



Who'd of Thought Light Bulbs Would Affect Audio Quality? *A Case Study of Virtual Classroom Training*

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This handout summarizes our advice on developing courses using virtual classroom software, both live and as a recording distributed on CD-ROM.

We believe you'll find this information helpful – it's based on practical experience, and it works. How so? Below are some comments we received back from our learners. Note that the majority of them were new to e-learning of any sort or had negative impressions of it.

What did our Learners Think?

"Just wanted to let you know that I found this to be a really effective method of training! It allowed me to get up to speed much more quickly than traditional training because it took up so much less time. The automation on the screen and discussion via headphones were a great combination. Much better than a manual."

"Very easy and convenient."

"The 'Learning in Progress' sign is extremely effective."

"It was pretty simple, and the actual program is easy enough to use once the e-learning was reviewed."

"I think that well developed e-learning is a really effective tool particularly for those with lots of software experience. It's much quicker than classroom training."

"Have used the e-learning to review things that I've forgotten."

"A terrific learning aid. Well done."

"Good job, well presented and demonstrated."

When we evaluated the live virtual classroom sessions:

- 73% of respondents rated the online virtual style of training very highly
- 86% of respondents said they would attend a virtual training class again for training on a similar topic



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What Kind of E-learning is Better? Synchronous versus Asynchronous

You may need to decide whether to provide your learners with live virtual classroom training, or a recording. (If you have bandwidth issues, of course, you may have no choice but the recorded route.) The table below compares the two modes of delivery, to help you make a more informed choice.

Table 1: Synchronous versus Asynchronous Modes

| Synchronous Advantages | Asynchronous Advantages |
|---|--|
| Closely mirrors traditional classroom format | No need to assemble everyone at the same time |
| Questions answered immediately | Learners can play sections repeatedly until they grasp the point |
| Instructor can adjust on the fly and overcome any weaknesses in the course instructional design | Learners can move around the material in an order that makes sense to them and meets their needs. Training time may be shortened |
| Instructors can create social atmosphere, sense of fun | No fear of making mistakes in front of others or appearing dumb |
| Management can be more certain that learners have at least attended the training | Training occurs at time most convenient for learners |
| Expand access to experts | Expand access to experts in an "edited" format |
| Practice on databases in real time | Have repeated access to good training-"talking manual" |



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Tips and Tricks We Found Helpful

Here are some ideas to make your training more successful.

Instructional Design Matters

- **The fundamentals work**

Your professors were right. Good instructional design leads to good learning, no matter what technology you use. Get your objectives straight, use advance organizers, chunk your sections, include summaries and always think about what the learners need to know to do their jobs. We suggest building the instructions on how to use the technology into the course itself. Few people take the time to read a separate manual or job aid.

- **Focus on practical applications**

We asked the help desk for the most frequently encountered problems, then built the training around them. We used scenarios to set the scene ("Sharon, a clerk in the ABC department, receives a phone call from a customer wanting...."). In the live sessions, we asked learners to give us a problem from their work, so we could solve it together.

- **Choose the right tool for the job**

We had to use the technology available to us. While you can use virtual classroom software to make audio CD's, most weren't designed specifically for that task. So, for example, a recording session can be challenging because when you make a mistake in the audio, you have to start back from the beginning. Other software is better suited for creating asynchronous e-learning—so if you have the budget; get the right tool for the job from the start.

- **Give yourself time**

Effective e-learning takes time to develop. Saul Carliner, co-author of *Advanced Web-Based Training Strategies* estimates that it takes 80 hours of development time to produce one hour of virtual classroom training. This number is double the 40 to 1 ratio for traditional classroom training.

- **Evaluation is a good thing**

We asked participants what they thought and also asked others to review materials as we developed the programs. Their comments were helpful. This pilot/evaluate/re-do cycle resulted in products that have prompted enthusiastic reaction from Hydro employees. A focus on quality is particularly important when people are "sampling" e-learning for the first time.



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Presentation Tips

- **Two voices are better than one**
Having a couple of instructors makes the learning more interesting and helps keep learners engaged. It takes more coordination to have two instructors, but we think it's worth it. If you have more than one presenter, they should attend the session from different locations.
- **Rehearse**
You need to get comfortable with the software, the content and in some cases, the other instructor. We had several practice runs before going live/recording.
- **Arrange technical support**
For synchronous events, try to arrange a "technician" who will:
 - greet people as they arrive
 - be available to those who may experience technical problems
 - can contact learners who are late in arriving to the session
- **Establish an emergency protocol**
Decide in advance what to do if the trainer gets disconnected or if there are technical difficulties with an application that you want to share.

Logistics – Get Organized Ahead of Time

- **Audio**
Find out whether people are technically able to receive audio. Do their computers have sound cards? If so, do they have speakers? For synchronous sessions, learners need a microphone to fully participate. For asynchronous sessions: would they prefer to listen using a headset?
- **Distributing headsets/microphones**
If learners are regional, how do you get their headsets/microphones to them if needed? BC Hydro has an internal mail system which we used. For those who registered for a session at the last minute without a headset/microphone, we sent them to their local office supply store to purchase a set, and then reimbursed them.
- **Training people in software use**
Sometimes we set up "pre-training" synchronous sessions to teach people how to interact with the virtual classroom – although getting learners to attend can sometimes be challenging.



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Prepare Your Learners

To minimize technical issues, be prepared!! If you're dealing with learners who are new to this type of delivery, do what you can to familiarize them with the tool and make them comfortable using it.

For **asynchronous events**, you can help people by providing:

- Instructions on how to view the module – we built them right into the recordings
- Headset and instructions on where to plug it in
- "Learning in Progress" signs for them to display while they are reviewing the training to minimize interruptions

For **synchronous events**, provide:

- Outlook meeting notice with link to event and basic instructions on how to attend
- Headset with instructions on where to plug it in
- Quick Reference Card on the virtual classroom software

If you have time, contact each learner prior to the event to ensure they can:

- Connect to the virtual classroom
- Hear
- Use the microphone and be heard

Securing Management Support

- **Involve them in development**

A senior manager was the subject matter expert for one of our courses. We had him use the software to record his classroom presentation. As a result, he developed a good understanding of what we were doing and the tools and the challenges involved. He became and remains a great supporter of e-learning. We had other managers evaluate the training we developed and incorporated their comments. Again, this activity built support for e-learning projects in general.

- **Keep statistics and get written evaluations**

We tracked statistics related to travel costs and help desk usage. For example, we know that:

- Training for one program saved learner travel cost and time. With classroom sessions limited due to time constraints, learners from regional offices would have had to travel to receive training. With another program, as a result of developing e-learning, live classroom sessions have been cut down by 90%, equaling a savings in trainer's time, some travel expenses and cafeteria orders.



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About the Speakers

CHERYL KITCHING

Cheryl Kitching is a Business Systems Analyst working in the Business Information, Training and GIS Services Department of BC Hydro(<http://www.bchydro.bc.ca>). She has taken up the challenge of introducing e-learning to the company in the effort of creating a more blended approach to learning. She has been involved with developing 3 online training modules delivered using a virtual classroom application and due to the success of these modules, she is currently responsible for identifying and developing additional e-learning opportunities.

RAMONA MATERI, CTDP

Ramona Materi, CTDP is the President of Ingenia Consulting, (www.ingenia-consulting.com) an innovative e-learning firm that specializes in the design, development and evaluation of e-learning projects and programs. Ingenia's clients include BC Hydro, Canada School of Public Service, Telus, Canadian International Development Agency, Syncrude Inc., Environment Canada and others. Ramona is a well-known leader of the Canadian commercial e-learning industry and is also on the National Board of CSTD. She writes frequently on e-learning topics and is often quoted in the press.