

IDENTIFYING AND INTEGRATING MEANINGFUL TECHNOLOGY CREATED THROUGH THE PANDEMIC

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ABSTRACT

This study explores the impact of online collaboration platforms (Zoom, Microsoft Teams, Google Meet, etc.) and their continuing use in post-pandemic higher education. The research examines how interactive role-playing assignments in online courses using a collaboration platform such as Zoom can enhance student engagement, collaboration, and learning. The instructor's transition from one-on-one phone calls to using Zoom to conduct interactive role-playing assignments is discussed. The use of online collaboration platforms allowed the instructor to be effective with their own time in being able to create an impactful interactive assignment and being able to reach all students in significantly less time versus phone calls being done on a one-on-one basis. The overall feedback received from the students showed an appreciation of having the interactive role-playing assignment conducted on Zoom as they were able to learn from each other's responses and interact in a live setting. The use of online collaboration platforms for key assignment(s) in specific courses that are relevant in doing so has helped to provide an enriching learning experience that inadvertently adds further depth and understanding to the other written-based assignments in the online courses. This research showcases the significance of online collaboration platforms and their effective use for interactive assignments in an online course setting.

Keywords: Online collaborative platforms, interactive role-playing online assignments, teaching online post-pandemic, student engagement

INTRODUCTION

The COVID-19 pandemic significantly impacted everyone's educational practices. Due to the pandemic, the use of online collaboration platforms such as Zoom, Google Meet, Microsoft Teams, and WebEx became the mainstream for communication. The shift to online learning platforms during the pandemic represented a significant change in educational technologies which saw a transition from a supplementary role to a primary mode of instruction (Dhawan, 2020). Their widespread acceptance and integration into educational practices highlight their significance in modern pedagogy, especially in the evolving landscape of online learning. Platforms such as Zoom have been instrumental in maintaining the quality of education by facilitating effective, efficient communication between students and instructors (Sarma et al., 2022).

As the pandemic subsided and allowed campuses to resume in-person functions, some of the innovative platforms have offered new modalities for university instructors to refresh old assignments and enhance the learning experience for students. The integration of such platforms has transformed traditional teaching methods by making learning more interactive and engaging (Barry et al., 2015). The pandemic has laid the groundwork for a reimagined future of higher education, one that highlights functional technology's role in improving engagement (Chen et al., 2022). The effectiveness and sustainability of online teaching are enhanced when educators gain experience and refine their communication strategies (Petrila et al., 2022).

Before the pandemic, in 2012, the [U.S. Department of Education's Office of Ed Tech](#) (Bakia et al., 2012) found online learning produced outcomes that were equal to or more effective than traditional Face-to-Face (F2F) instruction. Before the pandemic, faculty who taught online typically were self-selected, sought assistance in designing online learning spaces, and were supported in some way. This approach is quite different from the period of emergency remote Teaching and Learning (T&L). Online/Hybrid (OL/Hy) Learning is NOT emergency Remote Learning (RL). Remote Learning at the start of the COVID-19 pandemic was an emergency measure to attempt continuity by taking a F2F course and moving it quickly to online mode with little training or time to create high-quality learning. Online learning is a planned experience **over months** with purposeful design for online that includes accompanying tech and tools carefully selected and faculty receiving professional development and support.

Studies have highlighted the advantages of online T&L, which can include flexibility, [if designed well] more [authentic] interaction, and more learning opportunities (virtual field trips, student multimedia project-based learning, etc.). It is important to keep in mind the potential disadvantages of online, which could include creating a sense of isolation, requiring elevated self-regulated learning, and additional development for instructors (Williamson et al., 2020; Goksel & Hargis, 2021).

In this paper, I will share an innovative method derived from when the pandemic forced educational institutions online via emergency remote learning. During that time, I and others became aware that preparing and teaching online is drastically different when we quickly had to migrate F2F courses into an online format. I had become familiar with using Zoom due to the pandemic when I had to switch my F2F undergraduate courses to RL. University meetings all switched to Zoom and thus, others and I became quite proficient with its use. I have been teaching graduate courses online for numerous years and have used Zoom since the pandemic to hold several discussions with the students. However, I did not apply the use of Zoom to my online courses for interactive role-playing assignments until the beginning of 2024.

The insights provided for this study are based on an instructor's experience in several online courses at a small, private university in the Pacific region that has one of the most diverse student bodies in the United States, as a minority-majority institution. I teach graduate courses that are online in the areas of educational leadership and organizational leadership. It has been my philosophy to create assignments that are as relevant to current best practices and applicable to a "real-world" setting. This study examines my approach to using online collaboration platforms such as Zoom for interactive role-playing assignments and why it will now be the modality used going forward.

LITERATURE REVIEW

The COVID-19 pandemic accelerated the adoption of online tools and technologies in higher education (Rapanta et al., 2020). Online teaching platforms such as Zoom, Google Meet, and Microsoft Teams have become integral tools in education, especially during and post-pandemic times. These platforms offer various benefits that enhance the learning experience. They provide essential features like chat rooms, collaborative conversations, and video/teleconferencing (Dash et al., 2021). As universities continue to navigate the post-pandemic era, Zoom and other online collaboration platforms remain a key component in facilitating online education (Sahito et al., 2022). Its widespread use and positive impact on student learning have solidified its position as a fundamental tool for enhancing effective learning in the online classroom (Alia et al., 2022). As universities move into the post-pandemic era, collaborative online tools have become essential for enhancing the online learning experience and are recognized as opportunities to enhance higher education post-pandemic (Cotoman et al., 2021).

The constructivism learning theory describes how learners actively build their knowledge through experiences and reflection. Online collaboration tools are a natural connection as they serve as facilitators for a constructivism learning environment by encouraging students to engage in interactive and collaborative activities (Neo, 2005). By utilizing online collaboration platforms, students can participate in group activities, engage in discussions, and work together on projects, aligning with the principles of constructivist learning (Mustakim et al., 2020).

The quality of online learning platforms becomes pivotal in influencing learners' satisfaction and intentions to use them (Li & Zhu, 2022). The silver lining of the COVID-19 pandemic is the realization that most of what was taught in an F2F class could be taught online. To enhance engagement, breakout rooms in Zoom allow a sense of community, and students do not feel they are left alone. Small group teaching and learning strategies can be adopted in breakout rooms (Zaidi et al., 2022). Online learning platforms such as Zoom can enhance interactivity and engagement, providing a more comprehensive educational experience (Soesanto et al., 2023). During the pandemic, establishing effective two-way communication was identified as a key factor in ensuring the success of online teaching (Yuebo et al., 2022).

Collaborative and interactive online tools are essential for enhancing the online learning experience. Platforms such as Microsoft Teams, Zoom, and Google Meet have been successfully integrated into the educational process, contributing significantly to online learning at higher education institutions (Nurdiansyah, 2023). Now, after the COVID-19 pandemic, the future of online learning in higher education is expected to significantly differ from the pre-pandemic era (Guppy et al., 2022). In the post-pandemic era, a blend of online and offline teaching approaches is anticipated to become the new normal in education (Su, 2022). The exploration of future teaching modalities in higher education post-pandemic highlights the ongoing evolution and improvement required in online teaching practices (Yuan et al., 2022).

Students perceive Zoom and other online collaboration platforms as effective tools for online learning, with many institutions relying on it alongside other platforms (Fomsi et al., 2023). The importance of social interaction and collaborative learning in online environments are highlighted as key factors for meaning engagement (Lagat & Concepcion, 2022). Role-playing assignments in an online course can enhance the learning experience by significantly improving student engagement, participation, and understanding of complex concepts (Gundersen & Kaminaga, 2022). Role-play assignments or simulated scenarios provide a practical and interactive way for students to apply theoretical knowledge to real-world situations (Sapkaroski et al., 2021). Conducting role-play assignments in online classes has been found to increase student satisfaction with virtual learning environments (Elzainy et al., 2020).

METHODOLOGY

In several graduate online courses that the instructor teaches, there are one-to-two major interactive role-playing activities to provide students with as close to a real-world experience as possible while in the safety of the classroom. Up until 2023, the instructor conducted an interactive role-playing assignment in four separate graduate online courses via the phone and did so one-on-one with each student during the week. These calls usually would take place in the late afternoon to early evenings, including the weekends to accommodate various student schedules and average about 30 minutes each. To make it feasible from a time management perspective, the instructor conducted this form of assignment at different weeks. Two out of the four courses had two separate interactive role-playing assignments and the other two had one similar assignment.

An example of the verbiage provided on the assignment in our Canvas Learning Management System (LMS) is provided below:

"We will have our media relations scenario to do during the Zoom session. For the media relations scenario, you will play the role as principal of the school and I will be a news reporter. I will let you know what the scenario is during the Zoom session. To prepare for this assignment, make sure to review the materials found in this module and Chapter 7.

I am providing two Zoom times that you can choose from to join. Let me know if either time does not work for you, but please do try to make one of these two times if possible. This assignment will take about an hour, as we do have a bit to cover. Contact me if you have any questions.

Thursday, February 22, 3:30 pm or Saturday, February 24, 10:00 am

Zoom Link: [provided]"

This study adopts a qualitative research design to explore the impact of online collaboration platforms on post-pandemic higher education, particularly focusing on the use of interactive role-playing assignments facilitated by platforms such as Zoom. Qualitative research is chosen to provide a rich, in-depth understanding of the phenomenon under investigation, allowing for nuanced insights into the experiences and perceptions of the instructor.

Participants in this study consist of the instructor's lesson planning and reflection of the graduate students from online courses in aggregate at a small, private university in the Pacific region. The graduate courses address the topic of educational leadership and organizational leadership and are selected based on their experience in integrating online collaboration platforms into teaching practices.

Course materials, assignment instructions, and instructor reflections are analyzed to gain insights into the design, implementation, and outcomes of interactive role-playing assignments conducted via online collaboration platforms. This includes reviewing assignment prompts, communication with students, and any feedback or reflections from the instructor.

Qualitative data from the instructor were compared and contrasted from prior courses taught without using Zoom to identify similarities and differences in their perspectives, experiences, and outcomes related to the use of online collaboration platforms for interactive assignments. This comparative analysis helps triangulate findings and provide a comprehensive understanding of the phenomenon under investigation.

Findings

While I greatly enjoyed conducting these role-playing assignments, it was taxing on the time commitment in doing so to have about a 30-minute phone conversation with each student in the course. However, I valued providing a "real-world" application to the students and the overall learning experience that it provided. Even during the pandemic, I was utilizing voice calls via the phone to conduct this assignment.

One of the main impetuses with switching to a Zoom format for this interactive role-playing assignment was due to having multiple courses with this type of activity. The sheer number of students to complete a one-on-one phone call was daunting in the scope of having to block off a considerable amount of time for me. Thus, I made the switch to a Zoom session format, thinking this would be used for this instance, and then revert back to one-on-one phone calls with future classes as long as it was manageable. To accommodate the various schedules that graduate students have, I offered two or three different days that one could choose to attend. For example, a late afternoon on a Thursday and a mid-morning on a Saturday.

I was mindful to only schedule one-to-two of these interactive role-playing assignments during the course as the online program is designed to be asynchronous and to avoid potential Zoom fatigue. The extensive use of Zoom has brought about challenges such as Zoom fatigue which has been a topic of discussion in academia (Bullock et al., 2021).

After informing the students of the scenario, I then placed them in breakout rooms with 2-3 in each. They discussed how they were going to respond to the scenario and select the member to do so. After leaving the breakout rooms and meeting in the main area, each group's selected member would participate in the role-playing activity, with me as the instructor serving that function. Everyone in the session got to see how each of their peers did in the activity with their responses, including those who did not participate directly in the role-play activity. They still participated in planning for it with their peers prior and they all had to come prepared to the Zoom session ready to go since the decision on who would be chosen occurred during the breakout room period.

What became a revealing moment for me was the feedback the students provided across the courses during various time slots towards the end of the Zoom session. I had mentioned to the students that normally the activity would have been conducted on a one-on-one call, but the feedback universally showed appreciation for being able to listen to their peers and hear their responses. The students felt they got to learn further in a group setting and have “F2F” online interaction with their peers and instructor. After hearing this feedback, I made the decision not to go back to conducting these interactive role-play assignments through one-on-one phone calls and instead adopt the format of conducting it as a group using an online video platform such as Zoom.

By finally realizing a better approach to conducting interactive role-playing assignments, I now feel I can expand this type of assignment to my other courses as long as such an activity is relevant to the class. This is possible due to the significant reduction in the time that would have been spent conducting one-on-one phone calls with each student. The feedback from the students gave me confidence that going with an online collaboration platform in future courses would not only enhance student engagement and interaction but also further learning from each other. Thus, I felt that going forward with the online collaboration platform modality for future interactive role-playing assignments to be a win-win.

DISCUSSION AND CONCLUSION

The integration of online tools such as Zoom into the classroom can have a positive impact on enhancing traditional teaching methods. It has brought about a paradigm shift in teaching practices, offering new opportunities for enhancing student engagement, collaboration, and learning outcomes. This study examines the impact of using Zoom specifically for interactive role-playing assignments in online courses and explores its pedagogical implications. Online collaboration platforms have provided new possibilities for engaging students in diverse learning environments. The effective use of the features on these platforms can enhance interaction and student engagement not only amongst each other in the class, but also between the instructor and the students in the online environment. Having one or two assignments based on this approach also seemed to add a flair of synergy to the course.

A key finding in this study is that the use of online collaboration platforms allows the instructor to be effective with their own time in being able to create an impactful interactive assignment and reaching all students in less time significantly versus phone calls being done on a one-on-one basis that would be overbearing depending on the number of students in the class. The pleasant surprise for me was seeing how much the students appreciated this modality in being able to hear each other’s responses, as they felt it helped them further in their learning and the live interaction they were able to have with their peers. Although used sparingly in the term of the course to avoid “Zoom or video fatigue,” the instructor feels the use of online collaboration platforms for key assignment(s) in specific courses that is relevant in doing so has helped to provide an enriching learning experience that inadvertently adds further depth and understanding to the written-based assignments in the course. Online collaboration platforms such as Zoom allow for a blend of synchronous and asynchronous learning. The instructor teaches in an asynchronous setting but can provide this synchronous function by offering two or three-time slots during the week that a student can choose from for this interactive role-playing assignment.

Positive Impact of Online Tools

Enhanced Student Engagement and Collaboration: Online collaboration platforms provide essential features like video conferencing, chat rooms, and breakout rooms, fostering interactive and collaborative learning environments. These platforms allow students to engage with course content, interact with peers, and participate in group activities effectively.

Effective Communication: Platforms such as Zoom facilitate efficient communication between instructors and students, enabling real-time interaction and feedback. The transition from one-on-one phone calls to Zoom sessions for role-playing assignments allowed the instructor to reach all students more efficiently and effectively utilize their time.

Real-World Application: Interactive role-playing assignments conducted on Zoom provide students with opportunities to apply theoretical knowledge to real-world scenarios. This experiential learning approach enhances students' understanding of complex concepts and prepares them for practical challenges they may encounter in their professional careers.

Peer Learning: The use of online collaboration platforms enables peer-to-peer learning and interaction. Students can learn from each other's responses, share insights, and collaborate on assignments, fostering a sense of community and enhancing the overall learning experience.

Flexibility and Accessibility: Online collaboration platforms offer flexibility in scheduling and accessibility for students with diverse schedules and geographical locations. By offering multiple time slots for interactive sessions, instructors can accommodate students' needs and ensure maximum participation.

Pedagogical Implications

Active Learning Strategies: Integrating online collaboration platforms into teaching practices allows instructors to incorporate active learning strategies such as role-playing, group discussions, and collaborative problem-solving activities. These strategies promote student engagement and critical thinking skills development.

A/Synchronous Learning: Online collaboration platforms support a blend of synchronous and asynchronous learning, offering flexibility for both instructors and students. While asynchronous learning provides flexibility, synchronous sessions allow for real-time interaction and engagement.

Authentic Assessment: Interactive role-playing assignments conducted on online collaboration platforms such as Zoom can serve as meaningful assessment tools, allowing instructors to assess students' comprehension, communication skills, and ability to apply knowledge in practical situations. Peer evaluation and feedback mechanisms can further enhance the assessment process.

Faculty Development: The effective use of online collaboration platforms requires instructors to receive training and professional development to leverage these tools optimally. Instructors need to develop communication strategies, facilitate group dynamics, and create engaging learning experiences in the online environment.

Conclusion

The post-pandemic era has seen a continued reliance on online tools/platforms to enhance the teaching and learning experience in higher education. Integrating online collaboration tools and platforms in an online classroom post-pandemic is essential for enhancing student engagement while facilitating effective teaching practices. We are in the process of arriving at a new educational landscape. Some may say we already have. The integration of meaningful technologies such as Zoom and other similar online video platforms has revolutionized the educational landscape, offering opportunities for interactive and engaging learning experiences.

As the literature discussed, interactive assignments are essential for enhancing online student engagement. There is tremendous value in online collaboration platforms such as Zoom for creating interactive assignments, especially those that involve role-playing. A recommendation is for educators to make use of these platforms by designing interactive assignments where participants can take part in discussions in real-time and role-playing activities. This method enhances interaction and synergy between the instructor and students and peer-to-peer. Utilizing breakrooms can facilitate group discussions that provide more personalized feedback and deeper engagement with the content.

The use of collaboration platforms (Zoom, Microsoft Teams, Google Meet, etc.) in higher education online courses after the COVID-19 pandemic can be a means to increase student engagement and interaction among the students and with the instructor. Such tools that became common for everyday

functions during the pandemic have shown their ability in online courses to conduct interactive assignments, including role-playing activities. This approach, when appropriate to use in an online class, allows students to experience real-world scenarios and provides a learning environment that allows for collaboration and effective learning from each other.

LIMITATIONS AND CHALLENGES

Despite the evident benefits and positive outcomes associated with the integration of online collaboration platforms like Zoom into educational settings, several limitations and potential biases need to be acknowledged. While Zoom and similar platforms offer solutions for remote collaboration, their effectiveness relies on reliable internet connectivity and access to appropriate devices. Socioeconomic disparities may limit equal participation, exacerbating existing educational inequalities.

While online platforms enhance engagement and interaction, they also shift the role of the educator. The reliance on technology may diminish the educator's ability to provide personalized feedback and support, potentially leading to a less tailored learning experience for individual students. The study's insights are based on experiences from a specific institution and may not be generalizable to diverse educational contexts. Moreover, the emphasis on Zoom as a primary tool overlooks other potential platforms or approaches that could address different outcomes. While breakout rooms facilitate group discussions and collaboration, they may not fully replicate the dynamics of F2F interactions. Technical issues, such as audio/video quality or participant disengagement, can impede the effectiveness of these collaborative spaces. Over-reliance on online collaborative platforms may also lead to a lack of diversity in teaching methodologies, limiting the exploration of alternative pedagogical approaches.

Addressing these limitations requires a multifaceted approach that prioritizes equity, inclusivity, and pedagogical innovation. Future research should aim to explore alternative methodologies, mitigate biases in technology tools, and promote holistic approaches to online teaching and learning. Additionally, ongoing professional development and support for educators are crucial for navigating the evolving landscape of digital education effectively. Potential studies researching the long-term impacts of online collaborative tools on educational practices and student outcomes would help to explore how such platforms are reshaping learning environments.

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