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THE LIGHTBOARD: EXPECTATIONS AND EXPERIENCES

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This case study describes a small-scale Lightboard pilot and a full-scale Lightboard build with accompanying studio at a small, private liberal arts college in the southern United States. This article will provide an overview of the Lightboard landscape in higher education, offer considerations for the construction of a Lightboard, and share the authors' experiences and outcomes. In writing this article, the authors' goal is to present an attainable use case for the construction of a Lightboard by introducing a simplistic pilot design that was well received by faculty and administrators.

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INTRODUCTION

This case study describes a small-scale Lightboard pilot and a full-scale Lightboard build with accompanying studio at a small, private liberal arts college in the southern United States. This article will provide an overview of the Lightboard landscape in higher education, offer considerations for the construction of a Lightboard, and share the authors' experiences and outcomes.

Browsing the latest news in Lightboards, you are likely to see many high-tech studios with thousands of dollars in equipment for the production of professional-quality faculty videos. It can be quite easy to become overwhelmed by the sophistication of such professional-grade equipment, but remember this—a Lightboard does not have to be a complicated design. It is our hope that, by scaling down expectations as to what a Lightboard is and what a Lightboard can do, other educators, instructional designers, and instructional technologists will feel both inspired and empowered to build Lightboards of their own.

WHAT IS A LIGHTBOARD?

The Lightboard is a low-technology solution for recording instructional videos where the focus is on writing or drawing. Lightboards are most commonly constructed as a pane of glass surrounded by a strip of small LED lights that illuminate dry erase markers to make writing highly visible on camera. Faculty record their instruction in the manner to which they are already accustomed—using a dry erase marker on a whiteboard-sized surface—as they are captured with a camera on the other side of the glass. The video is mirror-flipped using computer software (or by pointing a camera directly at a mirror while recording) and the handwriting appears correct to those watching the video (McCorkle & Whitener, 2017).

Lightboards are one of the latest technology tools for producing instructional videos. Lightboards facilitate the traditional talk-and-chalk method of lecturing—

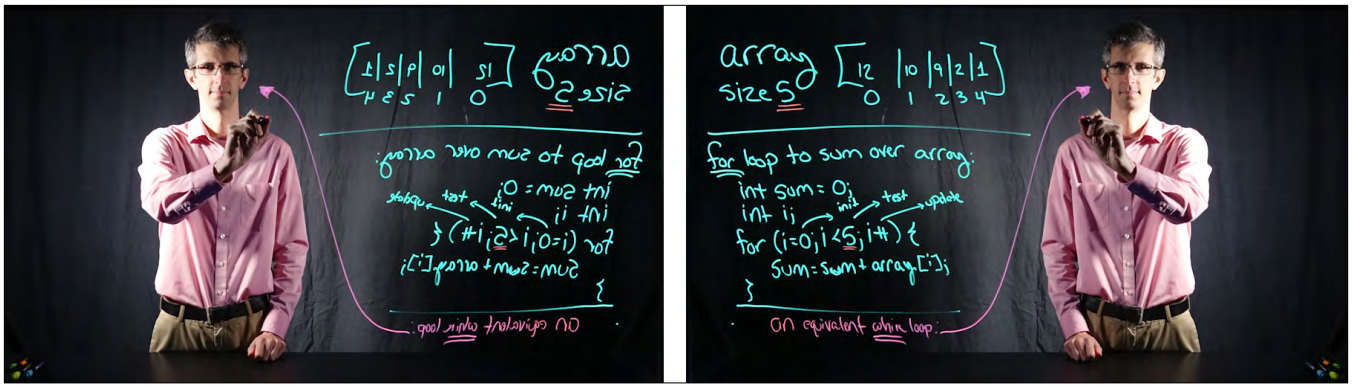

FIGURE 1. Lightboard videos must be flipped so the handwriting appears correct to those watching the finished video. This can be achieved by pointing the camera at a mirror during recording or by using software to rotate the video 180 degrees on the Y-axis. (Photo by Steven Wicker, Wake Forest University).

simply approach the board, marker in hand, and begin your instructional demonstration. Given to this simplicity, a Lightboard may be considered a sans-technology from the lecturer's point of view. Unlike other tools of the trade such as rapid e-Learning development software, narrated slideshows, screencasts, and Web 2.0 tools for producing learning media, the lecturer is not interfacing with computer hardware or software systems while using the Lightboard.

Despite the futuristic look and feel of illuminated annotating and writing, the most basic Lightboard video setup includes no more technology than a consumer-grade digital video camera and a pane of glass with small LED lights pressed against the edges. Flipping the video, so handwriting appears correct to those watching the finished product, can be achieved by pointing the camera at a mirror during recording. Software can be used to achieve this effect as well by rotating the video 180 degrees on the Y-axis (Figure 1). A Lightboard video can be recorded by turning off the lights in one's home or office, resulting in a video consisting of the lecturer's voice accompanied by their writing and annotation in the dark. By introducing a secondary light source to illuminate the lecturer, the Lightboard video can become a more engaging experience for students by featuring the lecturer's presence on video (Fung, 2017; Guo, Kim, & Rubin, 2014; Ye, 2016).

Moving beyond this most basic setup, entire video studios have been dedicated to the production of Lightboard videos. These studios may contain professional three-point lighting schemes, secondary audio sources such as lapel microphones, confidence monitors which allow faculty to see themselves on camera during recording, video switchers for the addition of figures or slides on screen, or projection systems to project an image, chart, or graph onto the Lightboard for further annotation (Peshkin, n.d.). These complex studio setups, as well as plans for Lightboard designs, are often shared freely on the web as Open Source hardware.

THE LIGHTBOARD AS OPEN SOURCE HARDWARE

Michael Peshkin, the originator of the Lightboard Open Source hardware initiative, inspired a number of individual lecturers, colleges, and universities to construct Lightboards of their own (Peshkin, n.d.). By promoting the Lightboard as Open Source, rather than a commercial product, Peshkin's website (Lightboard.info) and accompanying Google Group have fostered a collaborative and reciprocal environment of idea sharing and design documentation of Lightboard construction around the world.

The Open Source Hardware Association's (OSHWA) statement of principles defines Open Source hardware as "hardware whose design is made publicly available so that anyone can study, modify, distribute, make, and sell the design or hardware based on that design" (OSHWA, n.d., Statement of Principles, para. 1). The Open Source movement's focus on sharing and improving hardware designs may lower the cost commitment for those experimenting with new technologies, leading to individuals who choose to fund and develop their own hardware projects rather than competing for funding from their university (Baden et al., 2015).

The conversation surrounding Open Source is often intertwined with the "maker movement" and Makerspaces, a physical workspace housing shared equipment, often funded by a university or community-orientated initiative. Tan, Yang, and Yu (2016) describe the maker movement as one of cooperation, leading to shared innovation on a global scale thanks to social media.

CONSTRUCTION CONSIDERATIONS

The Open Source hardware nature of the Lightboard offers both benefits and limitations. While schools and individual faculty have constructed their own boards, and many design types and construction material options are described online (Peshkin, n.d.), the skills and tools necessary to construct a

Lightboard may not be feasible for everyone. Makerspaces, though not available in every community, maybe one solution for those who have a desire to engage with other makers, learn new skills, and collaborate with others in a shared workshop environment. Construction of an Open Source design can be hindered by time and construction concerns (Baden et al., 2015). There are, however, a few entrepreneurial educators who have kits or complete studio solutions available for purchase. Matt Anderson's Learning Glass Solutions provides full-package Lightboard studios as well as individual Lightboards for purchase (Anderson, n.d.). Kevin Koch, of Revolution Lightboards, sells Lightboard kits or full Lightboard packages (Koch, n.d.).

Lightboards can be constructed on a budget using acrylic such as Plexiglas as a writing surface rather than tempered glass. While it may seem as though a whiteboard-size Lightboard should be the goal if you're going to the effort of building one, it may be more practical to build a table-top-size board instead. Some considerations worthy of reflection during the planning phase include the amount of writing space necessary for your subject matter and discipline (simple diagrams or long, complex equations), the location of your work area (office or video studio), and amount of usage expected (individual, departmental, or campus-wide). Individuals have successfully constructed Lightboards of all sizes and from a variety of materials. Designs with detailed instructions can be found online for budgets of one hundred dollars (Lopez & Castaneda, 2015) to a few hundred dollars (Speranza, 2016).

Dry-erase boards made from clear tempered glass could be a quick construction solution for those who are not skilled in woodworking or are not particularly handy. The addition of LED strip lights around the edge of a dry erase board made of clear glass with a flat edge could make for a fine Lightboard. Locating a mobile dry erase board on casters with clear glass is difficult, as these models are frequently labeled as discontinued or out of stock by online retailers.

UNIVERSITY DESCRIPTION

This article presents a case study from a small, private residential liberal arts college with a total graduate and undergraduate enrollment of approximately 8,000 students and a 10 to 1 student to faculty ratio. Two programs within the university, one in the law school and another in counseling, offer online graduate studies. The undergraduate college and the business school have experimented with online electives, hybrid courses, and flipped classrooms.

Faculty of the undergraduate college who self-elect to teach an online, hybrid or flipped classroom course were often technologically savvy and eager to learn new instructional technology skills. These same faculty shared their online teaching techniques, projects, and successes with other faculty at all levels of the university, resulting in an increased interest in the development of instructional media. The teaching and learning center supported faculty in their instructional media development through hands-on workshops exploring Web 2.0 tools for teaching and learning. While searching for easy to use technology solutions to enable faculty media production, the Lightboard was identified by the authors as one possibility. The authors' goal was to empower our less technologically savvy faculty to confidently produce instructional media for their students.

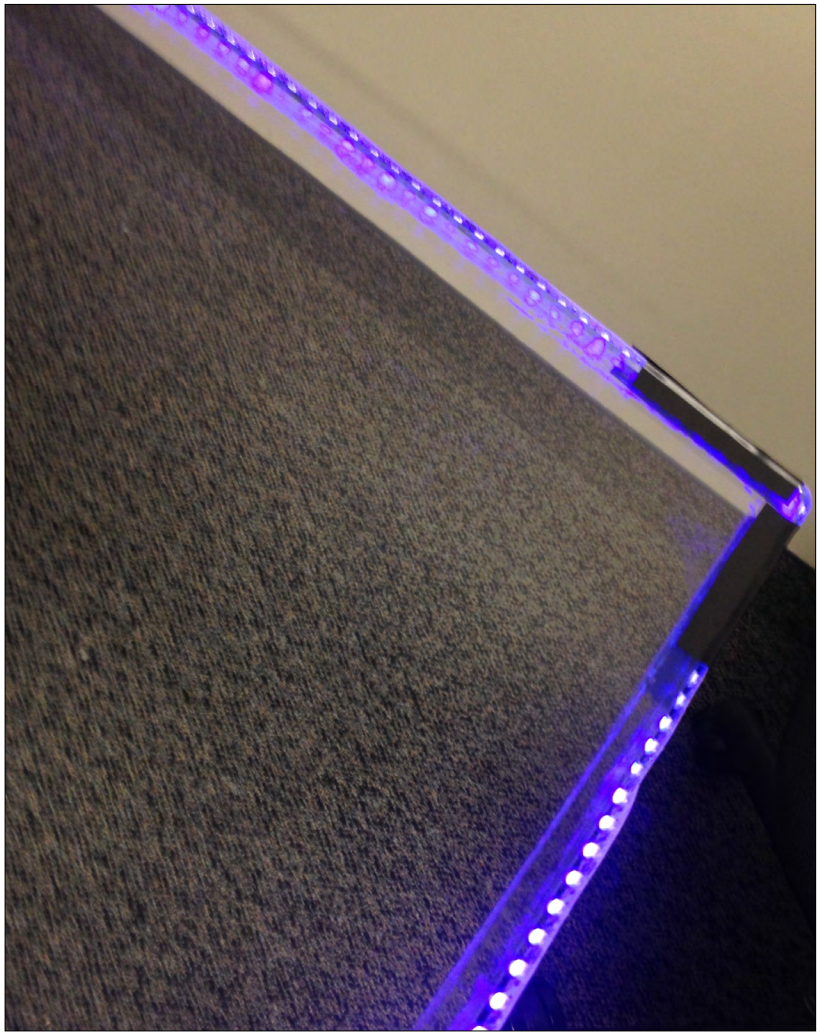

FIGURE 2. LED strip lights are pressed to the edge of the glass and secured with electrical tape during the pilot. (Photo by Steven Wicker, Wake Forest University)

FIGURE 3. The small-scale Lightboard constructed for the pilot was propped upright in a wooden stand. (Photo by Steven Wicker, Wake Forest University)

SMALL-SCALE LIGHTBOARD PILOT

Michael Peshkin's website (Lightboard.info) provides links to schools and individuals who have shared their Lightboard designs, instructions, and construction progress. The designs and materials used in the construction of Lightboards are varied and unique, such as custom woodworking, mounts upon existing adjustable height tables, and aluminum framing (Peshkin, n.d.). After considerable time studying the designs and materials used in Lightboard construction, the authors set out to develop a prototype to be used in a faculty pilot.

The Lightboard pilot began as a three- by five-foot sheet of Plexiglas surrounded by LED strip lights pressed to the edge of the glass and secured with electrical tape (Figure 2). The Lightboard contained no frame, but rather a modest wooden stand which, when inserted, kept the Plexiglas upright. The Lightboard used for the pilot was constructed by the authors in their garage and offices with materials and scrap lumber already on hand. The Plexiglas board, being frameless save for a border of electrical tape, was easily transportable and wide enough to fit on a desk-sized table (Figure 3).

An inexpensive consumer-grade Sony Handicam digital video camera, on loan from the campus library, was used to record faculty lectures. A variety of low budget lighting techniques, including table lamps borrowed from colleagues' offices, were used to provide "studio lighting" on the faculty. The backdrop used during filming consisted of flat, black bedsheets secured to the wall of our office with thumbtacks.

Five faculty, most of whom were flipping their classrooms or planning to teach online, experimented with the small-scale Lightboard during our pilot. The disciplines represented during the pilot were varied and included mathematics, computer science, counseling, business, and economics. While mathematics, computer science, and economics faculty gravitated to the Lightboard for problem-solving and demonstration, counseling and business faculty used the Lightboard in engaging storytelling techniques by drawing pictures and graphical representations.

The reaction to the pilot was positive. All faculty expressed the ease at which they could write on the board but expressed concern about the lack of a frame around the Plexiglas to keep the Lightboard from flexing. The lack of a frame meant the Lightboard would bounce and flex in the stand while writing on it. Although this was distracting to the faculty, the effect was not necessarily visible on camera. Those viewing the Lightboard videos, after being informed of the low-quality cameras utilized, felt the finished product was engaging and the writing on the board was clear and easy to read. Funding from the university was secured for a permanent, full-scale Lightboard based upon successful outcomes and positive feedback during the pilot.

FULL-SCALE LIGHTBOARD DESIGN

Designs from Grand Valley State University eLearning and Emerging Technologies (n.d.) and the University of California San Diego (Anderson & Frazee, 2014) featuring Steelcase adjustable height tables were used as the inspiration for this build. Specifically, the Steelcase Series 7 adjustable height table was ordered from a contracted vendor for black-on-black custom finish so as to not be visible on camera. Once arriving on campus, the table was modified with the addition of casters and a wooden frame to house the glass (Figure 4).

The adjustable height table could be lowered to a comfortable seated position or raised until the top of the glass nearly reached the ceiling, which we hoped would accommodate a variety of lecturer height or mobility needs. The frame housing the glass was fixed off-center on the tabletop, with one side of the table being wide enough to place notes and additional markers, and the other side of the table being shallow enough to reach the glass while in a seated position.

The glass selected for the full-scale build was 3/8" Starphire low iron tempered glass. A local glass company finished the glass with a flat, clear edge to allow as much light as possible to pass through the glass from the LED strip lights. The weight of the glass, a 48-by-60-inch sheet, was approximately 80 pounds. LED strip lights surrounded all four sides of the glass in this design. A T-shaped channel was routed in the bottom of the frame to allow the weight of the glass

to rest on the wooden frame with the LED strip lights tucked safely in the lower channel below (McCorkle & Whitener, 2017). (A similar channel design can be found in Lopez & Castaneda, 2015.)

Ultraviolet "black light" LED strip lights were experimented with during both the pilot and full-scale build. UV was preferred over white LED as it provided a reduction in the amount of visible light illuminating the lecturer, the surrounding wooden frame, or the table. Markers in neon colors were selected to complement the "black light" effect.

After experimenting with several types of dry erase markers, Washable Expo Markers proved much easier to clean off of the Lightboard. Writing could be erased by the faculty while lecturing by simply wiping it away with a dry, lint-free paper towel. The Lightboard was thoroughly cleaned with window cleaner before and after each recording session. Those experimenting with Lightboards at other universities found one of their biggest limitations was the inability to erase the glass quickly and easily while writing with other types of dry erase markers, resulting in the need to stop the recording and clean the glass anytime a mistake or inadvertent marking was made to the board while lecturing (Duke Digital Media Community, 2014; Peshkin, Birdwell, Inzko, Bobbert, & Evans, 2014; Ye, 2016).

The authors found that the ability to easily wipe away the washable variety of dry erase markers with a paper towel (or thumb), rather than needing to stop the recording and clean the board, provided more flexibility for faculty while lecturing. The ability to erase as needed resulted in a much more natural presentation and on-camera presence by reducing anxiety based on limitations imposed by the Lightboard; for example, the inability to spontaneously erase as needed with other varieties of dry erase markers.

FIGURE 4. Full-scale Lightboard based on designs from Grand Valley State University eLearning and Emerging Technologies (n.d.) and the University of California San Diego (Anderson & Frazee, 2014) using Steelcase adjustable height tables. (Photo by Steven Wicker, Wake Forest University)

LIGHTBOARD STUDIO SPACE AND EQUIPMENT

The full-scale Lightboard presented some challenges compared to the pilot's portable prototype. A dedicated space was required to house the board and the associated equipment purchased to support this new initiative (video camera, wireless microphones, tripods, studio lighting, backdrops, markers, and cases of paper towels). An under-utilized space was identified in the basement of one of our classroom buildings, which contained no exterior windows and was conveniently shielded from sounds and other distractions.

A charcoal grey background color was selected for our studio backdrop. This color was dark enough to allow good board visibility, while not feeling as though the video was recorded in a completely dark room. Charcoal grey worked well with a variety of hair color and skin tones and provided on-camera depth to the lecturer as opposed to a solid black background. Studio lights were used to provide illumination on the lecturer, configured in what is referred to as a three-point lighting scheme, with a light placed on each side of the lecturer and a third light positioned to illuminate the top of their head (Figure 5).

FIGURE 5. A dedicated space was required to house the Lightboard and associated equipment. A charcoal grey background was selected to complement a variety of hair and skin tones. (Photo by Steven Wicker, Wake Forest University)

FACULTY DEVELOPMENT

After launching the full-scale Lightboard, several "Meet the Lightboard" workshops were sponsored by the teaching and learning center. In these hands-on workshops, faculty were introduced to the following concepts: segmenting their videos into a series of brief video clips (Clark & Mayer, 2011), using formative assessment and/or reflection activities to bridge concepts between each video clip (Smith, 2014), and including an active learning activity at the end of each video series. Using a Flipped Classroom format for the workshop, faculty were provided materials to review prior to attending. These included an excerpt from Smith (2014) *Conquering the Content: A blueprint for online course design and development* and the Chunks and Bridges worksheet from the book's companion website (http://www.josseybass.com/go/conqueringthecontent). An example of a "bad" Lightboard video, intentionally developed by one of our pilot faculty and workshop co-facilitator, was provided to workshop participants to identify poor practices modeled in the video. Some of the poor practices intentionally included in this video were: wearing a white shirt which blended with the markers, writing too much text on the board that would have been better served as a handout, not making eye contact with the camera, and leaving a coffee cup in the middle of the table (McFall & McCorkle, 2017).

We were pleased to observe that the majority of attendees engaged with the materials they were sent ahead of time and came to the workshop prepared. A reflection activity kicked off the workshop, which provided participants with an opportunity to share with their peers in small groups while allowing those who came to the workshop unprepared an opportunity to catch up enough to participate in the subsequent activities. The remainder of the workshop was hands-on and included Lightboard video planning and development activities. Faculty worked in pairs to refine their Chunks and Bridges worksheet (Smith, 2014), organized their subject matter into a collection of brief video clips, and drafted a Storyboard to represent their video production plan.

As participants cycled through the workshop activities, they would participate in a practice video recording on the Lightboard while receiving feedback and support from peer attendees. It should be noted that peer feedback and support was an added benefit of this workshop format, as many participants were not eager to appear on camera. It was observed that, by receiving peer reassurance regarding their on-camera appearance, workshop attendees presented a reduction in their anxiety when appearing on camera.

FACULTY FEEDBACK AND OUTCOMES

It is the authors' opinion that, by including these workshops as part of the planned launch of the Lightboard studio, participants were not only informed on the availability of the equipment but were also informed of examples and non-examples of content that could be presented on the

Lightboard. As faculty worked in pairs and small groups, they were asked to think critically about the Lightboard and list the pros and cons of presenting in this medium, and what types of content may or may not work well in a Lightboard video. As these ideas were compiled, participants approached the Lightboard at the front of the room and wrote their thoughts onto the glass for others to see.

Workshop participants agreed the Lightboard is most useful for walking through equations, sketching and diagraming, or annotating content written on the board prior to recording. Videos should not be produced on the Lightboard for the sake of novelty or if the subject matter would be better presented in another medium. For example, text-heavy content would be best presented as a written document or bulleted lists would be best suited for a series of PowerPoint slides. Videos requiring multiple takes edited together into a single video may require more planning and preparation compared to a short, one-take video. Although several attendees came to the realization that the Lightboard would not be an ideal medium for their text-heavy subject matter, these participants indicated they found value in the workshop's information on best practices in producing instructional multimedia for their students and organizing their subject matter.

Throughout the Lightboard pilot and workshop series, faculty would ask if the Lightboard could be used in their classroom for lecture capture purposes. This would present several challenges such as lighting difficulties, intrusive reflections on the glass, and the lecturer's handwriting appearing backward to students present for the lecture. Skibinski, Debenedetti, Ortoll-Bloch, and Hines (2015) described their case using a small, table-top Lightboard in a lecture auditorium with a webcam mirror-flipping the video in real-time while displaying the live video feed on the overhead projectors. However, they acknowledge a full-scale Lightboard is "not well suited to the classroom" (Skibinski et al., 2015, p. 1755).

A Lightboard studio at San Diego State University has been outfitted for classroom use, with a seating capacity for 36 students (Anderson, Frazee, & Peshkin, 2018). In contrast to the stance offered by Skibinski et al., the classroom on the San Diego State campus features a full-scale Lightboard positioned at the front of the classroom. As the lecturer's handwriting appears backward to students in the room, students direct their attention instead to flat-panel monitors receiving a live video feed. While this setup may seem redundant and not ideal, there is value in the use of in-classroom video capture for students to review later.

One unexpected outcome of the Lightboard pilot and workshop series was the introduction of the Lightboard expanded faculty dialogue and increased critical thinking on the use of technology in the classroom. While faculty came to realize transporting the full-scale Lightboard and associated studio equipment to their classroom for live lecture capture would be impractical, they could use a document camera—an often-underutilized component already available in their classrooms—to write by hand with a pen, project the demonstration in the classroom, and record a video for students to review later. While the Lightboard studio space has the potential to seat approximately a dozen students, there were no requests for live lecture capture in the studio space.

PLANNING FOR AN EFFECTIVE LIGHTBOARD VIDEO

Whether the goal is to design a new course for the first time or simply revise a collection of existing videos, some level of planning is recommended to keep this venture quick and efficient for faculty, and effective for student learning. Mayer's (2011) Twelve Principles of Multimedia Design has informed the authors' approach to instructional video content production. These principles are worthy of review either through Mayer's body of work or, at the very least, a cursory search online. The authors have observed the following practices to be helpful in the planning and production of Lightboard videos with faculty.

Instructional support staff and faculty coordinate a schedule for recording all planned instructional video content prior to the start of the semester. Content such as weekly welcome videos, or videos addressing classroom management issues, are recorded as needed throughout the semester using more simplistic video production methods (i.e., the faculty's web camera) rather than in the Lightboard studio. Those who have access to a Lightboard with an accompanying One Button Studio may find that, with some practice, they can produce quick, just-in-time teaching videos with minimal time investment (Peshkin & Anderson, 2017).

Some faculty work better with a script, while others fumble over a pre-scripted lecture and work best from bullet points—especially when it comes to subject matter they have been lecturing on for years. It is, however, easy for time to get away from you when in front of the camera, and a three-minute video suddenly turns into nine minutes in duration. Whichever method is preferred, the authors recommend borrowing a technique from the film industry and employ the use of a Storyboard to estimate how much time is required to cover each part of the video. The Storyboard can also be used to plan where the subject matter should be broken into smaller chunks (Clark & Mayer, 2012) and paired with a short activity in between (Smith, 2014).

When recording a Lightboard video, instructional support staff assist faculty in aiming for a short, one-take video to eliminate the need for editing (McCammon & Parker, n.d.). Using the washable variety of Expo Markers will allow small mistakes in penmanship to be erased with ease. As was

acknowledged by Guo, Kim, and Rubin (2014), each video clip should ideally be 3-6 minutes in length. One way to reach a shorter video duration is to draw charts or visuals prior to recording, which can be filled in during video recording. Lightboard videos work best when students can watch the instructor actively work through a process, equation, or sketch. However, watching the instructor draw lines for a table or matrix presents an extraneous load on the student viewing the video and takes up valuable run-time (McFall & McCorkle, 2017).

Having the faculty participate in a "Screen Test" by lecturing for 2-3 minutes on the Lightboard, then watching the footage together, has become a valuable practice in the video production process. Time is spent observing the lecturer's body language, eye contact with the camera, and if the lecturer's face is being obstructed by what is written on the board. Faculty are asked to bring an extra shirt on the day of the recording, should the shirt they're wearing not work well on camera. Medium-tone neutrals tend to work best without blending in with the dry erase markers on video. The authors found solid white and solid black shirts did not present well on camera. It is also worth noting that logos or text on a shirt will appear backward once the Lightboard video is flipped; therefore, university branded apparel is not recommended (McCorkle & Whitener 2017).

THE LIGHTBOARD IN TEACHING AND LEARNING

As more faculty are making the transition to online learning, blended learning, and active learning, the Lightboard can serve as a low-barrier tool for the production of learning media. By removing the burden of learning how to use new software, this time can instead be shifted to the thoughtful design and pacing of instruction. When utilizing contemporary pedagogies, faculty often elect to make course materials available online. In designing instruction and supplemental learning media, faculty should reconsider the role of content in their classroom (Weimer, 2013) and aim for student-centered opportunities for active engagement with the ideas presented rather than passive consumption of a library of course videos. Unfortunately, contemporary pedagogies are often paired with dated instructional technologies and presentation techniques, such as voice-over slideshows or rapid eLearning development software, which are dry, passive, informal, and text-heavy.

Some may view the Lightboard as a technological novelty. But what makes the Lightboard noteworthy is in its simplicity of use—a *sans technology* from the lecturer's point of view—rather than its on-camera glow. The novelty of the Lightboard may entice faculty to visit their teaching and learning center and the center's program offerings, as was the case observed in our workshop, leading to secondary conversations on improving teaching practices. In the event that the Lightboard is not a good match for the subject matter at hand, the practices of planning, segmenting, and storyboarding content are transferrable to rapid eLearning development software, screencasts, and Web 2.0 media production solutions.

RECOMMENDATIONS AND CONCLUSION

In writing this article, the authors' goal is to present an attainable use case for the construction of a Lightboard by introducing a simplistic pilot design that was well received by faculty and administrators. Those wishing to experiment with Lightboard videos do not necessarily need to invest in an expensive, full-scale build. Careful planning and consideration as to the size of the writing surface needed for subject matter and discipline will help in determining your needs. As this case study demonstrates, a consumer-grade video camera, bedsheets tacked to the wall and dimmed office lamps produced Lightboard videos, which were well received by our audience during the initial Lightboard pilot.

Peshkin's Open Source approach to sharing his Lightboard has undoubtedly led to its quick and wide-spread adoption through sharing and collaboration with other makers and builders. While plans for building a Lightboard are available on the Web to suit almost any budget and material constraints, not everyone has the skills or ability to construct a Lightboard of their own. Maker Spaces, though not available in every community, may provide the support necessary for novice builders to construct a Lightboard. Commercial Lightboard solutions are available. However, these may be much more cost-prohibitive than self-construction.

The small-scale Lightboard pilot was used to build a case for university funding of a full-scale custom Lightboard with Starphire tempered glass housed in a frame with LED strip lights. The use of an adjustable height table made the Lightboard accessible from a seated or standing position, accommodating a variety of lecturer mobility needs. UV LED strip lighting produced a "black light" effect, resulting in increased illumination of the neon markers. The use of washable dry erase markers allowed faculty to easily erase the board while lecturing, compared to other varieties of dry erase markers.

In closing, it is important to acknowledge that the success of the Lightboard pilot was determined not by the authors (instructional support staff) but by the faculty using these tools. In the end, the faculty were the ones to champion this method for recording instructional videos and joined us in making a case to administration for funding. The addition of professional development workshops for faculty not only promoted the new Lightboard, but it also provided an opportunity for faculty of thinking critically about technology selection and gaining insight into best practices in media production for learning.

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