

VIDEO CONFERENCING FOR MINDFULNESS PROGRAMS: BENEFITS, EXPERIENCES, AND RECOMMENDATIONS

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ABSTRACT

Online learning has grown tremendously with the advent of increasingly sophisticated digital technologies. Used well, the online experience is a positive one rivalling and perhaps exceeding the efficacy of in-person programming. The use of video conferencing uniquely promotes several factors foundational to mindfulness programs, including participant engagement and the nuanced challenge of the creation of a safe space for open sharing and inquiry.

KEYWORDS: Mindfulness, Mindfulness-Based Stress Reduction, MBSR, Meditation online, Digital learning, Distance learning, Video conferencing

This opinion paper shares some capabilities of online programming, criteria for effective learning independent of media, outlines domains of competency for mindfulness teachers which promote effective learning and participation of students in mindfulness programs, and suggests what may contribute to program engagement when technical solutions align with mindfulness domains, based on student and teacher responses and anecdotal observations.

New use of digital technology has greatly expanded the capabilities and reach of teachers to students, and brings with it additional opportunities and challenges. As of 2014 over 5.5 million students took online courses in the United States alone, with over 70% of academic leaders rating online outcomes as equal to or better than in-person instruction¹, and the global eLearning market is over \$50 Billion².

This does not suggest homogenous frameworks, however, as each program delivered online may have very disparate capabilities; that is, not all online programs are alike. Online learning may be initially categorized as Expository, Active, and Interactive, further delineated by the timing of the delivery being Synchronous or Asynchronous, and within whether the online learning was in addition to in-person class time or a replacement of it³. In addition, the use of live interactive video can positively impact both learning outcome and learner satisfaction⁴.

For example, consider two ends of a digital capabilities scale. On the left would be a very basic, low tech, one-way delivery from teacher to student with email lectures in text. This could be categorized as Expository and Asynchronous, with little direct contact between student and teacher and no interaction between students with their fellow classmates. Additional technical capabilities exist, but are not used in this particular instance; it's a one-way email lecture series with no direct engagement opportunity.

Contrasting that lean delivery with its counterpart on the far right of a digital capabilities scale (at this time), which makes full use of a portfolio of options to promote student engagement: all course needs are housed on a single website rather than through disconnected emails, materials may include text, graphics, audio materials for learning and practice, videos for further learning, discussion forums for Asynchronous and shared communications between student and teacher and students with one another, as well as Synchronous and live video classes in which all participants see and hear one another as well as the teacher.

When combining the positive influences of interactive video with the foundational requirements of mindfulness programming, the benefit has the potential to match or in some instances exceed that of in-person programming in a number of ways, though this may be met with an understandable skepticism from those for whom in-person has been the established default for delivery.

CRITERIA FOR EFFECTIVE LEARNING

Growth of online learning itself is not an indicator of quality. If the student doesn't learn, the program isn't effective regardless of numbers of those in it, and online learning has its own set of criteria to foster student engagement and overall success of the program. Various qualities may be used as general principles for successful learning, including active participation by students, individual attention that invites connectedness, opportunities for practice, facilitation of questions and the process of inquiry, as well as using diverse instruction methods (lecture format, project-based learning, flipped classroom, etc.) to engage continued attention and participation⁵. Also of critical importance, effective learning can be fostered by the teacher's behavior modeling, and the creation and maintenance of the setting itself as conducive to the learning and practice environment.

These hallmark principles of effective learning may be more succinctly articulated as relevance, engagement, and use⁶. This addresses the students' perspective and needs by providing content that is meaningful to them in their lives, they are able to interact with the program and other participants, and have buy-in to the work required as part of the program because it is relevant and they are engaged.

With this as the backdrop, we can begin to tease out some alignment with critical success factors unique to mindfulness programming.

MINDFULNESS BASED PROGRAM DOMAINS OF COMPETENCE

One challenge to the articulation of what makes an effective mindfulness program is the lack of consistent definition of what is meant by "mindfulness". However, some general aspects appear to be shared in the 30+ year history of the scientific study of mindfulness:

- Intentional – mindfulness is characterized by cognitive awareness of volition, rather than the unconscious automaticity of habitual action.
- Present moment focus – mindfulness is rooted in the experience of the present, rather than ruminations about the past or future.
- Non-judgmental – mindfulness practices involve intentional awareness of the present moment without coloring that experience with value judgments. Note this is not non-discernment, but rather the attenuation of pre-conceived notions which otherwise influence experience^{7, p.4}.

Six domains of competency for mindfulness teachers reflect positive skills to foster participants' learning and practice^{8, p.5}. Though each of the competencies is actualized through various means of an online program, the use of live video conferencing technology touches directly upon them in ways that non-live,

non-video does not. Within those domains, core aspects conducive to a positive learner experience which are directly impacted by live video streaming include:

- Responsiveness to the participants in real time, including pacing and content organization that accounts for the integrity of the program as well as the learner engagement with it.
- Relationship building between teacher and student, and students with one another. This involves connecting with the participants on intellectual and emotional levels.
- Embodiment of mindful behaviors, setting the example in periods of calm and difficulty during the live sessions.
- Guiding mindfulness practices, including sharing about the experience of the meditation while still in the immediacy of the experience.
- Conveying course themes through interactive engagement with the participants, and fostering that engagement with one another.
- Holding the integrity of the “safe space” during class to foster open sharing of experiences, whatever they may be, without judgment^{8, p.43}.

Each of these domains is fostered through in-person mindfulness programming, which has been the primary if not almost exclusive mechanism of delivery for nearly four decades. However, the advent of live video conferencing may also support these domains in ways that are perhaps unexpected, and may open some opportunities which have challenged in-person programs.

ADVANTAGES OF LIVE VIDEO CONFERENCING

Online programming may include capabilities to address various functional requirements, and the tools used may fulfill those needs depending on how they are utilized. For example, a program that is only Expository and Asynchronous may simply consist of email attachments of text lectures and ancillary reading materials for the student to consume at their convenience. That same class may become Synchronous with the addition of a live webinar; however, it's still limited to being Expository because there is no back and forth between student and teacher, it is a one-way broadcast. That webinar may simply be audio of the teacher, or audio plus presentation visuals. With the addition of a simple chat feature, the program becomes both Synchronous and Interactive. However, the nuances of communicating tone, feeling, receptivity, attitude, etc. may be limited without the visual and auditory cues that are included with interactive live video.

Video conferencing (which is two-way interactive as opposed to video webinars which are one-way broadcasts) is uniquely suited to addressing several needs on the part of the learner, and the capabilities

of the software create additional opportunities with mindfulness programs. Consider the following benefits and options:

- Synchronous, interactive communications – rather than simply being another one-way lecture, having a live program that allows participants to respond to the teacher and each other increases their engagement on a very pragmatic level.
- Audio and video features – although text chat may still be part of the program, shifting attention from typing and reading to listening, watching, and speaking in real time creates the space for greater understanding as audio and visual communication cues are included.
- Virtual rooms – large classes can be split into smaller groups, or even pairs, for more focused attention and deeper dialogue. This can sometimes reduce the discomfort of speaking before many people, allowing one-on-one listening and speaking, and encouraging quieter individuals to share with another person directly.
- Recording – missing the live class may still be registered as absence for attendance metrics, but the participant may be able to view a recording of the class to keep abreast of the material covered and the discussion which occurred. Teachers can review the recordings for ongoing class and performance improvement.
- Convenience – by removing geographic boundaries or mobility constraints, the program is open to those who are physically isolated from others with a common interest. Consider those who live and work in more remote or rural settings, unable to solve for the problems of distance, travel time, childcare, or availability of nearby programs typically held closer to more populated, urban areas due to the need for local students because of those very circumstances. There are also those who may be interested in participating in online learning but have medically-based mobility constraints: those who are attached to life-sustaining devices that can't be moved, those suffering from arthritis or other movement-restricting illnesses, those in assisted living, hospice care, etc. Online capabilities escalate this opportunity to more than simple convenience; it may be the only means by which that individual could participate in a live, interactive group experience.

THE LEARNING ENVIRONMENT

Over the past several years, I've had the opportunity to be an active teacher and participant in several kinds of online mindfulness programming in a variety of settings. This includes informal, ongoing drop-in meditation groups using live interactive video; new mindfulness programs of set duration that are audio only with screen sharing of didactic presentations; and robust gold standard programs that include live video conferencing as well as online messaging, reading materials, discussion forums, and recorded audio and

video homework assignments. Each measures success in different ways. For one, just having a handful of attendees is enough. For another, attending half the program sessions is counted as completion, and in others, two missed classes results in not having completed the program. Despite these differences, some common elements impacting relevance, engagement, and use have been surprisingly consistent.

The environment for a mindfulness program is unlike a class in mathematics or the natural sciences. Rather than focusing on outward information and processes, mindfulness programs are turned inward to self-exploration and learning. This is deeply personal in ways that algebra or chemistry may not be, so in addition to students' comfort in asking information based questions, they must also feel safe enough to share very challenging personal experiences and try seemingly strange meditative practices that may be difficult to do with a group of strangers.

Live video conferencing fosters the safe holding space of the mindfulness program environment compared to in-person programming from the very beginning. Think about the first day of school, or a new job. Traveling, is that pleasant or stressful? Being in a new place, are you immediately comfortable, or perhaps a little uncertain? Sitting with strangers, what's it like to share deep emotions with them? What's it like if they're also a little off from getting to class, and not knowing anyone? Over time participants get to know each other, and the unbalance of the new situation settles out. What I've observed in online live video conferencing, however, is a significant departure from having to get over these initial hurdles:

- No travel – regardless of weather or traffic or distance, you don't have to go somewhere else.
- Being home – participants are typically connecting from home, what is likely the place they feel the safest.
- Strangers – other participants have also had no difficulties getting to class, and are benefitting from being in their "safe space".

Rather than having to overcome what may be minor or perhaps significant obstacles, those joining an online live video conference have immediately removed the tensions of travel, added the convenience and safety of being at home, and are interacting with others who are also enjoying those comforts. Setting this as the initial experience with the program gives it a helping hand in creating the safe holding space so very important in the learning and practice of mindfulness.

During the class itself, there are differences between in-person and online mindfulness groups and programs, and even between the varieties of online delivery. Sharing about one's practice and experiences are typical to mindfulness programs, with the full group, smaller groups, and even in dyads. With live but audio only programming, students can more easily avoid active participation simply by remaining silent. This may be through reticence about speaking up, or simply a desire to avoid speaking over someone else.

This has been my experience with all audio programs; though there is some sharing, there is a much greater situational acceptance of silence.

However, with live video conferencing, all participants can see one another and the teacher. This brings with it not only a social encouragement to speak as one sees the expectant faces of others, but also allows for the visual cues of human communication, showing the participant it's okay for them to take this particular moment to speak up, just by holding up their hand as they would in-person. Sympathetic responses from fellow participants are also exhibited, helping to make the sharing welcome instead of being sent into an uncertain reception of audio only environments.

VIRTUAL ROOMS

A common feature of mindfulness programs is the practice of partnering with another participant in a dyad. This serves several purposes, including more direct attention from another human being, which in turn supports personal engagement and a sense of connectedness. One person is the speaker about a topic given by the teacher, and the other person is the listener. After a few minutes, the listener shares what they heard from the speaker. This not only demonstrates that they truly listened (itself a beneficial practice for both partners), but may offer some insight as the person who first spoke may catch some nuance in having their monologue reflected to them in a caring and friendly way. Then the partners switch roles and repeat the process.

With in-person programming, there is often a bit of chaos as one finds a partner and a physical space with which to work. For me this has often brought up anxiety about finding the other person, not being “picked”, or being part of a more difficult and time constrained triad because I failed the social process of connecting with another person. Online live video conferencing changes that experience, however, as the teacher randomly assigns partners with the push of a button, and places us in a virtual room with another simple button push.

To get an idea of what this is like, imagine a computer screen with twenty-five unique faces streaming to you over video, arranged in a grid. When it comes time for dyad exercises, the screen shifts as you and the person you've been partnered with are placed into a virtual room. Everyone else vanishes off the screen, and all you see is your image and that of your partner. There is no ambient noise from others and no one to see in the periphery of your vision, you and your partner are simply together in private dialogue without distraction. As a speaker, you don't have to talk over others, and as a listener you don't have background conversations or people in sight to draw attention away from the one other face before you. You are dedicated to them and that other person is dedicated to you, while you each remain in the safe space of home.

CONSTRAINTS AND CHALLENGES

This paper is not reflective of a scientific study with double blind active controls, and merely indicates through shared experiences of teachers and participants what the positive influence of live video may be. Though online live video conferencing may have some advantages over in-person programs, there are aspects of it which require attention. Handling these situations can ensure the best possible outcome for mindfulness program participants, as well as the teachers.

Though the proliferation of mobile devices with increasingly sophisticated technology has greatly enhanced the ability of people to connect digitally, there are still some limitations that need to be observed when compared to having a full computer, even just a laptop. Many video conferencing tools do work quite well on smart phones, for example, but not all features are included, like being able to see all other participants on the same screen. Instead, the smart phone user is constrained to one speaker at a time, and the processor capacity of the mobile device may cause dropped calls or poor signal quality. I advise participants to have a stable high speed internet connection, directly hard wired if possible but wireless if necessary, with a video camera, speakers, and microphone. Typically the hardware built into recent laptop computers is quite sufficient, and permits a very effective live online class experience.

Technical problems do occasionally arise, either on the part of the video conferencing application, or individuals joining the session. In the first case, participants and teachers can have a secondary way to connect. This may be a different tool entirely, or perhaps an independent phone conference system. For this to work, users will need to have an understanding of how to discern a system problem from a technical issue with their own system. In the second case, often a simple restart of their computer will resolve the problem, but sometimes using the phone-in backup option within the existing video conferencing program works quite well.

For those considering the use of video conferencing technology, it is suggested that if technical challenges to arise to not spend valuable class time troubleshooting the issue. Instead, the objective is to allow maximum participation in the live online class. The best solution may simply be for participants to be clear about their secondary “plan B” to connect to the class, and that can usually be accomplished with a reliable telephone call-in number. It will lack the full visual experience of video streaming, but audio participation does allow some degree of live connection that would otherwise be spent on distracting technical issues that can be addressed after class.

Another challenge with video conferencing is the number of concurrent participants. Though one may be able to deliver a webinar, broadcasting the teacher’s video to a large number of invisible participants, the direct engagement with the teacher and other students may be curtailed. Programs that are limited to roughly 25 total users at a time are ideally suited to video conferencing tools able to display that many

participants on a single screen at a time. Class sizes can be larger, as of this writing over 100, but the challenges of clicking through several screens of 25 faces to survey the participants is a limiting factor to timely interaction with the teacher that can be seen as more difficult than turning one's head to scan the room of an in-person program.

In addition to potential technical challenges, there are some behavioral differences from in-person programming which bear mentioning. People may greet and chat one-on-one prior to an in-person class, which can help foster connection with each other and engagement with the program. Though video conferences can allow participants to join prior to class, they do not have any ability to have private conversations as they can't create breakout rooms on their own. Connection prior to class is therefore with the entire group, which may not be as inviting as relaxed one-on-one dialogue and connection building. After class, the session is typically closed entirely, and no potential one-on-one or small group discussions as participants gather their belongings, or have conversations on their way to their transportation home.

It is also worth noting that though the breakout rooms work well for dyads or small groups, the teacher is not able to listen in without becoming an obvious presence in that virtual space as they are in a physical space. Teachers who rely heavily on their ability to listen into dyads need to consider different ways to fill any gap in their delivery which depends on that passive participation.

There are few studies at this time directly comparing efficacy or participant experience for online to in-person mindfulness programs, and only one that clearly discussed online live video conferencing as a capability in that comparison. Most offer no live online video⁹⁻¹³, and one met in-person to facilitate a recorded online program¹⁴. Of those with no live video, various shortcomings are identified. Interestingly, these limits may be addressed in future research with the inclusion of live online video, and the programs are nonetheless beneficial to participants. For example, one describes that with in-person classes, "... participants learn much from investigative dialogue between teacher and class participants after each mindfulness practice." Despite this constraint, their work "suggests that people are able to use the course in this mode of delivery and are finding it helpful," and the PSS scores were higher in this study when compared to other in-person mindfulness programs⁹. Another study noted, "The remote delivery does not seem to lessen the efficacy of mindfulness interventions"¹⁵.

A 2012 study mentions an "... online virtual classroom that allowed for real-time bidirectional communication", but did not specify if that was live video (chat is also real-time and bidirectional) or some other capability, like streaming audio with a slide show. It did also note that though the online program had less attrition than their in-person control, attendance online was lower, perhaps due to the availability of a recording¹⁶. Another from 2013 states, "The magnitude of improvement is comparable to traditional mindfulness programs, although fewer participants were engaged." Again, there was no live video, which

could have positively influenced engagement if it was used. That study also exhibited low completion rates even in the in-person control group¹⁷.

The only study found at this time to explicitly state live online video was used was recently published in 2016, which also compared results to an in-person program delivered by the same teachers. The participants were, "... able to establish contact with the other participants in the group. This enabled them to watch and listen to all the dialogues after the formal practices and it enabled the Internet groups to experience a sense of belonging to a group, and to take part in the group inquiries, sharing experiences and learning from each other in an effort to increase the insight of mindfulness"¹⁸. Discussion is extensive and results are positive, though not all metrics are equally reported and, like all the studies mentioned, tend to have small sample sizes.

SUGGESTIONS

For an online mindfulness program to deeply engage students, the use of video streaming technology is critical. Broadcast only classes, even if they include live chat, do not provide the same level of human engagement as being able to see others in real time. Emailing home assignments is modestly problematic as well, with emails being lost or sent to junk mailbox filters, so including a "one stop shop" online location for all aspects of the program, including the live video streaming during class sessions, is extremely beneficial.

When designing an online mindfulness program, the following should be included as a minimum:

- Web location for all class materials – this could be as simple as a website with a handful of links to recorded audio guided meditations, and basic themes for each session.
- Live video conferencing – included as a link on the web location, allowing the users to easily connect to the class and thereby one another.
- Backup conferencing – ability to dial into the live conference with a phone line, in case of computer or network problems

Covering those basic needs will greatly enhance the experience during a mindfulness program, allowing the participants to lay the foundation for life long practice.

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