FROM ONSITE TO VIRTUAL

A Virtual Programming Playbook for Museums, Libraries, and Zoos

CITY OF
PALO ALTO

Acknowledgments

TABLE OF CONTENTS

INTRODUCTION

This digital playbook aims to give small museums, cultural institutions, libraries, and zoos across the US the tools, knowledge, and confidence to implement successful virtual programming. This go-to guide details the information, equipment, resources, and strategies required to develop robust and effective virtual programming at your organization, now and in the future.

Project background

The Palo Alto City Library, Palo Alto Art Center, and Palo Alto Junior Museum and Zoo (JMZ) would like to thank our funder, the Institute of Museum and Library Services, for awarding us with an IMLS CARES Grant of $129,039 to enable us to implement *From Onsite to Virtual: Expanding Access to Community Learning Resources*. This collaborative partnership project between the Library, Art Center, and JMZ has enabled us to build capacity in developing and implementing virtual programming and events that meet the expressed needs of the community amid the Covid-19 pandemic and beyond.

The project was built on the premise that community needs and modes of engagement will continue to evolve over the coming months and years, and is designed to be highly flexible and nimble in order to respond to a rapidly changing environment. The project included in-depth staff training in digital content development, and resulted in a model for best practices in virtual programs for museums, libraries, and zoos through the creation of this digital playbook, which can be employed by institutions throughout the field seeking to implement virtual programming.

When the Covid-19 shelter-in-place was announced on March 16, 2020, in Santa Clara County, our staff at the Library, Art Center, and JMZ scrambled to develop virtual programs to stay connected with our constituents. We had virtually no experience with developing and implementing these programs, and we began learning by doing, and in some cases failing. We were surprised to see very few resources online that provided instruction or tips on hosting virtual art or science classes, events, or library programs.

Funded by the IMLS CARES grant, this collaborative project aimed to enhance the quality of

virtual programs and events produced by each organization in both the short and long term through sustained training with Midpen Media Center and the one-time purchase of equipment and software to support new digital studios. In addition, the initiative supported staff positions that had been eliminated by City of Palo Alto budget cuts by rehiring staff as arts and science professionals responsible for promoting multidisciplinary programming. The project thus built capacity at the staff level for immediate response to Covid-19-related needs, while also strengthening infrastructure for ongoing virtual program delivery.

We succeeded in developing robust virtual programming in various formats, some of which we plan to continue beyond the Covid-19 pandemic, even as in-person programming recommences. Our goal is to operate a hybrid model of onsite and virtual program delivery, which aims to increase access and diversify audiences. Through the creation of this playbook, we hope to support our colleagues in similar institutions across the US in producing best-practice digital events and programs, now and in the future.

How to use this playbook

This playbook is intended to be a user-friendly guide to help you learn about virtual programming, and to plan and implement virtual programs that best suit your organization and the needs of your audience. You can read the playbook from start to finish, or dip into the content that is most relevant to your interests and needs. It will help you learn about the practical aspects of virtual programming, while also enabling you to develop an overarching digital strategy tailored to your organization. The playbook is divided into the following sections:

The virtual era: This section offers an introductory overview of virtual programming strategies, possibilities, and solutions. This will help you get started when considering virtual programming in your institution and when planning a digital strategy.

Platforms: This section is a deep-dive into the various platforms that are available, and when and how to use them. There is an in-depth section on Zoom Meetings and Webinars. The Zoom platform was selected for detailed discussion as it is the preferred solution for many organizations, our own included.

Accessibility: We felt this subject deserved its own dedicated section, so that organizations can consider, plan for, and implement accessible virtual programs and content offerings.

Unique considerations: While many virtual programming approaches can be adopted across all organizations, this section has some tips and ideas for the unique considerations of specific types of institutions, namely, libraries, zoos, and museums.

Training documentation: This is a useful how-to section based on the training our organizations received in video production, online classes, and livestreaming. This is worth studying if you are seeking practical training, advice, and tips on the technical aspects of virtual programming.

THE VIRTUAL ERA

This section draws on current literature to explore best practices in virtual programming and digital strategies for museums and other institutions, and identifies options and possibilities based on type of content and delivery approach.

Pivoting to online programming

The Covid-19 pandemic ushered in a new and unexpected era in the world of museums, libraries, zoos, and other cultural institutions. The widespread temporary closures of such institutions, coupled with budgetary issues that emerged as the usual forms of revenue disappeared when onsite activities shut down, resulted in both difficulties and opportunities, concerns and creativity, as staff had to pivot to new forms of engagement and new forms of programming, often with little or no training, limited budgets, and already stretched staffing (Ennes 2020). In many cases, the only way to reach out to and connect with audiences was via digital engagement, and institutions faced a steep learning curve to implement such programs (Cuseum 2020).

While larger museums and institutions were more likely to have already had a digital strategy and the staffing to implement it, for smaller museums and local institutions this was not always something that had been prioritized in the past, due to limited budgets and resources, and an understandable focus of such resources on in-person activities (The Knight Foundation 2020, 2). Once the Covid-19 pandemic hit, however, museums and institutions big and small were catapulted headfirst into the digital world, often with little guidance or prior knowledge (Center for the Future of Museums 2021, 14).

Palo Alto Art Center staff members and their pets at a staff Zoom meeting during shelter in place.

Considering content and approach

Unlimited reach and expansion of access

One of the key benefits of virtual programming is that your potential audience is no longer limited by geographic constraints; the reach is, indeed, potentially global. Likewise, members of your community who may have had difficulty attending onsite events even before the Covid-19 pandemic, whether due to accessibility concerns, time constraints or cost barriers, can now engage with your organization virtually. Seniors and people with disabilities in particular fall into this category. Expanding your reach beyond the walls of your building makes your organization more inclusive and accessible, which should be considered a key reason to continue online programming in addition to in-person programming beyond the pandemic (Culture Track 2020, 33).

At the time of writing, it is more than 18 months into the pandemic, and many community members are experiencing so-called "Zoom fatigue" (Center for the Future of Museums 2021, 19). At the same time, in-person activities have reopened as vaccinations ramp up and Covid-19 cases fall, and consequently many institutions have experienced a drop-off in sign-ups for virtual activities. However, virtual offerings should be maintained if possible as a part of overall programming, albeit at a reduced level, if institutions are truly seeking to engage all potential audience members (Cuseum 2020).

Variety of program offerings

A best-case scenario for virtual programming is to develop a suite of offerings that includes:

- free and fee-based programming;
- live content, prerecorded content, and a combination of both;
- small, interactive classes and large, broadcast-style webinars aimed at various cohorts.

It is important to keep track of engagement to determine the success of each program, and whether it is worth the ongoing investment of time, expense, and effort (Merritt 2020). This involves tracking the cost of production, number of sign-ups, and how much revenue, if any, is generated, while also using audience surveys and feedback to gauge satisfaction and user needs.

It is worth experimenting with various offerings to identify the needs of your audience, while not being afraid to try new options and, possibly, to fail. In addition to providing staff with training and resources, it is important to encourage nimble action when implementing digital programming (National Endowment for the Arts 2021, 2). Cross-departmental collaboration, as well as encouraging flexible organizational structures, is also important to enable the successful development of digital capacity (The Knight Foundation 2020, 10).

Types of content and modes of delivery

Whenever your organization decides to deliver any form of virtual programming, you must first take into account: the type of content you will offer, and the approach you will take to deliver this content. It is important to offer a variety of programming to suit the multitudinous needs of your audience. With each offering, you should therefore first consider whether you are targeting:

• adults or youth, including seniors, preschoolers, teens, and so on;
• untapped audiences of various means;
• already invested audiences with whom you are seeking to increase engagement.

Your mode of delivery should then be determined by three factors:

• the audience you are targeting and your anticipated audience numbers;
• the type of programming you are offering;
• and whether you are offering it for free or for a fee.

There are many possibilities in terms of your delivery approach. For example, when you are offering a lecture, expert talk, or live event such as an exhibition opening or concert, a broadcast-style webinar that is accessible to a large audience is usually the preferred mode of delivery, although it limits interactivity for the audience. Livestreamed webinar-style events can also include both live and prerecorded content, for example incorporating a prerecorded video or slideshow. In contrast, a small class offering is suited to an interactive, synchronous approach, which is particularly appropriate for youth programming (Rockman 2021, 10). When offering free content, prerecorded videos and assets that are readily available to access online are recommended.

Free and fee-based programming

Many forms of virtual programming can be costly to implement, in terms of staffing, time, and use of resources, so it is always important to consider your potential return on investment (Merritt 2020). When you choose to offer any form of virtual programming for free, it should be based on the following criteria: as a form of marketing to your audience to showcase your organization and encourage engagement, or as outreach and/or education for youth, underserved or new audiences. At the start of the Covid-19 pandemic, many institutions rushed to provide free virtual content as their doors closed and communities went into lockdown (Center for the Future of Museums 2021, 21). However, such an approach, while admirable and important at the time, is unsustainable in the long term due to the potentially high costs involved. For this reason, it is worth considering how to leverage your virtual programming for revenue (Cuseum 2021, 3). With the effects of the pandemic lockdown leaving some institutions facing possible permanent closure or at the very least a potential downsizing of their activities and operations (American Alliance of Museums and Wilkening Consulting 2020, 16), any prospect for monetization of virtual programming should be embraced.

Free virtual programming options

Marketing, outreach, and the utilization of social media channels are at the core of free virtual programming. It is important to have a presence on social media as part of your virtual programming toolbox, and to use this presence consistently to engage with your community and reach out to potential new audiences. You should maintain a presence on, at the least, Instagram, Facebook, and Twitter, in addition to your own website, if you are hoping to engage fully with your audience. Cross-posting to each of these platforms will help use your content to its greatest potential.

Short, prerecorded videos intended as outreach, education, or marketing can be used to promote your activities and engage with your audience. YouTube, Vimeo, Facebook, and Instagram are all potential platforms for offering free prerecorded video content. With increased engagement on YouTube and Vimeo you can, over time, potentially monetize your channel via the platforms' advertising systems. Videos posted on YouTube and Vimeo can also be embedded on your website.

It is important to note that social media and video platforms are not solely a form of marketing for your organization; they are also a crucial way to engage with your audience virtually, to start a conversation with your community, and to expand the reach of your organization beyond your local community. When museums and cultural institutions closed during the pandemic, social media became for many the primary way to engage with their audiences, and they often found engagement with virtual audiences, as well as the number and geographical reach of followers, increased during this time (Impacts Experience 2021). It is important to maintain this engagement as institutions reopen.
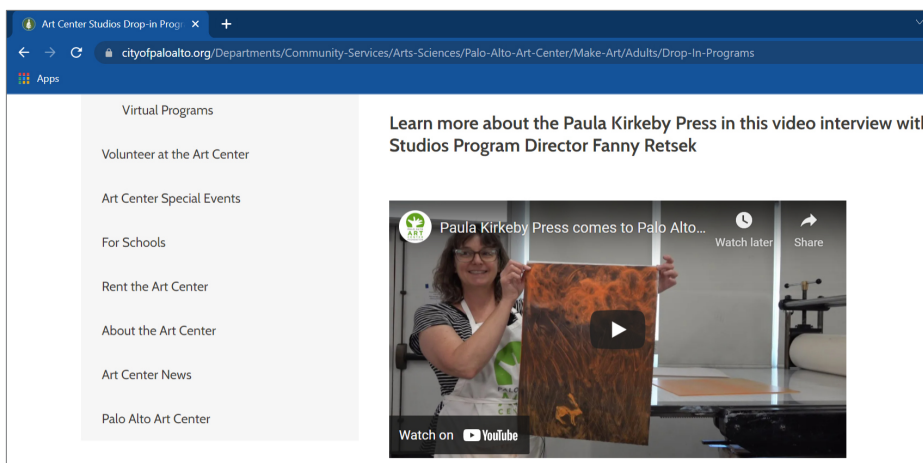
A short video about the Paula Kirkeby Press at the Palo Alto Art Center was uploaded to Instagram, Facebook, and YouTube. The YouTube video was also embedded on the Art Center's website. This means the video is free to access on several platforms.

Examples of free-to-access content for your website, social media, and video platforms

- Short, behind-the-scenes videos of activities being undertaken at your organization, for example, an animal feeding, exhibition installation, or introductions to your venue and staff members. Creating content using activities that are already taking place during your daily work is a great strategy that offers value to viewers without you having to come up with brand new content ideas. It is also fascinating for your audience, who get a sneak peek at life behind the scenes. Such videos can tell a story about your organization, and can increase engagement with and appreciation of your organization and the work that your staff do.

- An edited lecture or interview with a curator, artist, author, etc from a live event that has been recorded and is now offered online for viewers to watch at their leisure. While you may want to charge for access to live events and thus not make such recordings freely available online, it could be worth making this type of recording free to access if you are using it as promotion for your exhibit or current activities. Alternatively, you could edit together some highlights from a live event to give viewers a taste of the type of programs you offer.

- A recorded video walkthrough that gives viewers a preview of your current exhibit or venue, and encourages them to come and visit in person if and when it is possible for them to do so. This also enables people who cannot attend in person to access your exhibition or venue virtually.

- A demonstration of an art or science activity, an introduction to an animal at a zoo, a book reading, or a discussion of a particular museum exhibit. These short and sweet videos serve as great outreach resources for your audiences and offer educational benefits to students and families in particular. At the same time, they can showcase your offerings and help your audience build and maintain a relationship with your organization.

- Printable educational resources, which you have already developed, that you can make available online. This can be helpful to both you and your audience, as you are not trying to create new material and your audience will benefit greatly from access to such materials. You can simply upload PDFs of educational resources such as lesson plans or activity instructions to your website and have them freely available online for teachers and parents seeking resources. Not all digital assets have to be in the form of videos or streaming. They can also be text-based downloadable resources that you can upload to your website or send out via email.

Fee-based virtual programming options

A recent survey by Insights Alliance found that, while many people are willing to pay for virtual programming, the majority do not expect to pay the same amount as they would pay for an in-person event (Insights Alliance 2021, 36). People are also more likely to sign up for a paid virtual event if they feel there is something new or different about the experience (Rockman 2021, 6), and if they believe the experience has a "unique value". (Cuseum 2021, 38). It is important, therefore, to determine what can entice your audience to pay for an online experience that they have, in many cases, come to expect to be free (Insights Alliance 2021, 40).

Small classes and special events

The preferred formats for fee-based virtual programming are either interactive, synchronous classes for small groups, or livestreamed special events with exclusive content. Fee-based offerings could take the form of an online workshop, a course that runs over several weeks, or a one-off special event webinar that offers, for example, exclusive access to an expert or experts in their field (Cuseum 2021, 8). Examples of special events include: an author talk; an artist interview and Q&A; a gala fundraiser; an exhibition preview; a panel discussing a specialized topic; a behind-the-scenes zookeeper presentation; or an animal meet-and-greet. You could also consider offering free access to such events, but request a suggested donation from attendees.

Some one-off livestreamed events such as artist talks could be offered exclusively to your organization's members, with the incentive of gaining access to these events perhaps encouraging new membership, while maintaining engagement with current membership and thus encouraging them to renew their membership when the time comes (Cuseum 2021, 10). Access to exclusive events reminds members that they are a valued part of your organization who contribute to its well-being and perhaps even survival in these unprecedented times.

Artist Maria Paz giving an interactive ceramics painting workshop on Zoom from her studio, organized by the Palo Alto Art Center.

Youth programming and virtual field trips

- In general, for youth activities, a small, synchronous, interactive class or workshop is preferable, as this maintains engagement with your audience and limits the possibility of distraction. Keeping the activity relatively short is also recommended for youth programming (Rockman 2021, 11). For one-off youth special events that involve children who do not know each other, the broadcast-style webinar format should be considered as it protects their privacy.

- For science and art classes, you could offer a supply kit, which could be incorporated into the cost of your class or offered as an optional add-on to be picked up from your location or shipped. Alternatively, you could simply provide a list of suggested supplies for students to source themselves. If you are not offering supply kits to go with an activity or class, ensure that the activity can be completed at home with simple, readily available materials.

- Virtual field trips can be offered to schools and other educational establishments, and can be a frequent and reliable revenue stream while also engaging in outreach with your community stakeholders (Cuseum 2021, 20). Such programs can incorporate live and prerecorded content, as well as broadcast and interactive approaches. Possibilities include a live virtual walkthrough of your institution, animal meet-and-greet, or Q&A that could be combined with a live, virtual class activity. Alternatively, you could provide a prerecorded video, lesson plan, and activity for teachers to complete with students.

- Printouts and lesson plans can be helpful for teachers, and paid supply packs are an optional additional resource that could be delivered to the schools or individuals who have signed up for the virtual field trip.

- Any prerecorded content and lesson plans that you produce can be sent to multiple schools, so once you have created the materials they can be used repeatedly. It can be labor intensive to develop a virtual K-12 field trip program in the initial stages, but it is an effective way to build and maintain relationships with local communities and educational establishments, and it provides invaluable outreach and connection with students. Once established, it has also been shown to offer a reliable return on investment (Cuseum 2021, 20).

PLATFORMS

This section details the platforms that are available for a variety of forms of online programming. These include video-conferencing platforms; prerecorded video platforms, including social media; audio-conferencing platforms; and platforms for online exhibitions. This section includes detailed advice on how to use the Zoom video-conferencing platform in particular, but also considers alternatives. It also offers advice on how to create content for the discussed platforms.

Video-conferencing platforms

Zoom emerged as one of the most popular video-conferencing platforms during the Covid-19 pandemic. It may not necessarily always be the best platform to suit your particular needs, but because of its popularity among the general public and in educational environments, it is more likely that your audience will be familiar with and comfortable with its usage. This has been the main platform used by our institutions since the start of the pandemic, and for that reason this playbook will focus on using Zoom in detail. However, we will list some alternative options that you may want to consider.

An introduction to Zoom

A Zoom paid subscription plan is necessary for your organization if you want to benefit from the full suite of offerings. There are several tiers available, depending on the needs of your organization. Zoom offers two main services: Meetings and Webinars. The Webinars service can be purchased as an optional add-on license in Zoom's paid plans. This means that Zoom can be a suitable platform option both for small, interactive classes—using Zoom Meetings—and broadcast-style public events intended for a large audience—using Zoom Webinars.

It is important to consider the differences between Zoom Meetings and Webinars, and the different use cases for each service. It is also worth noting that while many of the general Zoom Meeting settings also apply to Webinars, some settings are distinct from each other. We will go

into detail on the options and settings for both Meetings and Webinars in the following pages.

Zoom Meetings are suitable for small, paid, interactive classes, with a sign-in link that adds security and controls the number and identification of participants, whereas Webinars are ideal for large, public events, free or paid. The key difference between Meetings and Webinars is that Meetings allow for more interactivity and engagement with participants, whereas with Webinars the audience cannot be seen or heard and the focus is on the panelists who are presenting.

With Zoom Meetings, the host and, if necessary, a co-host leads the session and controls the meeting. Participants can have their video on or off, and can mute and unmute themselves; hosts can enable the chat function and screensharing for participants; and everyone can see who the other participants are in the meeting. The host can also create breakout rooms in which the attendees can be divided into small groups who can work independently. For this reason Zoom Meetings are particularly suitable for a small, live class or workshop environment, where attendees are active participants. It is also possible to schedule a recurring meeting so that, if you have a course running over several sessions, participants can access it using the same log-in code.

Zoom Webinars are best suited for a livestreamed, broadcast-style presentation, with a host and panelists and limited audience interaction. Examples include lectures, interviews, expert panels, and special events. That being said, in Zoom Webinars there are some options to increase interactivity with your audience—for example, you can enable the chat function and a text Q&A function, and you can temporarily unmute or promote an audience member to panelist if you would like to have a more interactive Q&A in which the audience member who is speaking can temporarily be heard and/or seen.

It is possible to record your Meeting or Webinar event via Zoom, and an edited version of it can then be posted online later or sent to participants. If you do choose to record a Meeting, it is important to have the permission of all participants. For youth programming in particular, recording is not recommended to protect the privacy of the children involved, and you must receive signed consent of parents before any such recording. For this reason, the recording feature is usually best suited to Webinars, where the privacy of the audience is not a concern as only the host and panelists can be seen and heard.

- Helpful Zoom video tutorials

- Zoom's fee structures

- The key differences between Zoom Meetings and Webinars

- Details on how to use Zoom Meetings and Webinars

- How to record on Zoom

Best practices for small classes on Zoom

Getting started with Zoom Meetings

Whether you decide to offer a small class for free or for a fee, you will need to have participants sign up to your class so that you can track enrollment and send them a meeting code to log in.

This is best achieved via your own booking platform, if you have one. You can then copy and paste the meeting invitation to email to participants or include it in the registration information when they sign up for the class. If you do not have an established booking platform, Eventbrite is a useful option to consider.

- How to schedule an event on Eventbrite

- There is no fee to post free events on Eventbrite; however, for events that are not free, Eventbrite takes a cut of registration fees.

- Eventbrite's fees

- Collecting donations with Eventbrite

- You can link your Zoom event to Eventbrite for seamless ticketing and scheduling. For details on how to do this, see here.

Zoom Meeting settings for small classes

When you want to schedule a Zoom Meeting for a small class or meeting, go to the Zoom web portal, click on the Meetings tab, and then click on "schedule a meeting". At this stage you can select whether this will be a one-off or recurring meeting, and you can add an additional host.

You can also decide on certain meeting settings in the Settings tab. **You should ensure that you have enabled your preferred settings and reviewed all settings for your class or meeting before it begins**, so that it runs as intended, as some settings cannot be changed during the class or meeting. You can create a meeting template in your Zoom web portal account, and use this for all classes and meetings once you have decided on your preferred settings.

- **Security:** For small classes that require vetting and privacy, it is recommended that you have both a meeting ID code and a passcode, rather than simply using a meeting ID. For children's classes in particular, the passcode ensures additional privacy and security. In the "security" settings of your Zoom account, you can also enable "embed passcode in the invite link for one-click join". This means that the meeting passcode will be encrypted and included in the invite link to allow participants to join with just one click, without having to enter the

passcode—but it maintains the additional security.

- **Waiting Room:** It is recommended that you enable the "waiting room" function in Zoom Meetings so that you can ensure that the people who have signed up for the class are indeed the people gaining access. When sending out information about the class to attendees before the first session, remember to ask attendees to join the Zoom session using their real name. Then, when they are in the Zoom "waiting room", the host can check their names against the attendee list, and admit each participant individually once they have verified their identity.

- **Muting:** Participants should be muted upon entering the class. If your version of Zoom allows it, you can enable this when scheduling a specific meeting, or in the general Zoom settings for Meetings, by clicking on "mute all participants when they join a meeting". Participants can then unmute themselves in the class if and when they want to speak. However, it is recommended that you ask participants to mute themselves at all times unless they want to talk, as background noise coming from a participant can interfere with the host's presentation because audio from only one individual can be heard at a time.

- **Screens on:** Instructors usually prefer when participants of small classes have their screens on so that they can see who they are teaching, and to gauge interest levels and increase interaction. For this reason, it is recommended that you request that participants keep their screens on for the class. However, you may choose to enable the setting that has all participants' videos off on joining the class. While you can encourage participants to have their screen on, it is also important not to force them to do so if it is not something with which they feel comfortable. It is also worth noting that for some people with weak internet signal, their experience of a Zoom Meeting is often better when their screen is turned off.

- **Chat:** It is recommended that you have chat enabled so the host can communicate directly with all participants or privately with an individual participant. However, it is advisable to ensure that the participants can only message the host and not each other, as this prevents the risk of abuse of this function. To do this, in the "in-meeting basic" settings, you should disable "private chat". For more information on the chat function, see here.

- **Co-host:** If you want to have more than one host or a co-host, you should enable the co-host function in the "in-meeting basic" settings. This allows the host to make someone else a co-host during the class. A co-host does not have all of the controls of a host, but they can help with managing the class. For details on the differences between hosts and co-hosts, see here.

- **Screensharing and breakout rooms:** Depending on the type of class you are running, you may want to enable screensharing for all participants or only the host. This can also be enabled in the "in-meeting basic settings". If your class is large, you may also want to have so-called breakout rooms. You can enable this in the "in-meeting advanced" settings.

- **Closed captions:** It is important to enable closed captions (CC) in the "in-meeting advanced" settings. You can then assign a participant or third-party service to add CC in the meeting.

In-meeting view controls

In a Zoom Meeting or Webinar, participants can choose gallery view, where they can see all participants, or speaker view, when only the speaker is shown. However, if you are using a two-camera set-up for, say, a demonstration, you may want your class to focus on the demo screen as well as the host's screen. To do this, you can request that all participants "pin" the demo screen.

They can do this by hovering over the screen in question. A blue icon will then appear and, if they click on this, a drop-down menu will appear and they can click on the "pin" icon. This keeps this screen large no matter who is talking.

Alternatively, as host you can "spotlight" the screen for all participants. You can do this by going to the screen's dropdown menu and clicking on "spotlight for everyone". This ensures that this screen is highlighted for all participants throughout the class. You can also un-spotlight it at any time. For more information on pinning and spotlighting, see here.
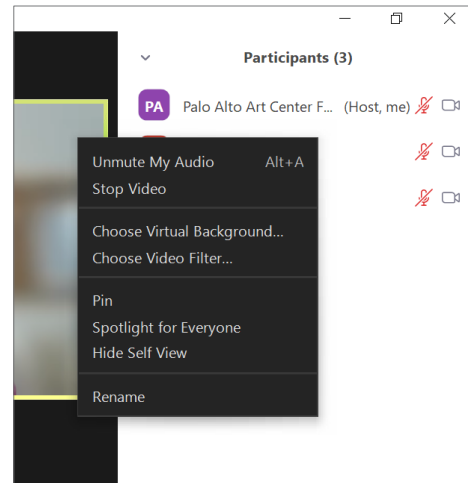
Screensharing

Screensharing is an important part of Zoom Meetings and Webinars, enabling you to share slides, videos, and other assets within your Zoom session. If you are sharing, for example, a PowerPoint presentation, it is advisable that you share "application only" rather than your full computer screen. Depending on the device you are using for Zoom, you should have access to the full suite of advanced screensharing options, but it is best to check this and test out the options that are available to you before your class or event. For example, many of these advanced features are only available on Zoom's desktop client with the latest version of Zoom.

For more information on screensharing, see here and here.
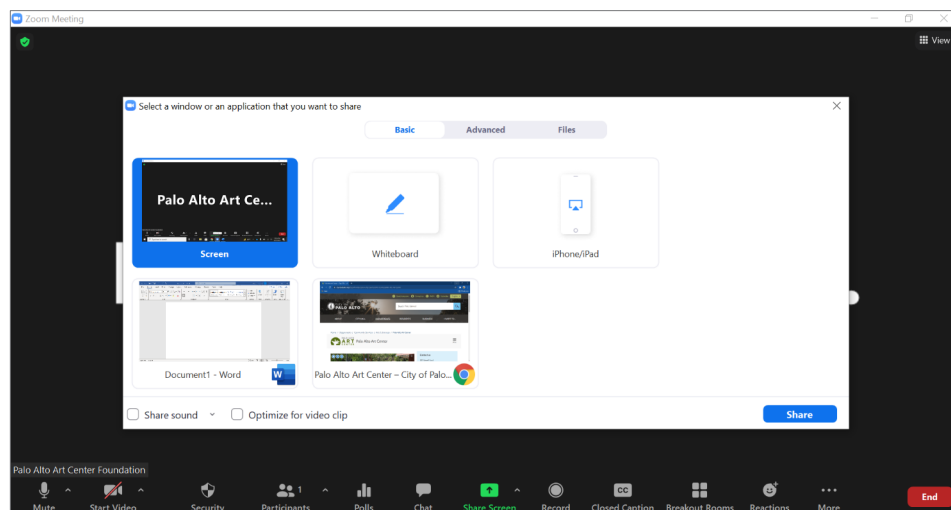
Audio and video sharing options

Before you share your screen, you will notice two options at the bottom of the screen. The first is "share computer sound", and you should check this if you are sharing anything that has audio, as this means that the audio will be heard correctly by Meeting and Webinar participants.

The other option at the bottom of the screen is "optimize for video clip". Only check this if you plan to share a video clip in full-screen mode. Otherwise, this option may cause the shared screen to appear blurry.

If you are sharing video, Zoom recommends that you use the application's built-in video player, rather than simply sharing your screen to play the video, as this will improve the quality of the video playback. You can do this by clicking on the advanced tab in the screensharing menu, and then selecting "video". You can then navigate to and select the video you wish to share, and click "open" to play the video for your audience. The advantage of this approach is that your audience cannot see the playback controls, and it improves the quality of shared videos, providing a more stable viewing experience.

When using this feature, "optimize for video clip" is automatically enabled, which is generally recommended for sharing videos but also restricts and downscales the resolution to improve framerate. This can be manually disabled, which will allow for higher resolution, but this should only be used in situations where framerate is less important. For example, it is recommended that you disable video clip optimization if you are sharing a video with a lot of text, such as a recording of a slideshow or presentation. If video optimization is enabled in this situation, the text in the video may appear blurry.

For more information on sharing sound, see here.

For more information on video sharing, see here and here.
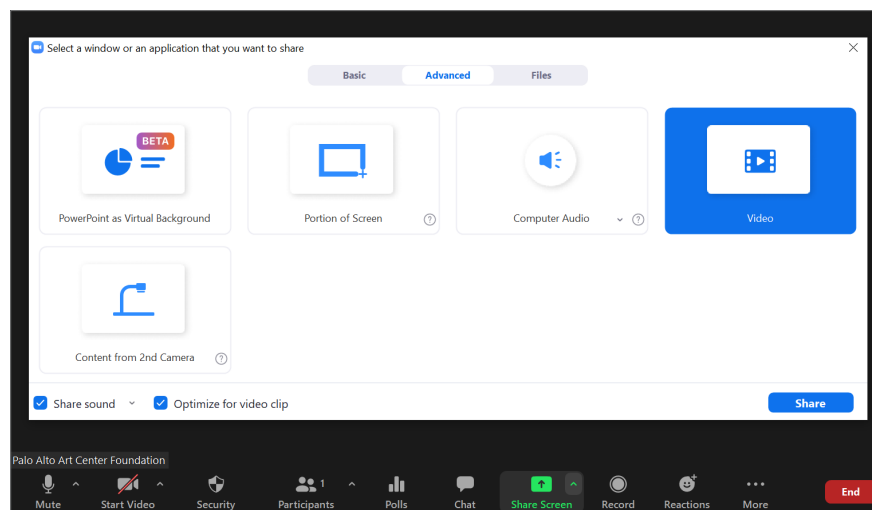
Advanced screensharing options

- It is possible to share your **slides or video as a virtual background**. This is of benefit if you want your viewers to see you while you are showing your presentation. For information on this, see <u>here</u>.

- In advanced options for screensharing, it is also possible to highlight a **portion of your screen** and share only this section. When you click on this option, a green border appears that can be adjusted by clicking and dragging any side or corner.

- **Dual monitors** are particularly useful when screensharing, as you can then both view participants and see what you are screensharing. This is achieved by enabling dual monitors in your general settings in Zoom. Instructions on how to do this can be found <u>here</u>.

- For detailed information on how to share a **PowerPoint presentation**, including how you can use dual monitors to view the presentation and participants while also seeing your speaker notes, see <u>here</u>.

- When you are screensharing, you have the option to **annotate** what is being shown on screen. This means you can "write" on your screen in real time, if there are certain things you want to highlight or point out. You can also enable the feature to allow others to annotate as well. Please note that this must be enabled in your settings before you start a meeting. Details on how to enable annotation and how it functions can be found <u>here</u>.

- Annotation is also useful when you are using the **whiteboard** screensharing function. The whiteboard is a useful tool for live brainstorming and note-writing, and is great for increasing the interactivity of your class. The whiteboard is found in the screensharing options. Details on Zoom's whiteboard can be found <u>here</u>.

Breakout rooms

The breakout rooms option is a useful feature in Zoom when you are hosting large classes and want to encourage interaction, group work, and discussion. Breakout rooms divide a class into several smaller sessions that are separated in video and audio from the main session. The host can then drop into any of these sessions while they are ongoing. You can assign individuals to certain breakout rooms, they can be randomly assigned, or they can choose which breakout room they want to enter.

To create a breakout room, you will first have to enable them in your Zoom Meeting settings. Details on how to do this can be found here.

For details on creating and managing breakout rooms as host, see here.
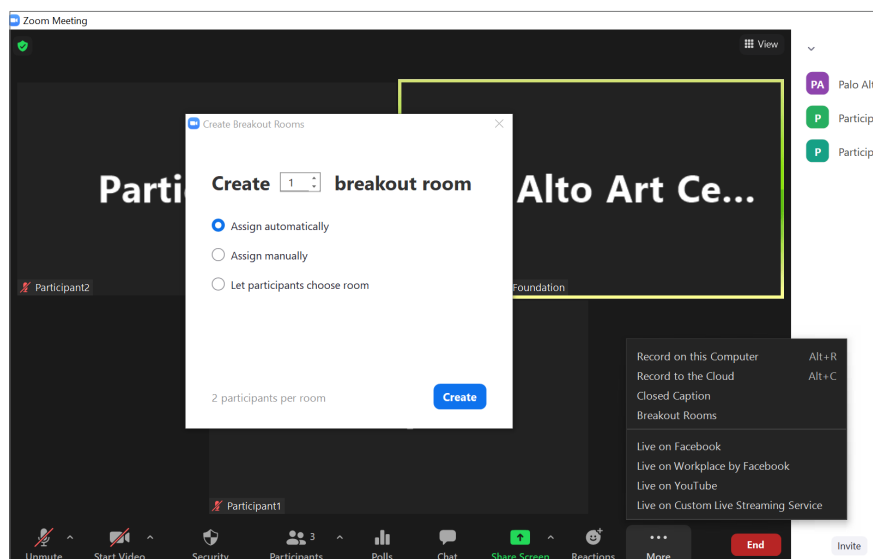
Polls

Polls are a useful way to find out more about your participants or to increase interactivity. Polls should be prepared in advance—you can do this on your scheduled meeting page, but you must also have enabled polls in your general Zoom Meeting settings. When setting up a poll, you can decide if the answers are shared anonymously and whether you want multiple choice. During the Zoom session, you can then launch the poll and as participants answer you can see the results in real time. Once the poll is complete, you can choose to share the results with the participants. You can also download a full report of the poll for analysis later on.

Polling for Meetings details are available here.

Virtual backgrounds

Virtual backgrounds are useful if you want a branded appearance for your class, if you are working from home or, as mentioned in screensharing options, if you want to use your background to show a slideshow or video. You can enable virtual backgrounds for yourself and/or participants in Meeting settings. To achieve the best virtual background effect, Zoom recommends using a solid color background, preferably green; you should also ensure your clothes are a different color from your background so you don't disappear!

For detailed instructions on how to use virtual backgrounds, see here.

You can also simply enable a blurred background for your meetings.
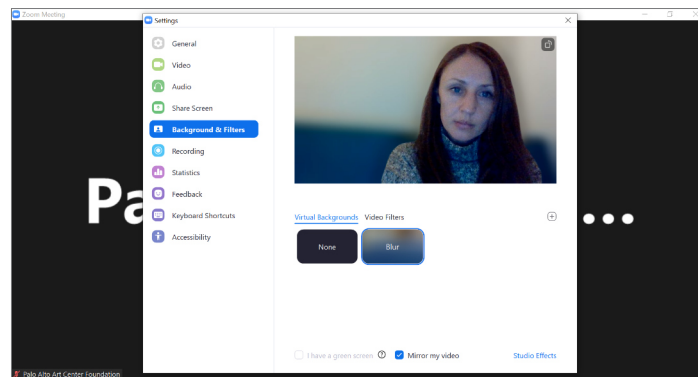
Closed captions

If you have enabled closed captioning in the "in-meeting advanced" settings on the Zoom web portal, you can assign a participant to type the closed captions, or connect the session with a third-party AI or human captioning service during a Zoom Meeting or Webinar. To do this, click on the "CC" closed caption button, and then select "Assign a participant to type", "I will type" or, to use a third-party service, click on "copy the API token", and then share this token with the service in question. Your Zoom session and the third-party captioning service can then be linked. You can also adjust how the captions will appear by clicking on "accessibility" in the Zoom app settings.

For more details, see here. See also the Accessibility section of this playbook, from page 39.
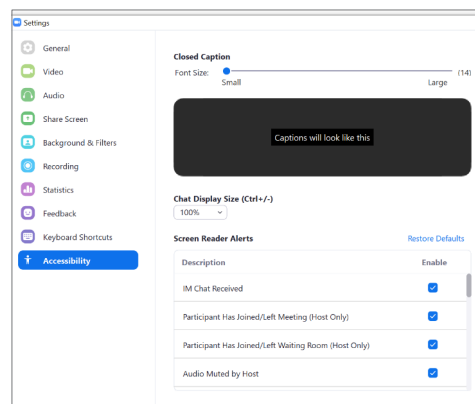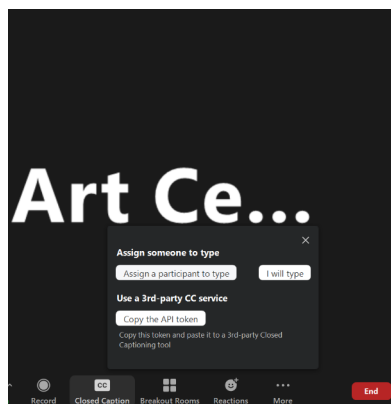
Multi-screen set-up options for Zoom

If you would like to conduct demonstrations during your Zoom session, a two-screen set-up enables participants to view your demonstration while also seeing your face on screen. There are numerous ways to do this:

- You can log into Zoom as a host on your primary device. This is the screen where your face will appear. Then you can log in as a co-host on a secondary device such as a smartphone or iPad that is mounted on a tripod or other device and placed over the space where you will be demonstrating. Your participants can then pin this screen, or you, as host, can spotlight this screen so that viewers can focus on what you are demonstrating. With your secondary device, it is important when joining the Zoom meeting that you do not click "join with computer audio", and that you also mute the device. This prevents any feedback or echo, which can happen when two devices in the same space are logged into a single Zoom session.

- You can also have a single log-in with multiple cameras that you can switch between via Zoom. With this option you can use a camera such as a GoPro mounted on an overhead boom mic stand that can be used as a top-down camera to show your demonstration. This is discussed in detail in the Training Documentation section of this playbook on <u>page 58</u>.

- For a more flexible but complex multi-camera option, you can use a third-party live video editing program in which several camera views can be displayed via one Zoom account. Options include software such as OBS Studio (<u>obsproject.com</u>) or ManyCam (<u>manycam.com</u>). This type of option is also discussed in more detail in the Training Documentation section of this playbook.

An Art Center staff member conducting a virtual field trip using a multi-screen set-up.

Best practices for large events on Zoom

Getting started with Zoom Webinars

Zoom Webinars are ideal for large events such as presentations with limited interactivity. Zoom Webinars allow you to broadcast to up to 10,000 view-only attendees, depending on the size of your webinar license. Licenses start at a capacity of 100 participants and go up to 10,000. If you believe you will go over your attendee limit, you can consider broadcasting directly from Zoom to YouTube Live or Facebook Live.

Webinars can require preregistration or attendees can join by simply clicking a link at the time of the event. Webinars can be held once, as a series, or can be the same session held multiple times.

Interactive options: The host, co-host, and panelists can share their screen, video, and audio in a Zoom Webinar, while attendees are "view-only", meaning they cannot be seen or heard. However, there are ways to increase interactivity in Zoom Webinars. Firstly, you can decide to enable the chat function. There is the slight risk that users, under the cloak of anonymity, may abuse this function, so this is worth bearing in mind when you are deciding whether to enable it.

Another possibility is the Q&A function, which means that attendees can submit questions that are seen by the host, panelists, and, if you choose, attendees. You can also enable the option for attendees to raise their hand digitally if they want to make a contribution. At this point, you can either unmute them so that they can speak, or you can temporarily promote them to panelist so that they can be seen and heard for the required time. It is important to remember to remove this privilege once they have had their chance to speak!

Practice and planning: Webinars can be complex events that often involve managing several panelists, sharing various types of content, and monitoring the chat and Q&A functions. For this reason, it is important to: run practice sessions, with tech checks and runthroughs involving all participants, including guest speakers if feasible; have a script or run-of-show with a detailed schedule and fallback options with which everyone involved is familiar; and have an all-hands-on-deck approach with clearly designated roles for each employee.

For example, if you are a host, it is important to have an alternative host assigned in case you have any issues, such as internet problems, on the day of the event. You should also have at least one person in addition to the host who has access to all the assets to be shown during the webinar, such as videos and slideshows, in case the host experiences technical difficulties. You should have someone on hand for tech support, and someone assigned to manage the chat, Q&A, and handraising if you can enable these functions, and they should perhaps have additional support if there is a section when they are promoting and demoting attendees who have been invited to speak.

For everything you need to know about Zoom Webinars, see here.

Scheduling a Zoom Webinar

When scheduling a Zoom Webinar, there are several options to consider. You can decide at this stage whether the webinar is recurring; whether there will be an alternative host; whether you want to enable the chat function; whether you want to automatically record the event; whether to make the webinar on-demand (which means it will be recorded and made available to registrants to watch at their leisure); and, importantly, whether you want to enable practice sessions. This last setting is advisable, as it means you can do a runthrough, complete a tech check, and practice with panelists before the event in a private session that is not broadcast publicly.

It is worth noting that you can have practice sessions at any time before the webinar. You can start the practice session, broadcast, and end the event without affecting your ability to start the webinar on the scheduled day and time. Attendees will not be able to join the practice session. On the day of the event, when you are ready to go live from the practice session, the host will click "start webinar", and the broadcast will then begin.

While you can designate an alternative host in case you cannot attend a webinar on the day in question, there can only be one host at a time running the webinar. You can assign co-hosts, who have some but not all webinar controls, and invite panelists, who are participants in the webinar.

Additional information on Zoom Webinars

Information on scheduling a Zoom Webinar, and the options for registering:

- Getting started with webinars

- Scheduling a webinar without registration

- Scheduling a webinar with registration

- How to schedule a recurring webinar

- Webinar practice sessions

Information on Webinar roles, and how to manage attendees and panelists, including muting and unmuting, promoting and demoting:

- Roles in a webinar

- Managing attendees and panelists

Advanced Zoom Webinar options

Chat function

The chat feature allows webinar attendees, the host, co-hosts, and panelists to communicate during the webinar. Whether attendees can chat with everyone or only the host and panelists will depend on the settings you have selected.

Using webinar chat

Q&A function

If you activate the Q&A function in a webinar, you can decide whether to allow anonymous questions, and whether to allow attendees to view answered questions only or view all questions. If you choose for attendees to view all questions, you can then choose if you want attendees to be able to upvote questions and/or comment on questions.

Using Q&A as the webinar host

Polling and post-webinar surveys

Polling can be a useful tool during the event, while a post-webinar survey can be helpful to gauge attendee satisfaction.

Polling for webinars

Post-webinar survey and reporting

Prerecorded Zoom content

You can integrate prerecorded Zoom content into a live webinar by using a Zoom cloud recording. This is useful if you are reusing a presentation a number of times, for example. You can also use Zoom as a recording device if you want some prerecorded content, and then share this in a live webinar.

Host live webinars with prerecorded presentation

Case study: live special event

The Black Index exhibition's Friday Night at the Art Center

This case study is intended to demonstrate the complexities of running a live event such as an exhibition opening, gala or special event, which has many moving parts and special considerations, and includes advice on how such an event can run smoothly.

The Friday Night at the Art Center event is a good example to use as a case study because it incorporates both Zoom Meeting and Webinar formats, live and prerecorded sections, and many special guests with many different roles. The event was notable due to its complexity, integrating different presentation formats, slides, videos, artists presentations, and a live exhibition walkthrough.

The Palo Alto Art Center traditionally hosts a Friday Night at the Art Center to celebrate the opening of new exhibitions, and features a members' preview for Palo Alto Art Center Foundation donors, as well as a public event that is open to all and draws 300-600 people. When the pandemic hit, this event moved to a virtual format. For the opening of *The Black Index* exhibition, a dual virtual event took place, involving a Zoom Meeting for Foundation members and, afterwards, a public Zoom Webinar for anyone who had registered for free to join.

Art Center staff began planning the event more than a month in advance. This involved several meetings among a group of staff members, and during these sessions ideas were formed on the content of each event; a "script" or run-of-show was then developed, the timing of each segment was determined, and roles and responsibilities were designated. A number of tech checks and practice sessions helped iron out any potential issues that might emerge on the night of the event, and helped staff plan for any unforeseen technical problems.

For the members' preview, it was decided that a Zoom Meeting was preferable due to the smaller numbers involved, and the increased opportunity for Foundation members to interact with the speakers in a more intimate, exclusive session. It also meant that the members' event and public event could be managed separately. With a buffer of 15 minutes between each event, the members' preview took place first on one Art Center Zoom account, while the public Webinar event was managed by a different staff member on a separate Art Center account that has a webinar license.

The events involved a real-world connection with local restaurant Jackie's Place, which provided pre-made cocktails that could be delivered to or collected by Foundation Circle-level members; the general public, meanwhile, were provided with a free cocktail recipe.

The members-only event included exclusive presentations by Dennis Delgado and Lava Thomas, two of the artists in the exhibition, and an intimate Q&A with members. There was also a live exhibition walkthrough with the curator, Bridget R. Cooks, and the use of a slideshow.

For the main public event, which was free to attend, attendees registered on Eventbrite to receive the Zoom Webinar link. This was of benefit as we were able to track projected attendance figures, with the consideration that we may have had to broadcast to YouTube Live or Facebook Live if the numbers went above our webinar limit. It also meant that we were able to send attendees a survey after the event so that we could track user satisfaction.

The main presenter of the webinar was Karen Kienzle, Director of the Art Center, who joined the session as a panelist and used a preprepared script. There was a behind-the-scenes webinar host, who shared videos and slideshows as needed; several additional employees worked in the background to monitor the Q&A and ensure any technical issues were resolved; and one person was designated to manage the walkthrough. A list of links and information was preprepared to input into the chat during the events. Everyone was clear on the schedule and timings of each event, which was important to ensure both the members' preview and public event ran smoothly.

During the webinar, there was an introduction to the event by Palo Alto vice mayor Pat Burt; a prerecorded video slideshow featuring the artworks in the exhibition accompanied by a reading of a section of the curator's "The Black Index" essay by actor and theater professor Aldo Billingslea; a second live walkthrough with Dr Cooks; a redaction poetry activity with playwright Leelee Jackson; and a talk by renowned writer Julie Lythcott-Haims.

Interactions with the audience were limited; however, the Q&A was enabled, and when it came to participants reading their poetry at the end of the writing activity with Leelee Jackson, they raised their hand digitally and were then unmuted so that they could share their work. This option was simpler to manage than promoting them to panelists in the limited time available, although it meant that the participants could only engage via audio.

For the live exhibition walkthrough, the curator wore a wired lavalier microphone that was connected to the cameraperson's smartphone. This was important to improve the audio quality for the live walkthrough. The smartphone was mounted on a monopod using a smartphone attachment so that the video feed would not be too shaky. The smartphone was then connected directly to the webinar as a live feed via the smartphone's Zoom account, with the cameraperson joining as a panelist under the name "Exhibition Walkthrough".

It was important to have a number of fallback options available if any issues arose during the event. For example, we designated an alternate host, ensured we had a co-host with access to all the assets, and had a fallback plan if any segment did not work out as planned. We worked to ensure that all panelists had a good internet connection, and that we had a plan in place if the internet failed for anyone at any point during the event. There is always the risk of technical issues with a live walkthrough, for example. For this reason, we realized it was advisable to have a prerecorded walkthrough or slideshow of the exhibition on hand that could be played at a moment's notice if there were problems with the live walkthrough.

We ensured that all onsite panelists were located in separate spaces, to avoid any feedback. In addition, all panelists muted themselves and turned off their screens unless they were

presenting, as this ensured that the audience saw only the relevant presenter. It was important to have smooth transitions between each segment, with the presenter bridging the gaps between each section and giving the webinar host the time and opportunity to prepare for the next section of the event.

Both events were recorded; however, only the public webinar was later published on YouTube. This meant the public event remained accessible to all those who were interested in it, while the members' preview remained exclusive.

To view the recording of this event, please visit the Palo Alto Art Center Foundation's YouTube channel.

The live walkthrough in progress during the Friday Night at the Art Center celebration of *The Black Index* exhibition. Pictured is curator Bridget R. Cooks, left, speaking about the artworks, and an Art Center staff member broadcasting to Zoom using a smartphone attached to a monopod.

Virtual artist talks, author visits, and expert presentations

The Palo Alto Art Center has found that virtual programming involving exhibiting artists, such as online lectures, talks, and presentations, have been particularly successful. As a result, the Art Center plans to continue this type of virtual event beyond the Covid-19 pandemic.

The Art Center has found that there has been significant interest among artists in participating in virtual talks and lectures, and that there has also been high audience attendance for such events. The benefits of these events are two-fold: they have removed travel barriers for artists who do not live near the venue, meaning they can still be involved in exhibition-related events, and at the same time members of the public from anywhere in the world who are interested in the artist in question can attend the virtual event.

Virtual author visits and high-profile expert presentations also fall within this category of virtual events. Cultural institutions may find that such events are actually more successful in a virtual format than in person due to their flexibility and high audience capacity. A well-known author, for example, can attract a significant audience from a wide geographic area for a virtual event.

Such events are best suited to the webinar format, as it facilitates a large number of attendees, and maintains the primary focus on the artist, author, or expert giving the presentation.

Options for broadcasting livestreams

Facebook Live and YouTube Live

Zoom Webinars can easily be broadcast live on Facebook Live or YouTube Live, which is an option if you are hoping to expand your reach and do not need the audience to sign up in advance, if you would like your followers to happen upon your event if they are online at the time of the broadcast, and if you suspect your audience numbers may be higher than your Zoom audience limits for webinars.

- Livestreaming from Zoom to YouTube Live

- Livestreaming from Zoom to Facebook Live

You can enable automatic redirects to a livestream on Facebook Live or YouTube Live if your Zoom Webinar reaches capacity. For directions on how to do this, see here.

For details on how to broadcast live to a custom service via Zoom, see here. It is also possible to livestream from Zoom to Vimeo, although the process is a little more complex, and there are costs involved. For details on how to do this, see here.

Facebook Live and YouTube Live are useful for livestreamed events in their own right, especially as a way to engage with current subscribers and followers, and for events that do not require registration. With Facebook Live and YouTube Live streams, you are likely to get casual viewers who drop in to your online event when they notice that it is streaming. For this reason, streaming directly to Facebook Live and YouTube Live is suitable for short, simple, free livestreams such as a book reading or craft demonstration. Other platform options for livestreaming video include Instagram, Vimeo, and Twitter.

For more complex livestreams with multiple presenters, cameras and assets, using Zoom or your platform of choice as the base platform and then streaming this to Facebook Live and YouTube Live is preferable as you have more options and controls over how your content is presented.

If you stream to YouTube Live or Vimeo, it is also possible to embed this stream on your website, which can then give you additional choices about how your stream is presented.

Additional information on livestreaming platforms

- How to livestream on YouTube

- How to livestream on Facebook

- Facebook Live details

- Facebook livestreaming best practices

- Facebook advanced event livestreaming

- How to broadcast live on Instagram

- How to broadcast live on Vimeo

- Vimeo streaming information and pricing

- How to embed YouTube video stream on your website

- How to embed Vimeo video stream on your website

- How to create live videos on Twitter

Alternatives to Zoom for video-conferencing

StreamYard

An excellent platform for broadcast-style professional-looking livestreams that gives the presenter many options for presentation and control in a simple, easy-to-use user interface. It is best suited for broadcast-style livestreams as opposed to interactive events such as small classes.

StreamYard

Pricing

Google Meet

Integrates well with Google's suite of products so if your organization already uses Google products, this may be a seamless option to consider. Easy to use and allows meetings of up to 60 minutes for up to 100 people in its free plan. Has fewer advanced options compared to Zoom in its free plan.

Google Meet

Pricing

Microsoft Teams

Teams is an option if your organization already uses Microsoft's Office 365 suite of products due to their seamless integration. Its free product, while having limited functionality, allows up to 100 participants and up to 60 minutes per meeting.

Microsoft Teams

Pricing

GoToMeeting

An affordable and flexible option for professional meetings. Allows users to sign in on any device without having to download an app or sign up to the service.

GoToMeeting

Pricing

External online education platforms

If you want to potentially reach more users than your local community network, you can consider having your virtual classes hosted on an external platform that has a large, potentially international, user base. Examples include Outschool and Coursera. If you plan to continue running virtual classes as in-person activities recommence, such platforms may be a good option to ensure you get enough sign-ups and the classes are sustainable financially.

Outschool

Outschool is geared towards youth classes, and can be a useful platform for extending the reach of your organization. For details on how organizations can set up classes on Outschool, see here.

According to Outshcool, the company "retains 30 per cent of the parent's enrollment cost, and organizations receive 70 per cent. We use this 30 per cent service fee to cover the cost of Zoom licensing, credit card fees, paid marketing of your classes, and top-tier support from our team." So if you do not have a Zoom license, and you are seeking to expand the reach of your classes, this may be a feasible option.

Coursera

Coursera is geared towards high-level adult education and has affiliations with many prestigious universities, so it may not suit small institutions. However, it could be an option worth exploring for your organization. Its courses consist of prerecorded video content rather than livestreamed classes. Examples within Coursera include courses offered by MoMA.

To inquire about how to partner with Coursera, see here.

Prerecorded video content platforms

YouTube and Vimeo
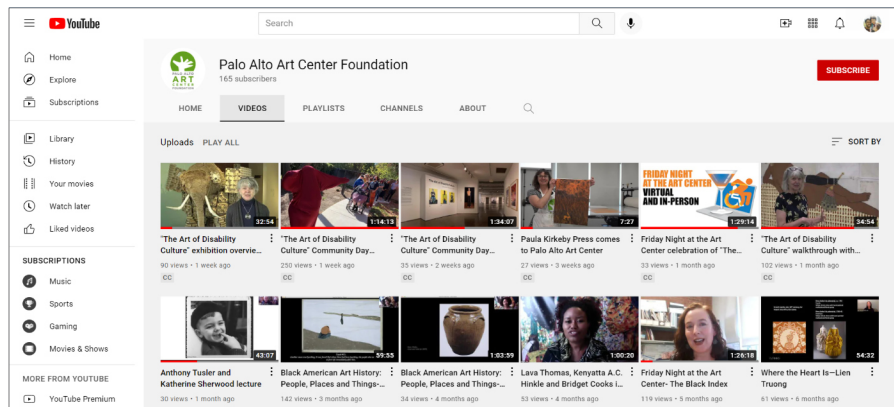
The Palo Art Center Foundation's YouTube channel.

Perhaps the most obvious platform for posting video content is YouTube. A YouTube channel can be an important and successful form of virtual engagement for your organization, which can be used to post new video content and archive live events. Vimeo is a viable alternative with similar functionality. Subscribers to your channel as well as individuals searching for content can access your videos, so your channel can be an effective way to engage with your audience and keep all your video content in one, easily accessible online location.

As with livestreamed events, prerecorded videos on YouTube and Vimeo can be embedded directly on your website so that visitors to your site can access video content directly from there.

SFMOMA has an article on its website that analyses how museums can best use YouTube to their advantage.

For instructions on how to upload videos to YouTube, see here.

For instructions on how to upload videos to Vimeo, see here.

YouTube has also recently launched a video-sharing service called Shorts, which is intended to be the platform's answer to TikTok and Instagram Reels. These short-form videos can be up to 60 seconds long, and are designed to be created, edited, and uploaded to YouTube using a smartphone.

YouTube Shorts

Getting started with YouTube Shorts

Social media platforms

Prerecorded videos are a popular and effective option for your social media platforms. These platforms include but are not limited to Instagram, Facebook, and Twitter. Each has their own unique possibilities and limitations.

Instagram

Instagram allows you to post videos of up to 60 minutes on its platform. Videos appear in your Instagram video tab, and you can also have them appear on your main profile grid and feed. Videos can be posted in both landscape and portrait format, but remember that on your Instagram profile grid the cover for the video will appear in a square format, while the 60-second preview on feeds will appear as a 4:5 center crop of your video, so it is important to consider this when editing your video. It is also worth noting that you cannot edit the cover image for your video after it has been posted, so bear this in mind when uploading your video.

How to post a video on Instagram

Video and cover image specs for Instagram video posts

When posting both videos and images on Instagram, it is important to consider hashtags. Hashtags are a useful way to increase discoverability of your post and to engage with new audiences. It is advisable to research and select up to 10 relevant and specific hashtags. Without hashtags, it is likely that only your current followers will see your post. Too many hashtags, and your account comes across as "spammy". Try to select hashtags that are not overused or too general. For example, there is little point in using #Art in a post, but you could use a more specific hashtag that is relevant to your post, such as #AbstractWatercolor. You can also tag other accounts in your posts by using @ and then their account name, both in the body text of the caption and in the image or video itself. However, again, do not overuse this function, and only tag accounts that are directly relevant to your post.

It is advisable to keep track of comments on your posts and reply if needed. With both Instagram and Facebook business accounts, you can choose to promote certain posts that are doing well so that they reach new audiences.

Reels is Instagram's latest video feature, with the intention being that it is a rival to TIkTok's videosharing platform. Reels are designed to be viewed in portrait format, are only 15 to 60 seconds in length, and can be discovered in the Explore section of Instagram. They are intended to be lighthearted, entertaining and experimental, with features such as being able to easily add filters, music, and text. Short videos like this, when accompanied by the appropriate hashtags, often generate significant engagement in terms of views, likes, comments, and shares.

How to create Reels

In Instagram Stories, you can post videos that are even shorter, of up to 15 seconds in length. Inspired by Snapchat, Stories show up at the top of your followers' Instagram feeds, and they disappear after 24 hours. You can keep Stories available to view after this 24-hour period by adding them to your Highlights at any stage—these appear at the top of your Instagram page.

Stories are also useful for image posts that are more ephemeral than your regular feed posts, such as time-specific announcements or resharing posts from other users' accounts, which helps to increase community engagement.

How to create Stories
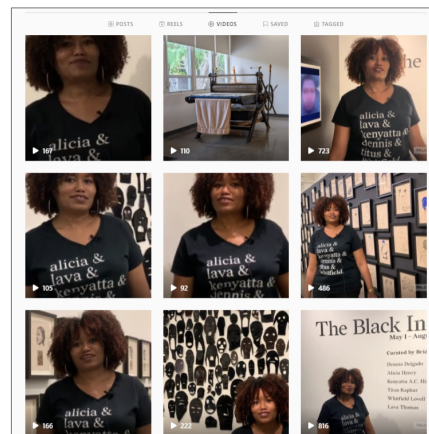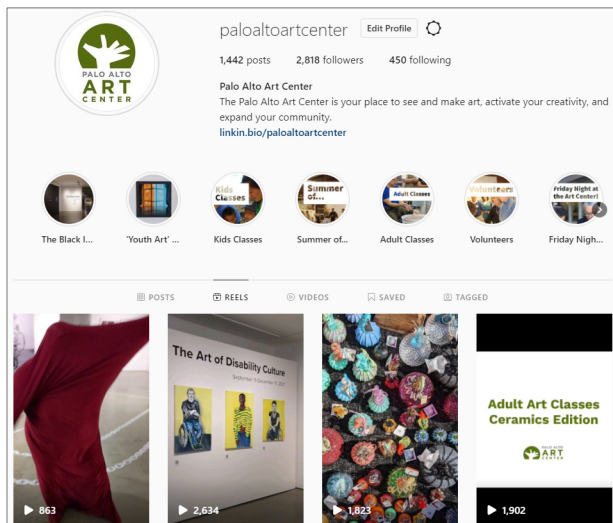
The Palo Alto Art Center's Instagram Reels, left, Instagram videos, above, and Facebook videos, below.

Facebook

On Facebook, you can upload a video of up to 240 minutes to your page, and you can upload videos in high-definition (HD) format from your computer.

How to upload a video to Facebook

Facebook also offers the capability to post Stories, and has just launched Reels on Facebook in the US, allowing users to share their Instagram Reels to Facebook, or to create Reels within the Facebook app itself.
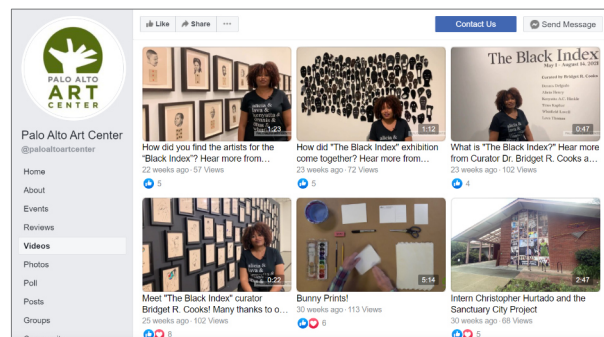
Twitter

Twitter is designed for short-form content, and so its videos have a maximum length of two minutes and 20 seconds.

How to upload a video to Twitter

Audio-conferencing platforms

Virtual programming does not solely need to involve video-based offerings. Audio livestreams can be an option if your event does not require video, such as an interview, panel discussion or book reading. While we will not go into detail on audio-based options here in this playbook, it is certainly something that you may want to consider or investigate. It is particularly useful for engaging with your social media followers.

Social media platforms

Twitter introduced a live audio broadcast "conversation" platform called Spaces in November 2020. This radio-style service allows you to host a conversation, for example a talk or interview, with up to 10 people. When it goes live, your followers will be notified that it is taking place, and it is possible for anyone on Twitter to listen in. The concept is similar to the recently launched app, Clubhouse, which describes itself as a forum for "drop-in audio conversations".

For more information on Spaces, see here and here.

For information on Clubhouse.

Facebook is also currently working on live audio options, the details of which can be found here.

Creating your own podcast

If you would like to take audio-conferencing one step further, beyond the confines of social media, then you could consider establishing your own podcast.

- How to start a podcast for your museum

- DIY podcasting for museums

- How to start a podcast

- Starting your podcast

Online exhibitions

There are several ways to bring exhibitions to your online audience in a virtual format:

- You can create an online version of your exhibition such as: a slideshow of the artworks on your website; a dedicated exhibition website showcasing the works and the artists in the show; installation shots of your exhibition uploaded to a photo-sharing site such as Flickr.

- You can film live or prerecorded exhibition walkthroughs, or create a video tour of your space.

- You can create a 3D tour of your building or exhibition space so that people who cannot attend your venue in person can get a sense of the space and your display in a virtual, interactive format that they can explore at their leisure.

If you have copyrighted images on display that you intend to show as part of your virtual walkthrough or online exhibition, it is important that you ensure you have agreements from the artists or rights owners in question to present their artwork in this format. This is particularly important if your walkthrough, slideshow or 3D virtual exhibition is available to access freely online.

Online exhibition examples

The Black Index, a touring exhibition hosted by the Palo Alto Art Center during the summer of 2021, utilized many online exhibition options. The exhibition has a dedicated website with official stills of the images, installation shots, and a 3D tour of the first space in which it was on display. The Palo Alto Art Center also has installation shots of the show uploaded on Flickr.

- Dedicated website with interactive 3D tour.

- Installation shots on the website of the University Art Galleries at UC Irvine, where the exhibition was first on display.

- The Palo Alto Art Center's Flickr album of installation shots of the show.

- A YouTube recording of the Friday Night at the Art Center online special event featuring a live exhibition walkthrough of *The Black Index* with exhibition curator Dr. Bridget R. Cooks (walkthrough starts at 13:53 minutes).

3D tours and virtual reality exhibitions

Matterport and similar providers

Matterport technology is perhaps best known for interactive 3D walkthroughs of properties on real-estate websites, but it is also a potential option for museum walkthroughs, as it creates a digital version of your space using specialized 360-degree cameras. You can actually create a 3D version of your space yourself using the Matterport app and an iPhone, or if you have the budget you can hire a professional Matterport photographer to take a 3D scan of your space. It can then be published online for visitors to explore. Some examples of Matterport being used in a museum context can be found here.

Matterport's pricing structure

Other companies offering similar options with various pricing scales include:

- Ricoh360 Tours

- 3DVista

- Box Brownie

Google Arts and Culture

Another possibility is Google Arts and Culture and Google Street View. For Street View, you can create a tour yourself using a 360-degree camera or you can hire a Google-approved professional photographer to create the tour with specialized equipment. When you have uploaded it to Google Street View, anyone searching for your venue on Google Maps can enter the 360-degree tour of your space.

You may also decide to partner with Google Arts and Culture to bring your museum and collections to a wider audience in a digital format. Google Arts and Culture offers the opportunity to create 360-degree tours, as well as helping you to create and publish digitized versions of your collection online. Google Arts and Culture is a non-profit initiative run by Google. It is free for museums to partner with Google Arts and Culture, with the concept being that it makes your exhibitions and collections freely accessible online to all. This option is best suited to museums with a permanent collection.

Google Arts and Culture

Google Arts and Culture Street View tours

Street View 360 tours

Second Life

Second Life is an online virtual world, and its technology allows you to create a virtual reality version of your exhibition space. An example of this is the Peale Center in Baltimore's Second Life version of its building, developed by Linden Labs and Virtual Ability.

Second Life

Virtual Peale

Linden Labs information on Virtual Peale

Filming walkthroughs and demos

Live walkthrough tips

- If you decide to film a live walkthrough via Zoom or another platform, the most important consideration before going down this route is to ensure you have a strong wifi connection throughout the space in which you intend to film.

- Many smartphones have excellent cameras and, so long as your internet is reliable, this is the best and simplest option for livestreaming a walkthrough. Use a wifi-connected smartphone with a high-quality camera that can stream directly to the platform you are using, for example Zoom. Ensure you have the Zoom app, or the platform you are using, set up on your smartphone beforehand so that you can log in to the event easily when the time comes.

- Attach your smartphone to a monopod or smartphone gimbal rig to ensure your camera is stabilized.

- Use the camera on the back of your phone rather than the front-facing camera, as this is of superior quality. It also means that you can see what is being shown on your screen. When you join Zoom in your smartphone, click on the "reverse camera" icon on the top left of the screen to switch to this camera.

- If you are using Zoom, ensure that this screen has been spotlighted by the host before the walkthrough starts. It is also recommended that the host and panelists turn off their screens so that the walkthrough screen is the main focus.

- If the speaker is onsite for the walkthrough, the best audio option is a wireless lavalier microphone or a wired lavalier microphone with a long cable that is connected to the

smartphone. Another option is wireless earbuds that have an inbuilt microphone, although these can have a slight audio delay.

- Ensure the exhibition space is closed to the public during the walkthrough, and check for room sounds beforehand, such as if there is any sound coming from multimedia artworks, or if there are loud footsteps when walking through the space.

- Check that the lighting is adjusted so that the space and the exhibits can be seen at their best in the video feed. Check for reflections, shadows or glare on glass protecting the exhibits, and ensure that the images can be seen properly on camera.

- When panning across the space or when the cameraperson is moving, ensure this happens as slowly as possible to avoid blurriness and disorientation for the viewers.

Prerecorded walkthrough tips

If you want to film a prerecorded walkthrough, there are more options than a live walkthrough as you can use a video camera rather than a smartphone, and the wifi connection is no longer a concern in this context. It is still advisable to use a monopod or stabilizer, and a wireless lavalier microphone for the speaker. Another option is to film the walkthrough without the speaker on camera, and add a voiceover in the editing stage. When editing, you also have more options to show the artworks at their best, such as adding in official stills of the images rather than simply showing installation shots. For more details on using camera equipment, filming, and editing, please refer to our Training Documentation section, from page 50.

"The Art of Disability Culture" exhibition overview with curator Fran Osborne

Welcoming everyone into the Art Center is a life-size juvenile

2:55 / 32:53   Scroll for details

A prerecorded walkthrough and overview of *The Art of Disability Culture* exhibition presented by curator Fran Osborne. This video was filmed by Midpen Media Center and is available to view on the Palo Alto Art Center Foundation's YouTube channel.

How to film a single-camera or two-camera prerecorded demonstration

For this type of video, which is popular to demonstrate art projects and science experiments, you have two options:

- **Two-camera setup:** Use a camcorder as your main camera, set up on a tripod and facing the presenter, with a shotgun mic or with the presenter using a lavalier mic. The second camera can be a GoPro or a smartphone, which is attached to a boom mic stand using a tripod mount adapter or smartphone tripod attachment. This can then be extended over the demonstration space for the top-down frame. If you are using a GoPro in this scenario, you can connect the GoPro wirelessly to your smartphone to check how the frame looks. Then, in the editing stage, you can switch between camera views as needed. Ensure that the lighting is adjusted so that the top-down camera does not cast shadows during the demonstration.

- **Single-camera setup:** When you are recording a top-down demonstration using a single camera, it is preferable to use a camcorder rather than smartphone or GoPro as it is higher quality. The camcorder can be attached to a boom mic stand using a ¼" screw adapter. You can then extend and adjust the boom mic stand with the camcorder attached so that it is facing directly down on to the demonstration table. If your camcorder has a swivel viewing screen, you can adjust this to face downwards so that you can check how the frame appears when filming. However, due to the weight of the camcorder, it is paramount that you use sandbags as counterweights to prevent it toppling over.

A single-camera set-up for a prerecorded art demonstration for kids. The completed video, a bunny print demonstration, is available to view on the Art Center's YouTube channel.

ACCESSIBILITY

This section demonstrates how virtual programming can expand access and engage new audiences. It goes into detail on the accessibility considerations that should be taken into account, as well as the tools and practices that can be adopted when creating inclusive live and prerecorded content, and when posting on websites and social media.

Expanding access with virtual programming

Virtual programming should be considered a part of overall programming beyond the Covid-19 pandemic as it expands access, inclusivity, and reach, thus engaging new audiences and, indeed, offering a chance to engage all audiences. With hybrid programming that includes both in-person and digital offerings, your organization can integrate accessibility and inclusion into your programming strategy (Cuseum 2021, 38). People who cannot attend your institution physically can engage with your institution virtually, while people with disabilities can access your institution and its programs in ways that they otherwise might not be able to.

For this reason, it is of paramount importance that you plan your online offerings with accessibility in mind, considering how you can make your virtual programming accessible to all people of all abilities and backgrounds. It is important to consider this from the outset, rather than trying to shoehorn accessibility options in to your programs at a later stage, as there may be some budgetary considerations.

Most importantly, planning should by default include consideration of all possible audiences and this should be built into your overall program strategy. While not always possible due to budget constraints, it is preferable to offer accommodations such as live captioning and ASL interpretation by default, rather than waiting for a potential audience member to request accommodations. It is often possible to enable accessibility features at relatively low cost or, at the very least, consideration of accessibility at an early stage in program planning can help with budgeting for such services.

How to make live virtual events accessible

For live virtual events it is important to offer live closed captioning (CC), a live transcript, American Sign Language (ASL) interpretation, and visual descriptions.

Live closed captioning and transcription services

Live closed captions and an accompanying transcript should preferably be delivered in real time by a person, as this ensures the greatest possible accuracy. Automatically generated live captions, by contrast, are known for their high error rate. If posting a video of your event on YouTube or social media afterwards, you should edit the captions before uploading to iron out any errors. The transcript, edited to correct errors, should also be made available after an event.

You should consider signing up for a captioning and transcription service. Both human and automated options are available, and such services often have free trials and non-profit rates. It is preferable to seek Communication Access Real-time Translation (CART) providers for live events. CART professionals provide real-time human captioning, and are specially trained to transcribe text reliably and accurately. Alternatively, services such as Otter.ai and Rev.com offer AI-based live captions that are affordable and reasonably accurate.

Zoom offers automatic live closed captions, if you do not have the budget for a paid service, but be aware that the error rate is quite high. Be sure to enable captioning in Zoom's "in-meeting advanced" settings before starting a meeting or webinar. Within Zoom, an individual can then be assigned by the host to provide manual captioning, an integrated third-party closed captioning service can provide the captioning, or Zoom's live transcription feature can automatically provide captions.

- Information on Zoom's accessibility features and how to set up closed captioning on Zoom.

- With Zoom you can also have separate audio feeds for language translation.

Live American Sign Language (ASL) interpretation

Depending on the length of your event, at least one ASL interpreter should be employed to provide ASL interpretation. This individual's screen should be clearly visible at all times. On Zoom, you can do this by using multi-pinning or multi-spotlighting.

Visual descriptions

Speakers in live events should describe themselves and their background, and should also describe whatever is shown on screen, such as slides or images, so that people with visual impairments can fully engage with the event. Examples include: "I am a petite woman with shoulder-length brown hair, pale skin, blue eyes, and freckles. I am wearing a plain navy blue sweater and I am sitting on a black office chair. The background is a plain white wall."

- Amara: Subtitling service for prerecorded videos

- Ubiqus: Offers video transcription, subtitling, translation, and localization

- Rev: Human and AI video transcription and captioning, and AI Zoom captioning

- CastingWords: Transcription and captioning service

- 3Play Media: Offers video captioning and transcription, and live captioning

- Otter.ai: Live AI Zoom captioning, as well as video transcription and captioning

- Linguabee: ASL interpretation and CART captioning service provider

- StreamText: Technology used by transcription and captioning providers

How to make prerecorded videos accessible

It is possible to edit automatically generated closed captioning (CC) on YouTube and Vimeo before posting your video online. It is important to check the CC for accuracy before posting. Alternatively, you can use a service such as Otter.ai or Rev.com to create perfected captions, with a more accurate, time-synced caption file, usually in SRT format, that you can add to YouTube or Vimeo when you upload your video.

- YouTube offers editable automatic captioning, and integrations with third-party services.

- Vimeo also has various captioning options, including integrating with third-party providers.

You may also consider open captions. Closed captions can be turned on or off by the viewer; open captions are added to the video file itself in the editing stage and cannot be turned off. In addition, consider providing a transcript below or alongside the video, or a link to the transcript. Again, edit any automatically generated transcripts for accuracy prior to posting.

When filming a video with audio, ensure that you leave space in the lower-third of the frame so that captions can be added without covering something important such as a key visual detail.

Audio descriptions, i.e., a voice that describes what is being shown on the screen when no dialogue is being spoken, should be considered. You may also consider adding an ASL interpreter to your prerecorded videos. The interpreter's video can be included as a picture-within-a-picture in the editing process. Remember to consider this when setting up your shots, ensuring there is a place in the frame where the picture-in-picture video of the interpreter can be positioned.

Websites and images

Ensure that digital content such as your website is accessible to all users, i.e., that it can be easily navigated by people who use assistive technologies such as screen readers, and that it includes alt text and visual descriptions. Alt text, or alternative text, is a short visual description of what an image shows, while an image description is a long, detailed, non-interpretive description of the image.

You can check the accessibility of your website by installing the Wave Chrome extension.

If you have images from an exhibition or your collection posted online, always ensure that these images have alt text embedded in them. Alt text and visual descriptions are essential tools for individuals with visual impairments to be able to engage fully with your digital image content. It is important to have alt text and visual descriptions available for screen readers to access in addition to the standard basic description of an image offered on a caption or label, which usually includes simply the image title, copyright information, materials, date etc.

For advice on how to write image descriptions and for sample alt text and image descriptions, see the comprehensive guidelines offered by Cooper-Hewitt.

Social media posts

When posting images on Facebook, Instagram, or Twitter, ensure that you have added a short description of the image in the alt text field. This enables screen readers to describe the image shown. It is not recommended that you post an image with text as part of the image, as screen readers cannot recognize the text in an image. If you do post an image with text in it, include the full text in the description of the image.

- How to edit or insert alternative text when posting images on Facebook.

- How to edit or insert alternative text when posting images on Instagram.

- How to edit or insert alternative text when posting images on Twitter.

It is also best practice to include a longer image description in the body text of your post. You can add this at the end of your post, before hashtags.

Whenever you add hashtags to a post, it is important to capitalize the first letter of each word in the hashtags, so that a screen reader can read the hashtags correctly.

It is possible to upload SRT caption files to Facebook and Twitter when you upload videos to these platforms, meaning you can provide perfected captions with your videos. However, at time of writing, Instagram only offers auto-generated captions for videos.

Case study: improving access and inclusion

The Art of Disability Culture exhibition at the Art Center

An installation shot of *The Art of Disability Culture* exhibition at the Palo Alto Art Center.

The Art of Disability Culture exhibition, curated by guest curator Fran Osborne, opened at the Palo Alto Art Center on September 11, 2021. The show featured work by 20 artists with disabilities based in the Bay Area or with strong ties to the Bay Area.

This exhibition provided an impetus for staff at the Art Center to consider the ways in which we could make our programs more accessible, in particular considering all potential avenues of access and inclusion—for the artists, for online audiences, and for in-person attendees.

We realized from the outset, when planning our Friday Night at the Art Center exhibition opening and a Community Day celebration, that the optimal format for these events would be a hybrid offering. In other words, the events would take place simultaneously onsite and online, so that those who could not attend or did not feel safe to attend in person could still access the events. In this context, we researched and implemented many accessible features for the online component of the events, namely:

- Live human CART captioning, which was integrated into our Zoom and YouTube livestreams, and was also accessible via a StreamText live transcript.

- A camera trained on the onsite ASL interpreter for the livestream section of the events that was shown as a picture-in-picture.

- The use of prerecorded videos that reflected many of the live onsite activities. We decided upon this strategy to ensure both the online and in-person events ran smoothly. For example, for our online events, we showed prerecorded exhibition walkthroughs with the guest curator and prerecorded artist presentations. We also livestreamed the performances that took place onsite using stationary cameras. We worked with a local media production company, Midpen Media Center, to produce the videos and to livestream the performances to YouTube, in an effort to enhance the production values of the online component of the events.

- Video recordings of the events with perfected captions. We later published videos of the events on our YouTube channel with perfected captions so that anyone who could not access the event live would be able to view the content at their convenience.

We achieved perfected captions for the recordings by using the Otter.ai automated transcription service. It is worth noting that the transcript produced by Otter still required significant editing. We were then able to export the transcript from Otter as a timed SRT caption file, and upload this to YouTube when uploading the videos. We found it was important at this stage, when the SRT file was uploaded to YouTube, to double-check that the captions and audio matched up. The end result was far superior to automated YouTube captions and, while time consuming, this approach was less costly than employing a service provider to deliver the perfected caption file.

Following our review of the Friday Night at the Art Center and Community Day events, we determined that large-scale, simultaneous hybrid events can be somewhat challenging for small institutions with limited staffing and resources. We plan to continue to offer online programming for special events in addition to our in-person events; however, to enable our staff to manage both in-person and online events effectively, we are reconsidering whether to host these events simultaneously. We did find, however, that the combination of live and prerecorded video content worked well for online special events, and plan to continue incorporating this into our future events.

When planning exhibitions and events, we discovered that it was necessary to prepare for accessibility considerations well in advance—at the budgeting and initial planning stages. It can take time to source available ASL interpreters and CART captioners, and it is also important to budget for their services. We hope to continue to offer such accommodations for our online events beyond this exhibition. Our Otter.ai subscription also enables us to provide improved captions for Zoom Webinars and Meetings if a live captioner is not an option—while not as good as a human captioner, Otter.ai's captioning service is far superior to Zoom's automated captions.

We also created an enhanced website for the exhibition, so that those who could not visit the show in person could still access materials related to the exhibition. Each artist had a page dedicated to their work in the show, and we ensured there was alt text embedded in all images. We also had audio descriptions for all the artworks, as often as possible recorded by the artists themselves. These were accessible in the gallery via QR code, but also available on the website.

In terms of our social media , this exhibition gave us the opportunity to learn about ways that we

could make our social posts more accessible. For each post on Facebook and Instagram, we now add alt text to all images. We also include an image description at the end of each post. In addition, we capitalize each word in hashtags so that a screen reader can read them correctly.

The Art Center will continue to implement and develop the accessibility strategies that we adopted in the context of the *The Art of Disability Culture* exhibition. Thanks to a recently awarded IMLS American Rescue Plan grant, we can build on the accessibility efforts initiated by *The Art of Disability Culture*, and plan to continue strengthening the Art Center's capacity to engage and serve individuals and families with disabilities of all kinds.
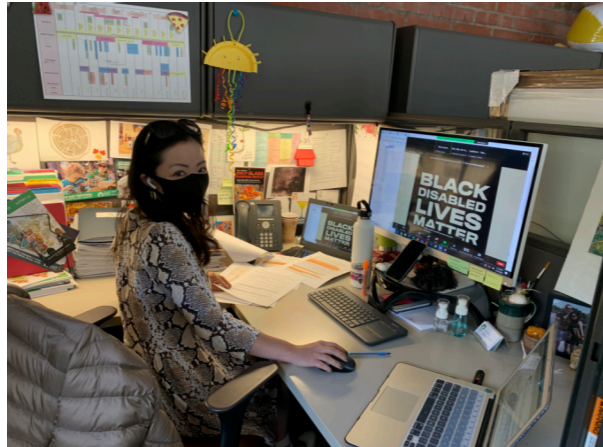
A staff member during the *The Art of Disability Culture* Community Day webinar at the Palo Alto Art Center.

Additional accessibility resources and links

- Museum Learning Hub training module on accessibility and inclusion

- Inclusive design glossary

- Reading list

- Audio description and captioning guide

- Tips on how to make your presentations accessible to all

- Coyote resources list

- Accessible virtual meeting tips

- Virtual Ability organization

- *New York Times* article about how the pandemic made work and social life more accessible for many: "When the World Shut Down, They Saw it Open"

- Paul K. Longmore Institute on Disability guidance on how to make Zoom events accessible

UNIQUE CONSIDERATIONS

This section summarizes the potentially unique aspects of virtual programs for libraries, zoos, and museums, with some advice on digital programming that is particular to each type of organization.

Libraries

An exterior view of Rinconada Library in Palo Alto, CA. Rinconada is one of the Palo Alto City Library's branch locations.

Libraries are special public institutions that perform an important civic function, in that they offer their services, in general, for free to their community. For this reason, it is important to take this unique aspect of such an organization into consideration when planning virtual programming. The majority, if not all, of your programming should be offered for free or at a reduced rate, as your budget allows.

Examples of free programming that can be offered by libraries include: book readings for youth audiences; singalong sessions or craft videos; author events; online book clubs; curated book lists; writing workshops or poetry slams; and wellness and outreach events such as a free online meditation class or an online session offering advice on, say, resume-writing. Libraries would benefit from having a YouTube channel, Facebook account, and Instagram page as they can use these to offer free content, both live and prerecorded, to their constituents, who can access the material easily at any time.

The Palo Alto City Library has been using both its Facebook page and YouTube channel extensively for its free virtual offerings. The Library offers free Facebook Live children's storytime and craft-

making sessions. The storytime sessions on Facebook Live do not require registration and are open to all; they are also scheduled at a set time each week so that regular viewers know when to tune in. The Library's YouTube channel, meanwhile, features craft and STEM videos for anyone to view at their leisure that have been organized into easily accessible playlists: Crafternoons and Steam Lab Saturday. For more details on the Library's digital programs, see its calendar of events.

One particular consideration when offering virtual storytimes is that you have ascertained the copyright situation for such an endeavor. While many publishers relaxed restrictions on virtual read-alouds during the pandemic, it is important to check what policies each publisher currently has in place before you record a video of a reading or engage in a live virtual read-aloud. Information on many of the main publishers' copyright permissions can be found here.

A crowd-sourced document that includes a great deal of information on author and publisher permissions can be viewed here.

On a technical note, when you are doing read-alouds on Zoom and are holding the actual, physical book up to the screen for viewers to see, you may notice that on your video screen your text appears backwards. However, your audience can read the text as normal. Zoom has an automatic setting enabled called "Mirror Effect". This means that when you see yourself on Zoom, everything is flipped as if you are looking at yourself in the mirror. However, the other participants see you as you are, as though they are looking at you through a window, so they will indeed see the text as intended. If you find this disorientating, you can disable the mirror effect, and you will see your video as other participants see it. For information on how to change this setting, see the "Video" section of this Zoom webpage.

If you are doing the read-aloud via Zoom, and plan to use a PowerPoint presentation or video showing each page of the book while you read, perhaps the best way to display this is to use your slide presentation or video as a virtual background. This means that the viewer can both see you and read the text as you read it aloud. For information on how to do this, refer to the section of this playbook on Zoom virtual backgrounds.

Biblioboard is a consideration to help libraries and their community to create, share, and discover local content. It is a suitable platform for user-generated content that can be curated into collections and arranged by theme. Such content can include self-published works by your constituents, writing contest winners, and suggested reading lists. While Biblioboard's main use case is for libraries, local museums and art centers can also benefit from this service, as it is possible to host virtual exhibitions of students' and local artists' works. For an example of this, you can see an exhibition of artwork by volunteers at the Palo Alto Art Center here.

Here are some resources with tips and ideas for virtual programming in libraries:

- Programming Librarian resources

- WebJunction resources

Zoos

The flamingos outdoors at the Palo Alto Junior Museum and Zoo, in Palo Alto, CA.

Zoos have one particular asset that is unique to them: animals! As a result, there is great scope for zoos to offer: videos of animals and behind-the-scenes activities; live online animal meet-and-greets; virtual zoo field trips; and zookeeper presentations. Zoos also employ and have access to many experts in their fields. These experts are worth tapping into for special events such as lectures and round-tables.

In addition, one relatively simple idea that can be implemented easily is to set up live webcams of your animals for online visitors to view at any time on your website. Some webcams can pivot toward movement so that the livestreamed feed is most often focused on the animals. Zoos can also post video highlights of recent livestreams so that your viewers can see the animals when they are most active and visible.

Popular examples of zoo webcam livestreams include:

San Diego Zoo

Bronx Zoo

Zoos perform an invaluable educational resource for families and schools on the subjects of nature and science. For this reason, it is recommended that zoos publish printouts on their website of lesson plans, educational activities, games, and other resources for parents and teachers to access and download. For activities and experiments, it is advisable to include only items that are readily available at home for children to use.

Museums

An exterior shot of the Palo Alto Art Center building in Palo Alto, CA.

Museums have experts with specialized knowledge in their field who can be tapped for online talks, lectures, interviews, and panels. These include, for example, curators, artists, conservators, and so on. The education department, meanwhile, is in an ideal position to offer online classes and workshops to adults and children. Other content possibilities include: special events such as virtual community days or exhibition openings; virtual studio visits; behind-the-scenes glimpses of working in the museum; time-lapse videos of exhibition installations; online art auction fundraisers; film screenings; and online digital or live art commissions.

Museums usually have temporary exhibitions and/or permanent collections. Both of these can be accessed online in similar ways. One of the most effective virtual offerings for both temporary and permanent exhibits is the exhibition walkthrough. This can be offered either live or as a prerecorded video. The exhibits in the show can also be displayed online as a virtual exhibition slideshow, a Matterport-style 3D tour, or via a platform such as Second Life where a virtual-reality version of the exhibition can be created. Such options are discussed in detail in the Platforms section of this playbook.

For some effective examples of virtual museum tours, see this article in the *Guardian*.

It is also worth considering, if resources allow, posting your permanent collections online, particularly if you are a public institution. Digitized collections increase access for the public, and are an invaluable educational resource. For examples of digitized collections, see here.

For a list of virtual programming links and resources for museums, see here.

TRAINING DOCUMENTATION

The purpose of the section is to provide resources to help you produce and edit video material and livestreams of professional quality. As part of the IMLS CARES grant, the Art Center, Library, and JMZ received funding to purchase the necessary equipment to create live and prerecorded virtual programming with high production values. If your budget allows, professional equipment such as camcorders, lighting, and microphones will help greatly with creating high-quality productions.

In addition, the IMLS CARES grant enabled staff at the three institutions to receive in-depth training from professionals at Midpen Media Center in video production, video editing, and improving production values for livestreamed events. This section documents the training sessions, and provides information, resources, and advice on video production.

Midpen Media Center training sessions

The Art Center, Library, and JMZ had four in-depth training sessions on video production with Midpen Media Center. Sessions 1 and 2 focused on video production; Session 3 focused on video editing, specifically on using the Adobe Premiere Rush program; and Session 4 focused on how to improve production values in Zoom.

In each training session section below, this playbook includes a link to a video recording of the training session; a timed guide to the video training session if you are seeking specific information; highlights from the training; and any additional resources relevant to the training session.

A Google Drive folder with access to all the files relating to these training sessions is available here: Virtual Programming Playbook

Equipment

The IMLS CARES grant enabled the Art Center, Library, and JMZ to purchase suitable equipment to increase the production values of our virtual programming. With guidance from the professionals at Midpen Media Center, we purchased cameras, lights, microphones, tripods, and mic stands, as well as accessories including cables, mount adapters, and SD cards. The equipment was selected to meet our requirements for both prerecorded content and livestreaming.

We also purchased several annual subscriptions to Adobe Creative Cloud, which gives us access to the Adobe Premiere Rush video editing program and thus enables us to edit recorded video material. While Rush does not offer quite as much editing capability as Adobe Premiere Pro, this cloud-based program was selected due to its simple user interface, which is ideal for non-professional editors, and due to the flexibility it offers by being accessible on desktop, tablet, and smartphone. We purchased the Adobe Creative Cloud subscriptions through TechSoup, which gives nonprofit organizations special discounted software rates.

This document details the video production equipment that Midpen Media Center staff suggested we should purchase, in line with our budget: Virtual programming equipment list

The document lists the purchases we made, the approximate and actual cost of the purchased equipment, and the total final cost of all the equipment, including the software subscriptions. The document is specific to the Art Center's purchases, although the Library and JMZ made similar purchases.

- The Adobe Premiere Rush editing program

- TechSoup Adobe for Nonprofits

- Folder with instruction manuals for purchased equipment: Manuals

Palo Alto Art Center staff filming an interview using equipment and training funded by the IMLS CARES grant.

Training session 1: video equipment

This training session covers getting comfortable with your equipment; the importance of good audio; and lighting techniques.

Video

Midpen Media Center training session 1

Timed Guide

Midpen Media Center training timed guide session 1

Highlights

- This video goes into detail on the technical aspects of the Sony Camcorder FDR-AX700, GoPro Hero8, tripod, mic stand, Rode shotgun mic, and wireless lavalier mic, and how to use each piece of equipment that was purchased.

- The instructor advises on the camcorder setup, how to ensure good **exposure** using the auto function, and the importance of using "zebras" to check the exposure of your shot. (Zebras are graphically imposed slash lines that are not recorded, but show up on the LCD screen of your video camera to indicate over-exposure).

- The instructor gives advice on how to keep the camera steady using optical image stabilization, your body, a tripod or monopod.

- The instructor discusses the zooming, panning, and tilting your camera:

  - **Zooming:** changing the focal length of the lens to make the subject appear closer or further away in the frame. The instructor recommends minimizing the use of zoom, with some exceptions such as establishment shots and ending shots.

  - **Panning:** moving the camera's lens during your shot from one side to the other (right-to-left or left-to-right). Panning can be used for establishment shots, with the left-to-right pan preferable. The instructor recommends slow pans, as they can always be sped up in the editing process.

  - **Tilting:** moving the camera's lens direction up or down while keeping its horizontal axis constant. Tilting can be used to emphasize height, soaring up or down an object, or as a "reveal". Make your tilts shower than you might think.

- **Framing** your shots/composition: Use the rule of thirds to add tension, energy, and interest to your video frame. With the rule of thirds, two horizontal lines and two vertical lines divide

the frame into an imaginary grid of nine equal parts.

- When framing your shots, the instructor recommends a combination of long shots, medium long shots, medium shots, medium close-up shorts, close-up shots, and extreme close-up shots. When framing a face, it is important to have sufficient head room and looking room. It is also important to have walking room if your subject is walking across the frame.

- Avoid distractions in the foreground and background of your frame.

- The instructor addresses the importance of good **audio**. A separate microphone is always recommended for clean audio, and this audio should always be monitored with headphones. It is recommended that you listen closely for ambient sounds that may affect your audio recording.

- The difference between indoor and outdoor audio is discussed.

- In general, the closer the mic is to the source, the cleaner the audio quality.

- The instructor advises on the different use cases for a handheld microphone, a lavalier (lapel microphone), and shotgun microphone.

- The instructor discusses how to achieve good **lighting**. White balance/color temperature is addressed, with the differences between "warm" indoor lighting and "cold" daylight discussed, and how to avoid mismatches of color temperatures. The instructor discusses how to achieve classic three-point lighting, which includes a back light, a key light, and a fill light.

- The difference between directional, controllable "hard light" and more flattering, diffuse "soft light" is discussed.

Additional resources and links

- PDF handout of PowerPoint presentation for training sessions 1&2

- A video tour of the Sony Camcorder FDR-AX700

- A video that introduces the GoPro Hero 8 and its features

Training session 2: production values

This training session covers interviewing skills; B-roll; camera movement; shooting; and production values.

Video

Midpen Media Center training session 2

Timed Guide

Midpen Media Center training timed guide session 2

Highlights

- In this video, the instructor goes into detail on good **interview techniques**. He recommends having the camera's lens at eye level with the interviewee, and having your eyes near lens-level too, positioned just off-axis from the camera so the interviewee is not looking directly at the camera.

- The instructor gives interview tips, including: have a list of questions; make it conversational, get the person to focus on you, not the camera; ask open-ended questions; ask the interviewee to repeat your question in the form of a sentence.

- When filming the interviewee and interviewer together, the instructor advises that you keep your subjects "uncomfortably close" to one another so that they don't appear too far apart in the shot.

- Ensure your interviewee is looking their best—clothing, glasses, sitting up straight, etc.

- The instructor advises on **B-roll**: Cutaways (B-roll) is secondary footage that adds meaning to a sequence, or disguises the elimination of unwanted content. The cutaway to B-roll footage can be used to hide verbal or physical tics that would be distracting. B-roll also enhances the story being told. With interview videos, the instructor recommends striving for about 80 per cent B-roll on the screen.

- The instructor discusses types of camera movement:

  - Your video camera moves should emulate a viewer's natural movement.

  - **Dolly shots (push in):** the camera moves directly toward or away from the subject (like on a track), or follows the subject's progress (Steadicam-type shots).

  - **Trucking shots:** the camera moves perpendicular to the subject or action.

- **Walking/roaming shots:** involves moving through the action—emulates "being there".

- **Starting and ending shots:** The instructor recommends ensuring that the "Record" indicator (usually a red dot) is showing "Record" when you want to capture video. Also, tell yourself before every shot," 3+10+3". Push "Record" and hold your shot steady for 3 seconds. Ensure every clip is a minimum of 10 seconds. Wait 3 seconds after your shot is "over" before going back to "Standby".

- The instructor advises on the steps to take to ensure good **production values**:

  - Create the concept.

  - Gather the elements (shot list, script, music, scheduling interviews/event coverage).

  - Take responsibility for the project (releases, permissions, copyright issues).

  - Recruit your crew and take care of them.

  - Give credit to those who helped in the closing credits of your video.

- The instructor explains that every clip in your final video should "move the story forward". Be ruthless in your editing of the final product.

- The **5-shot sequence** (popularized by video journalist Michael Rosenblum) should be mixed up for good visual storytelling:

  1. Close up of action (e.g. subject's hands doing some activity).

  2. Close up of subject's face (e.g. concentrating on activity).

  3. Medium shot of subject involved in action.

  4. "Over-the-shoulder" shot of the action.

  5. Wide shots, creative angles, dolly shots, crane shots, etc.

- The instructor explains the importance of the **shot list**. It is important to have decided beforehand every shot you want, and check them off as you shoot. Include primary shots and B-roll. Vary the shots and angles, and shoot several times if necessary.

- Always end with a **call to action**, such as "visit us" or "take a class".

- PDF handout of <u>PowerPoint presentation</u> for training sessions 1&2

- Video <u>shot list</u>

- Generic <u>talent release form</u>

- How to make your own silk <u>diffuser</u>

Training session 3: video editing

This training session covers the Adobe Premiere Rush video editing program.

Video

<u>Midpen Media Center training session 3</u>

Timed Guide

<u>Midpen Media Center training timed guide session 3</u>

Highlights

- This training video goes into detail about how to edit a video using the Adobe Premiere Rush program.

- The instructor discusses how to turn your **"assets"**, i.e. your video clips, audio, titles, and music into a finished video product.

- The instructor discusses the Adobe Rush user interface. He demonstrates how to create a new video project and import assets into Adobe Rush. He demonstrates how to create a video sequence, and how to add and edit audio, visuals, and titles. The difference between the **spine** (the part of your video that tells the story) and your **B-roll** is discussed. The instructor shows how to add B-roll on top of the spine.

- How to create and edit transitions between shots is demonstrated, as are the addition of lower-thirds (i.e., captions and titles), editing audio, and the recording of voiceovers.

- The instructor also demonstrates how to export and share your finished product.

Additional resources and links

Adobe Premiere Rush

- Adobe Rush <u>shortcuts handout</u>

- Adobe has a series of helpful <u>video tutorials</u> that walk you through the process of creating and editing videos in Adobe Premiere Rush.

- Adobe Premiere Rush: <u>getting started</u>

- Adobe Premiere Rush <u>user guide</u>

Royalty-free music

- Royalty-free music is a must if you are using prerecorded music in your video. Some royalty-free music requires credit in your video, while others are only licensed for non-commercial use, so always double-check the copyright situation for any music that you choose to use in a video.

- Adobe Premiere Rush offers royalty-free music within its program. While limited and thus often overused in videos, it is a reasonable, and simple, option.

- The <u>Free Music Archive</u>

- YouTube has <u>royalty-free music</u> options.

- <u>Storyblocks</u> is a subscription service for royalty-free music, images, and footage. With Storyblocks you have unlimited access to download tunes and other media.

Images with no copyright restrictions

- If you are using stock images in your video as assets, you will need to ensure you either have the rights to use the images, or you are using images that have no copyright restrictions. Be sure to double-check the licensing arrangement of any image that you use, as some creative commons images require credit and some are not licensed for commercial use.

- <u>Creative Commons</u> is an excellent resource for finding copyright-free images.

- <u>Wikimedia Commons</u>

Training session 4: Zoom technical tips

This training session covers how to best use Zoom for instruction, focusing on camera, sound, lighting, sharing, recording, and streaming.

Video

Midpen Media Center training session 4

Timed Guide

Midpen Media Center training timed guide session 4

Highlights

- This instructor begins by discussing how to look good on a webcam. He recommends having plenty of light, controlling light contrasts, having the camera at eye level, framing for medium close-up shot, using solid colors, and having an uncluttered background.

- **Camera** options are discussed:

    - Built-in laptop cameras are usually poor quality. Smartphones, tablets, a GoPro plugged into your laptop via USB/USB-C connector, or a DSLR camera or camcorder plugged in using a HDMI-USB converter can be used as your primary camera instead.

- Multiple cameras:

    - You can log in to Zoom multiple times and switch by choosing which camera to spotlight.

    - You can switch via Zoom—select the camera to use within Zoom by clicking on the video icon in Zoom.

    - You can feed everything into the OBS virtual camera, and choose how you want to display your various cameras using this software. The output comes directly from the OBS to Zoom. OBS allows overlaying videos and insets.

    - Tripods and bracket systems are recommended for positioning your camera for optimal viewing. A boom mic stand can be used with a GoPro as an overhead camera for a demonstration, for example. Brackets and adapters for each type of equipment are discussed.

- **Audio** sources:

    - Best sound is achieved if your microphone is close to your mouth.

- Laptop mics are not the best.

- Earbuds with mics or wireless AirPods are a good option; headsets and lavalier microphones work particularly well.

- The instructor covers how to avoid over and under exposure of **lighting** in your video feed. He recommends avoiding a very bright or very dark background, and avoiding mixing warm and cool lighting in your background.

- **Advanced Zoom options:**

  - The instructor demonstrates how to share your screen, applications, and videos. He shows how to use a whiteboard and how to share a portion of your screen or content from another camera. He also demonstrates how to share a slide as a virtual background.

  - The instructor discusses recording options in Zoom, including how to record locally (which only records your spotlighting) and to the cloud. For cloud recording, it is recommended to go to the recording tab in Zoom's settings and select "active speaker", "gallery" and "shared view", so that all three views are recorded, and you can then edit them together later. You can also opt to record the chat. Download straight after the meeting as Zoom deletes the files after 30 days.

  - How to stream from Zoom to Facebook, YouTube, RTMP server, which broadcasts to cable TV, and multiple places using Castr or Restream, is demonstrated.

  - How to improve live music performance using Zoom is demonstrated. Zoom audio processing must be turned off. For this reason, a sound check is recommended before streaming.

Additional resources and links

- PDF handout of PowerPoint presentation for training session 4

- OBS Studio, free and open-source software for video recording and livestreaming that allows real-time video/audio capturing and mixing

- Castr multistreaming platform

- Restream multistreaming platform

- How to optimize Zoom for music performance: High-fidelity music mode

- Instructions for using Zoom's high-fidelity music mode

CONCLUSION

The Art Center, Library, and JMZ would once again like to take this opportunity to thank the Institute of Museum and Library Services for awarding us with this incredibly important and valuable CARES grant, which enabled us to develop our virtual programming skills and knowledge, and, now, has enabled us to pass on our knowledge to others through this playbook. We would also like to thank the staff at Midpen Media Center for their in-depth and valuable technical training, which enabled and empowered us to enhance our video production skills and embrace digital programming.

This section summarizes the key lessons we have learned along the way since we embarked upon the *From Onsite to Virtual* project, and closes with some final thoughts about virtual programming for museums, libraries, and zoos.

Lessons learned

Training is vital

Training your staff in video production and online delivery platforms is of vital importance to give them the skills and confidence to produce virtual programs of high quality and with good production values.

The right equipment can make a huge difference

Investing in high-quality equipment such as a camcorder, lighting, and external microphone will make a significant difference in the quality of the work you produce. You do not need to invest in a lot of expensive equipment, but even an external microphone and proper lighting can significantly enhance the look and feel of your videos and livestreams. Getting comfortable with your equipment is also necessary if you want to get the most out of them.

Familiarize yourself with your chosen platform

Whether you choose to use Zoom or another platform, being well-versed in how it works, both its possibilities and limitations, is vital to ensure your events run as you would like.

Cross-departmental cooperation is key

Working across departments to help develop your digital strategy is important so that all stakeholders are engaged and new strategies can be implemented smoothly.

Have a defined strategy but be willing to experiment

All virtual programs should be considered and implemented with a defined digital strategy in mind. That being said, it is important to experiment with your offerings and not be afraid to fail or try alternatives. For this reason, it is also important to track user satisfaction and needs on an ongoing basis.

Accessibility is of paramount importance

Digital programming expands access and inclusion, so it is extremely important to consider a hybrid model of in-person and digital programming as part of your ongoing programming strategy. It is also vital to ensure that online offerings are accessible to everyone.

Everything is changing, all the time

If 2020 and 2021 taught us anything, it is to expect the unexpected; to be ready to pivot to new ways of doing things at a moment's notice; and that everything is always changing, all the time. What works for you in digital programming today may change in a month or a year's time, so it is important to stay abreast of change and, indeed, embrace it if and when the time comes to adapt.

Final thoughts

We hope that this playbook has given you a solid foundation for developing robust, professional virtual programming in a wide variety of formats and on various platforms. While a great deal of information, links, and resources are available within this playbook, the best way to find out what works for your organization is to learn by doing, to try out various options yourself, and discover what best suits your needs and the needs of your community. Getting hands-on experience is the ideal way to learn, and the various platforms and resources that are available are constantly changing and developing. However, if you begin today, we hope that this playbook will help give you a headstart in your virtual programming journey.

Financing and staffing resources are, admittedly, of paramount importance when developing and maintaining virtual programming. It is hoped that libraries, zoos, and museums recognize the importance of implementing virtual programming and developing a digital strategy as a vital part of their overall programs and strategy beyond the Covid-19 pandemic. Digital content development opens virtual doors to your institution, making it a more inclusive and accessible place that is available to everyone, everywhere.

Community Advice Revisited, by Susan O'Malley, an outdoor poster installation placed along Embarcadero Road outside the Palo Alto Art Center from October 2020 to January 2021. The poster is © The Estate of Susan O'Malley.

Contact us

We would love to hear from you if you have any feedback, thoughts, or suggestions on this playbook, and on virtual programming in general.

Palo Alto Art Center, 1313 Newell Rd, Palo Alto, CA 94303.

Email: artcenter@cityofpaloalto.org

Phone: (650) 329-2366

BIBLIOGRAPHY

References

American Alliance of Museums and Wilkening Consulting. 2020. *National Snapshot of COVID-19 Impact on United States Museums*. American Alliance of Museums. https://www.aam-us.org/wp-content/uploads/2020/11/AAMCOVID-19SnapshotSurvey-1.pdf.

Blackbaud and Cuseum. 2020. *The Ultimate Guide to Surviving and Thriving as a Cultural Organization in the 21st Century*. Blackbaud and Cuseum. https://static1.squarespace.com/static/584ee3cc2994cac9e545aadd/t/5ee2483c4bc1507770a5472e/1591887939293/cover+photo+updated+version-compressed.pdf.

Center for the Future of Museums. 2021. *TrendsWatch: Navigating a Disrupted Future. American Alliance of Museums*. https://www.aam-us.org/programs/center-for-the-future-of-museums/trendswatch-navigating-a-disrupted-future/.

Culture Track. 2020. *Culture + Community in a Time of Crisis*. Culture Track. https://s28475.pcdn.co/wp-content/uploads/2020/09/CCTC-Key-Findings-from-Wave-1_9.29.pdf.

Cuseum. June 24, 2020. "Coronavirus: the unexpected driver of digital innovation at museums and cultural attractions." cuseum.com. https://cuseum.com/blog/2020/6/24/coronavirus-the-unexpected-driver-of-digital-innovation-at-museums-and-cultural-attractions.

Cuseum. 2021. *The Impact of Virtual Programs on Revenue Generation for Cultural Organizations*. Cuseum. https://cuseum.com/revenue-generation-report-2021?utm_source=Cuseum+Newsletter&utm_campaign=15ce07bd5d-Newsletter-May-18-2021-2&utm_medium=email&utm_term=0_27827bb7a3-15ce07bd5d-607720350.

Ennes, Megan. October 16, 2020. "The Keys to Sustainable Online Programming? Partnerships and Professional Development." American Alliance of Museums. https://www.aam-us.org/2020/10/16/the-keys-to-sustainable-online-programming-partnerships-and-professional-development/.

Impacts Experience. 2021. "More People Really Are Engaging With Cultural Entities Online During the Pandemic." Impacts Experience. https://www.colleendilen.com/2021/03/31/people-really-are-interacting-with-museums-online-during-the-pandemic-data/.

Insights Alliance. 2021. *Culture Restart: Latest Findings*. Insights Alliance. https://s3-eu-west-1.amazonaws.com/supercool-indigo/Culture-Restart-Latest-Findings-Digital-Focus-webinar-slides-c-Insights-Alliance-2021.pdf.

The Knight Foundation. 2020. *Digital Readiness and Innovation in Museums*. The Knight Foundation. https://knightfoundation.org/wp-content/uploads/2020/10/Digital-Readiness-and-Innovation-in-Museums-Report.pdf.

Merritt, Elizabeth. November 18, 2020. "Digital Tools for Pandemic Times." American Alliance of Museums. https://www.aam-us.org/2020/11/18/digital-tools-for-pandemic-times/.

National Endowment for the Arts. 2021. *The Art of Reopening: A Guide to Current Practices Among Arts Organizations During COVID-19*. Washington DC: National Endowment for the Arts. https://www.arts.gov/sites/default/files/The%20Art-of-Reopening.pdf.

Rockman. 2021. *What do parents want now? Children's virtual programming during the pandemic*. Rockman et al. https://rockman.com/docs/downloads/2021-REA-Childrens-Museum-Survey-Report-Feb-2021.pdf.

Additional sources

Association of Children's Museum's. "Museums in a Pandemic: Audience Experiences." Children's Museums Blog. December 10, 2020. https://childrensmuseums.blog/2020/12/10/audience-experiences/.

Cascone, Sarah. "Thousands of US Museums Could Close Forever as the Financial Effects of Lockdown Turn Existential, a New Report Finds." Artnet. November 17, 2020. https://news.artnet.com/art-world/museums-shuttering-aam-report-1924371.

Cieko, Brendan. "4 Ways Museums Can Successfully Leverage Digital Content and Channels during Coronavirus (Covid-19)." American Alliance of Museums. March 25, 2020. https://www.aam-us.org/2020/03/25/4-ways-museums-can-successfully-leverage-digital-content-and-channels-during-coronavirus-covid-19/.

Cohen, Arthur. "What We Learned from 2020." Culture Track. January 25, 2021. https://culturetrack.com/ideas/what-we-learned-from-2020/.

Collins, Mary Ellen. "Rising to the Challenge." American Alliance of Museums. September 1, 2020. https://www.aam-us.org/2020/09/01/rising-to-the-challenge/?utm_source=American+Alliance+of+Museums&utm_campaign=b1d860d84b-FieldNotes_2021_April26&utm_medium=email&utm_term=0_f06e575db6-b1d860d84b-67769146.

Cuseum. "Reopening Museums and Cultural Attractions Succeeding in the Post-COVID Era with Thoughtful Digital Tools." Cuseum. 2020. https://cuseum.com/playbook/reopening-museums-and-cultural-attractions.

Galperin, Misha. "Thriving as a Virtual Museum: The National Museum of American Jewish History's Playbook." American Alliance of Museums. April 2, 2021. https://www.aam-us.org/2021/04/02/thriving-as-a-virtual-museum-the-national-museum-of-american-jewish-historys-playbook/.

Hilton, Hollie. "Is there an appetite for paid digital content from museums and cultural organizations?" Culture Geek. April 1, 2021. https://culturegeek.com/article/is-there-an-appetite-for-paid-digital-content-from-museums-and-cultural-organisation/?fbclid=IwAR0a4UfNXd18ZBp70VWc3QlfHYbtKb7ldKsc_pwvUsBpA16Jm9bA4Z9q8SY.

Mathern, Andréa Giron, and Laureen Trainer. "Essential Evaluators: Digital Storytelling." American Alliance of Museums. January 13, 2021. https://www.aam-us.org/2021/01/13/essential-evaluators-digital-storytelling/.

Porter, Molly. "Up Close and Personal: Finding Connection through Virtual Education Programs." American Alliance of Museums. March 31, 2021. https://www.aam-us.org/2021/03/31/up-close-and-personal-finding-connection-through-virtual-education-programs/.

Rea, Naomi. "Here Are the Lessons Top Museum Leaders Learned in 2020, From Adopting New Revenue Streams to Listening to the Quietest Voices." Artnet. November 24, 2020. https://news.artnet.com/art-world/reframing-museums-symposium-1926151.

Rea, Naomi. "Museums Are Selling Virtual Classes and Tours to Boost Revenue During the Pandemic. Here's What They've Learned About What Works." Artnet. February 17, 2021. https://news.artnet.com/art-world/museums-digital-content-revenue-1944362?fbclid=IwAR1-Td5lFEiRLAyBiS2lb9MXxAZJeFucrqKF7FGP8FEeEH799ulpuABNO-w.

Spolar, Christine. "When the world reopens, will art museums still be there?" National Geographic. December 30, 2020. https://www.nationalgeographic.com/travel/article/how-museums-are-staying-alive-during-coronvirus.

Stein, Robert. "Museums and digital strategy today." American Alliance of Museums. July 10, 2017. https://www.aam-us.org/2017/07/10/museums-and-digital-strategy-today/.

Tang, Carol. "Digital trends for museums." Museum Re-set. April 6, 2021. https://museumreset.substack.com/p/digital-trends-for-museums?r=fty04&utm_campaign=post&utm_medium=web&utm_source=copy.

Wilkening Consulting. *Annual Survey of Museum-Goers Data Stories*. Wilkening Consulting. 2021. http://www.wilkeningconsulting.com/data-stories.html.