (2017), found that program chairs understand the purpose of program review and believed it would help to inform their future program planning. Further, Siems and Bell (2018) discovered that an annual program review can help department chairs to identify areas of program weakness and areas of improvement for curriculum design. For instance, strong program review processes have even demonstrated a positive impact on pass rates for board certification exams (Wiemers et al., 2018).

Quality Assurance

There are a multitude of ways to describe quality in education. For example, Within higher education contexts the conceptions of tacit (i.e., value and intellectual property) and performance are important aspects of quality (Barnett, 1992; Beketov & Lebedeva, 2022). Academic quality assurance frameworks are focused on guaranteeing that academic programs are viable and reflective of national and international standards and provide students with comparable, rigorous, and high-quality academic experiences. Due to the immense investments put forth into higher education contexts and the concerns associated with providing students with positive outcomes, the issue of quality assurance has continued to receive more attention (Brown, et al., 2017). Fundamentally, the multifaceted nature of quality in education, encompassing aspects such as tacit value, intellectual property, and performance, is underscored by academic quality assurance frameworks. These frameworks play a pivotal role in ensuring that academic programs adhere to rigorous standards, providing students with comparable and high-quality academic experiences, a critical concern given the substantial investments in higher education and the increasing emphasis on positive student outcomes.

Quality assurance factors have been described as encompassing evidence-based approaches occurring throughout assessment, teaching, and learning outcomes (Kohoutek, 2014; Stensaker; 2014). Further, quality assurance is viewed as contributing to teaching and learning quality and making the decision-making process more transparent (Cardoso, et al., 2016). How academics perceive the value of quality assurance is crucial since their views may directly impact the quality of course offerings. Particularly, Cardoso et al. (2016) proposed that “an integrated quality culture implies that everyone in the institution is responsible for the quality, i.e., for ensuring that things are done right” (p. 951). As such, institutions need to place importance on

how university leaders value and perceive processes focused on better understanding the quality of their programs of study. Therefore, the purpose of this mixed-methods study was to conduct a thorough review of an institution's current program review processes at the level of its online campus in order to determine its effectiveness. Therefore, the purpose of this mixed-methods study was to conduct a thorough review of an institution's current program review process at the level of its online campus. Areas of improvement and opportunities for strengthening the current process were addressed. Conducting an annual program review is imperative to university success and it is essential to ensure the process utilized is accurate and systematic and is conducted through the analysis of robust data. Specifically, strategy planning has been found to positively impact organizational performance (Aidhaheeri et al., 2020). Consequently, this study was framed by the following research questions:

- RQ1: How do department chairs and associate department chairs describe the program review process?
- RQ2: How do department chairs and associate department chairs relate areas of strength and improvement outlined in program review to their future departmental processes?

Methodology

This research study incorporated a case study mixed-methods to further understand the annual program review processes undertaken in a particular setting. A case study design provides researchers the opportunity to explore a phenomenon within their own contexts (Baxter & Jack, 2008) in order to examine a problem through a holistic approach. By conducting case studies, researchers can further explain a real-life situation which is not always captured through surveys or experimental designs (Zainal, 2007). Case studies are one of the most widely used qualitative research approaches (Yazan, 2015). Through this type of qualitative investigation,

researchers examine a phenomenon within a specific context to better understand the complex issues that occur in real-world settings. Nevertheless, it is important to note that case study research is not intended to make broad generalizations but rather to comprehend the specific case under investigation (Wyness, 2015). Specifically, consideration should be given to whether the findings have applicability and can be transferred to diverse situations or populations.

Research Setting

This study was conducted at a non-profit university that offers degrees at the bachelor's, master's, and doctoral levels of education. The institution has both on-ground and online campuses with an approximate total enrollment of 5,000 students annually. Data for program review is provided by the University's Office of Institutional Research along with program metrics. Faculty collaborate with department leadership to review and analyze appropriate program data that results from course signature assignments, course capstone activities, field practicums, internships, competency and comprehensive examinations, and thesis and dissertation research. Program leaders and faculty also analyze data focused on retention, program demographics, time-to-completion rates, and enrollment trends across the academic year. Comparisons are provided in annual program review reports for current program data and prior program review reports.

Role of the Researchers

The researchers were employed at the Online Campus of the University. Both researchers were attentive to the potential influence their own biases could have on the study. Recognizing research bias is crucial for identifying the utility of the research results (Galdas, 2017). As a means of bias regulation, the Dean of Academic Affairs was consulted on a monthly basis

throughout the study. The researchers upheld ethical data maintenance standards to ensure the privacy and anonymity of the participants.

Participants

A total of 16 administrative faculty members were invited to partake in the study. All 16 administrative faculty members invited to participate were employed with the Online Campus and had experience with the university's program review process. All participants were employed as program department chairs or associate department chairs and worked remotely across the world as part of the Online Campus at the institution. The participants were from a variety of academic disciplines spanning the field of psychology. Of those who voluntarily participated in the study, the group consisted of 12 total administrative faculty members in which the majority of participants identified as female ($n=10$) in comparison to male ($n=2$). Participants were from varied cultural backgrounds and ethnicities and possessed diverse terminal degrees.

Research Approach

A case study approach was utilized that focused on the program review processes. This research approach was essential in providing the researchers with an in-depth and multi-faceted understanding of an issue that was identified within their workplace setting (Crowe et al., 2011). Seven participants responded to the survey questions while nine attended the focus group session. Participants completed a researcher-developed electronic survey that contained eight items. Survey items were reviewed by university deans and support staff members prior to distribution to administrative faculty members. Approximately two months following the electronic survey, all participants were invited to attend a virtual focus group session that lasted approximately one hour in length. Additionally, administrative faculty members submitted presentational materials that identified department successes, challenges, and future directions.

The focus group session centered on the program review presentation format for the Online Campus. The departments were provided with a presentation template for their session, which provides an outline and consistency during the virtual program review webinar. The presentation template focuses on each department's perceptions of the following program review questions: (1) "what is working well," (2) "what are current challenges," and (3) "what are the future directions." Once the program templates are completed and submitted to the Online Campus leadership, the virtual program review session is hosted virtually by the Office of Academic Affairs. Each department chair presents the aforementioned questions for approximately 20 minutes and responds to attendee questions. Department chairs' responses to each of these areas are based on program review data and faculty input. They are expected to integrate statistics from their program review reports and elaborate on their findings. All department chairs and associate department chairs employed with the Online Campus are required to participate in these sessions. The online deans also engage attendees in a robust conversation to identify themes across presentations and opportunities for synergies across programs. Through these interactions, department chairs identify common areas of strengths, challenges, and future directions in order to further collaborate on innovative projects focused on curriculum and student outreach efforts.

Data Collection Measures

The anonymous electronic survey consisted of eight items with responses ranging from "strongly disagree" to "strongly agree" (see Appendix A). The survey link was emailed to department chairs and associate chairs allowing them one month to provide their responses. The survey was created to restrict access to participant IP addresses to ensure that their responses remained anonymous. There were a total of nine participants who participated in the focus group.

The voluntary focus group took place approximately two months after the electronic survey closed. The group met virtually for one hour and five semi-structured questions were posed to the group for discussion and reflection (see Appendix B).

Once all data were collected and transcribed, participants were offered the opportunity to provide feedback on the accuracy of the data collected. Candela (2019) described member checking as “an integral part of creating trustworthiness in qualitative research” (p. 619). Specifically, member checking was used as a validation strategy to ensure the data was interpreted accurately. The research findings were shared in a regularly scheduled department chair meeting where attendees had an opportunity to clarify and provide additional comments. The results of the survey and focus group responses were reviewed by both researchers and then shared with the department chairs along with the academic and campus deans in a virtual meeting. Descriptive statistics were conducted for the survey data. The results of the analysis were reviewed and confirmed by the department chairs during the meeting time. All identifying participant information was kept confidential.

Findings

Participants’ survey responses indicated that nearly 57% of them learned a considerable amount of beneficial information in their participation in the virtual collaborative program review sessions. This type of information included new approaches to addressing challenges and opportunities for innovation in program curriculum and processes. Specifically, approximately 58% of respondents reported that providing data on “What is Working Well” helped them focus on strengthening their own program(s). Identifying and recognizing what is working well reinforces positive practices within the program. This reinforcement can contribute to the sustainability of successful strategies and approaches. Further, 72% of respondents found that

providing examples of the “Current Challenges” within their programs was insightful in identifying new approaches for the upcoming academic year. Additionally, nearly 86% of respondents reported providing data on “Future Directions” offers guidance on potential directions to help them strengthen their own program(s). Finally, nearly 72% of respondents stated they would prefer to focus on “program enhancement” rather than “program review” as the theme for virtual collaborative review sessions.

Retreat Approach

Data from the focus group confirmed the survey findings and revealed that the participants preferred a one-day “retreat style” program review session rather than several sessions throughout the week. Along with sharing the benefits gained from attending sessions presented by their colleagues, the participants requested that additional time be built into the schedule for information processing and theme recognition among the program reports. Particularly, participants requested that leadership provide further time for synergy building across programs since they often experienced similar challenges. This request was expressed in sentiments that included “I find the interactions among my peers to be most valuable and offering additional time for these synergies would be beneficial.” Finally, participants requested to have the complete slide deck made available for review in advance of the meeting session to ensure that they arrived prepared to engage on a deeper level with their peers. This approach would allow participants to review their colleagues’ presentations and identify potential similarities and challenges across programs allowing for deeper reflection and discussion.

Collaborative Efforts

One theme identified in the data included the participants' ability to learn from other programs' innovative approaches, which they identified as providing opportunities to strengthen their own goals. Particularly, because participants were actively involved in analyzing data on program enrollment, graduation rates, student placement, and other relevant metrics and sharing these findings with their peers, they discussed how these metrics were valuable in identifying trends and making recommendations for improvement. One participant expressed that “actively sharing their discoveries with peers resulted in a narrative that enabled the group to collaboratively identify trends and craft informed recommendations.” During each presentation, participants often realized similar challenges or future directions between their program and other programs of study, resulting in possibilities for future cross-disciplinary partnerships or idea exchanges. They also expressed excitement in coming together to support one another and embraced each program's successes further creating a strong professional learning community within the online campus.

Once the data was presented as part of the online campus program review process, participants shared potential ways to collaborate with other degree programs in a number of ways. For example, participants had opportunities to share best practices. Examples of best practices included creating online forums for students and faculty to connect, developing resources for students, and providing additional outreach and mentorship to students. A participant explained that these practices “were vital in promoting student success and retention.” Participants further shared their findings and recommendations with colleagues in other programs and learned from their experiences and successes. These overviews provided support in identifying best practices and improving the quality of programs across the campus. There

were also opportunities for developing interdisciplinary collaborations. For instance, participants were able to use the program data and annual program reports to identify areas of overlap between their program and other programs and explore opportunities for interdisciplinary collaboration. Moreover, participants utilized their data to assess the effectiveness of their program in meeting student learning outcomes and to collaborate with other programs to ensure that students have access to the courses and resources they need to succeed. Most importantly participants discussed the importance of fostering innovation in which they could use the data to identify areas where their program could benefit from new approaches and collaborate with other programs to develop new and innovative solutions. Discussions centered on the significance of collaborating with other degree programs using the data from program review leading to more efficient and effective use of resources, better student outcomes, and a more vibrant and dynamic university.

Participants also proclaimed that they appreciate receiving feedback from leadership and from their peers and found this aspect of the virtual meeting to be insightful in resolving challenges that they faced throughout the academic year. Additionally, they discussed that the virtual program review process provides them an opportunity to identify themes across programs and identify strategic solutions. One participant expressed that “it’s vital to have an online community forum where we talk ... about our program reviews.” Another participant noted that “it really enhances our community and our way of assessing student learning and our programs.” Finally, a participant stated “hearing the challenges and the solutions from other programs may also help us. Some of the solutions may be also applicable to our programs.” In conclusion, participants highlighted the value of feedback from leadership and peers during virtual meetings, emphasizing its role in resolving challenges faced throughout the academic

year. They underscored the significance of the virtual program review process in identifying common themes across programs and devising strategic solutions. The expressed need for an online community forum further emphasizes the collaborative and beneficial nature of sharing challenges and solutions, contributing to an enhanced community and improved assessment of student learning and programs.

Implications

Annual program review fosters community, support, and opportunities for reflection. The department chairs can isolate program needs to strengthen their overall focus for the benefit of their students. This knowledge is vital for administrative faculty since Artino et al. (2018) proclaimed program directors are expected to understand how to critically review curriculum, promote faculty growth and development, and create robust evaluation systems. Through these program review processes, university leaders engage in content-sharing practices that promote overall university success and student satisfaction. Further, due to a multitude of factors impacting online education (e.g., content development, the role of instructional strategies, learner readiness) (Kebritchi et al., 2017; Money & Dean, 2019; Tsai et al., 2021), institutions need to carefully evaluate student outcomes, faculty evaluations, and other relevant data to determine program effectiveness.

Examining current online practices is particularly essential given the continual growth of students learning in a virtual environment. In fact, student enrollment in online courses has experienced a continuous uptick with students enrolling in at least one online course (Allen & Seaman, 2017). Online student enrollment is predicted to continue to increase (Blumenstyk, 2021) requiring institutions of higher education to continuously monitor and improve their instructional practices. However, Lee (2017) and Isaac et al. (2019) cautioned that universities

need to integrate more sophisticated approaches in considering online educational quality. Because university leaders receive vital information focused on the program's viability and potential future impact, they have access to valuable insight on how to better support student growth and learning experiences in virtual settings. Additionally, through this process, institutions apply their findings to create long-term plans. However, institutional planning should be continuous and focused on current needs and continual reviews of student learning and program outcomes. Particularly, Grauerholz et al. (2020) highlighted the significance of drawing intentional connections between program assessment and linking program measurement outcomes to university strategic planning. Essentially, long-term goals need to be continuously reviewed to ensure that they remain appropriate and reflective of program and student needs.

Conclusions

Annual program review is an essential process to ensure quality and rigor, and to guarantee that student needs are met and evaluated (Carnovale et al. 2016). This review process is a time for department leadership to engage in robust discussions regarding common themes and advocate for resources. Program review provides a unique opportunity to identify and reduce disadvantages along with strengthening the positive impact of academic programs for student success (Mavengere & Ruohonen, 2018). Further, campus leadership is provided with an opportunity to impart critical and productive feedback to each program. Although this study contained a small sample size, collaborative efforts across departments was identified as a vital aspect of the virtual meetings often resulting in unique partnerships to support student learning among programs. Open dialog and discussion regarding program review among colleagues create a more engaging experience for academic leaders. Through this process, department chairs can further reflect on program quality and rigor and identify areas of program

growth and collaboration across different degrees of study at the university. Additionally, administrative faculty are afforded the unique opportunity to receive guidance and feedback through supportive dialogues with colleagues.

Researchers have proposed that universities should assess quality in terms of student growth (Jackson & Bridgstock, 2018; Naylor et al., 2020; Tam, 2010) and online education practices (Palvia et al., 2018). Conducting annual program reviews provides institutions of higher education additional insight into student performance and the viability and effectiveness of a program of study. Although there is not a universally accepted model of program review, three primary elements are typically included within this process. These elements focus on the review being internal and faculty-driven, containing an external evaluation, and involving a comprehensive evaluation that culminates into a targeted action plan (Hanover Research, n.d.). Students graduating from programs that value this type of quality control will be better positioned to enter the workplace with the necessary skills and education. Once in the workforce, students from programs that highlight annual program reviews will have a more significant impact on society as a result of the educational foundation.

References

- Aidhaeri, F., Ameen, A., & Isaac, O. (2020). The influence of strategy formulation (vision, mission, and goals) on the organizational operations. *Journal of Critical Reviews, 7*(17), 1-10.
- Allen, I. E., & Seaman, J. (2017). *Digital learning compass: Distance education enrollment report 2017*.
<https://www.bayviewanalytics.com/reports/digitallearningcompassenrollment2017.pdf>
- Andrade, M. S. (2020). A responsive higher education curriculum: Change and disruption innovation. In D. Parrish and J. Joyce-McCoah (Eds.), *Innovations in higher education: Cases on transforming and advancing practice*, (75-92). IntechOpen Limited.
- Andrade, M. S., Miller, R. M., Kunz, M. B., & Ratliff, J. M. (2019). Online learning in schools of business: The impact of quality assurance measures. *Journal of Education for Business, 95*(1), 37-44. <https://doi.org/10.1080/08832323.2019.1596871>
- Artino, A., Cervero, R. M., DeZee, K. J., Holmboe, E., & Durning, S. J. (2018). Graduate programs in health professions education: Preparing academic leaders for future challenges. *Journal of Graduate Medical Education, 10*(2), 119-122.
- Barnett, R. (1992). *Improving higher education: Total quality care*. Open University Press.
- Baxter, B., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report, 13*(4), 544-559.
- Beketov, V., & Lebedeva, M. (2022). Intellectual property and quality of education: Exploring the academic integrity among medical students. *Frontiers in Education, 10*(7).
<https://doi.org/10.3389/educ.2022.1012535>
- Bergdahl, N. (2022). Engagement and disengagement in online learning. *Computers & Education, 188*. <https://doi.org/10.1016/j.compedu.2022.104561>
- Blumenstyk, G. (2021). Enrollment may be down, but some established online providers are seeing a surge. *The Edge*. <https://www.chronicle.com/newsletter/the-edge/2021-01-27>
- Bozick, R., Anderson, D. M., & Daugherty, L. (2021). Patterns and predictors of postsecondary re-enrollment in the acquisition of stackable credentials. *Social Science Research, 98*.
<https://doi.org/10.1016/j.ssresearch.2021.102573>
- Brown, J., Kurzweil, M., Pritchett, W. (2017). *Quality assurance in U.S. higher education: The current landscape and principles for reform*. https://sr.ithaka.org/wp-content/uploads/2017/06/SR_Report_Quality_Assurance_US_Higher_Education_06082017.pdf

- Bustamante, J. (2020). *Online education statistics*. <https://educationdata.org/online-education-statistics>
- Candela, A. G. (2019). Exploring the function of member checking. *The Qualitative Report*, 24(3), 619-628.
- Cardoso, S., Rose, M., & Stensaker, B. (2016). Why is quality in higher education not achieved? The view of academics. *Assessment & Evaluation in Higher Education*, 41(6), 950-965. <https://doi.org/10.1080/02602938.2015.1052775>
- Carnovale, S., Allen, C., Pullman, M., & Wong, D. (2016). Using continuous improvement in online program design: DMAIC as a tool for assurance of learning assessments. *Decision Sciences Journal of Innovative Education*, 14(2), 128- 153. <https://doi.org/10.1111/dsji.12094>
- Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, 11. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3141799/#:~:text=A%20case%20study%20is%20a,particularly%20in%20the%20social%20sciences>
- Dixon, R. J. (2017). Online education: Let's start the conversation. *Communique*, 46(2), 26-27.
- Duffin, E. (2019). *Share of students studying online in the U.S., by gender and education level 2019*. <https://www.statista.com/statistics/956145/share-students-studying-online-gender-education-level/>
- Dumford, A. D., & Miller, A. L. (2018). Online learning in higher education: Exploring advantages and disadvantages for engagement. *Journal of Computing in Higher Education*, 30, 452-465. <https://doi.org/10.1007/s12528-018-9179-z>
- Galdas, P. (2017). Revisiting bias in qualitative research: Reflections on its relationship with funding and impact. *International Journal of Qualitative Methods*, 16(1). <https://journals.sagepub.com/doi/full/10.1177/1609406917748992>
- Galoyan, T., & Betts, K. (2021). Integrative transfer of learning model and implications for higher education. *The Journal of Continuing Higher Education*, 69(3), 169-191. <https://doi.org/10.1080/07377363.2020.1847970>
- Glazier, R. A., Hamann, K., Pollock, P. H., & Wilson, B. M. (2019). Age, gender, and student success: Mixing face-to-face and online courses in political science. *Journal of Political Science Education*, 16(2), 142-157. <https://doi.org/10.1080/15512169.2018.1515636>
- Gopal, R., Singh, V., & Aggarwal, A. (2021). Impact of online classes on the satisfaction and performance of students during the pandemic period of COVID 19. *Education and Information Technologies*, 26, 6923-6947. <https://doi.org/10.1007/s10639-021-10523-1>

- Grauerholz, L., Lancey, P., Schellhase, K., & Watkins, C. (2020). Linking program assessment to institutional goals. *The Journal of Assessment in Higher Education, 1*(1). <https://doi.org/10.32473/jahe.v1i1.117164>
- Hanover Research (n.d.). *Best practices in academic program review*. https://www.asanet.org/sites/default/files/hanoverresearch_bestpractices_programreview.pdf
- Ingstrup, M. B., Aarikka-Stenroos, L., & Adlin, N. (2021). When institutional logics meet: Alignment and misalignment in collaboration between academic and practitioners. *Industrial Marketing Management, 92*, 267-276. <https://doi.org/10.1016/j.indmarman.2020.01.004>
- Isaac, O., Aldholay, A., Abdullah, Z., & Ramayah, T. (2019). Online learning usage within Yemeni higher education: The role of compatibility and task-technology fit as mediating variables in the ID success model. *Computers & Education, 136*, 113-129. <https://doi.org/10.1016/j.compedu.2019.02.012>
- Jackson, D., & Bridgstock, R. (2018). Evidencing student success in the contemporary world-of-work: Renewing our thinking. *Higher Education Research & Development, 37*, 984-998. <https://doi.org/10.1080/07294360.2018.1469603>
- Joshi, O., Chapagain, B., Kharel, G., Poudyal, N. C., Murray, B. D., & Mehmood, S. R. (2020). Benefits and challenges of online instruction in agriculture and natural resource education. *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2020.1725896>
- Kebritchi, M., Lipschuetz, A., & Santiago, L. (2017). Issues and challenges for teaching successful online course in higher education: A literature review. *Journal of Educational Technology Systems, 46*(1), 4-29. <https://journals.sagepub.com/doi/abs/10.1177/0047239516661713>
- Kohoutek, J. (2014). European standards for quality assurance and institutional practices of student assessment in the UK, the Netherlands and the Czech Republic. *Assessment & Evaluation in Higher Education, 39*(3), 310–325. <https://doi.org/10.1080/02602938.2013.830694>
- Kumar, A., Kumar, P., Palvia, S. C., & Verma, S. (2017). Online education worldwide: Current status and emerging trends. *Journal of Information Technology case and Application Research, 19*(1), 3-9. <https://www.tandfonline.com/doi/abs/10.1080/15228053.2017.1294867#>
- Lee, K. (2017). Rethinking the accessibility of online higher education: A historical review. *The Internet and Higher Education, 33*, 15-23. <https://doi.org/10.1016/j.iheduc.2017.01.001>

- Mavengere, N., & Ruohonen, M. (2018). Context and user needs in virtual learning in pursuit of qualities of learning. *Journal of Science Education and Technology*, 23, 1607-1620. <https://doi.org/10.1007/s10639-017-9681-3>
- Masalimova, A. R., Khvatova, M. A., Chikileva, L. S., Zvyagintseva, E. P., Stepanova, V. V., & Melnik, M. V. (2022). Distance learning in higher education during Covid-19. *Frontiers in Education*, 3(7). <https://doi.org/10.3389/educ.2022.822958>
- Money, W. H., & Dean, B. P. (2019). Incorporating student population differences for effective online education: A content-based review and integrative model. *Computers & Education*, 138, 57-82. <https://doi.org/10.1016/j.compedu.2019.03.013>
- National Center for Education Statistics. (2011). *The condition of education 2011*. <https://nces.ed.gov/pubs2011/2011033.pdf>
- National Center for Education Statistics. (2017). *Digest of education statistics*. https://nces.ed.gov/programs/digest/d17/tables/dt17_311.15.asp?current=yes
- National Center for Education Statistics. (2018). *Distance learning*. <https://nces.ed.gov/fastfacts/display.asp?id=80>
- National Center for Education Statistics. (2022). Postbaccalaureate enrollment. Condition of education. *U.S. Department of Education, Institute of Education Sciences*. <https://nces.ed.gov/programs/coe/indicator/chb>.
- National Institute for Learning Outcomes Assessment (2020). *Program review and assessment for continuous improvement: Asking the right questions*. <http://www.learningoutcomesassessment.org/>
- Naylor, R., Dollinger, M., Mahat, M., & Khawaja, M. (2020). Students as customers versus as active agents: Conceptualising the student role in governance and quality assurance. *Higher Education Research & Development*, 40(5), 1026-1039. <https://doi.org/10.1080/07294360.2020.1792850>
- Pakpour, N., Souto, I., & Schaffer, P. (2021). Increasing engagement during online learning through the use of interactive slides. *Journal of Microbiology & Biology Education*, 22(2), 117-121. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8441999/>
- Palvia, S., Aeron, P, Gupta, P., Mahapatra, D., Parida, R., Rosner, R., & Sindhi, S. (2018). Online education: Worldwide status, challenges, trends, and implications. *Journal of Global Information Technology Management*, 21(4), 233-241. <https://doi.org/10.1080/1097198X.2018.1542262>
- Saint Louis University (n.d.). *Academic program review*. <https://www.slu.edu/provost/educational-program-development-review/academic-program-review.php>

- Salta, K., Paschalidou, K., Tseteri, M., & Koulougliotis, D. (2022). *Shift from a traditional to a distance learning environment during the COVID-19 pandemic. Science & Education, 31, 93-122.* <https://doi.org/10.1007/s11191-021-00234-x>
- Schwam, D., Greenberg, D., & Li, H. (2020). Individual differences in self-regulated learning of college students enrolled in online college courses. *American Journal of Distance Education, 35(2), 133-151.* <https://doi.org/10.1080/08923647.2020.1829255>
- Siems, A., & Bell, M. (2018). Utilizing specialty in training examinations and annual program review to improve program curriculum. *Academic Pediatrics, 18(5), 16.* <https://doi.org/10.1016/j.acap.2018.04.050>
- Stensaker, B. (2014). European trends in quality assurance: New agendas beyond the search for convergence. In M. J. Rosa & A. Amaral (Eds.), *In Quality assurance in higher education* (pp. 135–148). Palgrave MacMillan.
- Tam, M. (2010). University impact on student growth: A quality measure? *Journal of Higher Education Policy and management, 24(2), 211-218.* <https://doi.org/10.1080/1360080022000013527>
- Tate, T., & Warschauer, M. (2022). Equity in online learning. *Educational Psychologist.* <https://doi.org/10.1080/00461520.2022.2062597>
- Tsai, C. L., Ku, H. Y., & Campbell, A. (2021). Impacts of course activities on student perceptions of engagement and learning online. *Distance Education, 42(1), 106-125.* <https://doi.org/10.1080/01587919.2020.1869525>
- United Nations (2020). *Policy brief: Education during Covid 19 and beyond.* https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf
- University of Illinois (n.d.). *Academic program review.* <https://provost.illinois.edu/assessment/academic-program-review/>
- Ward, A. M., & Brennan, N. M. (2020). Developing a student-doctoral education fit analytical model to assess performance. *Studies in Higher Education, 45(7), 1448-1460.* <https://doi.org/10.1080/03075079.2018.1545758>
- Wickham, S., Brady, M., Ingle, S., McMullan, C., Mhichil, M., & Walshe, R. (2017). Implementing a standardised annual programme review process in a third-level institution. *Quality Assurance in Education, 25(3), 362-374.*

- Wiemers, M., Nadeau, M., Tysinger, J., & Falcon, C. F. (2018). Annual program review process: An enhanced process with outcomes. *Department of Family and Community Medicine*, 23, 1-3.
- Wijngaards-de, L., & Merx, S. (2018). Improving curriculum alignment and achieving learning goals by making the curriculum visible. *International Journal for Academic Development*, 219-231. <https://doi.org/10.1080/1360144X.2018.1462187>
- Yazan, B. (2015). Three approaches to case study methods in Education: Yin, Merriam, and Stake. *The Qualitative Report*, 20(2), 134-152.
<https://nsuworks.nova.edu/cgi/viewcontent.cgi?article=2102&context=tqr>
- Zainal, Z. (2007). Case study as a research method. *Journal Kemanusiaan*, 9, 1–6.
- Zlatkin-Troitschanskaia, O., Pant, H. A., Lautenbach, C., Molerov, D., Toepper, M., & Brückner, S. (2013). *Modeling and measuring competencies in higher education approaches to challenges in higher education policy and practice*. Springer VS.

Appendix A: Survey Questions

1. I enjoy presenting program review data in a virtual setting.
 - a. Strongly agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly disagree
2. Providing data on “What is Working Well” helps me to focus on strengthening my program(s).
 - a. Strongly agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly disagree
3. Providing data on “Current Challenges” helps me to focus on strengthening my program(s).
 - a. Strongly agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly disagree
4. Providing data on “Future Directions” helps me to focus on strengthening my program(s).
 - a. Strongly agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly disagree
5. I learn a great deal of beneficial information from participating in virtual collaborative program review sessions.
 - a. Strongly agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly disagree
6. I am able to effectively implement new ideas gained from participating in virtual collaborative program review sessions.
 - a. Strongly agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly disagree
7. I prefer to only attend the virtual collaborative program review session in which I am presenting.
 - a. Strongly agree
 - b. Agree
 - c. Neutral

- d. Disagree
 - e. Strongly disagree
8. I would prefer to focus on “program enhancement” rather than “program review” as the theme for these virtual collaborative review sessions.
- a. Strongly agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly disagree

Appendix B: Focus Group Questions

1. Describe your experiences presenting program review data in a virtual setting.
2. Program Review Structure: The following items are focused on the current structure of the Online Campus's program review process.
 - a. Describe your perceptions of program review questions focused on what is working well within your program.
 - b. Describe your perceptions of program review questions focused on the challenges experienced by your program.
 - c. Describe your perceptions of program review questions focused on future directions for your program.
 - d. What additional questions or focuses may need to be included into virtual program review sessions?
3. How does your program implement new ideas gained from collaborative program review sessions?
4. How might we more effectively structure program review sessions to enhance our programs?
5. What are your reactions to the terms "program enhancement" vs. "program review"?