

More than One Button: Creating a Successful and Sustainable Support Model for the One Button Studio

Nicholas Smerker
Teaching and Learning with Technology
The Pennsylvania State University
United States
njs177@psu.edu

Graham Berg
Teaching and Learning with Technology
The Pennsylvania State University
United States
grb16@psu.edu

Abstract: The One Button Studio has been a successful tool for allowing quick and easy creation of video content across Penn State - and beyond. However, due to its many moving parts and the reality of it existing as an open resource used by many faculty and students each day, it does require special considerations for keeping it operating at its best.

Creating a successful One Button Studio visit actually starts with the installation of the equipment on campus. Many potential problems are headed off before they can manifest by optimizing planning and communicating the level of support expected from local partners. Online self-service support has been put in place, offering up common troubleshooting advice to a global audience. For Penn State locations, a tune-up service and dedicated expert staff time offers assistance that can be leveraged prior to - or just after - heavy usage periods, ensuring that everything is in best shape for the next round of video producers.

History of the One Button Studio

The One Button Studio (OBS) was created to be a fully automated video production resource, leveraging various off the shelf technologies to allow users to simply press a single button to record themselves in a well-lit environment with appropriate sound and high definition video. (In most locations, optional green screen recording and over the shoulder presentation display are also available, where needed.) The OBS is driven by a freely available, custom app that allows lights, camera and microphone to be controlled without separate input from the user for each. When installed properly and operated as configured, the OBS will create recording after recording with no need for manual intervention in video creation. The end result is a seamless, low-barrier-to-entry experience for user - from the moment they walk up to the kiosk through when they walk away with their finished recording.



a One Button Studio kiosk conveys the intended simplicity for users

As with all technologies, a lot can go amiss once a human factor is introduced and the OBS is no exception to this rule. Owing to the many parts and pieces that come together to make the OBS function, installation can present challenges without guidance from professionals with direct, first-hand experience. Because much of the hardware is in reach of the user, many of the components can be misadjusted, causing not only the culprit's recording to be negatively impacted, but also those of every user who comes after. Software limitations that are in place to ensure the highest level of functionality (such as restrictions on flash drive free space or format, for instance) can contribute to unique errors for the user that might need some explaining. And, of course, things as simple as dead batteries or power failures can lead to the need for intervention with the OBS in the day to day of its operation. All of these examples point to the need for flexible, on-the-ground corrective actions via dedicated front-line support (something not always accounted for before or during installation).

Front-line Support Experience Uncovers Needed Tools, Strategies and Services

The first OBS spaces were installed in the Spring 2012 semester at Penn State's main, University Park campus in the Knowledge Commons, a space that bridges University Libraries and Media Commons (MC). After multiple semesters running the OBS, the MC staff (who are front-line for all media production support) recognized the need for a suite of tailored resources and services that would ensure the smoothest possible operation of the OBS for its users. This need became an especially pressing concern as stakeholders at Penn State's twenty statewide campuses began expressing interest in installing their own studios. Further, by nature of being freely available, many other institutions - from higher education to K-12 to businesses and beyond - decided to invest in OBS as a resource for their users and looked to MC staff for guidance. How to best support these many different audiences in a scalable, sustainable way?

One of the most critical steps in ensuring the OBS is a success is making sure that information about its installation is widely and readily available to those looking to implement a studio. Accomplishing this task hinges on the availability of a Setup Guide and an Equipment Guide (both available on the OBS website). These guides detail the necessary purchases, costs and required installation considerations: The Setup Guide covers everything from room dimensions to electrical requirements to equipment installation procedures while the Equipment Guide takes the form of a “live” document that MC staff keeps updated with current recommended components and prices. These include not only the standard OBS gear but also additional options like green screen functionality and projection capabilities. A pre-installation checklist was added most recently based on observations of things most commonly overlooked by those on-site on install days. All three items help certify that the room and all OBS components are properly prepared beforehand to make installation as smooth and effective as possible.



the One Button Studio Setup and Equipment Guides

Having a means of local, on-site maintenance and support is also important for keeping the studio running in top form and to tackle any daily troubleshooting. Prior to installation, it is communicated that the campus or institution should identify an “OBS Manager” who will take point for supporting the OBS. Media Commons often partners with a campus library or local IT department for OBS implementation, so it may make sense for a librarian or IT staff member to take the lead. OBS support structures that tend to be most successful when they incorporate a secondary line of support, by training part-time help desk workers and students on the technology and basic troubleshooting. Any staff member involved in the day-to-day operation of the OBS should receive proper training in order to feel comfortable with the basic issues that can arise with the studio. For Penn State studios, MC staff provides installation assistance and additional training to any and all members of the local OBS support team.

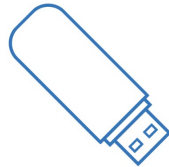
In order to make finding the answers to common (and less than common) questions for those both using and supporting the OBS as straightforward as possible, MC staff built an online, self-service website. Called the One Button Studio Support Tool, the site presents the primary pieces of the OBS as a grid of icons and a simple question prompt: “With which component of the One Button Studio do you need help?” A visitor selects the item that is presenting a problem and is next taken to a list of issues related to it. Since support staff will often be attempting to find a solution based on user reporting of issues, an effort was made to organize topics based on how they are likely to be seen from a non-technical point of view.

One Button Studio Support

Home Components Contact

Search

With which component of the One Button Studio do you need help?



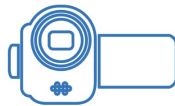
Flash Drive



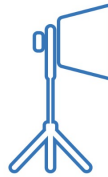
Microphone



Button



Camera



Lights



System/Other

the One Button Studio Support tool homepage

For example, “I plugged in the flash drive and the lights turned on, but there is no video or a solid blue background” actually has solutions that involve the h.264 compression box instead of the flash drive - however, a student would likely report that the flash drive was the issue when approaching a help desk employee or campus librarian making it a better place to start. Once a solution is identified, the OBS can be quickly be put back in working order by those trained to operate it in most cases. When assistance beyond the advice in the support tool is needed, those within the University can connect with the Media Commons team to troubleshoot, order replacement gear or schedule an in-person service visit - while individuals from outside the University would need to contact the local team that installed the OBS at their institution.

Started officially in the Fall of 2015 for all Penn State studios across the Commonwealth, the OBS Tune-Up is a by-request support service provided by MC staff. The aim of the Tune-Up is to properly and completely re-calibrate all of the OBS components to ensure each studio is running at peak form and offering the ease of use that users have come to expect. Like many technologies, after periods of heavy usage the OBS can start to behave sluggishly. There is also a tendency among users to adjust the camera, lights and projector away from the original settings. The OBS Tune-Up offers a way to refresh and realign - and to make sure the recording quality is up to par. Each Tune-Up consists of an in-person visit by MC staff to thoroughly test all components and re-adjust any pieces that may be out of place or out of order. In-person support allows staff to tailor calibrations and support to each specific studio - and record any relevant data or special considerations about that OBS so that it can be shared with local partners. MC staff also provides on-site training during the Tune-Up for any new staff or those looking to know more about OBS intricacies.

Immediate Outcomes of Support Offerings

Since implementing the OBS Tune-Up, MC staff has performed nine Tune-Ups across the Commonwealth for a total of seven different campuses: Penn State Abington, Altoona, Behrend, Berks, Brandywine, Harrisburg and Mont Alto. Each semester and campus is different, and usage can fluctuate depending on the circumstances. Thus, the level of support required can vary from campus to campus. Keeping a by-request support model has proven to be an effective method of catering to each individual OBS and encourages OBS staff to stay vigilant and anticipate any issues. On-site training also imparts more in-depth knowledge and contributes to smoother day-to-day operation.

[One Button Studio: Technical Guide : College Educational ...](#)

One Button Studio: Technical Guide. The following guide describes the setup and operation of the **One Button Studio** at Spring Branch Campus Library, RC19.

 tech.nwc.hccs.edu/obs-tech-guide/

[One Button Studio Kennedy Library | Home](#)

The **One Button Studio** (111E) is designed to be a simple video production **studio** for students and faculty, requiring no technical knowledge to operate.

 lib.calpoly.edu/study-spaces-and-tech/reserve/one-button-...

[One Button Studio: Frequently Asked Questions](#)

Find answers to frequently asked questions (FAQs) for the **One Button Studio** at UC San Diego.

 <https://students.ucsd.edu/student-life/involvement/communication-le...>

[One Button Studio - Indiana Wesleyan University Support ...](#)

The **One Button Studio**, located in the Jackson Library at Indiana Wesleyan University, is a simplified video recording setup that can be used without any previous ...

 https://kb.indwes.edu/Presentation_Technology/One_Button_Studio

sample search results for "one button studio"

Since Spring of 2012, the OBS has found a home at over twenty campuses and colleges within the University - with more on the way in the very near future - and, together, these spaces account for the recording of over 54,000 hours of video content. It is impossible to judge the number of OBS installations outside of the University, but it can be inferred from usage data for the Support Tool website that thirty-six countries have at least one studio in operation. Installation time for the studio averages four hours, down from a full day or more owing to the streamlining of planning materials like the Setup Guide, Equipment List and install checklist. Training for support staff on-site continues, with each new semester seeing onboarding for student workers, new hires in campus libraries and the like. Signage and best practices from one campus is shared with all, making it possible to spread the wisdom that comes from challenges overcome with the entire community and improve the experience of using the OBS for all. While always a work in progress, anecdotal reports show up-time for the studio improving and the level of confidence in supporting the OBS increasing.

Looking Forward: Iterative Improvements

Now that a suitable and effective support model has been established, improvements and updates to support material and the One Button Studio itself are the focus going forward. Recently, MC staff has updated the OBS Setup Guide to more accurately reflect the current requirements and recommendations for each aspect of OBS planning and implementation. As technology advances and modifications are made to the OBS formula, the Setup Guide will allow for direct, clear and accurate distribution of evolving information. The OBS Support Tool will similarly receive continual and relevant updates, and will continue to be honed based on new errors and troubleshooting tips resulting therefrom.

One major update in the coming months will be a brand new version of the One Button Studio application, bringing improvements to the user interface and added functionality to enhance ease-of-use. Along with updated graphics and colors, the new version will add a preferences panel so that OBS Managers can adjust options, including recording bit rate and the countdown duration at the start of the recording. This panel will also automatically track the number of recordings made with that specific OBS and the amount of total time recorded. This should prove very useful to identify trends in usage, and also make it easier to report at the end of semesters. It also includes a usage reset button, if a campus ever needs to take those numbers back to zero. Minor, but important adjustments have also been made to the phrasing and prompts that the app presents to the user, which should better clarify each step of the recording process. MC staff is currently testing this iteration in studios at University Park, and so far the results are very promising. The hope is to make the next version of the One Button Studio app universally available by the end of Summer 2017.

In Conclusion

The One Button Studio continues to be a valuable, accessible tool for students, faculty and staff to create high-quality video content: What once required technical knowledge to accomplish is now literally at the push of a button. The OBS continues to be adopted across Pennsylvania, across the country and in many countries around the globe. Supporting a large scale operation with a small team is never easy, but the OBS support model offers proof that it is possible, with an eye towards scalability and sustainability. With the help of online resources and in-person assistance, MC staff is able to keep each OBS running smoothly and also impart a greater knowledge and comfort-level to those supporting the OBS at their own campus. Keeping these resources relevant and constantly up-to-date also ensures that no time is lost as the OBS continues to evolve. While the One Button Studio could not be simpler from a user perspective, there is quite a lot that happens behind the scenes in order to keep the system running. With the proper support in place and continual improvements to both materials and processes, it is possible to ensure that video creation remains as easy as pushing one button.