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# eCelebrations: Virtual Graduations to Celebrate Online Students

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## Abstract

Online students are often short-changed when they reach their most important milestone—graduation. For many institutions, virtual graduation has proven to be a holy grail of sorts—critically important to student experience, but illusive in form and difficult to achieve. This article explores several existing models of virtual graduations, and proposes a framework to evaluate the quality of synchronous virtual graduation events.

We also present an example of a synchronous virtual graduation celebration in a master's degree program that optimizes social presence and engagement. This robust event features real-time audio and webcam participation by all participants, keynote speakers, interactive prize contests, and personalized announcement of graduates. By illuminating the logistics, we enable other universities to consider adoption of this powerful innovation to enhance the online learning experience and further engage online learners.

## Introduction

What happens when an online student graduates? Many online learners have no access to a graduation ceremony and thus cannot celebrate this major milestone in their academic careers. We begin by reviewing the literature on virtual graduations, and establish a typology of the various graduation models currently employed by higher education institutions. We then present an example of a real-time virtual graduation celebration that optimizes social presence and engagement, the eCelebration of Graduates. We also propose a framework to evaluate the quality of synchronous virtual graduation events, and discuss limitations of these events and directions for future research.

## Review of Literature

Social presence and engagement plays a critical role in combating the sense of isolation online learners often experience (Link & Scholtz, 2000). Social presence is a strong predictor of student satisfaction (Mirah, 2008), and numerous research studies have demonstrated the benefits of online student engagement for student satisfaction and retention (Peacock & Cowan, 2018; Shea, Stone & Delahunty, 2015; Poll, Widen & Weller, 2014; and Kemp, 2002). The Community of Inquiry (CoI) framework indicates that learning occurs at the intersection of the social, cognitive, and teaching presence, where presence constitutes the ability "to project personal characteristics into the community, thereby presenting themselves to other participants as 'real people'" (Garrison, Anderson, & Archer, 2000. p. 89). Waldner, McDaniel, Esteves & Anderson (2012) highlight the need for increased social presence by degree programs, beyond the discrete units of the online class; similarly, Mon (2010) stresses the need for "institutional telepresence" (n.p.). Indeed, some virtual graduation efforts identify social presence as a core objective for their ceremonies, and consciously seek to foster it (Mon, 2010).

Campus rituals and ceremonies such as commencement are an important part of campus culture (Manning, 1994, 2000). Graduation ceremonies provide opportunities to celebrate the accomplishment of earning a diploma or degree. Moreover, graduation ceremonies hold deep-seated ritualistic value, serving as a rite of passage that celebrates the graduate's entrance into a new phase of life. "The act of crossing a threshold...or embarking on a new

stage of life, has traditionally been endowed with considerable meaning...Colleges are not exempt from the sacrosanct nature of entrances and exits", notes Manning (2000, p.7). Magolda (2003) writes that "a single commencement ritual... illuminates the power of ritual to transmit cultural norms" (p. 779) such as tribal affiliations and the institutional values of the university.

The literature on Quality of Experience (QoE) also provides insights. This literature examines the parameters that optimize user experience in settings ranging from virtual events to virtual laboratories (de Moor et al, 2010). Social presence, defined as "the extent to which other beings (living or synthetic) also exist in the world and appear to react to you" (Heeter, 1992, p. 265) plays a key role in successful virtual events. Gaggioli, Bassi and Fave (2003) identify several additional elements that promote optimal experiences in a virtual setting, including opportunities for action (ability to interact), feedback (multi-modal responses or feedback to the user's behavior), control of the environment, and a challenging skills-based rewards to stimulate further interaction with the environment.

The virtual graduation literature itself tends to feature anecdotal examples of such commencements. The literature revealed similar challenges across multiple event types, such as lack of social interaction in some types of events (Scott & Mason, 2001; Mon, 2010); the work-intensive nature of the development process (Mon, 2010); and technical difficulties, such training first-time attendees (Mon, 2010) or bandwidth issues that prevented access (Scott & Mason, Year). Another common difficulty involved continuity—namely, how to ensure the event would continue each year instead of being a "one and done" experiment, as is often the case. Scott and Mason (2001) in particular noted the importance of administrators institutionalizing virtual graduations to ensure their long-term success beyond the initial prototype event.

### **Types of Virtual Graduations**

Universities have experimented with various techniques to provide universal access to commencement, with varying degrees of success. The literature review yielded eight distinct models or approaches to virtual graduation.

**Multiple-location graduation ceremonies.** Some universities hold multiple ceremonies in different regions of the country. For example, Purdue University Global will hold their 2019 commencement ceremonies in Washington, DC and Indianapolis, IN. American Intercontinental University (AIU) is holding three commencements in 2019 in the cities of Houston, Atlanta, and Chicago. This strategy offers online students the opportunity to participate in a physical ceremony in an accessible regional location, yet may engender significant costs for the institution (and costs for students and guests, if travel is involved).

**Streamed ceremonies.** Some universities will livestream their physical campus commencement ceremony. Most ceremonies merely consist of a livestream that announces the names of graduates who are physically present, thus leaving online learners without an opportunity for recognition or interaction. However, some universities include online graduate names and recognize online students that are not present. The University of Glasgow even utilizes a robot equipped with a tablet as a stand-in for the online student (BBC News, 2018).

**Avatar-based ceremonies.** A few institutions have experimented with live webinars utilizing avatars in a gaming-type environment, by creating virtual environments that resemble a ceremony hall. Bryant & Stratton College has used this "Second Life" commencement ceremony approach (Kerr, 2009). Keynote speakers and students alike have avatars and receive their diploma on the virtual stage with an animated scroll. The University of Edinburgh School of Education also used Second life avatars for their 2013 graduation ceremony (Virtual Graduation Winter 2013, 2013). These events permit real-time interaction, but often result in an artificial environment that reduces realistic social interaction by replacing the true appearance of guests and speakers with animated characters.

**Live webinars.** Some colleges host live, real-time fully interactive webinar events in which individuals are recognized while students, faculty, and friends join on their computers using audio and webcam to be part of the ceremony. Open University was one of the first institutions to use this model in 2000 as an experiment with a small cohort of students (Scott & Mason, 2001). In 2016, Troy University's Master of Public Administration program hosted its first eCelebration of Graduates (discussed in detail later in this article). Colorado State University (CSU) Global Campus conducted its first live webinar virtual commencement ceremony in 2018. The CSU event incorporated online student interaction with the emcee, as well as pre-recorded elements allowing students to thank their families for their support. The President delivered the keynote speech through a pre-recorded video. The CSU event also incorporated social media for posting pictures and tweets during commencement increase participation. Though these live webinar events can help maximize social presence and engage students, these events can involve extensive preparation and technical expertise.

**Live home visits.** Southern New Hampshire University's (SNHU) uses a traveling bus to award degrees to online students at their homes in front of friends and family (Plourde, 2017). For example, SNHU's bus delivered

diplomas to 25 teachers at the Goffstown (NH) High School to recognize the teachers who earned their Master of Education degrees together in a cohort (Plourde, 2017). SNHU recipient students seem very appreciative of the extra innovative effort the school provides to acknowledge their online graduates. However, this venture may prove costly if the school is delivering diplomas to all online graduating students throughout the country.

**Pre-recorded videos.** American College of Healthcare Sciences (ACHS) held their 2015 virtual commencement ceremony that consisted of an uploaded YouTube video that graduates viewed at their convenience (ACHS, 2015). These prerecorded videos generally feature administrators announcing the graduates and recognizing honor students. Students can alter their slides and provide quotes; however, there is no real-time interaction. The prerecorded video effectively re-creates the core elements of a physical graduation yet does not provide an opportunity for real-time interaction with peers. Students can leave messages in the comment areas of the YouTube that provides some form of feedback.

**Commencement webpages.** Strayer University builds a virtual commencement webpage that features a pre-recorded President's Address, commencement awards, and graduate profiles that are labeled and organized on a website page (2016). The webpage features and audio with an announcer and commencement-themed background music recognizing online graduates as the website displays their individual diploma slide. Additionally, there is a section that features the commencement awards and a featured student with written narratives for both. As another example, Columbia College has a Virtual Commencement webpage that features pre-recorded commencements from 26 ceremonies held throughout the country, graduate profiles, recorded commencement student address, alumni charge and other items. Students, friends and family are encouraged to share new using Facebook and other social media. The webpages are easily accessible and provide opportunities to promote the institution's graduates. However, the webpage model does not permit an opportunity for real-time interaction between the institutions and their graduates.

### **Example of a Virtual Graduation (Live Webinar Model): The eCelebration of Graduates**

Virtual graduation for Troy University's Master of Public Administration (MPA) program became a priority after one pivotal conversation between a faculty member and an alumnus. When the faculty member asked the alumni how he felt now that he had graduated, the student shared, "Actually, I feel a little let down. Throughout the program, I felt so connected to all the faculty and my fellow students, but then I took that last class and then, nothing... No more emails, no more instant messages, just crickets." The faculty and program administrators realized they were profoundly failing our online students who lacked the option of participating in graduation, and needed an equally powerful way to celebrate their accomplishment. However, the virtual graduation proved to be a holy grail of sorts—critically important to student experience, but illusive in form and initially difficult to achieve.

The MPA faculty at Troy University wanted a fully interactive virtual graduation that optimizes social presence and engagement, a live event that would genuinely connect faculty, students, and their families in real-time through webcam, regardless of where they live and learn. The key design objective was to maximize active student participation in the event. Thus, in 2015, we designed a live webinar celebration, with the goal of creating an event with potential to surpass the immersive experience of a traditional physical commencement ceremony.

The eCelebration is a one-hour real-time webinar event hosted by faculty. The eCelebration allows the faculty to celebrate graduating and recently graduated students in a virtual event; friends and family of the graduate are also encouraged to attend the eCelebration to celebrate with them. The eCelebration features welcome remarks from the dean, department chair, program director, and a featured guest speaker; interactive prize contests; three student spotlight speakers; announcement of the graduates; an honor society induction; a parting gift for all (a free year of alumni membership); and post-event social time to allow faculty and the graduates time to socialize.

The eCelebration has been held in May or June annually since 2016. The sections below discuss the process of developing the eCelebration, the structure of the eCelebration itself, and results in terms of student satisfaction.

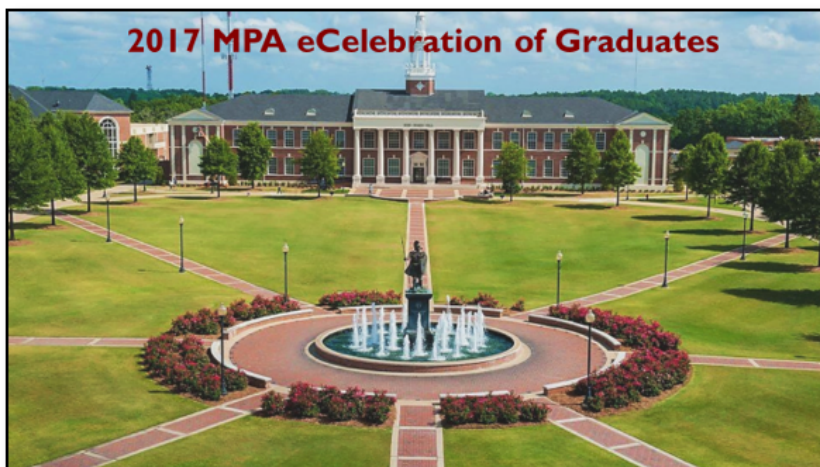
**Developing the eCelebration.** The planning team consisted of three faculty members. Initial design decisions included which students to include, whether to officially confer degrees, technical platform, and technical support. The Dean determined that an informal celebration event would permit maximum flexibility. Thus, though we use the term "virtual graduation," "virtual commencement," and "eCelebration" interchangeably here, the MPA eCelebration of Graduates is not an official ceremony to confer degrees, and the invitation includes an explicit disclaimer that the event does not constitute an official graduation or conferral of a degree. All MPA students system-wide are invited to participate, thus providing access to online students as well as a celebration opportunity for students who must miss the physical graduation due to deployment, illness or a family emergency. The faculty decided to host the webinar and provide technical support themselves using WebEx.

The first year of the eCelebration involved considerable development work by a hosting team of seven faculty members (in subsequent years, the event was far easier to plan and deploy since the event infrastructure was in place). First year development work included the following:

- Storyboarding—developing the sequence and agenda of the event, transitions, and what would visually appear on the screen during each segment of the event.
- Scripting—developing a script (a Word document) to guide the verbal narration throughout the ceremony.
- Roles—establishing and assigning roles for the event (emcee, technical hosts, prize coordinator, announcer of the graduates, honor society induction, etc.)
- PowerPoint design—developing the visual landscape of the event, including obtaining photos and quotes in order to develop a customized slide for each student.
- Survey design—developing and deploying the post-event survey
- Featured speaker and spotlight speakers—identifying and inviting the featured guest speakers and the three student spotlight speakers, providing them with technical specs (e.g., webcam required), and obtaining their bios.
- Event room build—building the meeting room in WebEx with optimal settings (see Appendix A).
- Invitations—developing the invitation with registration link, working with the registrar’s team to identify graduates, sending the invitations through mail merge to promote personalization, etc.
- “How to Attend” instructions—developing and sending three event reminders to registrants, with clear instructions on how to attend the event and how to obtain technical help.
- Soundscape development—integrating music into certain points of the event (e.g., celebration music, graduation-themed music, etc.).
- Prizes—Developing the prize contest questions, obtaining prize donations from the University, and mailing out prizes.
- Coordination with internal partners—coordinating with the graduation center to prevent date conflicts, with the registrar’s office to identify graduating students, with the alumni office for free memberships, and with the University Foundation for prize donations.
- Dry runs—managing two dry runs for the planning team, a dry run for the featured speaker and a separate dry run for the student spotlight speakers to ensure they can navigate in the room and that their audio and video equipment/webcam works.
- Video development—developing the countdown video that precedes the event.
- Promotion—promoting the event to current students, to graduating students in the capstone class, etc.

### **Structure of the eCelebration of graduates.**

Figure 1. Opening Slide

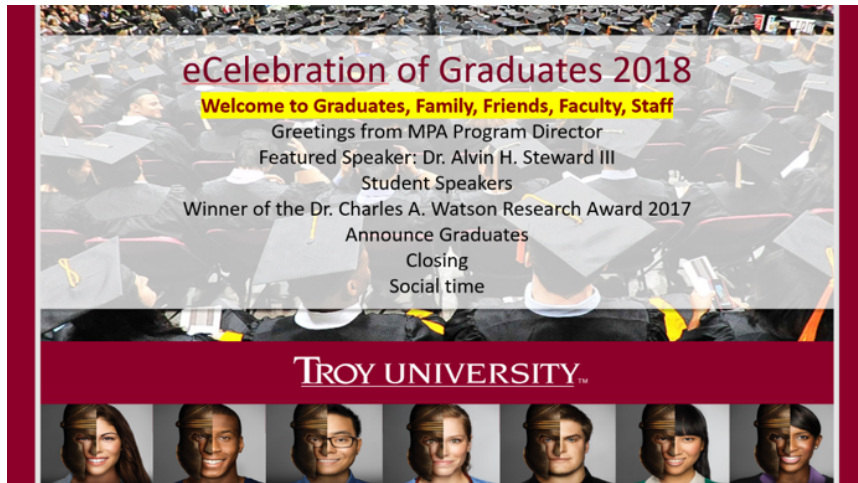


An hour before the event, the hosts, featured speakers, and student spotlight speakers log in for a quick equipment test. Other participants and guests begin arriving a half-hour prior to the event as part of a special welcome session prior to the event that allows them to test their audio connection and webcam. The emcee and technical hosts greet each student and family member individually and chat, asking guests if they would like to test their webcam. In the background, the technical hosts quickly identify entering guests without an audio connection and send them a chat message to provide assistance. The emcee continues to chat with the guests, asking where they are attending from today, asking students to introduce their relatives, etc.

Ten minutes before the event begins, the event countdown begins, featuring a countdown clock with a video tour of the Troy University campus, to reinforce sense of place. The countdown video features music, enabling participants to see if they successfully connected their audio. The tech hosts continue assisting incoming guests, who are now muted upon entry. Using the phone number provided by participants when they registered for the event, the tech hosts now call any remaining guests that do not have audio access to see if they need assistance.

The emcee officially kicks off the eCelebration of Graduates, welcoming graduates and their family to their celebration and introducing each of the faculty members. Because many participants are new to virtual events, the emcee discusses the agenda so participants will know what to expect (Figure 2). The agenda slide appears before each new segment to help participants visually follow the flow of the event.

Figure 2. Agenda Slide



The emcee then introduces the tech hosts, who share their meeting window so they can physically demonstrate a few features in WebEx to ensure all guests can navigate comfortably in the environment—how to send a chat message, how to mute, how to ask for help, etc. Guests practice sending a chat, thus preparing them to participate fully in the prize and announcement of graduates segments.

The emcee then introduces the dean, the department chair, and the MPA program director. The program director congratulates the graduates in a two-minute welcome speech. Next up is the prize coordinator, a faculty member who runs four interactive prize contests during the event (Figure 3). The prize coordinator explains the prize contests, and encourages participants to participate by talking or via chat message. She or he also announces the prizes that have been generously donated by the University. The prize winners are announced at the end of the eCelebration. The hosting team carefully designed the prize contest questions to encourage interaction, such as: 1) who lives furthest away from the campus? 2) who has served longest in a government or non-profit field? 3) who has served longest in the military?, and more.

Figure 3. Prize Slide Example





After the first prize segment, the emcee then introduces the featured speaker for the event (Figure 4). Speakers have included distinguished government and non-profit leaders as well as military officials in order to inspire our public administration students. Speakers are carefully selected for their experience, their reputation as public speakers, and their potential to speak in a virtual environment (i.e., willingness to use webcam, to participate in a dry run and pre-event equipment check, etc.). The featured speaker's segment ranges from 5 to 7 minutes, and often is a key highlight of the event for students.

Figure 4. Featured Speaker



After another prize contest, the emcee then introduces the student spotlight speakers (Figure 5), three students specifically selected by the planning team to give a 1-3 minute talk to their peers. Often the three students overcame considerable obstacles to achieve their degree; thus, the committee selects them for grit and/or academic performance. The emcee introduces each student speaker individually in turn, using a bio the student speaker has provided.

Figure 5. Student Speakers Slide



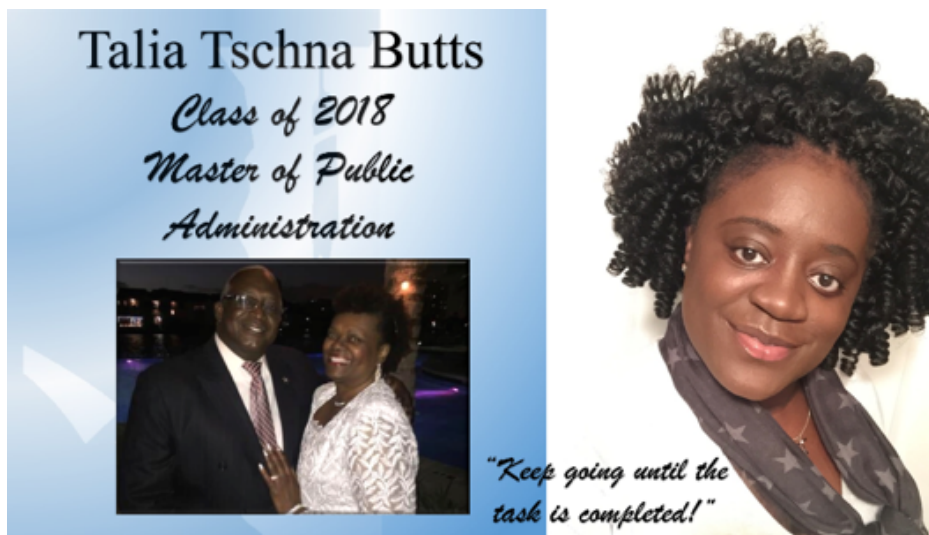
Another prize contest ensues, and then the announcement of graduates (Figure 6) and graduating students commences. First, the emcee provides instructions for this all-important segment of the event so that family and students can unmute and practice cheering for their graduate (graduates often wave to the family via webcam, do a celebration dance, etc.). The announcer then announces each graduate in turn, allowing time for a personalized slide (Figure 7) to appear on the screen that the hosting team has integrated into the presentation.

Figure 6. Announcement of Graduates Cue Slides



Figure 7. Examples of Personalized Slides





After the announcement of graduates, the emcee congratulates the graduates (Figure 8) and takes a moment to thank the planning team and other key contributors to the event (featured speaker, alumni foundation, prize donations, program director, etc.). The emcee then reveals that each graduate present will receive a gift—a free year of membership to the alumni association. The prize coordinator announces the winners, and the tech hosts push out the post-event survey through the chat box.

Figure 8. Congratulations Slide



Amid much fanfare and cheering, the emcee formally ends the event, and the social time commences the emcee encourages guests to stay after the event for social time, where graduates and their families can stay to say hello to their faculty members and chat. This post-event social time is often a high point for faculty, as it enables faculty to meet the loved ones that supported the student throughout their journey, from grandparents to grandchildren. After 20 minutes or so, the technical hosts close the event room and then push out the survey link again via email. Soon thereafter, the hosting team share their ideas to improve next year's event, either through a shared word document or in a follow-up meeting.

Post-event tasks include surveying the participants to obtain feedback, mailing the prizes to the winners, sending thank you notes to the speakers and internal partners, and analyzing the survey results. In the interest of continuous improvement, the host team reconvenes to review the survey results and decide on enhancements for the next eCelebration. The team also develops a short 3-5 minute highlights video of the event as a keepsake for participants and as a promotional piece to share with current students to encourage attendance in the future.

## Findings & Results

Participants and their families viewed the event as a resounding success. In all three years of the eCelebration, 100% of the post-event survey respondents indicated that they were satisfied or extremely satisfied with the



event, and 100% would recommend the event to future graduating students. Survey responses included feedback such as:

- “*This was the best graduation ever. Short, sweet, well-organized and I could attend in the comfort of my home. Great idea and very innovative.*”
- “*I just want to say thank you for being considerate enough to give us this.*”
- “*Enjoyed the event. Each professor truly cares about the program, school, and most importantly the students. I am honored to be a part of the program. Thank you, TROY!!!...*”
- “*It was wonderful! Thanks to everyone for all their hard work to make this possible and special!*”
- “*The program was awesome! Well planned and, despite being virtual, it was an excellent experience.*”

Grouping the survey responses over three years thematically, four distinct themes emerge. Participants often suggested improvements that would enhance the *symbolic* value of the event to make it approximate a traditional graduation ceremony even more closely. For example, participants suggested playing graduation-themed music during the announcement of graduates; they also suggested that faculty wear regalia such as caps and gowns. Students also recommended creating a pre-event countdown video featuring the Troy University campus, to reinforce sense of place for online learners that had never visited the campus.

A second distinct theme involved *real-time interaction* among participants. These suggestions led to the creation of an informal social time immediately following the event, so that graduates and their families could see and speak with faculty members informally after the event ended, as they would in a physical campus graduation. The respondents also recommended the prize contests to promote interaction.

The participants also called for *more student voice* rather than faculty voice, so the team removed a humorous segment on faculty’s home lives and replaced the segment with three featured student speakers. To further enhance student voice and student engagement, the hosting team created a custom slide for each student using their submitted family photos, quotations, and more, allowing students to effectively personalize their graduation slide (students often request a copy of this as a memento for their families).

A fourth distinct theme involved suggestions for *technical enhancements*, including a welcome session an hour before the event to allow guests to test their webcam and audio connections, real-time muting of participants that generate audio feedback, and more video and PowerPoint elements.

The hosting team incorporated each of the changes above in the subsequent year, allowing continual improvement in the event. Other survey-driven improvements involved the logistics of the event itself, and resulted in a shift of the event from Friday evening to Sunday afternoon, and condensing the event from an hour and a half to one hour.

### **Framework to Evaluate the Quality of Synchronous Virtual Graduations Events**

How can administrators assess potential quality of a virtual graduation? Utilizing the elements requested by the event participants as expressed demand, we can construct a framework to evaluate the quality of virtual graduations and virtual events in higher education (Figure 9). These components include: 1) high symbolic value of the event, particularly elements that mimic a traditional graduation; 2) real-time social interaction among participants (including audio and webcam interaction); 3) degree of student voice in the event; 4) robustness of technical environment; and 5) quality of the visual landscape and audioscape of the event. Examining the MPA eCelebration of Graduates, we can see multiple elements from the framework in play (Figure 10):

Figure 9.

Framework to Evaluate Quality of a Synchronous Virtual Graduation

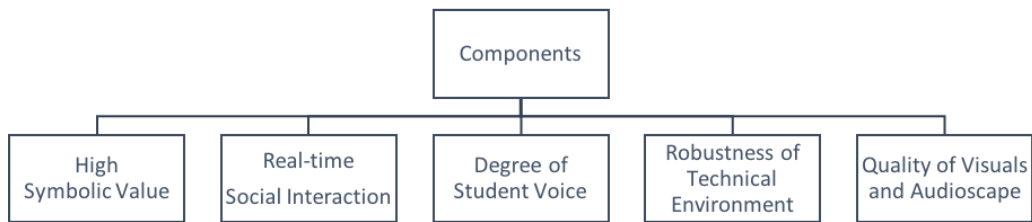


Figure 10.  
Framework Elements--Examples from the MPA eCelebration of Graduates

| High Symbolic Value                      | Real-time Social Interaction  | Degree of Student Voice  | Robust Technical Framework                          | Quality of Visuals and Audioscape                                   |
|--|---|--|---|---|
| Regalia for faculty                      | Full webcam and audio participation of guests, graduates, and faculty | Student Spotlights (student speakers)  | Instructions on how to attend                       | Pre-event countdown video   |
| Graduation-themed music                  | Emcee   | Announcement of Graduates  | Multiple avenues for troubleshooting audio access   | PowerPoint base for event   |
| Greetings from Dean and Department Chair | Pre-event conversation  | Personalized slide designed by each student                                  | Two faculty serving as technical hosts              | Celebration music before and after event                            |
| Keynote speaker                          | Post-event social time  | Ability to invite unlimited friends and family                               | In-event training (WebEx demo for all participants) | Soundscape diversity (cheering, conversation, prize contests, etc.) |
| Keepsake video                           | Interactive prize contests  | Voice in providing recommendations for next year's event (post-event survey) | Presenter technical tips + Dry run for speakers     | Real-time webcam for all speakers                                   |

Perhaps not surprisingly, the elements requested by the students echoed the concepts from the theoretical literature, including social presence, symbolic value, control of the environment, and challenge-based rewards (in this case, the prize contests).

## Conclusions, Limitations and Future Research

The eCelebration of Graduates proved to be a robust event that allows us to celebrate and interact with students and their families and friends in real-time, and in the very medium in which we teach (online). By constructing and hosting a fully realized event with speakers, interactive prize contests, personalized announcement of graduates, and parting gifts, we are able to honor our students appropriately. Now when students graduate, there are no more crickets. Instead, the crickets have been replaced with a powerful event that recognizes and celebrates the graduation milestone they worked so hard to earn.

However, the eCelebration is not without challenges. Considerable prototype and testing work was involved the first year. Though the event has become easier to run over time as the pieces are now developed (graphics, scripts, invitations, etc.), it can still be time-consuming, leading to concerns about long-term sustainability. Participation remains a concern, as only a minority of the total graduating population participate in the eCelebration. Future research should survey students that elected not to participate in order to identify any potential barriers to participation and ascertain their celebration preferences. Differential faculty participation is still a concern, with campus-based faculty being less likely to attend the event.

Technical learning curves can be particularly steep the first year. Thus, teams should give themselves a safe space to experiment and fail, and keep the event visibility low the first year or two (i.e., upper-level administrators can be invited in later years after the team has experience in running the event successfully). The technology limits the event soundscape at times, resulting in a lower quality of music when people are speaking. In addition, the necessity of muting everyone during parts of the event can lead to an overly sterile soundscape, lacking in the natural vocalizations that would be present in a traditional campus graduation event. This balance between protecting the soundscape from disturbance (e.g. from audio feedback or participants talking) and promoting natural audio interaction can be challenging and will continue to evolve.

Scalability is also a concern. Can the event be scaled up to a department level, or even university-wide? Hypothetically, it is possible to scale up the eCelebration if certain conditions exist, including a faculty or I.T. team experienced with large webinars, supportive departmental leadership, and faculty willing to add to their workloads. However, a larger event may reduce the quality of interaction between the faculty advisors in students if several degree programs celebrate their graduates at the same virtual event.

Future research and experimentation should be conducted to allow administrators and practitioners to optimize virtual graduations. Systematic surveys of higher education institutions would enable administrators and scholars to ascertain the extent and variations of virtual graduation, and generate additional candidates for best practices. Future studies should rigorously evaluate the effectiveness of different formats of virtual graduation as determined by participant satisfaction, ease of access, ability to optimize social presence and engagement, and other criteria. Focus groups with online learners would aid in determining the demand and interest in various types of graduation events. Additionally, though scholars understand the value of social presence in the classroom, more research is needed on the value of social presence in the degree program itself, in the interstitial spaces beyond the discrete units of the classroom, from virtual orientation to virtual graduation.

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