



## Expanding the Reach of Undergraduate Research in the Arts and Humanities through Academic Posters

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In March 2020, when most institutions of higher education across the U.S. quickly moved classes online for the remainder of the term due to the COVID-19 pandemic, myriad forms of undergraduate research (UR) had to be reconfigured, and in some cases ended, within days. One of the first pivots we made as UR program administrators at Norwich University (NU) (Woodbury Tease) and Bridgewater State University (BSU) (Shanahan), respectively, will be familiar to most readers: rethinking with our colleagues our campuses' annual showcases of student scholarship. Like hundreds of other colleges and universities, NU and BSU host a UR campus symposium every April. Student-presenters share posters, give oral presentations, display artwork, or perform music, theater, or dance. Rather than canceling the event, NU, BSU, and — judging from dozens of posts on the Council on Undergraduate Research (CUR) Community Forum last spring — many other institutions in the country redesigned the events for online spaces.

Even though faculty and administrators were under extraordinary stress to overhaul in-person classes and programs for remote teaching and learning, in the midst of a global pandemic that hit our most vulnerable students hardest, we found overwhelming agreement on our campuses that the UR symposia should be made virtual rather than canceled. That is because mentors of UR who have seen their students present work in a campus showcase or taken students to deliver an oral or poster presentation at a local or national conference know about the transformative nature of the experience. With the cancellations of the 2020 National Conference on Undergraduate Research (NCUR) and numerous other conferences that our students had planned to attend (e.g., American Chemical Society, American Geophysical Union) last spring, we were especially determined to maintain a meaningful opportunity for undergraduate researchers to share their work with the campus community. BSU planned virtual symposia that included live and recorded oral presentations and performances along with academic posters and other visual representations of UR. NU created a one-stop virtual showcase of research posters and short (1-3 minute) “research snapshots” where students recorded videos providing overviews of their research, either to accompany a poster or to stand on their own.

Very fortunately, many of the positive aspects of campus symposia, including the significant step for students to learn how to communicate complex ideas in language and visual formats accessible to a general audience, and a few new benefits were realized in the virtual events. Our experiences mirrored others' reported by CUR, in terms of “surprising positive outcomes and learning” (Moris, 2020, July 14, para. 1) from “successful virtual experiences” (Moris, 2020, March 30, para. 1). The most promising aspect of both of our universities' virtual symposia was a larger audience than we typically have in person. The strong participation by presenters and audience members in our

universities' virtual UR celebrations exceeded our expectations. Analytics showed the reach of the events extended to members of the campus community who did not usually attend in-person UR symposia, as well as large numbers of family and friends beyond the university community. That high level of audience participation and engagement — measured through the number of views, questions, and comments on the conference site (i.e., Microsoft Sway for NU; ForagerOne Symposium for BSU) — was especially strong for asynchronous poster presentations. For example, BSU students' poster presentations were viewed twice as many times and received nearly twice as many questions and comments as did recorded oral presentations. Each poster had an average of 13 views and 2 questions/comments. The ten most-viewed presentations (which comprised broad disciplinary diversity, including Chemistry, Dance, and Social Work) were all posters. They received an average of 68 views each.

While student-presenters and faculty mentors alike lamented the virtual events' lack of live, in-person interaction (the majority of BSU student and faculty survey participants ranked "insufficient interaction with the audience" as the aspect they most disliked about online presentations), they overwhelmingly agreed that having a virtual event was preferable to canceling the symposium. The most positive feedback came from poster presenters and their mentors. Several students who presented posters noted that they had added the PDF of their poster to their LinkedIn site and recognized the visually appealing image of their poster on the conference page as a valuable, lasting artifact of their research. (At NU, the virtual showcase will remain available for viewing for a full year after the event.) Because poster presentations were multi-modal, comprising the visual representation of the poster itself plus a video recorded "poster talk," poster presentations offered flexibility for use beyond the conference itself.

Our students' experiences and feedback about their virtual presentations, especially the surprising benefits of posters for arts and humanities majors, added a compelling lens to our many years of work with students on posters (e.g., for Posters on the Hill in Washington, DC) in fields that do not typically utilize them. This article makes the case for teaching poster design and presentation to all students participating in undergraduate research, but with particular emphasis on undergraduate researchers in the arts and humanities. We argue that posters, a form of dissemination traditionally associated with quantitative and empirical research, can also be effective modes for students in the arts and humanities to enhance their learning and engage larger, more disciplinarily diverse audiences in their scholarship in both online and in-person settings.

### **Why Campus Symposia Survived Pandemic Closures**

#### **Students Benefit from Presenting UR**

Scholars studying the benefits of UR have demonstrated the value to students of presenting their research to an audience of peers, members of the campus or broader community, and/or experts in their fields. Students' self-reported gains have included increased interest in their academic discipline, stronger motivation to continue the research and do their best work, improved understanding of the topic area, and better communication skills (Hill & Walkington, 2016; Kneale, et al., 2016; Mabrouk, 2009; Mekolichick & Bellamy, 2012; Potter, et al., 2010; Spronken-Smith et al., 2013; Walkington, 2014). Students in the natural and physical sciences, the disciplines longest associated with UR, have expressed growing confidence in conducting research and developing a professional identity as a scientist after presenting their work at conferences (Hunter, et al., 2007; Laursen, et al., 2010; Seymour, et al., 2004). Multidisciplinary studies have indicated, however, that the benefits for students to share their research apply across academic disciplines (Kneale, et al., 2016; Spronken-Smith, et al., 2013). As Chick (2013) explained, presenting research can bring about a powerful shift in students in any field of study, as they transform from "recipients or consumers" of information to "creators, producers, or performers of knowledge, understanding, interpretations, and conclusions" (para. 3). Represented in those many studies are countless stories

of students who developed confidence and skills through engaging with audiences about their discoveries, creations, or new understandings. It is important to acknowledge that the literature we cite about UR presentations examined participation in in-person conferences only. Individual campus data from Spring 2020 virtual symposia and, especially, larger sets of data from upcoming Spring 2021 online conferences will offer valuable comparisons between students' experiences with in-person and virtual presentations.

### Dissemination/Circulation is Integral to Undergraduate Research

Presenting the results of their work is not only important to students' development as scholars, it is also essential to "completing the research cycle" and understanding the shared purpose of scholarship (Spronken-Smith, et al., 2013; Walkington, 2015). Dissemination, or *circulation*, a term suggested by Downs, et al. (2020) to imply reciprocal exchanges and the sharing of and adding to ideas, is one of the defining aspects of UR that distinguishes it as a high-impact practice (Hensel, 2012; Osborn & Karukstis, 2009). Traditional essay assignments, "research training," or other early stages of acquiring research-related techniques are important to student learning but may not result in new knowledge that is shareable beyond the classroom. Such assignments are therefore not considered *undergraduate research*, a designation that depends on dissemination (Crawford & Shanahan, 2014). Elaborating on the Boyer Commission's (1998) statement that "Dissemination of results is an essential and integral part of the research process" for students (p. 24), Spronken-Smith, et al. (2013) explained that through activities such as presenting and publishing, students examine the implications of their findings beyond the conclusion of their work on the project. Spronken-Smith, et al. (2013) found that students particularly benefited from exposure to professional practices and increased autonomy as a result of presenting or publishing. Underscoring the critical importance of dissemination in any UR process, Walkington (2015) outlined 17 means of sharing student work with campus, disciplinary, online, and/or regional communities, from traditional academic conferences to client presentations, websites, and podcasts.

### Presentation Opportunities have Expanded with the Growth of UR

Opportunities for undergraduates to disseminate or circulate their scholarly work have expanded significantly in the last two decades in both conventional academic venues and the countless multimedia sites afforded through digital technology. We predict that the lower cost and greater accessibility of virtual conferences will give rise to even faster growth this year. Most of the nearly 700 Council on Undergraduate Research (CUR) member institutions already host annual UR campus symposia, and over 200 publish UR journals (Council on Undergraduate Research, 2020). Online technology makes both of those enterprises less expensive and no longer dependent on physical space constraints and all that goes along with them, from poster boards to catering and parking. Dozens of professional organizations now include student-presenters in their annual meetings (Council on Undergraduate Research, 2020), and some that already moved online have reported a surge in student abstract submissions (e.g., Sigma Xi May 2020 and November 2020 conferences). NCUR, which has provided a platform for student presentations since 1987, has grown nearly ten times in size since its beginnings, to approximately 4,000 presenters in 2019 (Council on Undergraduate Research, 2020; Young & Nelson, 2010). It is notable that while NCUR and many other large academic conferences scheduled in Spring 2020 had to be canceled, they are on track for virtual events in Spring 2021.

Increased numbers of students presenting scholarly work reflect the growth and expansion of UR opportunities in the U.S. and around the world, especially since the Boyer Commission's (1998) call for research opportunities for all students and Kuh's (2008) research on the benefits of ten high-impact educational practices, which identified UR as the most significant among them. Much of that growth has come from the extension of UR from scientific laboratory and field research to the scholarly work of every academic discipline (Haeger, et al., 2020; Malachowski, 2019; Shanahan, et

al., 2015). Growth in arts and humanities UR has been particularly notable since 2008, when the CUR Division of Arts and Humanities was founded. Two CUR books (Klos, et al., 2011; Crawford, et al., 2014) and several articles on UR in the arts and humanities (e.g., the *CUR Quarterly* 2009 special issue dedicated to arts and humanities UR; Grobman & Kinkead, 2010; Levenson, 2010) have outlined UR models and approaches, including dissemination or circulation, in those fields of study.

### **Presentation Formats Reflect Disciplinary Modes of Scholarship**

As UR has spread well beyond the sciences, its forms and methods have also diversified — and appropriately so. As Osborn and Karukstis (2009) explained, the scholarly work of students ought to resemble what their faculty mentors do, in terms of methods, formats, techniques, and means of dissemination. Quite logically, therefore, poster presentations are common among undergraduate researchers in the natural, physical, and social sciences; oral presentations are usually preferred in the humanities; and performances and exhibits are prevalent means of sharing scholarly work by those majoring in the performing and visual arts.

There are epistemological and pedagogical reasons for those traditions. For example, poster sessions were found to “more accurately reflect the realities of a science career” than did other formats for students in the sciences (Deonandan, et al., 2013, p. 183). The process of designing and presenting posters has helped inform science students’ career paths, increased their knowledge of their own topic area and the overall discipline, and improved their communication and collaboration skills (Deonandan, et al., 2013; Laursen, et al., 2010). Faculty mentors in the humanities, on the other hand, have emphasized the value of oral presentations for boosting students’ sense of ownership of their ideas and work, a key development in students becoming scholars. As explained by the coordinator of a U.S.-Canada UR conference comprised of oral presentations, “The oral performance of one’s arguments is central to the mastery of knowledge. [...] Teaching undergraduates to engage in that model of discourse also teaches them how to articulate, defend, and own their ideas” (A. Holman, email to Shanahan, October 19, 2020). And in the performing arts, the Performance as Research movement has maintained that the very act of performing one’s scholarly work generates knowledge, represents disciplinary methods, and creates an impact for the audience and the discipline (Arlander, et al., 2017).

### **Making Undergraduate Research Visible through Posters**

As English professors and administrators leading robust UR programs, we have seen first-hand the advantages of students presenting in various formats. We have modeled our campus events on NCUR, which has always offered an array of presentation formats. Supported by this combined experience and by the literature about UR poster presentations, we have found that undergraduate researchers in the arts and humanities can achieve different aims through posters than through oral presentations and that working with students to determine how and what to disseminate in different modalities has been rewarding for them. Posters “operate on multiple levels” that are distinct from oral presentations (Hess, et al., 2013, sec. 2). As visual representations of knowledge, posters succinctly inform audiences of the research findings, prompt conversations between presenters and audience members, and promote the presenter’s work, among other purposes (Hess, et al., 2013).

In our institutional roles, we encourage organizers of student conferences and campus showcases to create space for oral presentations, performances, and exhibits so that undergraduate researchers in the arts and humanities have opportunities to share their work in some depth and in disciplinarily appropriate ways. However, experience has shown that attendance in sessions where arts and humanities research is presented in traditional formats, both in-person and online, is significantly lower than at poster sessions, likely because of the perceived specialized nature of oral presentations. Additionally, oral presentations are rarely accessible for people with hearing

impairments, whereas multimodal presentations in poster sessions include both the text of the posters and the presenters' oral expression.

To engage broader audiences in UR findings, we and our colleagues have experimented with popular variations on the panel talk in our campus symposia and classrooms (e.g., Pecha Kucha slideshows, three-minute theses), but those options have also been limited in attendance and are still inaccessible for people with hearing impairments except when sign-language interpreters participate. In our varied attempts to identify productive vehicles for advancing the life of student research in the arts and humanities beyond its usual locations, we had, even pre-pandemic, come to an appreciation for the mobility, accessibility, and durability of the academic poster, in all its evolving forms. We have observed what Chick (2013) did about the adaptability of posters to “reflect the meaning-making in the humanities,” and the ways in which poster presentations prompt “students to think not only about their ideas but also how they form their ideas” (para. 2 of Poster Presentations section). Based on students' successful experiences with posters as modes of dissemination, especially in virtual conference settings, we seek to redirect resistance from our colleagues in the arts and humanities to that practice.

Posters are a valuable complement to various modes of dissemination and circulation of arts and humanities UR. Two standing-room-only presentations on posters in the arts and humanities at CUR Biennial Conferences (Iacullo-Bird, et al., 2018; Shanahan, 2012) and the conversations that followed those sessions indicated that many UR program leaders and arts and humanities UR mentors are seeking guidance on this topic. Questions about posters in the arts and humanities have also come up on the CUR Community forum in dozens of discussions about making UR symposia inclusive of all disciplines. UR programs and events aim to (a) help students see themselves as part of a broader research community, (b) provide students with more visibility across that community, and (c) create opportunities for collaboration and cross-disciplinary conversation, all of which can be advanced in measurable ways with poster presentations.

### **Arts and Humanities Undergraduate Researchers' Openness to Posters**

We make the case for posters while fully acknowledging that the oral presentations, performances, and exhibits more traditionally utilized by arts and humanities scholars are valuable modes of dissemination that should continue to be made available for deep and immersive engagement with the work, especially for discipline-specific audiences. That said, broadening the ways in which arts and humanities students disseminate research to include posters and other forms of visual representation has been meaningful for our students, as well as for us as UR mentors and administrators. Presenting posters has contributed to our students' growth as scholars and has presented new opportunities for collaboration and celebration of their work. That is why, for a variety of reasons — from the constraints of a particular event, to our pedagogical decisions to expand students' presentation skills, to students' own interest in designing posters — we had both adopted the practice and adapted the format of posters for UR in the arts and humanities on our campuses and for regional, national, and international academic meetings. The move to online conferences this year has made the value of posters even more evident.

Our students who were “early adopters” of poster presentations in the humanities were rewarded for their efforts with high-profile visibility of their research. They especially enjoyed interacting with audience members outside their disciplines — something they had not experienced in oral presentations. Shanahan's student Carina Woodward was among the first humanities majors to present at Minnesota's Scholars at the Capitol poster event in 2008 and was the only non-STEM major in that year. While much of the research presented that day was beyond the expertise of the mostly non-scientist state legislators and staffers, Woodward's poster on her analysis of Gabriel García Márquez's *One Hundred Years of Solitude* drew crowds throughout the session, as many



members of the audience had either read the novel or knew of the Nobel laureate's work. Our humanities students who have presented posters in the 12 years since then have reported similarly exciting experiences of getting to discuss their work, in person, through video, or in written online comments, in cross-disciplinary ways with new audiences.

Based on successful results from our first few humanities UR posters years ago, the two of us set out to help more undergraduate researchers in the arts and humanities design posters that enhance dissemination of their work. For example, in Woodbury Tease's Senior Seminar course for the English major, students share their culminating research project in a defense presented in front of an audience of peers, English Program faculty, and NU community members in other fields. The assignment requires them also to create a poster and apply to present it at NU's annual Celebration of Excellence in Undergraduate Research and Creative Activity poster session, which this year's cohort did virtually in Spring 2020. Including the poster in the assignment has invited students to experiment with different ways to represent their results visually and has allowed English Program faculty to learn what they respond to in the design process. That experience echoed what Manarin (2016) discovered with regard to posters in the literature classroom:

I recognize a key *conceptual shift* from seeing research as an exercise in finding and using information to *seeing research as the creation and communication of knowledge*. Research posters can help make this shift visible for instructors, for students, and perhaps for larger communities (p. 1; emphasis added).

Reflecting on her experience designing and presenting her poster for Senior Seminar, one student observed the conceptual shift that Manarin described, stating:

[It is] a fast-paced, interactive medium. [...] I think [designing the poster] allows people to have opportunities for creativity and growth because of problem-solving skills that need to be used when consolidating research. It also is an area that elicits growth, specifically in students within the English major because we are not often expected to present information in a medium other than essays or oral presentations (A. Roberts, email to Woodbury Tease, June 27, 2020).

As our students have evinced, posters facilitate efficient sharing of results and one-on-one interfacing with audience members and allow for the creation of "interpretive commun[ities]" (Manarin, 2016, p.12) in a variety of venues, from large international conferences to campus symposia and even the more intimate spaces of our in-person or online classrooms.

We encourage students in the arts and humanities to acquire experience producing academic posters because the practice of designing and presenting posters strikingly resembles the exercises associated with majoring in these fields. For example, Chick (2013) discussed how students in literature classes might represent on a poster their close reading of a passage of text. As do other researchers, we highly value what students report achieving through poster presentations: "concise writing for generic audiences," the "confidence to communicate research," and the benefit of getting "critical feedback to improve [their] own skills" (Kneale et al., 2016, p. 9). Undergraduate poster presenters have told researchers they appreciated "immediate in-depth dialogic feedback" from audience members, and they noted that poster sessions offer "spaces for conversation, interaction and reflection, a context for learning that matches the culture of professional workspaces" (Walkington, 2015, p. 28). Such descriptions of what students learned from participating in poster sessions have resonated with us as humanities professors. Our pedagogies and assignments also emphasize oral and written communication, reflection on learning, and dialogic feedback.

Finally, and perhaps most importantly, we value poster sessions for their facilitation of crossing disciplinary boundaries and learning about a diverse sampling of research, especially within a short timeframe and where space is limited. At CUR's prestigious Posters on the Hill showcase in Washington, DC, various U.S. states' Posters at the Capitol events, Harvard University's National Collegiate Research Conference, and Posters in Parliament in the U.K., posters are the only presentation medium. Organizers of the statewide Commonwealth Undergraduate Research Conference in Massachusetts, which, like most UR conferences, has been rapidly expanding its number of presenters in recent years, announced in 2019 that it would feature a smaller percentage of oral presentations than it had previously in order to accommodate the growth in interest in the event; abstract reviewers are asked to redirect hundreds of students from their requests for oral presentations to posters. That will be true for the 2021 virtual conference too. As opportunities for arts and humanities scholars to present research in traditional oral or performance-based formats wanes for many large-scale and virtual conferences, we consider it important to respond to the call to disseminate arts and humanities scholarship via posters, especially as that work is often underrepresented in these venues, and consequently may be perceived as less valuable or relevant to current questions and problems.

### **Responding to the Resistance to Posters**

Despite changes to poster formats that make poster presentations more prevalent in academic conferences, and despite the many opportunities and advantages unique to disseminating research in poster sessions, posters remain an uncommon format for sharing scholarship, including by undergraduates, in the arts and humanities. Resistance to the poster format often stems from the misconception that posters are only advantageous or effective for scientific researchers, and that arts and humanities scholarship does not translate well into the format.

Scholarship in the arts and humanities deals with knowledge and evidence that are not easily transferable to charts, tables, graphs, or other visual representations. The two-dimensional space of a poster can seem particularly unfriendly and ill-suited to scholars in the studio and performing arts, where the experience of seeing, hearing, and/or experiencing the work "live" may be considered integral to understanding its value. It is unsurprising, then, given the nature of their work, that arts and humanities scholars express resistance to creating posters and gravitate instead to oral presentations or performances when given the choice.

Along with those practical concerns, we suspect that many artists and humanists resist posters (for their own as well as for their students' work) as a response to the contemporary "crisis of the humanities" in higher education, as it has been cast in *The New York Times*, *The Chronicle of Higher Education*, *The Atlantic*, and a host of other periodicals and academic books (e.g., Jay, 2014) in the last decade. Several state and national government leaders in the U.S. who have criticized arts and humanities majors as impractical and not contributing to innovation and economic advancement have also likely contributed to the devaluing of those disciplines and the decline in numbers of majors in the arts and humanities in relation to those in STEM and professional fields. The results are felt in budget cuts and elimination of programs.

Examining the historical role of the humanities in higher education in this context, *The Atlantic's* Benjamin Schmidt (2018) argued that "the decisions and rhetoric around the humanities now have especial importance, as journals, libraries, and universities have to make new sets of decisions around what shape the new humanities will take" (para. 20). This suggestion holds even more relevance in 2020, at a heightened moment of anxiety in higher education when administrators, faculty, and students alike are trying to contend with an unprecedented set of intersecting public health, racial, political, and economic crises. We believe this moment presents opportunities for arts and humanities scholars to be at the forefront of efforts to document and engage complex crises

through research, collaboration, and community engagement and to disseminate that work in spaces where it can have the broadest impact. Poster sessions, whether in person or virtual, are some of those academic spaces.

The anxiety felt by arts and humanities scholars is palpable in our desire to defend our work and preserve some of the traditional forms of its dissemination. The defense of our disciplines plausibly includes preserving the means in which we communicate our ideas: oral presentations, long-form essays, gallery exhibitions, and live performances. One of our colleagues in the humanities summed up that position when she insisted that her students read their eight-page papers aloud, word-for-word, to the audience at a campus symposium, saying, “When the Chemistry students have to give oral presentations without any slides, I’ll consider asking humanities majors to present posters.” Proving the value of arts and humanities scholarship in a climate in which their disciplinary worth and practicality are increasingly questioned understandably sparks suspicion of suggestions that we and our students present scholarly work in the STEM-friendly format of the poster.

Despite such resistance to posters and other changes to our disciplines, recent trends in academia have mobilized efforts in arts and humanities organizations to extend the reach of scholarship through interdisciplinary collaborations, public engagement, and new formats. The National Endowment for the Humanities established the Humanities Connections program in 2016 to “foster productive partnerships among humanities faculty and their counterparts in the social and natural sciences” (para. 1). The Modern Language Association piloted “The Humanities in Five” at its 2019 convention, in a session that challenged scholars to present their research in language accessible to the general public in just five minutes. These opportunities demonstrate an increased investment in and attention to the value of sharing humanities scholarship with broader audiences in more accessible formats, a goal that we argue can also be achieved through research posters.

### **New Needs, New Formats: Posters During a Pandemic**

In the upheaval of the current coronavirus pandemic and intersecting racial, economic, and social crises, artists and humanists are being sought out to collaborate with scholars in STEM, social science, and business fields in creating productive solutions to global issues, making their work visibly more integral and relevant to the world outside of the university. Much like the *medical humanities*, which emerged to “rehumanize” physicians through the teaching and learning of humanities methods and content (e.g., close reading of poetry, fiction, and visual art), global health education in the age of COVID-19 is utilizing arts and humanities curricula and pedagogies, including theatre and design, to bring together humanists, health professionals, artists, and scientists for collaborative solutions (Stewart, 2020; Ostherr, 2019). Teresa Mangum (2020) from the University of Iowa argued that arts and humanities scholars not only bring historical and cultural perspectives to complex problems, but also “intersectional approaches” that are attentive to the disproportionate impacts of COVID-19 on BIPOC (Black, Indigenous, and People of Color) Americans. As Mangum put it, humanists and artists bring “valuable awareness of nuance in language, communication style, public narratives, [and] ways to move and persuade the public to commit to collective, altruistic action” (Mangum, 2020, as cited in Reisz, 2020, para. 8).

Speaking in similar ways to emerging opportunities for research and collaboration in these difficult times, President of the American Council of Learned Societies Joy Connolly issued a call to action for arts and humanities scholars. In a virtual forum on the topic of “Faculty Resilience and the Coronavirus” hosted by *The Chronicle of Higher Education*, Connolly spoke of an opportunity for artists and humanists to “seize the moment,” stating that “we cannot solve the problems ahead of us without understanding how humans communicate with each other, our histories, the ways we think, [and] why we believe what we believe” (Connolly, 2020, as cited in Wilhelm, et al., 2020). By making their research more visible to public and interdisciplinary audiences in large-scale venues,



which often include poster sessions and virtual symposia, arts and humanities scholars and undergraduate researchers can demonstrate the profound value and relevance of their disciplines in everyday life, work, and citizenship.

The unprecedented, practically universal pivot from in-person meetings to virtual showcases and online conferences in 2020 gave a particular timeliness to visual representations of UR. In our discussions with UR program coordinators around the country, we find ourselves in the majority, considering making virtual presentation spaces permanent, either on their own or as a complement to in-person events. In addition to the cost savings, easing of demands on campus space, and wider participation associated with virtual symposia, we appreciate having for our programs and for individual student use, portable archives that promote, reward, and recruit undergraduate researchers.

Virtual conferences and exhibitions privilege posters over oral presentations due to posters' visual components and accessibility to diverse audiences. We see teaching students how to present posters as a particularly timely need in today's uncertain climate, as one of the many lasting impacts of the COVID-19 pandemic on higher education practices will likely be more virtual conferences, or at least the addition of virtual components to on-site and in-person events. The lingering and potentially resurgent risks to public health associated with travel and large gatherings of people—not to mention the high costs of travel, lodging, and conference hospitality — necessitate online or hybrid meetings and symposia for equitable, safe, and accessible attendance. Given this shifting landscape for UR presentations, we now provide some practical insights and advice for arts and humanities scholars and students who want to experiment with the poster as an additional mode of dissemination for their research.

### **How to Get Started with Poster Design in Arts and Humanities UR**

It has been our experience as UR program directors and mentors of student-researchers in the humanities that when confronted with the academic poster, not only our arts and humanities faculty colleagues but also our students feel at a loss. They have been skeptical that a poster can accurately articulate the significance of their work. Humanities majors wonder how to communicate research methods and results visually when their work largely involves the “hidden” scholarly work of analyzing texts. Artists and performers struggle to convey artistic creations (e.g., visual art, composition, or performance) through static, two-dimensional artifacts.

Arts and humanities majors who do attempt the poster grapple with suitable visual modes of representation of their research. They often design posters that mirror the written work, using long blocks of text alongside images that do little to illuminate the findings. For example, one of our students examining the effects of shellshock on the families of soldiers diagnosed during World War I through the lens of Rebecca West's novel *Return of the Soldier* chose to use two images on their poster — a photograph of West and an image of the book cover — with the abstract sandwiched between them. To be fair, we frequently see such practices in oral presentations in our shared field of Literature when slides are utilized: the obligatory photo of the book jacket and a photo of the author, often without other means of engaging the audience visually. As an NU English minor explained, resistance to posters is related to a lack of understanding of the genre:

I had a hard time fitting all the key components of my presentation [onto the poster]. The first time I put way too much on my poster and had to revise it. [...] I felt that everything was important and should have been on the poster [...]. I learned that the poster is supposed to be the attention grabber (C. Khoury, email to Woodbury Tease, June 17, 2020).

Like that student, many of our students have seen the poster as an extension of their research paper, rather than as a distinct genre or another way to tell the story of their research.

Both of us started addressing these challenges several years ago through our students' acceptances at Posters on the Hill and a state Posters at the Capitol event. In order to mentor our students through the process of designing and presenting posters and in the absence of any training in poster design, we turned, as academics do, to research. We located some useful models online and sought advice from colleagues in design fields, adapted poster templates, evaluated dozens of examples, and, mostly, put our heads together with our students to rethink their research papers for dissemination in a new format.

We found that engaging the poster as its own genre — rather than as another tool or product of research — invited our students to be creative and envision a new life, as well as a new audience, for their scholarly work. Beginning with the fundamental principle that an academic poster is a distinct genre has helped our students move away from the standard pitfalls of text decorated with a few staple images and start experimenting with format and design elements that express their findings in clear and accessible ways.

### **The Action of the Poster Genre**

As objects of design, posters require planning and presentation of ideas that differ greatly from other genres of scholarly dissemination, such as research essays and oral presentations. Genre theorist Carolyn R. Miller (1984) wrote that “a rhetorically sound definition of genre must be centered not on the substance or the form of discourse, but on the *action* it is used to accomplish” (p. 151; emphasis added). We have found that conceptualizing posters as a genre, distinct from other types of research presentations and aimed toward unique actions, resonates well with arts and humanities majors. Perhaps due to their academic experiences with myriad forms of texts and media, or maybe just because they are immersed in richly visual digital environments, our students have readily grasped that creating a poster is fundamentally different from writing a paper or giving a talk when we shift to a discussion of genre expectations.

Like any other text or discourse — in any genre or rhetorical situation — research posters are responding in particular ways to audiences, contexts, and purposes. The function performed by academic posters is visual communication of scholarly work, through text, images, graphs, and figures. As Edward Tufte (1990) wrote in *Envisioning Information*, “To envision information – and what bright and splendid visions can result – is to work at the intersection of image, word, number, art” (p. 9). That visualization of information in text and images in a two-dimensional artifact is what most obviously distinguishes the poster genre from most other forms of research dissemination.

As Miller (1984) went on to explain, though, different genres do not simply appear different from one another. There are also differentiations in the *intended actions* associated with each genre. A poster's actions occur both in the moment of the presentation, in the one-on-one interaction between presenter and audience, and in the lasting artifact of the poster that may be read in digital or print form long after the live presentation (or even before it). Those forms of reciprocal communication between presenter and audience are distinct to posters; and the understanding gleaned by audience members from a poster presentation is different from that grasped by reading a paper, for example.

One of the actions of the poster genre is speaking to multiple audiences at once, even in the same place and time: those who glimpse the poster from a distance, seeing which titles and large-scale images and designs draw them in; the casual observers who peruse posters as they walk down the aisle, pausing to read subheadings and data charts to get a cursory sense of key findings; the

audience members who attend to the poster for minutes rather than seconds, reading sections of text, analyzing elements, and engaging with the presenter by asking a question; and, depending on the situation, the engrossed experts who need and want to understand the information, so they ask informed questions, scrutinize the data, and may even follow up later with additional thoughts and questions.

The genre of the poster is, to borrow another term from Miller (2015), a *mediation* between the scholar's purpose and audience's needs (p. 57). The text of a poster, its design and visual rhetoric, and the presentation and discussion of the poster and the research, all work together to convey the scholar's purpose in a manner that makes meaning for the audience. A poster session's audience, even when comprised of people with vastly different degrees of expertise in the topic, seeks information in a way that is different from a panel presentation's audience. And when audiences opt for a gallery talk or lecture-recital, they expect yet other types and formats of communication and meaning. In other words, the poster genre employs visual representation in unique means of mediation between scholar and audience.

### **Considering Poster Design Using Design Thinking**

Aron Temkin, a licensed architect, professor of architectural design and Dean of the College of Professional Schools at NU, recommended answering the following questions before drafting a poster: What is the main idea that I want to communicate to my audience? What is the most relatable way to communicate my thesis and/or research findings through visual images and design? How can I draw viewers in through poster design? How do I design a poster that is easy to navigate? In other words, how can I help the viewer know what to look at? (personal interview with Woodbury Tease, July 31, 2019). As Temkin's questions highlight, a poster is an object of design. As such, the success of a poster is significantly enhanced by design thinking on the part of the creator/presenter. The Hasso-Plattner Institute of Design at Stanford (known as the "d.school") has laid out six iterative and recursive stages of design thinking that have given structure to our work with undergraduate poster-presenters: Empathize, Define, Ideate, Prototype, Test, and Implement (d. school, n.d.). The fundamental stage of *empathizing* has been revolutionary in our students' poster-design processes. It is also precisely where Temkin's initial questions are situated: empathy with the audience.

Beginning with empathy means that the design emerges from the outset from the needs, interests, questions, and concerns of the audience. Such a starting place entirely shifts the researcher's approach. Rather than beginning with what one knows and wants to convey, a design-thinking presenter begins with the audience's concerns. With empathy as the foundation, a presenter becomes less self-conscious — less worried about proving one's expertise or impressing the audience — and freer to select content, format, and style that align with audience concerns and curiosity. Design thinking's foundation in empathy means meeting "end users" (or members of the audience, in this case) "where they're at," very much like effective teachers design learning experiences suited to student needs (d. school, n.d., p. 2). We see an immediate change in affect as students release their tight hold on content and the underlying anxiety about proving their command of information.

Asking our students to start the design of their posters with empathy for the audience resonates with us as English professors who have each taught many semesters of writing courses in which we explained to students the importance of audience when planning any kind of writing. The primacy of considering audience in determining everything from the purpose of the piece to its style, format, length, degree of formality, vocabulary and jargon, and the sites in which it would be read, was already second nature to us as educators and research mentors. In encouraging students to connect to potential audiences before engaging in any other poster-design work — for example, by brainstorming and researching what various audience members might need from the presentation —

we align the process of dissemination or circulation of scholarship by poster with more familiar forms of sharing their work in writing and speaking.

### **Making the Case for the Poster for Arts and Humanities UR**

We have witnessed a growing diversity of presentation formats across academic disciplines, within and beyond traditional broad categories, that has led us to consider the value of encouraging all of our undergraduates to experiment with different forms of dissemination of their research. As Walkington (2015) suggested, “there is a need to create a range of opportunities for disseminating research to meet the needs of a broad student population with differences in disciplines, backgrounds, types of institution and levels of infrastructural support” (p. 17). Recent trends in disseminating academic research encourage experimenting with and/or updating traditional modes of presentation for broader impact and accessibility. Visme designs, Microsoft Sway creations, and “Posters 2.0” (Greenfieldboyce, 2019) are recent innovations that have upended the conventional three-column poster design, allowing presenters to create more accessible, visually appealing, and interactive presentations. Oral presentations now include Pecha Kucha slideshows, TED-style talks, three-minute theses, and departmental defenses in addition to standard panel talks common to professional conferences. And visual and performing arts majors infuse their scholarly showcases with a mixture of media to bring their work to new audiences, live and in-person as well as through video and in virtual spaces. While undergraduate research in the arts and humanities does not obviously lend itself to fixed, two-dimensional, visual representations, through some reconsideration of the genre of the academic poster and through principles of design thinking, we position posters as a legitimate and productive format for dissemination of our own and our students’ work that maintains its value and relevance even as these new forms of presentation are introduced and utilized.

Perhaps more convincingly for our historical moment in 2020, as we look toward the uncertain future of UR, we return to posters with a renewed appreciation for their versatility, mobility, and digestibility. Increased participation in poster sessions by students in the arts and humanities will not only make their work more visible to the broader academic community, but it will also demonstrate how arts and humanities scholarship complements and supports the scientific, biological, economic, political, and sociological conversations taking place at this unprecedented time of intersecting crises: a global pandemic, high unemployment and economic downturn, and a historic, international movement against systemic racist violence and discrimination. Creating more opportunities for collaboration and discourse across disciplines is vital to developing productive solutions, and it is crucial that arts and humanities UR be represented in interdisciplinary locations. By rethinking the purpose and design of posters in the context of arts and humanities student scholarship, we hope to encourage both undergraduate researchers and their faculty mentors to experiment with the poster medium in certain contexts, disseminating their work more broadly and to more diverse audiences.

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