



RESEARCH CENTER FOR DIGITAL LEARNING & LEADERSHIP

What Can We Learn From Our Colleagues?

A FRAMEWORK FOR VIRTUAL CLASSROOM TRAINING

BY GLENN KESSLER SEPTEMBER 2016



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What Can We Learn from Our Colleagues? A Framework for Virtual Classroom Training

There's a plethora of established theories about online pedagogy with a rainbow of accompanying acronyms: Col, TPACK, CBT, UDL, RAT, TEST and many more. In thinking about the best way to prepare instructors to teach in a synchronous virtual classroom, we took a different approach; we asked them. We asked instructors with significant virtual classroom experience how they would do it. How would our colleagues, in a first-hand position to know what works, structure a virtual-classroom training program? Compared to our current approach to synchronous classroom preparation, the results are surprising. They suggest a new and exciting direction for helping instructors conduct maximally effective virtual classes.

One of the most striking results of the survey is that we seem to forsake much of what we know about pedagogy when training our own. There's general agreement that to be meaningful, knowledge must be constructed through social interaction rather than imparted by an unquestioned authority. This precept is a key component of the Community of Inquiry ("Col") model and many of us now standardly incorporate a social dimension into our own courses without even noticing it. We understand collaboration and interaction are keys to successful learning and construct our courses accordingly.

We also know learning a skill is a process that involves identifiable stages through which one moves as a result of instruction and practice. This process is captured in the familiar ascension to mastery that takes us from unconsciously incompetent (novice), to consciously incompetent (apprentice), to consciously competent (journeyman) to unconsciously competent (master).

However, when it comes to training instructors to use virtual classrooms, our survey results suggest we're overcome with selective amnesia. Neither principle is respected. A virtual classroom's strength is its ability to drive interactivity and engagement. Yet our current approach to virtual instructor training reflects the familiar "sage on the stage" ("instructivist") paradigm – a paradigm that doesn't play to the strengths of a virtual classroom and should not be reinforced in this virtual environment. That instructivist approach also minimizes the opportunity to develop that "unconscious competence" – mastery – required to create a maximally productive virtual learning environment that is engaging, collaborative and personally meaningful.

The Virtual Classroom Training Survey

In early 2016, the survey was deployed to Online Learning Consortium (OLC) e-mail and newsletter recipients and OLC social media followers. The 733 respondents who completed the survey had substantial teaching experience and significant online experience. (See "[Demographics and Experience](#)" in the Appendix below.) Among instructors who had taught using a synchronous classroom, 66% (241 respondents) received training that specifically addressed the use of virtual classroom technology¹: 27% received a month or more of training, 32% received less than a day and, on average, instructors received 55% of their training before entering a virtual classroom for the first time.

¹ Interestingly, this is only slightly higher than the 60% training-rate across all respondents, whether **or not** they had taught in a synchronous environment. This suggests training programs are generic and not targeted to the specific needs of the instructors who participate in them.



These survey respondents represent a “best case” for evaluating virtual classroom training. With experience using, a stake in, and commitment to online education our respondents are ideally positioned to assess the effectiveness of their virtual classroom training programs and evaluate the sorts of changes required to improve them. Our respondent profile tells us we need to listen – and listen closely – to what these respondents tell us about virtual classroom training. And the first thing they say is something is wrong. We have a problem with our current approach to virtual classroom training.

Even among this experienced, formally trained and committed group of respondents, only 24% primarily rely on formal training to learn how to teach virtually. The rest are either mostly self-taught (50%) or mostly learn through informal conversations with peers who teach synchronously (26%). Of course, this also means we don’t have any direct evidence addressing what or how much this large group knows about teaching in a synchronous environment. There’s no direct assessment vehicle. If we look at an even better case – instructors who have *more than a month of training* – only 38% find formal training the most useful vehicle for learning-to-teach in a synchronous virtual environment. This suggests we need to look more closely at what that formal training involves. How *do* we train our virtual classroom instructors?

What We Do

We asked respondents how large a role each of the following eight elements played in their training²:

1. Discussion with other instructors in training
2. Being a participant in a virtual classroom
3. Reading relevant material
4. Video training tutorials
5. Workshops
6. Listening to lectures
7. Submitting written assignments
8. Reviewing recordings of their performance as an instructor in a virtual classroom

Respondents ranked each element on a scale of 0 to 3, where 0 corresponded to no role and 3 a substantial role. Responses were then averaged across all respondents.

Overall, the respondents’ average experience *as a virtual classroom student* fell between “Little” and “Moderate,” with 40% reporting their training included *little or no* experience as a virtual classroom student. A full 76% said their training included *little or no* review of their own performance, by way of recordings, in a virtual classroom. These results suggest our virtual classroom training doesn’t focus on helping instructors understand what it’s like to be *a student* in a virtual classroom – what the virtual learning experience is like from the students’ perspective – much less what’s it’s like to be a student in their own virtual classrooms.

On the other hand, 63% reported their training included moderate to substantial reading, 57% reported their training included moderate to substantial video tutorial review and 40% reported their training included moderate to substantial listening to lectures. In short, as mentioned above, our current approach to virtual instructor training reflects the familiar “sage on the stage” (“instructivist”) paradigm, which is antithetical to effective virtual classroom pedagogy.

² See [“What We Do”](#) in the Appendix below for details.



We also asked respondents what they did, as captured in their level of participation in eight types of activities during their training³:

1. Teaching in a virtual classroom not monitored by a trainer
2. Consultation with an instructional designer
3. Peer coaching from a colleague
4. Shadowing an experienced virtual learning instructor
5. Teaching in a virtual classroom monitored by a trainer
6. Teaching monitored by an experienced virtual classroom instructor
7. Co-teaching with an experienced virtual classroom instructor
8. Reviewing recordings of their performance in a virtual classroom

On the one hand, 44% reported a moderate or substantial amount of *unmonitored* teaching in virtual classroom. On the other, nearly **80%** of our respondents reported *little or no*

- shadowing an experienced virtual classroom instructor
- teaching in a virtual classroom monitored by a trainer or an experienced virtual classroom instructor
- co-teaching in a virtual classroom with an experienced instructor
- reviewing recording of their own performance in a virtual classroom

Working with experienced virtual-classroom instructors or trainers *within a virtual classroom environment* plays a minimal role in our current approach to virtual instructor training. Or, as one of our respondents put it, “We tend to just ‘throw’ instructors into the synchronous environment with little training and support ... with the ‘myth’ it’s just like teaching face-to-face.” Another respondent correctly observed, “practice makes perfect,” ... but only if we practice the *right things* in the *right way*. Our training seems to ignore this fundamental principle of successful coaching.

Finally, we also asked respondents about the modalities through which the training was delivered: face-to-face, asynchronous, and synchronous. The results are, once again, surprising: 41% of our respondents said synchronous activities played *little or no* role in their virtual classroom training and *for only 30%* did synchronous activities play a substantial role. In short, synchronous activities don’t play a predominant role in learning to use synchronous technology. This is very much like teaching someone to play the piano by having them read biographies of great pianists or trying to get to the moon by climbing a ladder. Some of the work gets done, but the heavy lifting – the bulk of the training – is left unaddressed.

Perceived Effectiveness

We next asked respondents about the perceived effectiveness of their training as a virtual-classroom instructor. We then compared these results across four independent variables.

1. Amount of training
2. Who provided the training
3. Institutional policy on training
4. Use of synchronous components in training

³ See “[What We Do](#)” in the Appendix for details.



Amount

Amount of training ranged from one hour to more than a month with the greatest number of respondents engaged in less than a day of training. (See "[How much training did you receive?](#)" in the Appendix for details.) According to the data, very little training – an hour or less -- affects an instructor's perceived effectiveness in the virtual classroom. After 1 hour of training only 35% of respondents perceive their training as moderately or substantially effective. An hour of training is not sufficient, but this is the only meaningful correlation between amount of training and its perceived effectiveness warranted by the data.

After a day of training, 82% of respondents perceived their training as moderately or substantially effective. After both a week and a month of training, about 73% of respondents perceive it as moderately or substantially effective. And after over a month of training 91% of instructors perceive it as moderately or substantially effective. In terms of perceived effectiveness, the return on more than a day of training doesn't clearly warrant the investment of time. Amount of training makes a difference, but apart from the lower extreme, it's difficult to detect a significant pattern in these data. See "[Amount of Training – Perceived Effectiveness](#)" in the Appendix for details.

Training Provider

How does the training provider affect perceived effectiveness and confidence? We included seven provider categories and asked respondents to indicate all that applied.

- Your university/institution (78%)
- Peers through informal coaching (30%)
- Support modules available through your synchronous training platform (22%)
- An external training provider or learning organization not through your university/institution (22%)
- Generally available training on-line (20%)
- An external training provider or learning organization through your university/institution (19%)
- A professional organization (16%)

These data display no significant variation across provider for perceived effectiveness of the training. See "[Perceived Effectiveness: Provider](#)" in the Appendix for details.

Institutional Policy

What about institutional policy towards training? How does this affect perceived effectiveness of the received training? We considered three institutional policy categories:

- Institution requires instructors to be formally trained in online techniques (49%)
- My institution actively encourages formal training (29%)
- There is no policy regarding training for online teaching (24%)

While the lack of an online training policy may have an impact on perceived effectiveness, the data are ambivalent between required versus actively encouraged training. See "[Perceived Effectiveness: Institutional Policy](#)" in the Appendix for details.

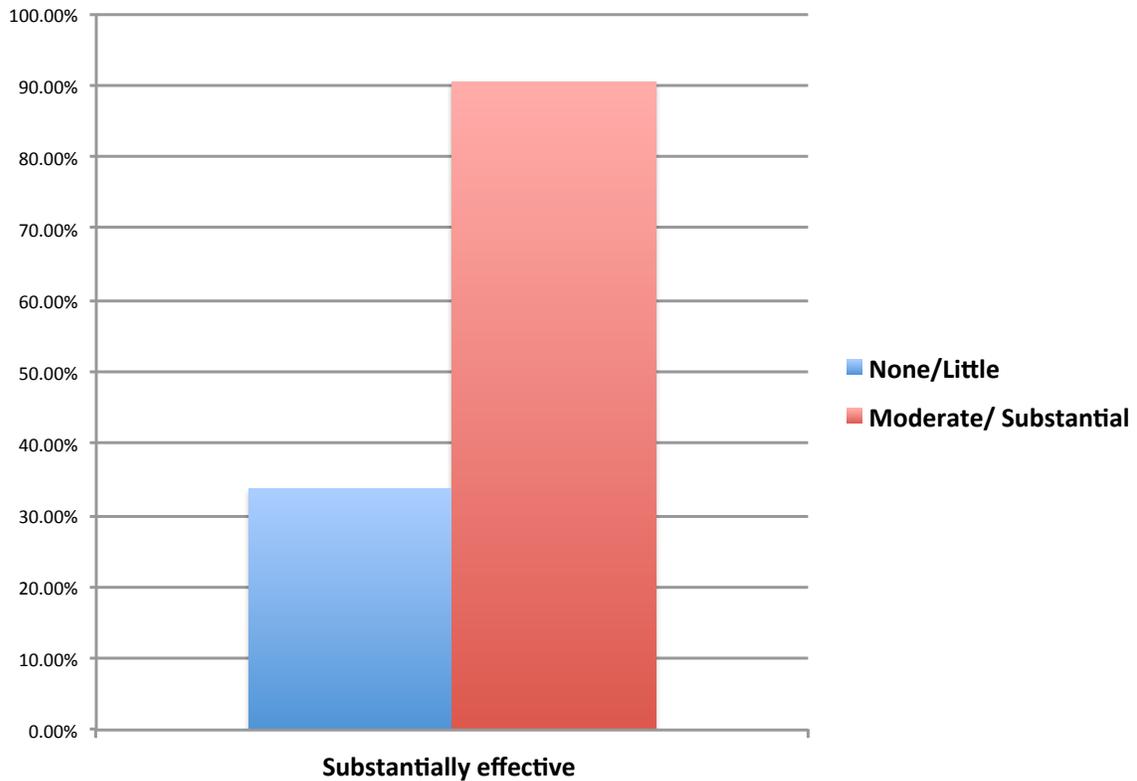
Synchronous Components

The situation is different with our fourth independent variable: using synchronous components in training. While **91%** of respondents for whom synchronous activities played a *moderate or substantial* role in their training perceived their training to be **substantially effective**, only **34%** of respondents whose training included *little or no* synchronous



components perceived their training to be substantially effective.

Using Synchronous Components



Perceived Effectiveness

This supports our earlier observation that substantial use of synchronous training activities in virtual classroom training yields substantially more effective synchronous training programs.

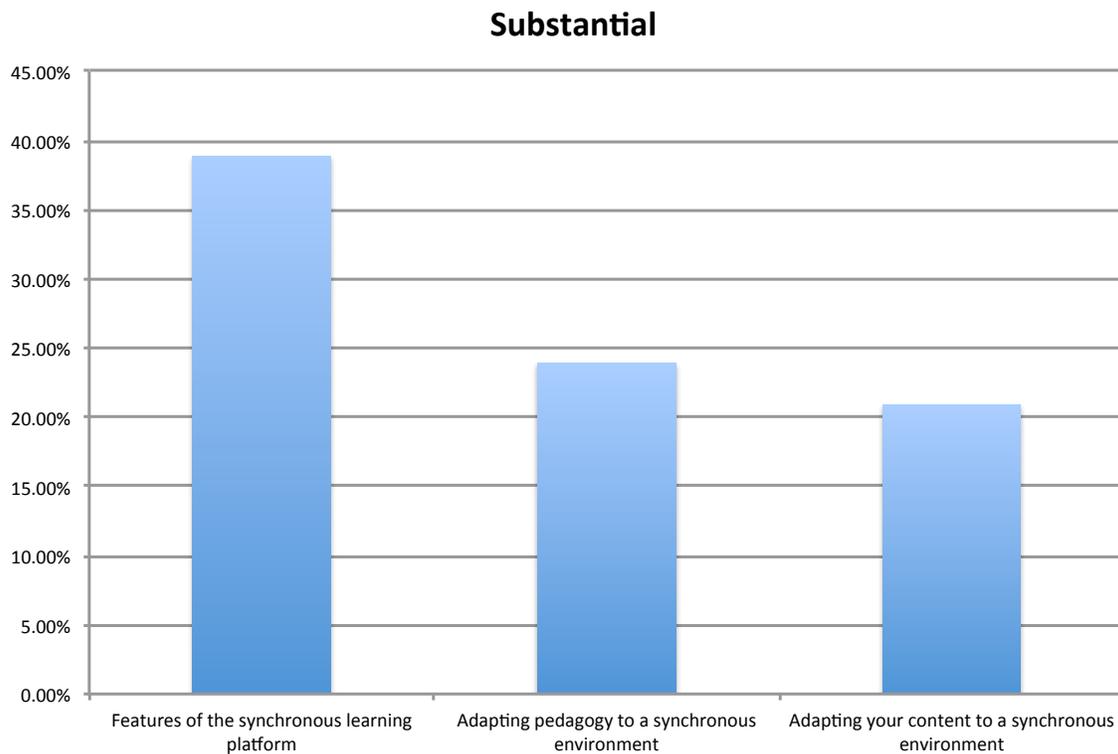


What Our Colleagues Tell Us

Where do we go from here? What **should** virtual classroom training include? What do our colleagues tell us? In conclusion, we offer **three** key learnings from the survey, the first of which should already be obvious:

1. Use synchronous components in virtual classroom training!

What we do now



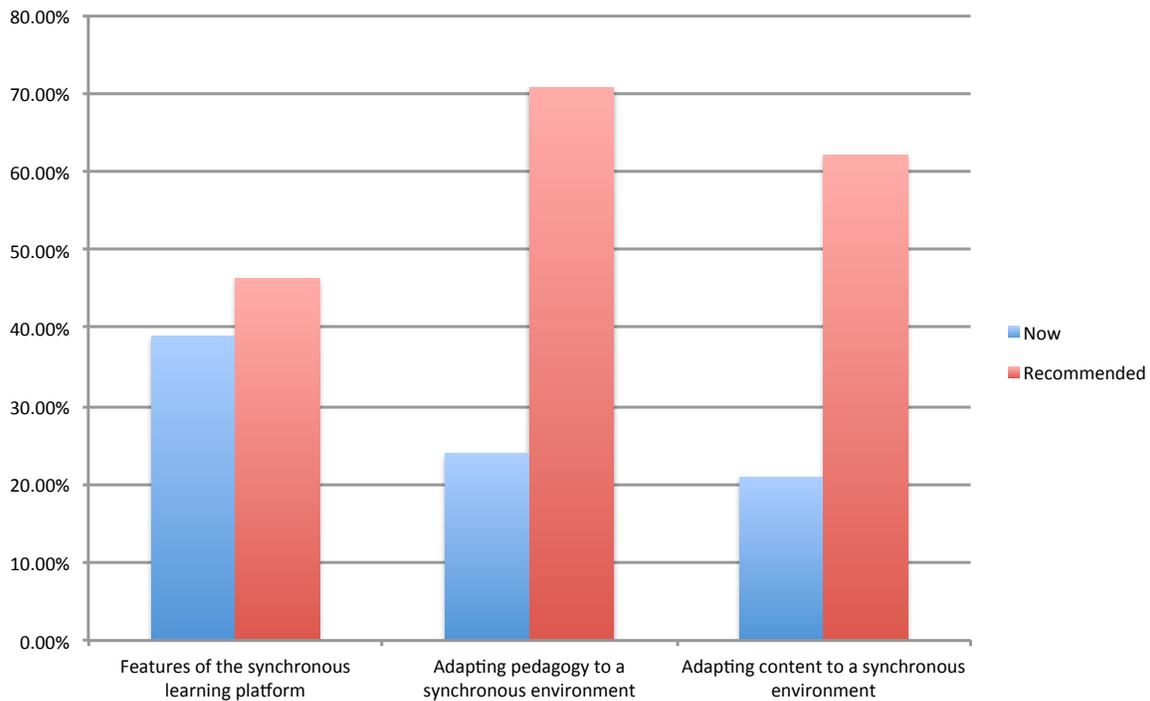
Teaching effectively – inside of a virtual classroom or out – requires more than knowing **what** to do. It requires knowing **how** to do it. Our colleagues are telling us that **effectiveness** in the virtual classroom requires that synchronous components play a large role in virtual classroom training. You can't learn to cross country ski by watching a video on YouTube. Why should it be any different for the skills that support virtual classroom instruction?



Takeaway #2

Change the training *orientation*!

Substantial



Our current training places significantly more emphasis on learning the technology than adapting pedagogy or content to this new environment.

We asked respondents, given their knowledge and experience, how would they do it? How much emphasis would they place on each area? They would structure the training quite differently.

This is the second key learning:

2. Change the training *orientation*.

Our colleagues tell us training orientation needs to shift from a focus on the technology to the more the balanced approach suggested by Koehler and Mishra in the TPACK model⁴.

⁴ P. Mishra & M. Koehler, "Technological pedagogical content knowledge: A framework for teacher knowledge" *Teachers College Record* (2006)



This takeaway is echoed in a number of additional comments on the survey:

[Training courses] miss a lot of the great advantage this new way of teaching offers. They focus on the technical usage of tools, but miss out on using the tools to make an exciting interactive and advanced class.

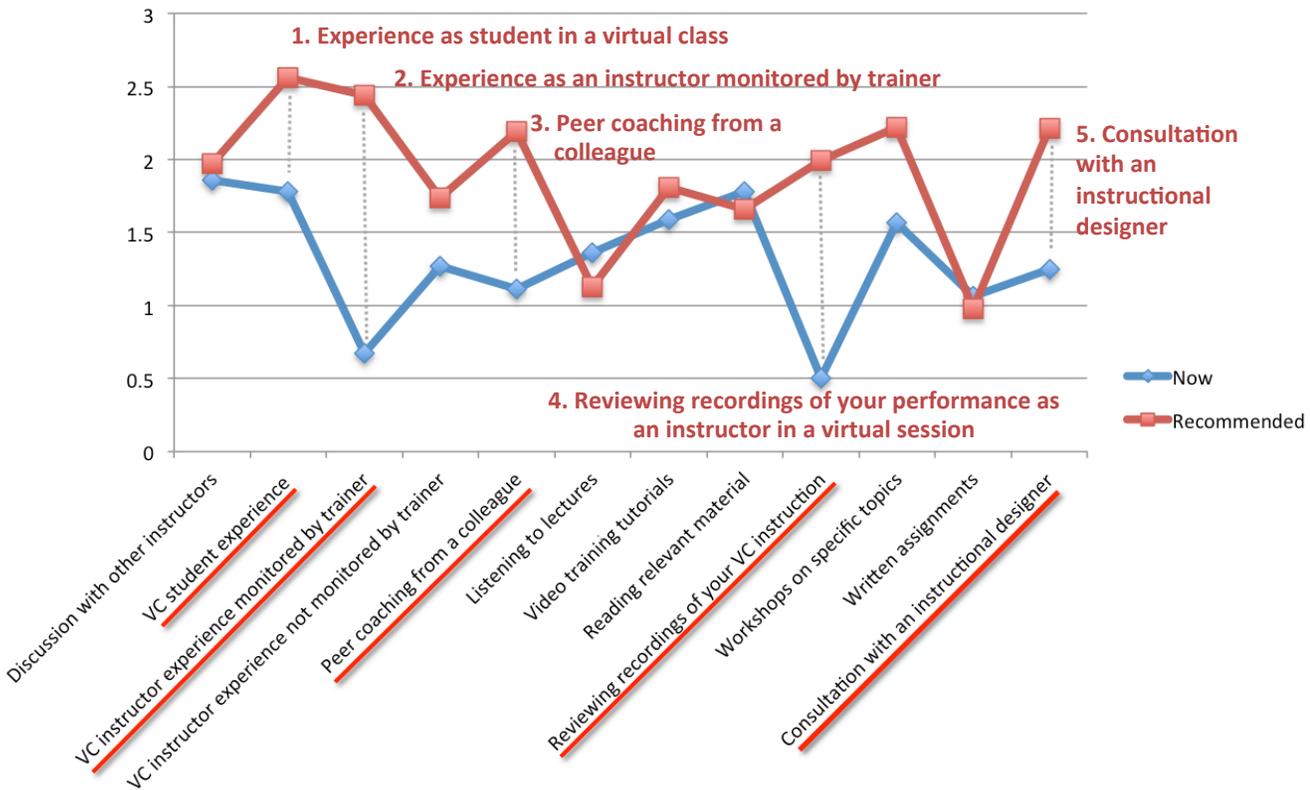
The technical training needed to teach effective online classes is critical. But so is ensuring some training in the soft skills of an instructor who previously only taught face-to-face classes

Finally, our colleagues tell us we need to rethink the *elements and activities* employed in virtual-classroom training. We discussed above those elements and activities.⁵ In contrast, we asked respondents how effective these elements are in creating productive virtual classroom instructors. Which work? Which don't? We asked them to forget about what they did in their training and consider what they should have done. What can we learn from their experience as virtual classroom instructors?

3. Change the training elements.

This chart summarizes the results in the form our final (for now) key learning from the survey:

Takeaway #3 Change the training elements!



⁵ See "[What We Do](#)" in the Appendix for details.



As demonstrated in this graph our colleagues are telling us to focus on a set of key elements to increase the effectiveness of virtual classroom training:

1. Experience as a student in a live virtual class
2. Experience as an instructor in a live virtual classroom *monitored by trainer*
3. Peer coaching from colleagues
4. Reviewing recordings of our performance as instructors in live virtual sessions
5. Consultation with an instructional designer

On the flip side they're telling us to decrease the current emphasis on listening to lectures, reading relevant material and written assignments. In other words, we need to move from passive information retention to active skill building and creative application of these powerful new tools.

The Framework

These takeaways form the pillars for an effective approach to virtual classroom training. They stress understanding the synchronous virtual experience from the standpoint of the student, incorporating a collaborative social element into the training (with peers and instructional designers), learning from our personal successes and challenges (by reviewing our virtual classroom performance) and building skills through practice in the virtual classroom with an established mentor or trainer. This practice should focus not just (or even primarily) on mastering the technology. It must include adapting content and pedagogy to this powerful interactive environment.

As academics and educators this comes as no surprise. But putting these learnings into practice has proved surprisingly difficult. We offer this survey as a first step in a new direction for virtual classroom training.

The Framework and Implications for Future Research

The survey findings suggest critical pillars for an effective to virtual classroom training program. The pillars are:

- stress understanding the synchronous virtual experience from the standpoint of the student,
- incorporate a collaborative social element (with peers and instructional designers) into the training,
- learn from our successes and challenges (by reviewing our virtual classroom performance),
- build skills through practice in the virtual classroom with an experienced mentor or trainer, and
- focus on adapting content and pedagogy to this powerful interactive environment rather than a primary focus on mastering the technology

As academics and educators these observations come as no surprise. They're familiar from the online learning literature. But putting them into practice has proved surprisingly difficult. We offer this survey as a first step in a different direction for virtual classroom training. Follow-on research may compare the effectiveness of training strategies and programs based upon these pillars with the findings offered from our current programs.

This should provide fruitful comparison and a strategy for validation of these hypotheses.



Research Team

Glenn Kessler, Ph.D., University of Virginia



Glenn Kessler, Ph. D., has over 30 years of experience in higher education and information technology. His academic experience includes teaching (both online and face to face), advising and academic program development. He was an Assistant Dean of the College at the University of Virginia and the Associate Director for Academic Programs at the University of Virginia's adult education program. Glenn served as the VP Emerging Technology of the RIA Group, a unit of the Thomson Corporation, and VP for Electronic Product Development for several Reed Elsevier companies including Reed Reference Publishing and Butterworth US. He holds an M.A. in Philosophy from McGill University and a Ph.D. in Logic from Princeton University. He is a senior consultant with Align Virtual Learning Solutions continues to teach online as an Adjunct Professor at the University of Virginia and the University of Maine System.

Michele Lewski, Ph.D., Stevens Institute of Technology



Michele Lewski is a results-oriented educator and consultant. She started her career at AT&T Bell Labs, shaped and managed a sizable consulting organization, and has had a consulting practice for over 20 years. Current and recent clients include Pfizer, Exxon-Mobile, JPMorgan, Credit Suisse, Deutsche Bank, and not-for-profit organizations. Michele has led over 5000 corporate development programs in leadership development, technology management, and program management-related topics. She teaches within the MBA, Technology Management, and Executive Development programs within the Graduate School of Business at Stevens Institute of Technology. Dr. Lewski holds a Ph.D. in Human and Organization Development, a M.S. in Operations Research from Stanford University, and engineering degrees. She is also a certified Project Management Professional

Jennifer Withrow, Align Virtual Learning Solutions



Jennifer Withrow has over 10 years of experience in higher education and information technology as a student taking online classes, working with administration, and as an adjunct faculty instructor. She has experience teaching and co-facilitating in both virtual online and face-to-face environments. With her desire to improve the delivery and engagement of participants during her educational career, she has had her skill sets acknowledged with both class award and scholarship. She served on the NVCC Education Advisory Board for Veterinary Technology and currently serves the DCAVM as the technician liaison. She was invited to work with a global veterinary continuing education community in 2010. During that time, she also worked as an independent contractor working with global corporate clients as a virtual course associate. With her focus on quality, she has implemented successful strategies and techniques to enhance training, design, and engagement within the synchronous learning environments.

Kathryn F. Wood, Ph.D., University of Virginia Faculty



Kathryn (Kate) Wood, Ph.D., is senior project director at the University of Virginia's Center for Survey Research. She is instructor in the Department of Sociology at the University of Virginia, and in addition teaches in UVA's Bachelor of Interdisciplinary Studies Program. She is experienced with both face-to-face and online classrooms. Her research and teaching interests include research methods, the study of social inequality, and the sociology of religion.



Appendix

Demographics and Experience

Demographics



81% university or four-year college

21% two-year community college or technical school



63% full-time



71% untenured



40% Masters

49% Ph.D.



84% taught **5 years** or more at the college

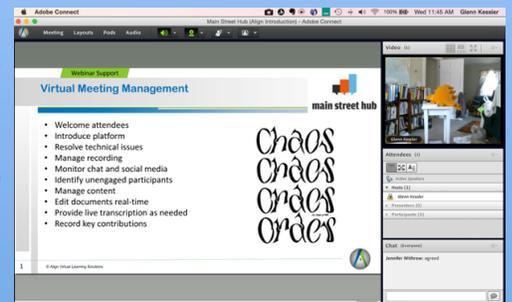


61% 50 years or older

Online teaching experience

91% taught online

56% included a virtual synchronous component



65% taught **online 5 years** or more

72% have taught **5 or more** online courses

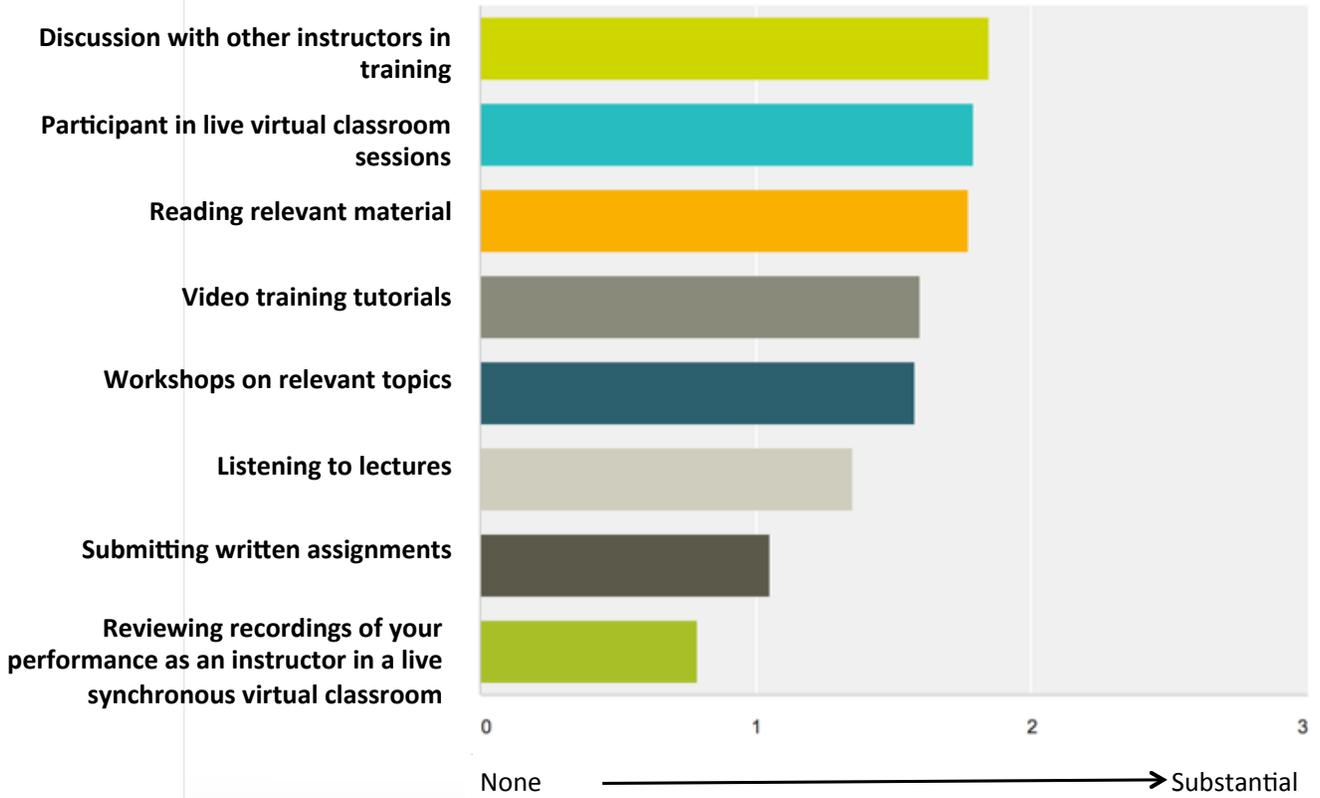


What We Do

Q23

How large a role did the following elements play in your training?

Answered: 285 Skipped: 440

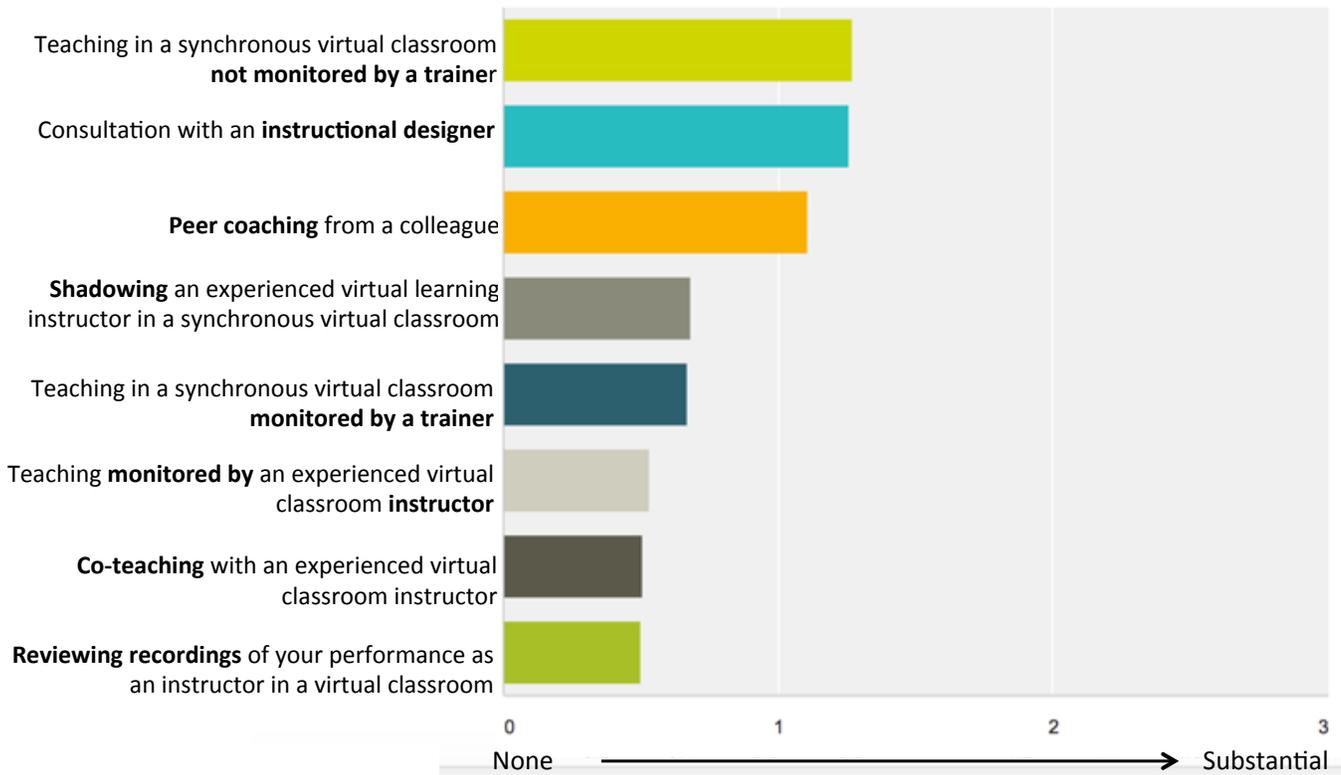




Q24

Level of participation in these activities?

Answered: 287 Skipped: 438

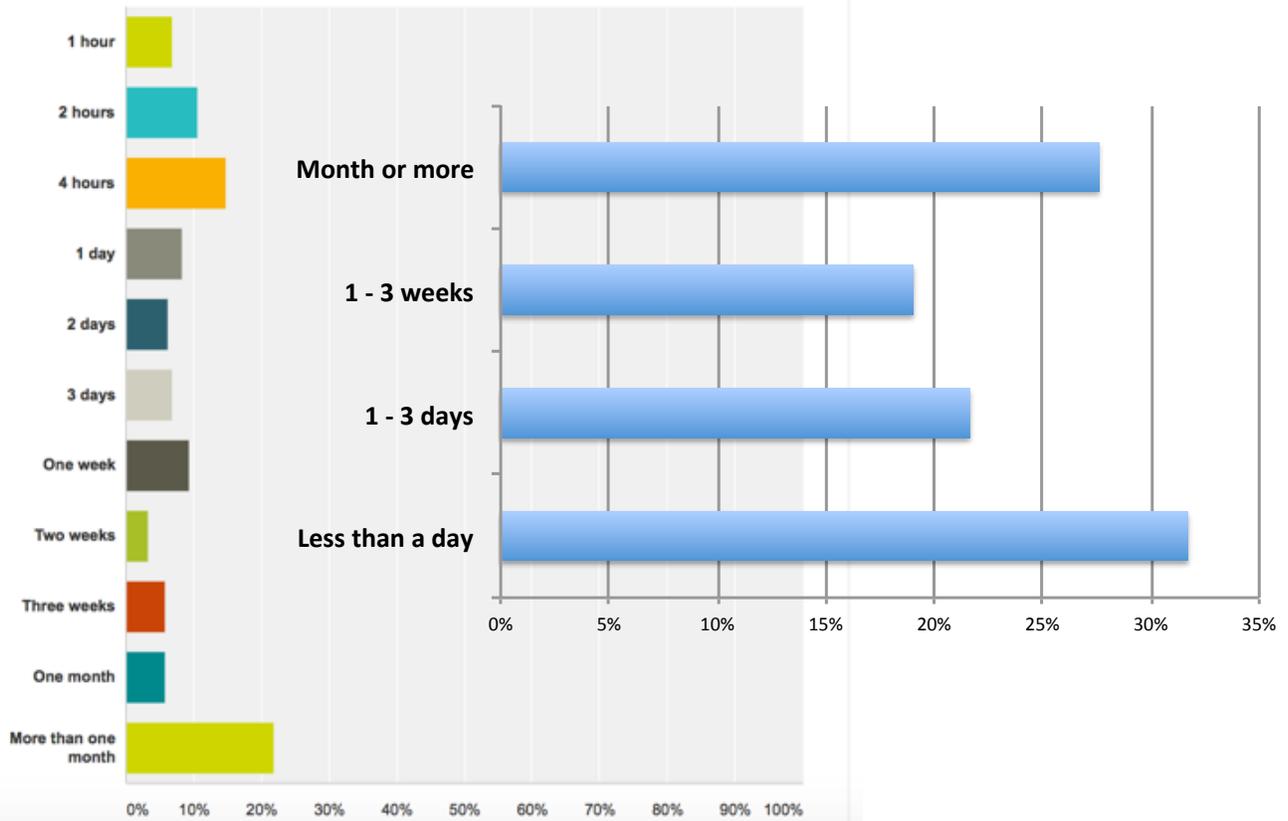




Q17

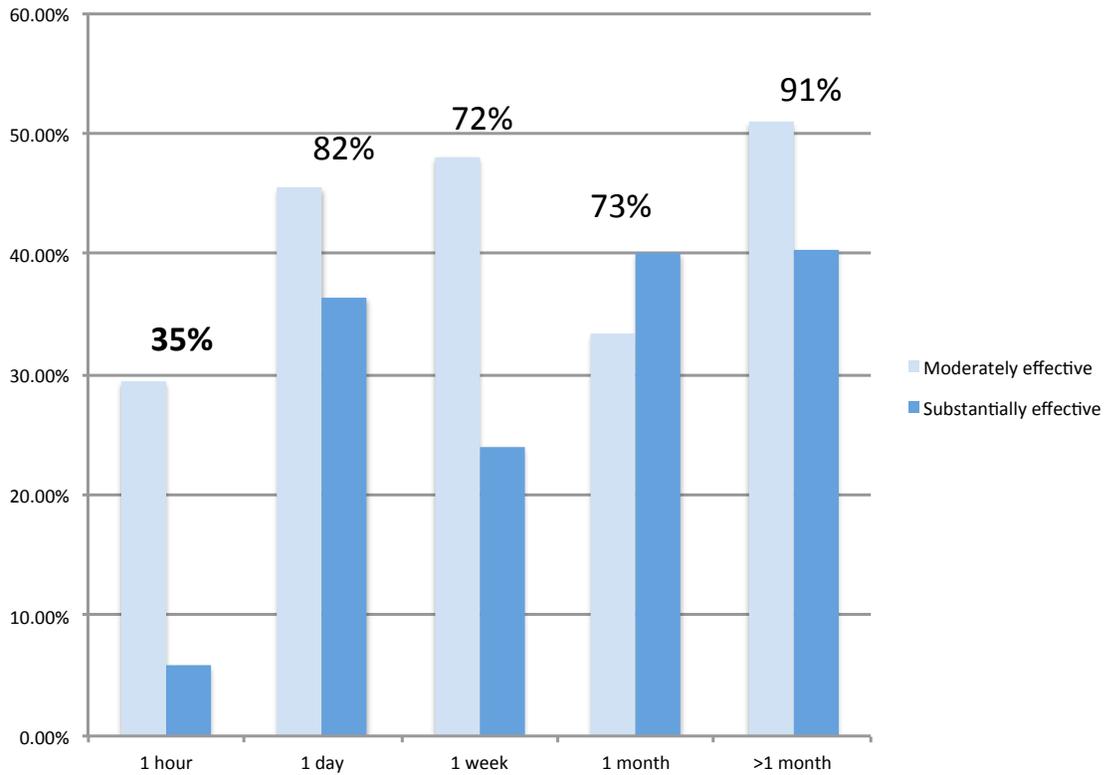
How much training did you receive?

Answered: 275 Skipped: 445





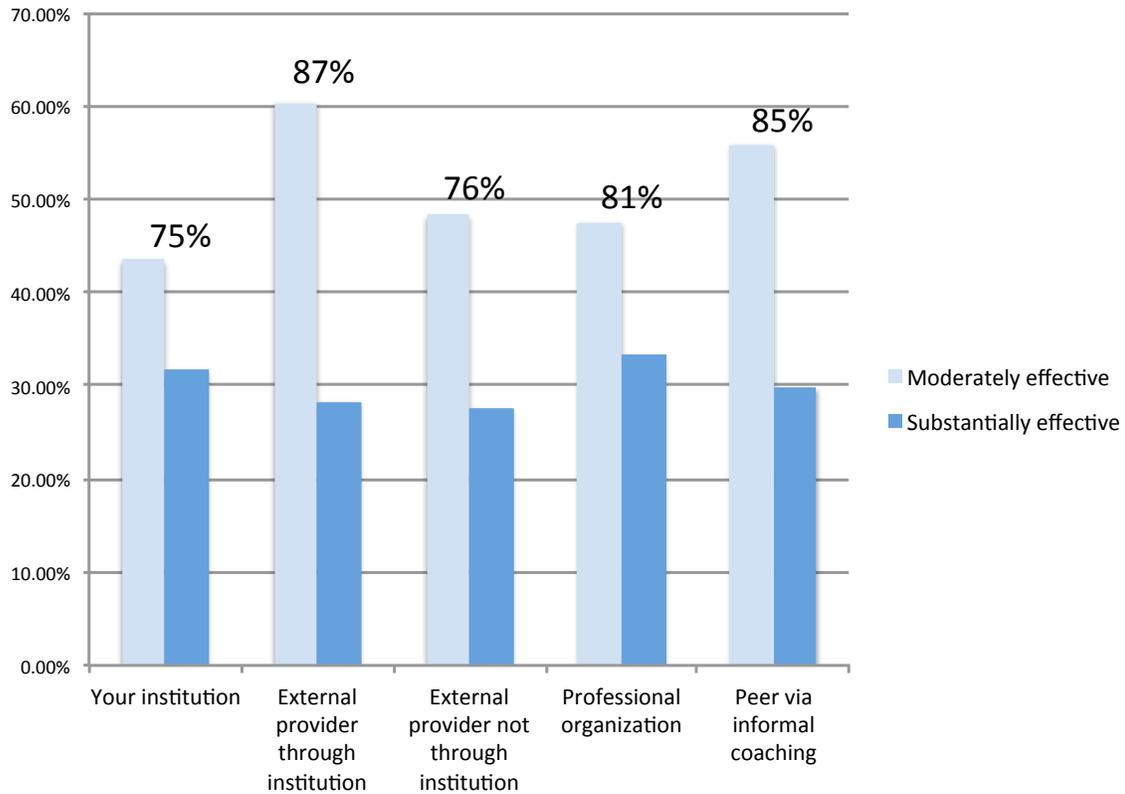
Amount of Training



Perceived Effectiveness



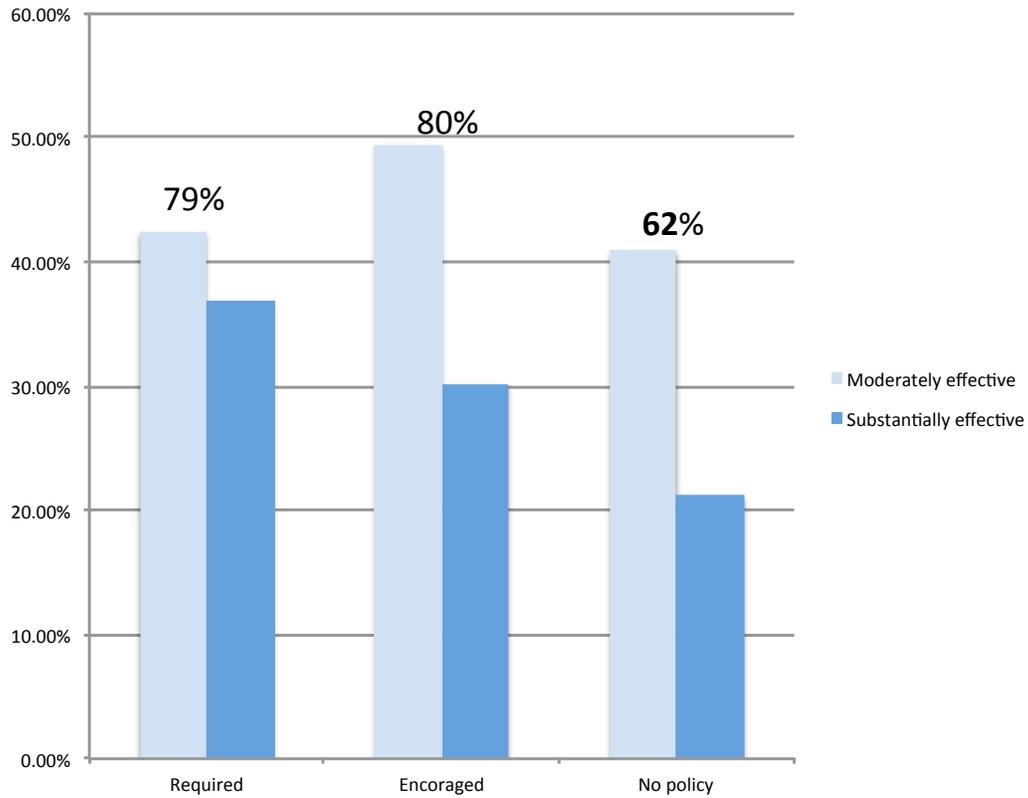
Training Provider



Perceived Effectiveness



Institutional Policy



Perceived Effectiveness