

Interactive Remote Demos USING LIVE VIDEO

Woodturning clubs are often challenged to find willing, qualified demonstrators. Wouldn't it be great if woodturning presenters could conduct demonstrations from their own shops, with their own tools, and have live, interactive audience participation in a faraway chapter location? The advantages are obvious: no travel time, no equipment packing, increased availability of presenters from all over the world, and greater affordability for chapters.

Remote demonstrations, conducted in the turner's own shop and transmitted over the Internet to a viewing/listening audience, are becoming a reality. Presented here is a case study of how a Michigan demonstrator shared his expertise with an AAW chapter in Hawai'i without leaving his shop.

A REMOTE BUT RESOURCEFUL CHAPTER

Emiliano Achaval, Maui Woodturners Association

I have been a woodturner for about twenty years, right here on the magical Hawaiian island of Maui. When I started turning, I had a few mentors who showed me the way, sharing their knowledge. I wanted to pass on what I had learned, so at the end of 2015, I contacted the AAW and inquired about a chapter on Maui. There wasn't one, and the AAW staff encouraged me to start a new chapter, and that is just what I did (see mauiturners.com).

The AAW had great resources on its website to help me start the new chapter. Each time I had a question or doubt, the answer was right there. The best idea was to send a notice to the local newspaper. When the notice was published, my phone was ringing off the hook! Twenty-four woodturners showed up at the first organizational

meeting. The club now has twenty-eight members.

Since it is impractical and not cost-effective for us to bring in woodturning demonstrators from afar, we were easily sold on the idea of receiving a remote demo. Even at an in-person demo, most audience members are looking at the screen anyway. So why not have a remote demo by a world-class master woodturner at a fraction of what it would cost to bring him or her to our location? We coordinated with Lyle Jamieson for our first remote demo.

Getting set up

When preparing to receive a remote

Members of the Maui Woodturners Association enjoy a live, interactive, remote demonstration by Lyle Jamieson, of Traverse City, Michigan.

demo, the most important thing is to have a wired Internet connection. Our Wi-Fi connection provided video that was inconsistent and "jerky." Not surprisingly, when we went to a direct, wired connection, the download speed improved dramatically, and Lyle's video and audio quality was received in smooth fashion.

We connected a laptop directly to a cable modem for Internet. A projector connected to the laptop via HDMI cable displayed Lyle's video feed onto a sheet we had hung as a



makeshift screen. The studio where we had the remote demo had a built-in surround-sound system, which we connected to the laptop with a standard audio jack. But you could also connect a more basic external speaker. A few days prior to the

demo, we tested the setup to ensure everything was working correctly.

Lyle did a great job with the remote demo, providing more than three hours of instruction. We appreciated that he could easily switch between his three cameras, all with different,

clear views. He could even zoom in on the project for a closer look, or zoom out for a broader view. At any moment, we could stop him for questions, as he could hear us well even when turning. And we could hear him too, even with his faceshield on.

A DEMONSTRATOR'S PERSPECTIVE

Lyle Jamieson, Traverse City, Michigan

My experience with the Hawai'i group was successful on all fronts. I covered a lot of ground and, based on their good questions, was prompted to cover a number of ancillary topics related to the hollow form demonstration.

Why remote?

When I do a demonstration in person, the participants cannot all get up and stand behind me and look over my shoulder to see my techniques—they look at the monitor (if there is one). Very few are sitting in the front row with a good view—most are looking at the monitor. The people on one side of the room can see the inside of the bowl or vessel, and the people on the other side of the room can see the outside of the project. They can't see both, so they look at the monitor. The idea of remote demonstrations acknowledges and

embraces this limitation by making use of multiple cameras for good quality, live audio and video. All viewers can see the workpiece, zoomed in close from multiple angles, as well as the turner when he or she addresses the audience. The demonstrator and viewers can see and hear each other, and ask and answer live questions.

When the demonstration is completed, club members don't have to sweep up the shavings. In fact, they don't need a shop at all—no lathe, no grinding wheel, no compressor, no whiteboard. You can have a meeting in a school, church basement, or someone's living room—wherever there is an Internet connection.

Not having to travel is a huge advantage for demonstrators—and ultimately for audience members, too. Demonstrators can actually put on a better demo in their own shop with their own tools and audio/video equipment than they could at a club location. We can eliminate the kinds of variables I have experienced while

demonstrating on the road: rickety lathes on wheels, faceshields that do not shoulder

on the spindle, poor live centers and drive centers, missing knock-out bars, cameras with short wires or stationary cameras that would not reach the positions needed to show the turning action, no amplified speaker system so participants can't hear, grinders not attached to their stand, etc.

It's doable

Demonstrators should know that I had no prior camera or computer experience. I accepted mentoring help from AAW member Alan Zenreich, an expert in this area. Those close to me will confirm, all I know how to do on the computer is answer email. So I am living proof: if I can do this, anyone can.

Of course, remote demos will never replace face-to-face, hands-on workshops, which are invaluable for gaining practical experience, but they can complement local club efforts to educate members by exposing them to demonstrators they would not otherwise be able to access. A remote demo can be part of the programming for a club's regular meeting (as it was in my experience with the Maui group), but it can also be a full-day workshop at club locations or woodworking supply stores. Audience members can arrange to have the demonstrator follow up with a shorter session a month or two after the presentation so they can ask questions that arose since the demo.

I encourage other demonstrators to jump on board with this trend. There are turners and clubs out there starving for quality demonstrators, so the opportunity is upon us. ▶



Lyle Jamieson conducting a demonstration from his Michigan workshop for members of the Maui Woodturners. Note three small cameras providing coverage: on a microphone boom looking over Lyle's shoulder, above the lathe facing down, and in the open laptop lid facing Lyle.

Resources

Alan Zenreich, Oradell, New Jersey

At the AAW Symposium in Atlanta this year, I presented a Special Interest Night (SIN) session introducing the concept of remote demonstrations. The video recording of the session notes the benefits of remote demos, then highlights some of the equipment used in my own shop for this purpose. Demonstrators and local clubs have varying equipment and budgets, but the topics discussed should be applicable to just about anyone, with a little tweaking.

The session covers:

- How presenters can use the Internet, low-cost computers, webcams, audio, software, and free video feeds to present real-time, multi-camera demonstrations.
- Typical chapter set-ups to make remote demonstrations interactive, seeing and taking questions from the audience.

Items needed

During the Symposium session, I demonstrated a wide variety of equipment because I wanted to show a range of possible configurations. A resource sheet that lists the equipment I used or mentioned in the video is available at tiny.cc/AWRResources. Following is a condensed version of the resource sheet to give you an idea of the minimum, or baseline, configurations for demonstrators and clubs.

Basic demonstrator equipment

- A laptop computer (with built-in web camera)
- Two hi-definition USB webcams (for a total of three cameras)
- A microphone
- An Internet connection with an upload speed of at least 3Mbps (the faster, the better)
- A free video-conferencing program (e.g., Zoom.us or Skype)

- A low-cost video-switching program (like vMix or ManyCam) is highly recommended but not essential. These programs let you switch between cameras, do picture in picture, display photographs and recorded videos, etc.

There are many items that can be added to this list for more capabilities and features. In my video, I show several of these options, including a handheld remote keyboard to easily switch between cameras.

Basic club equipment

- A device that can accept a video call (typically a computer, tablet, or mobile phone)
- A monitor or projector to display the presenter's video
- Speakers for the presenter's audio
- An Internet connection with a download speed of at least 3Mbps (the faster, the better)
- A free video-conferencing program (e.g., Zoom.us or Skype)

Optionally, to let the presenter see and hear the club members, add

- A webcam
- A microphone, preferably wireless, that can be passed around the audience

You can do this!

None of this is rocket science. Grandmothers regularly have video calls with their grandchildren—this is not much different. It may be unfamiliar to many woodturners, but demonstrators and clubs can get up to speed quickly with a relatively small investment and a little mentoring. Remote demonstrations have the potential to dramatically increase the ability to teach woodturning in a new, effective way—and reach a truly global audience.



Alan Zenreich adjusting one of the webcams used for remote presentations and recordings in his New Jersey workshop.

Remote Demonstration Video

Alan Zenreich made an informative video recording of his 2016 Symposium



presentation on the possibilities of remote demonstrations. View the video at tiny.cc/RemoteDemo or by scanning the QR code.



Coming Soon! AAW Demonstrator Scheduling Tool

One of the VISION 2020 service improvements underway for AAW members is an online demonstrator resource. This will include a searchable databank to help chapters easily identify and schedule demonstrators for chapter events, as well as useful demonstrator information such as contact information, schedule, fees, project types, ability to do remote demos, and sample demonstrator contracts.

Professional turner and demonstrator Mike Mahoney is among those offering remote demos. Mike is shown here in his well-lit, production-ready California shop addressing a camera.

