

# STAGECRAFT,



# INTERRUPTED



aerogondo/Getty Images

Lessons learned  
teaching scenery  
construction from  
a distance

BY ERIK VIKER

The nature of stagecraft education is physical, tactile, and collaborative, often tied directly to the creation of scenic elements for academic productions on stage. Stagecraft is traditionally taught in person, with hands-on practice and live demonstration of construction and installation techniques serving as the primary classroom activity. When the COVID-19 pandemic interrupted our usual stagecraft educational process, we were driven to develop new teaching strategies and rethink goals. Many educators in our industry encountered an interrupted semester, with no time to prepare for a move to fully remote learning, followed by semesters of completely remote teaching and learning. Some instructors used the summer months to plan for fully online teaching. Others, where pandemic protocols allowed, continued in person for a time, with strict social distancing restrictions in place. These limitations changed how we could safely and effectively teach and challenged us to rethink our conventional stagecraft education methods.



What worked, what didn't, and how did our teaching change, for worse or for better? Interviews conducted with faculty and staff at institutions of all types and sizes focused on the undergraduate experience, where students are more likely to be exposed to serious stagecraft activity for the first time as part of a broader academic program.

Analysis of the responses suggests we cannot safely and effectively teach students how to physically construct and install scenery from a distance. At a minimum, we must be able to stop and redirect activity for safety or accuracy as we observe student efforts to replicate demonstrated construction processes. No respondent could identify a way to do this remotely for a group of students. Even if we use a real-time video link for synchronous instruction, scenery fabrication cannot be safely taught at a distance. It would be irresponsible to have students working with power tools where we cannot immediately intervene as needed. Some instructors created and shipped



*Trifles* by Susan Glaspell at Susquehanna University, October 1, 2020, with remote actors and scenic elements that could each be constructed by one student in social distancing. Photo by Caleb Stroman. Pictured left to right: Allison Steinert, Joseph Peachey, Samuel Emmanuel, Meredith Felix | Image courtesy of the author.

to students kits for at-home stagecraft activities that did not require cutting materials or the use of other power tools. For example, Associate Professor Richard Dionne and his colleagues at Purdue University sent scale truss segments and rigging hardware to students for practicing wraps, bridles, and other fastenings. And at Susquehanna University, faculty provided rope and links to online knot-tying demonstrations for students to practice when their schedules allowed. As a result, students returned to campus ready to put those skills to use, but this sort of exercise cannot deliver an entire curriculum that relies on tactile engagement with materials and tools.

To fill the resulting curricular gaps, educators instead chose a range of “stagecraft-adjacent” activities, and examining their choices brings to light some possibilities for rethinking how we package and present scenic construction education. While they are not an

equal replacement for watch-and-learn lessons with supervised hands-on replication, these stagecraft-adjacent experiences may serve to enhance traditional stagecraft teaching and provide valuable context for students exploring scenic construction.

Respondents were asked to consider a variety of questions, such as: How did we teach scenery construction and operations from a distance, if suddenly required to stop in-person activity? How did we modify our pedagogy when we had time to prepare for an online learning semester? How did we effectively teach in person with social distancing restrictions? What aspects of unexpected online or physically restricted teaching should be retained to enhance traditional teaching in the future?

Regardless of program size, instructor reactions to pandemic challenges seemed to fall into a few common themes. First, addressing the immediate

problem resulted in big-picture assignments that may enhance and support traditional hands-on teaching in the future. Second, the work of reimagining our courses and grading, adhering to safety protocols, and addressing student needs during the pandemic led to potential benefits and models for future courses. Consider the following ideas.

### Going Beyond Stagecraft

Observation 1: Introductory-level stagecraft courses benefit from including basic project management or technical direction assignments by highlighting the place of stagecraft in the overall theatre production landscape.

One noticeable pattern across institutions was the introduction of survey-style assignments exploring project management to replace skills-based project execution exercises. In a normal semester, the introductory stagecraft course at Susquehanna University uses scenic

designs and technical direction drawings as source material for hands-on teaching, resulting in students contributing to construction and installation of mainstage season scenery.

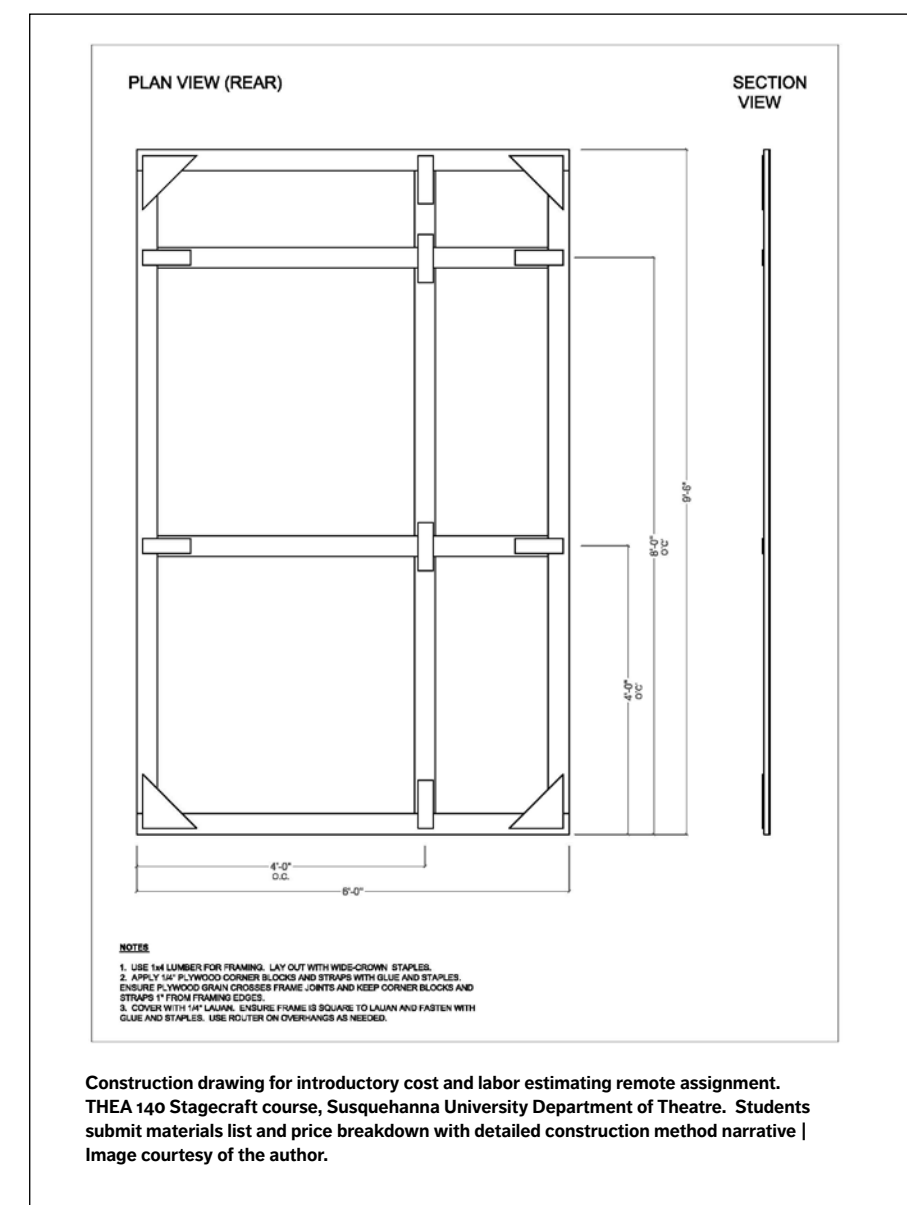
The pandemic ended in-person teaching after only one completed production in spring of 2019. Rather than trying to teach new construction techniques remotely, we modified the course goals to include a greater focus on project management. Students worked remotely on cost and labor estimates for very simple construction projects such as a custom ladder and a large flat, followed by basic technical direction documentation for a simple scenic design. The professor and the student staff carpenter, an experienced teaching assistant, were available via email and during Zoom office hours to help with these projects.

“Before we had those projects, students basically showed up and everything was ordered and organized, and as senior carpenter, I would have divvied up the lumber and materials,” says teaching assistant Annabelle Lucas. “Now, they see how I did that, and why, and I feel like it made the entire process a lot easier for students to understand.”

As an accomplished stagecraft student guiding the work of less-experienced peers, Lucas saw that students gained a stronger understanding of the course material “not only during the pandemic where we physically couldn’t touch things, but after, to extend learning beyond the physical labor of set building that we had focused on.”

Course evaluations corroborated students’ appreciation for the opportunity to apply their construction observations to a new challenge, giving them a better understanding of the collaborations needed to create scenery beyond construction itself. After we returned to campus, these new cost/labor estimating exercises and mini-tech-direction projects became part of our in-person teaching. They now serve as a valuable end-of-semester learning experience providing a comprehensive alternative to a traditional final exam.

Associate Professor Ed Baker at Wichita State University says he took a similar approach when hands-on stagecraft activity abruptly ended. To compensate for the time lost in the shop, Baker says he shifted “more towards the management parts of stagecraft” while



still offering video-conference versions of skills such as knot tying, measurements, and demonstrating alternative uses for common materials. In considering management as a course topic, Baker found himself including time for broader student discussions about the place of theatre in society, the impact of the pandemic on the arts, and how a career may impact self-worth. Baker suggests this sort of course activity may help balance some of the counterproductive practices that still plague the industry. Baker noted that such reflection helped him as an educator.

“I had fallen into a bad habit of cranking out the most efficient work that I could, often at the expense of teaching students,” he says, reaffirming the

importance of students being “fully present in the process and learning.”

### Reaping Unexpected Benefits

Observation 2: Emphasizing closely focused instruction instead of requiring a high quantity of scenic output can improve learning and protects the professional/personal resources of the instructor and can benefit the mental wellness of the students.

Technical director Alan Perez at Ball State University discovered separating lectures and small-group labs at Ball State had value beyond coping with the pandemic. “With 25 students in a class, it was very difficult to be everywhere and address everyone’s questions, or keep everyone on task,” says Perez. “Only having

nine in at a time was hugely beneficial in ensuring everyone truly understood what they were looking at. Our attention wasn't so divided, which meant we could answer questions more quickly and effectively."

At Auburn University, Technical Director Matthew Gist had a similar experience using online video lectures to gain time for smaller working groups. "I was able to give more one-on-one instruction to the students," says Gist, adding that he has continued trading in-person lecture days for online lectures to increase his available time for working with small groups. Gist has also created a list of colleagues from other schools who are willing to Zoom in for guest talks about their areas of expertise. The lack of in-person lab time created space in educators' schedules, and several reported using that time to expand virtual office hours.

"I was religious about remaining available to students via phone, text, chat, and Zoom for at least one hour a day every day," says Wichita State's Baker. He adds that the students who took advantage of his online availability needed the time with him, and he was reminded of the

importance of office hours. "(Students) are already paying for that office hours time and they should take advantage of it."

Baker also reflected on how university instructors work for educational institutions, not production houses. "My time as a teacher is far too valuable to waste merely generating product." Baker admits to being moved by the pandemic to think more broadly about the often-hidebound nature of academic instruction. During the pandemic, he says he "watched colleagues fail because they were unable to imagine any way to transfer their craft knowledge except the way they were doing it in 2019." He recognizes how easy it is for a lack of flexibility to result in professional "surrender," problems with job satisfaction, and even personal mental health wellness.

J.E. Johnson, lecturer and scenic studio supervisor with the University of Texas at Austin, seems to have paid close attention to the personal toll inflicted on students by the pandemic, and worked to avoid the mental exhaustion often caused by distance learning during the crisis. "I went into '20-21 with the same goals we

had from March 2020—building creative confidence, supporting mental well-being, and developing career readiness," he says. Johnson believes that when done thoughtfully and with care, asynchronous online instruction can be an effective part of a teaching strategy. He noticed the value of adding time for reflection and re-grouping. "Breaking up the class period into 20-minute (or less!) chunks is a practice that I'm going to continue."

In cases where in-person stagecraft classes resumed but performances did not, instructors had to create useful social distancing projects. "I had the students build and assemble new sawhorses, says Auburn's Gist. "They also created a new stock of flats for the scene painting class." At Susquehanna, the faculty scenic designer considered social distancing limitations for in-person construction so the technical director could assign modules for assembly that did not require two people for completion or installation.

Dionne observed a positive side effect of the reduced production scope at Purdue, which he hopes to continue. "We didn't experience any significant loss in education outcomes for any of our



**USITT Education & Training**  
**Hands-On and Online**  
learn more about our in-person classes and events plus our  
online opportunities available 24/7.

Visit our website and explore!

CONFERENCE ♦ WORKSHOPS ♦  
CLASSES  
[www.usitt.org](http://www.usitt.org)



students, and we gained a more well-rested and potentially more mentally healthy student body.”

### Flipping the Shop

Observation 3: Deliberately programming hands-on coursework to include smaller group activity may improve instructional quality, with off-site video lessons providing the instructor with re-assigned time for small-group interaction.

Strict COVID-19 protocols at Purdue University allowed teaching to continue in person, with what Dionne describes as “dedensifying,” where students were socially distanced and personal protective equipment requirements were modified to include masks. “Our shop space was reduced to a total capacity of seven students at any given time,” Dionne says. “Students were grouped into tool and workspace sharing pods, and tools weren’t shared outside of those pods. At the end of each work period, those tools were placed in a hamper for sanitization later, which the shop supervisor managed.” Dionne says the dedensification process and capacity limits led to students attending remotely and in person on alternating class days. Faculty prepared for this arrangement by prerecording instructional video content for remote instruction.

“I can *tell* someone the proper staple pattern for constructing a Broadway-style flat over and over again,” says Perez, “but it’s a poor substitute for having them actually staple a flat together and see how important it is.” Perez and colleagues had adequate warning before the shutdown to create 15 construction technique videos at what he describes as breakneck speed, often doing three recording sessions a day. Upon returning to campus, Perez worked under similar space and capacity limits as those at Purdue, using the videos for lecture/demonstration lessons and instituting small-group lab sessions to ensure social distancing.

Johnson reports that his program at UT Austin will continue using a new video series to reinforce tool safety procedures via an online portal and badging system. To build what Johnson describes as a community of practice, accomplished students instead of instructors are featured in the video demonstrations to make the material more accessible and the teaching-learning process more

## PPE Becomes the Norm

It should be noted that some adjustments were generally easy, particularly surrounding personal protective equipment. Stagecraft activity routinely occurs in an environment that prioritizes physical safety, so instructors generally had little difficulty incorporating COVID-19 precautions into their teaching when able to work with students in person again. Compared to a traditional classroom, suddenly requiring distance between students and mandatory face masks, adding additional personal protective equipment is a less drastic step for scene shop classwork.

“As we regularly enforce PPE in the shops anyway, this became just one more element of PPE to wear, notes Richard Dionne of Purdue. When hard hats, ear protection, and safety glasses are already normal equipment for stagecraft activity, a face mask poses little difficulty.

At Susquehanna University, a strict tool and workspace sanitization protocol was put into place for the return to campus. While we can hope another pandemic does not impact our work in the future, we are better prepared to quickly redeploy successful precautions that we have already established. Some program staff may choose to retain a heightened level of physical distancing and mask use during times when seasonal flu is likely to infect close-knit student populations. In this way, the lessons we have learned about physical precautions during the pandemic can better protect student wellness and the integrity of instruction throughout an average academic year.



Personal Protective Equipment. | USITT.

inclusive by highlighting peer expertise. “The goal is for us to spend less in-person time repeating the same stale (but necessary) safety guidelines and more time helping students develop their technique,” Johnson says. “You’ve heard of a flipped classroom? We’re flipping the production shops.”

Video instruction may seem counterintuitive for a hands-on discipline, but many educators seemed pleasantly surprised by how helpful their pre-recorded instruction videos were during pandemic distance learning. Upon return to campus, students who used video lessons demonstrated a familiarity with construction processes that accelerated in-person mastery of techniques. Several educators mention that the demonstration videos they created or acquired via YouTube when anticipating the shutdown added flexibility to available in-person student time, but these video preparation efforts were, in many cases, rushed. Using institution funding or outside grants to create a more polished set of video resources may further enhance coursework in the future.

## Rethinking Assessment

Observation 4: Rethinking grading protocols to emphasize skills acquisition and engagement with the craft, such as with specifications grading, may enhance student learning beyond what conventional rubrics can do for stagecraft learning assessment.

Scenic technology faculty at UT Austin are retaining a commitment to specifications grading that lent itself to remote teaching, a development that other schools have adopted in various forms during the unprecedented challenges of the pandemic learning environment. As described by Linda B. Nilson, director of the teaching effectiveness and innovation at Clemson University, specifications grading is “where you grade all assignments and tests satisfactory/unsatisfactory, pass/fail. Students earn all of the points associated with the work, or none of them, depending on whether their work meets the particular specifications you laid out for it” ([www.insidehighered.com/views/2016/01/19/new-ways-grade-more-effectively-essay](http://www.insidehighered.com/views/2016/01/19/new-ways-grade-more-effectively-essay)). Coursework is assessed not on a system of the instructor

counting accumulated points, but instead by applying predetermined expectations for what satisfactory and unsatisfactory work looks like. To earn a higher course letter grade, students choose to complete “bundles” of assignments of increasing depth and complexity. To earn a grade of C, for example, students might demonstrate they understand basic construction materials properties, safe tool use, and common technical theatre vocabulary. For a higher grade, they might demonstrate understanding of how the scenic design process impacts the scope of work for a stage carpenter, or construct a more complicated piece of scenery.

Nilson’s grading approach as used by Johnson and his colleagues at UT Austin was especially valuable during the pandemic environment and is well-suited for the skills development and collaborative aspects of technical theatre.

### Looking Ahead

We can use the insights gained during our unexpected disruption to plan for the future, not just in anticipation of some other catastrophic interruption, but to meet changes in educational trends. Even

before the COVID-19 pandemic pushed most higher education teaching activity online, the movement toward providing effective online teaching opportunities was well-established and growing by the year.

The strategies and teaching tools that were most useful during pandemic restrictions may be effective for meeting the challenges of online education for stagecraft education. We cannot safely teach hands-on scenery construction remotely, but a “principles of stagecraft” course could be a useful part of an online theatre curriculum.

This inquiry did not reveal that we learned any surprising new way of teaching stagecraft. We can, however, see that the adversity of the pandemic has caused educators to re-examine and highlight different sorts of teaching strategies that enhance scenery construction education. These exercises are more interdisciplinary; cost estimating, materials sourcing, and labor coordination are skills that can transfer more easily to other industries than traditional stagecraft can. We should be ready to substitute stagecraft-adjacent experiences for traditional stagecraft

construction experiences when outside forces make it necessary, with an understanding that students are gaining valuable insights and skills as a result, and not merely “settling” for a lesser experience.

Stagecraft-adjacent activity during the pandemic proved to have substantial teaching/learning value in its own right and could be incorporated into the production curriculum to both enhance traditional stagecraft teaching and provide a broader foundation for understanding the value of that work.



*Erik Viker is a professor of theatre at Susquehanna University where he serves as faculty production manager and teaches courses in*

*stagecraft and theatre operations. He is the editor of the book Inspired Teaching: Essays on theatre design and technology education and his articles on safety, education, and management have appeared in TD&T, Teaching Theatre, and Stage Directions. He holds an MFA in theatre technology and is a member of USITT and IATSE Local 636.*

## Who are we?

Find out by browsing the easy-to-digest sections of the **USITT Workforce Demographics Study**, the first of its kind look at the performing arts design and technology communities.



Learn more at  
[www.usitt.org/wds](http://www.usitt.org/wds)

The 2021 Entertainment Design & Technology Workforce Demographics Study was conducted April 1 - June 5, 2021 by SMUDataArts.