

Inclusion of Online Students in a Campus-Wide Research Symposium

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Abstract: This article communicates a methodology for and the benefits of including online student presentations in an on-campus research symposium named Scholar Day at A (SDA). The authors an outline of how SDA was structured to allow participation of online students. Both quantitative and qualitative feedback were collected from student participants. Data suggest students were satisfied with the events and felt SDA accomplished the primary goal: "To highlight the scholarly work of LSUA students." The method of including online students was refined each year to identify the most effective model of inclusion. The authors conclude that, while there are challenges to accommodating online student presentations, the benefits of their inclusion are meaningful both for the participating students and for the larger campus community.

Keywords: inclusion of online students, student research, campus symposium, online student engagement

Online learning has increased exponentially over the last decade as student demand and technological advancements have supported what could be the most extensive shift of teaching modality in the last two centuries (Kentnor, 2015). By 2015, over a third of all students and 86% of undergraduate students had taken at least one online course (Seaman et al, 2018). Although distance education has been around in various forms long before the internet, Sener (2012) contends it can be divided into two eras. The first era focused on providing access to students who otherwise could not attend college, and the second era (the current one) focuses on improving the quality of education as a whole. This paper argues for the inclusion of online students in high impact learning opportunities typically only available for on campus students and presents a methodology for including online student presentations in an on-campus research symposium named Scholar Day at A (SDA).

Although online delivery has increased in popularity, barriers remain for many degree seekers. Females tend to outperform males in both online enrollment and success (Vella et al., 2016; Cavanaugh, 2015; Hachey, 2015). Females are also more likely to feel a stronger sense of community online (Yang, 2015), though some data suggest the differences decrease with age (Vella, 2016). Nontraditional students have both a higher representation online and higher success rates than traditional students (Slover, 2018; Tanyel, 2014,). Underrepresented students still face constraints in online learning similar to those their face-to-face (FTF) counterparts experience. Among these constraints are the feeling that they have a harder time establishing academic credibility as serious students (Hunn, 2014; Love, 2008) and developing a sense of belonging (Tinto, 2012). In addition, online courses that require minimal participation and engagement correlate with lower grades and reduced persistence in online degrees (Banoor, 2018; Faulconer et al., 2018).

In 2008, George Kuh changed the academic landscape with his seminal work on High-Impact practices (HIPs). High-impact practices (First Year Experiences, Common Intellectual Experiences, Learning Communities, Writing-Intensive Courses, Collaborative Assignments and Projects,

Undergraduate Research, Diversity/Global Learning, Service Learning, Internships, Capstones, and ePortfolios) are specific learning strategies and experiences that increase student engagement, retention, and persistence to graduation (Sell, 2018; Kuh, 2008). The research on these practices has been prolific over the past 10 years. An undergraduate research symposium can highlight the work being done through high impact practices such as undergraduate research and capstone projects. Much of this research has focused on traditional on campus student population. In “High-Impact Practices in Online Learning: Research and Best Practices,” edited by Linder and Hays (2018), the need for additional research on the role HIPs have for online students is emphasized. Each chapter of this book explores strategies for transitioning these practices into the online learning environment.

Engaging online students in high-impact practices (HIPs) would help mitigate a number of the barriers they face. As many universities have implemented undergraduate research and senior capstones in their high-impact practices, there has been an increase in the number of on-campus undergraduate research symposiums being hosted. Events such as these can help students develop a sense of academic accomplishment and credibility, reduce isolation by promoting faculty and peer mentoring (Hunn, 2014), and provide social interaction, the last of which Hausmann (2007) demonstrates is particularly important for underrepresented students striving to develop a sense of belonging.

Scholar Day at A as a Model

Scholar Day at A (SDA) was hosted for the first time at Louisiana State University at Alexandria (LSUA) in April, 2019. LSUA is a regional liberal arts college recognized as the state representative in COPLAC (Council of Public Liberal Arts Colleges). Like many universities across the country, LSUA had begun offering several of its degrees in a fully online format. These online programs expanded the LSUA population beyond the immediate geographic area and helped broaden the diversity and perspective of the LSUA community. With online students representing almost 28% of the total student population, the Scholar Day planning committee felt it was important to find creative ways to include online students in this campus event. The online students were referred to as “Online Scholars.”

Developing a plan for inclusion of online students in a campus symposium

During the first three years of SDA, different methods of inclusion have been attempted. In this section of the paper, we will provide a detailed account of the methods that have been implemented each year in hopes that one of the methods might be helpful to readers in their contexts. The outcomes, benefits, and limitations of each method are discussed.

Year 1: Accommodations and Inclusion

Two types of presentations were offered for Online Scholars during SDA Year 1. In one format, students were asked to prepare a brief set of PowerPoint slides that corresponded to the sections of a poster and a 2- to 3-minute summary of their work. A computer lab on campus was reserved for this breakout session. LSUA’s IET Services equipped each computer with a webcam, a headphone splitter, and the Zoom software. Each computer had a label with the student's name and topic attached to the top. Upon entering the lab, attendees, and judges were given Scholar Day headphones to use and keep. Attendees then sat in front of each computer where the Online Scholars waited, live, to present their research.

The second presentation type available to the Online Scholars was an Oral Presentation. Online students presenting in this modality joined an oral presentation session via Zoom (a relatively new technology in 2019). In this format, Online Scholars presented alongside FTF peers and were judged on the same criteria. Each presenter was given 12 minutes to present and three minutes for questions. These students presented to a room with approximately 20 attendees and four judges.

Outcomes from Year 1

Eighty-nine students presented at SDA in 2019. Seven of these presenters were Online Scholars. Four online students presented in the short poster presentation format; three online students presented their oral presentations during a concurrent session. A breakdown of student participants is provided in Table 1. In the event feedback forms, faculty members whose students presented expressed appreciation for the opportunity afforded their students, and the students stated they were very pleased to be included in this type of event, which is typically reserved for face to face (FTF) students.

Table 1. Breakdown of student participants in SDA Year 1.

Department of Study	Presentation Type	Type of Student
Nursing (n = 22)	Poster Presentations (n = 22)	Online Scholar (n = 0)
	Oral Presentations (n = 0)	FTF (n = 22)
Psychology (n = 28)	Poster Presentations (n = 27)	Online Scholar (n = 1)
	Oral Presentations (n = 1)	FTF (n = 27)
Arts, English, Humanities (n = 15)	Poster Presentations (n = 0)	Online Scholar (n = 3)
	Oral Presentations (n = 13)	FTF (n = 12)
	Performance Presentation (n = 2)	
Biological Sciences (n = 10)	Poster Presentations (n = 5)	Online Scholar (n = 0)
	Oral Presentations (n = 5)	FTF (n = 10)
Criminal Justice (n = 3)	Poster Presentations (n = 1)	Online Scholar (n = 1)
	Oral Presentations (n = 2)	FTF (n = 2)
Business Administration (n = 5)	Poster Presentations (n = 2)	Online Scholar (n = 1)
	Oral Presentations (n = 5)	FTF (n = 4)
Math and Physical Science (n = 6)	Poster Presentation (n = 0)	Online Scholar (n = 0)
	Oral Presentation (n = 5)	FTF (n = 6)
	Visual Tech Demonstration (n = 1)	

Student presenters were given the opportunity to provide feedback on the event. The overall reactions to the event from student presenters were positive. The average ranking for overall satisfaction with the event was 4.3 out of 5 (n = 30). The objective of this event was to highlight the scholarly work of LSU students. When asked how well this objective was met, respondents indicated a 4.3 out of 5 (n = 30).

Two of the student quotes related to the inclusion of online students are shared here: “It was great to be able to present remotely and still feel a part of an on-campus activity;” “I thought the option to present online provided a valuable tool for many of the LSU students from out of town to participate in this. I feel like it was really inclusive and was representative of how things are in life after college in the advanced technological times we live in today.”

By the conclusion of this first SDA, it was clear our online students have a valued place in our academic community and that their ideas and research must be included in our scholarly activities and

conversations. Plans were made to broaden the inclusion of our Online Scholars in Year 2.

Year 2: Let's ALL go digital... Response to COVID-19

As preparations began for Scholar Day 2020, the inclusion of online students was a stated priority. The plan was to expand the opportunities for online scholars through better recruitment and advertising and to blend the concurrent presentations with online and FTF students in the same sessions. However, due to the COVID-19 pandemic, all students were asked to present online. Thus, all 80 participants presented via Zoom on May 1, 2020. No distinction was made between 100% online students and traditional FTF students. In this strange turn of events, we switched from trying to accommodate online students in an FTF event to trying to accommodate mostly FTF students in a fully online event. As a campus community, we joined the world of our online students. In doing so, we connected with our students in a new way. We embraced technology and closed the divide between our online and FTF students and faculty.

Organization and Implementation of the event

One of the first concerns in shifting the event fully online was determining how many students would still opt to participate in the event with these changes. Students were asked to complete an online application that included a brief abstract of their work and the identification of the faculty mentor (FM) who oversaw their work. When the application period closed three weeks prior to the event, FMs were asked to approve their students' applications. All students who had approval from their FMs were allowed to present. Eighty students from 10 different disciplines presented.

In order to accommodate the number of students, we created three concurrent sessions in five different Zoom rooms. This allowed for 15 sessions in total.

Students were given the option of presenting in one of two ways. The first option was the short option, which consisted of 3 minutes to present and 2 minutes for questions. This option was suggested for students presenting literature reviews. The second option was the long option, which consisted of a 10-minute presentation with 5 minutes for questions. Student group presentations were accommodated as needed. Each Zoom room was assigned a room moderator and co-moderator. The responsibilities of the moderator were as follows:

Moderator Tasks

- Start the Zoom conference about 5 minutes before the session start time.
- Assist the co-moderator in allowing people in via the waiting room if it is still enabled.
- Read script to introduce student presenters
- Give student one-minute warning and if needed cut off at the end of the time allotted.
- After Presentation read any questions to the presenter

Co-Moderator Tasks

- Keep all non-presenters muted.
- Field questions and refer people to IET if they are having technical issues.
- Post link to the "sign-in sheet" in the comments link when prompted

A script was provided for each moderator with the list of student presenters and directions for presenters and judges. A sample script is provided in Appendix 1.

Practice and Preparation

Many of the student participants, faculty mentors, room moderators, and judges expressed some apprehension about navigating the online event. In order to ease some of this anxiety, two training sessions were held. The first was held three weeks prior to the event and allowed the room moderators to practice accessing the various Zoom rooms. This training was critical because once the event launched, each room had to function independently, and the room moderators needed to feel confident in their ability to run the room.

The second training was open to all student presenters, faculty mentors, judges, and room moderators. This event took place four days prior to the event. Students were told they could drop in and make sure they felt comfortable with the technology. In particular, students were encouraged to practice accessing Zoom and sharing their screens to show their presentation slides. More than 70% of student presenters attended this training.

Website

The LSUA Scholar Day website was used as a launching pad for all directions and links for the event. This central location provided an easy way to communicate clearly with all parties involved in the event, including those wishing to attend the event. On the day of the event, the website contained the following information:

- Welcome and Overview of the event including schedule
- Sign in form (using Google Forms)
- Link to the opening Plenary address
- All Zoom room links with student names and room topics.
- An interactive PDF that allowed participants to move through the rooms more easily.
- Link to closing remarks and award ceremony.

After the event, this website was updated to include all of the event recordings, award winners, and press release.

Outcomes from Year 2

On the day of the event, 80 undergraduate students from LSUA presented their scholarly work. Of these students, 41 opted to present in the short format, and 32 opted to present in the longer format; in addition, one group of seven was granted extended time for their presentations. A breakdown of student presenters by discipline is provided in Figure 1.

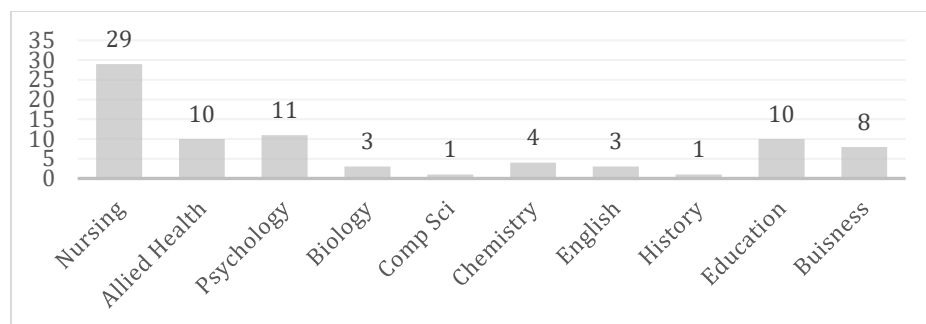


Figure 1: Number of student presentations by department of study.

Throughout the day, approximately 200 people logged onto the event. Forty-six individuals completed the event feedback form and indicated a 4.26 rating out of 5 ($n = 45$) on overall satisfaction with the event. The objective of this event was to highlight the scholarly work of LSUA students. When asked how well this objective was met, respondents indicated a 4.82 out of 5 ($n = 45$).

A few relevant comments shared on the feedback form by student presenters are included here:

Amid these uncertain times, the fact that we were able to get together and present our research is testament to our campus' commitment towards its students and their research.

I thought it was awesome to see everyone working together to make this event possible. It reminded me of my favorite thing about LSUA, it is a big family.

I learned a lot and was really excited to present my research. This experience will definitely help me one day in the future.

Year 3: Finding a Balance

When the university returned to campus in the Fall of 2020, many classes transitioned to a “HyFlex format.” This format has been used throughout the country as a way to provide live instruction with students in person and online. This format enabled LSUA students to be back in the classroom while maintaining social distance requirements: half of the students attended the lecture through Zoom while the other half was in the classroom. The Scholar Day committee decided to adapt this format for the third year of SDA. There were 109 presentations: 33 presented oral presentations and 75 presented posters. All oral and performance presentations were offered in the HyFlex format. Twenty-five of the oral presenters took advantage of the Zoom option, and 18 of these were enrolled in the 100% online programs (see Figure 2). Students enrolled in FTF programs selected the Zoom option for a number of reasons, particularly COVID-19 concerns.

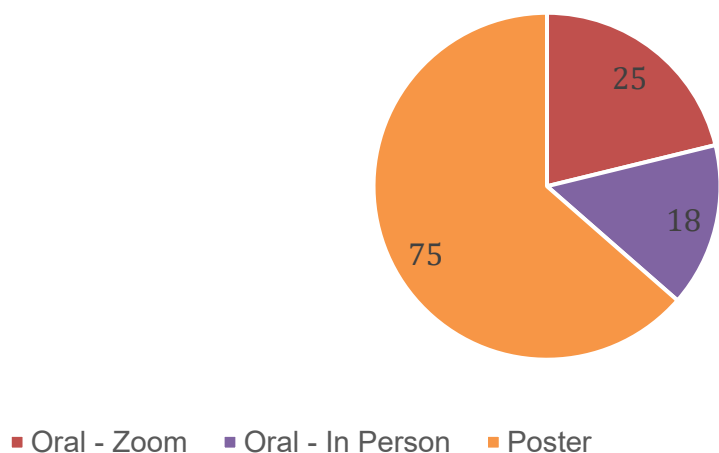


Figure 2: Presentation style at SDA Year 3.

Throughout the event, approximately 206 people completed the sign-in form. The average ranking for overall satisfaction with the event was 4.75 out of 5 ($n = 64$). The objective of this event

was to highlight the scholarly work of LSUA students. When asked how well this objective was met, respondents indicated a 4.78 out of 5 ($n = 64$). These ratings were the highest achieved so far. This may reflect better organization and more experience running this event.

Intentionality in Inclusion

In order to ensure that the Online Scholars felt included and valued in the event, several intentional actions were taken. These items are discussed below.

Awards

Students were selected to receive an award for outstanding poster presentation and outstanding oral presentation based on discipline. In order to remain consistent between students presenting online and FTF, judges were asked to utilize an electronic scoring rubric. This enabled students to be considered using the same criteria and also enabled judges to join the event live via Zoom. Online students are invited to join the award ceremony via Zoom and were then mailed their awards.

Scholar Day shirt

Due to a generous donation from the Endowed Chair in Business, each participant, judge, faculty mentor, and room moderator was given a Scholar Day shirt. This shirt was designed specifically for the event and mailed to each online scholar prior to the event so that participants could wear their shirts while presenting. Seeing students in person and online in the same shirts helped create a strong sense of community during the event.

Conclusion

There are pronounced benefits to including online students in on-campus events. When online students are given the opportunity and space to participate in on-campus events, they become part of the community. When they are given the opportunity and space to participate, their voices, perspectives, and work are represented. In addition, it challenges online faculty to require students to organize their work in a meaningful manner and to practice professional presentation skills. Hosting this digital event helped broaden the perspective of online students on the digital possibilities for presenting to online audiences. Some additional benefits to hosting a digital event were a reduced cost of poster printing for presentations, the ability to include judges from other states, and the opportunity to invite alumni to attend. Finally, this event created engagement during the pandemic-related lockdown by bringing the campus together for this celebratory event. Thus, the event helped improve campus community spirit and cohesivity.

Over the past three years, the world has learned the importance of being competent in navigating the digital world and being able to deliver professional presentations over online conferencing tools. At the same time, the online student population has exploded, giving many students a reasonable way to earn a degree while working full time or living in isolated communities. As colleges continue to expand their online course work and degrees, academia needs to close the gap between the online students and the FTF students. Downing and Hultz (2018) clearly state, “Enormous attention and resources have been devoted to supporting UR [undergraduate research] in traditional settings. However, consideration of Online Undergraduate Research Experiences in STEM (OURES) is largely a vacuum in terms of concept, practice, and strategies.” Downing and Hultz (2018) provide several ways to develop strategies to engage online students in meaningful research

opportunities; they emphasize that dissemination of research is essential to completing the research cycle and that this step is particularly important to online students who may be accommodated through a variety of methods, including online conferences. All students need to be given the opportunity to gain the benefits of presenting research and engaging in high impact practices available at their university. For universities that offer both online and traditional FTF degrees, thoughtful effort needs to be made to include online students. While there may be a temptation to host separate events for online students, such events eliminate an opportunity to build connection between these two student populations. Online students' inclusion not only enriches their student experience but also improves and expands the richness and diversity of the entire academic community.

Appendix

Appendix A. Sample script for room moderator. Student names are redacted for privacy.

Room 1: Session 1 Script

Moderator Host Script:

Hello and Welcome to Session 1! If you have not already done so, please complete the sign-in form located in the comments of the chat feature. If you cannot locate the sign in sheet, you can also locate this form on the Scholar Day Webpage.

Before we begin, please note this session will be recorded. I am pushing the record button now.

In this session we will have 5 students presenting their research from the Education Department. I will introduce each presenter and read the title of their presentation.

Presenters, please share your screen while I am introducing you. Please note, students you will have 5 minutes to present your work and 3 minutes to answer questions. I will give you a 1-minute warning.

Judges I will also be providing you with the participant id number which will go at the top of your judging form. All attendees will be muted throughout the presentations. If you have questions for the participants, please write them in the chat feature and we will read them to the presenter at the end of their presentation.

Let's begin. First, we have __Student Name_____ presenting their work entitled: Money and Markets. Judges, please note the participant ID number for your form is _____42_____.

First Name	Last Name	ID number	Title of Work
████	████	42	Money and Markets
████	████	43	Magnetism and Static Electricity
████	████	44	Magnet Science Unit: Student Growth Research and Analysis
████	████	47	Astronomy
████	████	60	The Impact of Group Work on Students' Performance

After Presentation

Thank you (████)! Here is your first question ...

Great job (████).

Transition to next presenter

Next, we have _____ presenting their work entitled _____.

Judges, please note the participant ID number for your form is _____.

Excellent job everyone! I am now turning off the recording. The next session begins at 10:30 in this same room. If you are presenting in the 10:30 session, please make sure your presentation is pulled up and ready to go.

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