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Getting Started with Distance Education Technology

This is an overview guide to installing, testing and getting started with the Elluminate software on your laptop or desktop.

For Everyone

1. Make sure you have the right equipment and that it is all working. You will need a computer (PC or Mac running Windows, Mac OSX or Linux), and a fast Internet connexion already established – a telephone modem won't cut it. We recommend a wired rather than a wireless connexion for greater stability. Most common browsers (e.g. Firefox, Explorer) work fine. Firefox seems to have fewer problems.
2. You will need a working *noise-reduction* or *noise-cancelling* headset to hear/speak. You can buy one for about \$35. Web-cams are also required - plan on spending about \$70. Install and test the software/hardware beforehand, and on the *same* machine you will be using for the class. For students, do NOT use computer speakers and a microphone – you will set up a loud audio echo which will annoy everyone in the class. Professors will disconnect anyone who uses such equipment.
3. Install the latest Java software from <http://www.java.com/en/download/index.jsp>. You need this because Elluminate runs using Java. Allow lots of time. Installing all the software and getting it working takes anywhere from 10 minutes (nice new machine) to three hours (worst experience on an old laptop). Even if you think you have Java installed, please update it anyway – we have had application freezes which turned out to be due to older versions of Java. Make sure Java is enabled in your browser.
4. Go on line and try out Elluminate. The best place to start is <http://www.illuminate.com/support/> to test if it works, adjust the audio and video, and to read their support materials. Do this well in advance – if you leave it until the last minute, it is very likely not to work out. There are some good basic tutorials at https://www.illuminate.com/Services/Training/Elluminate_Live!/?id=418 for students and professors.

5. We have had some problems with sound. These are mostly avoidable if you do the following:
 - Set up the audio *each time* you start an Elluminate session (Tools – Audio – Audio Setup Wizard). When you do this, the wizard will give you the chance to test both your sound input and sound output devices - if they work during the test, they will work during the lecture. This is especially important if you have more than one sound device (e.g. microphone and web-cam – as many web-cams also have a built-in mike). If you don't go through the wizard, Elluminate may well choose the wrong one - web-cam mikes are usually terrible and will cause feedback.
 - The audio input wizard has two options for the microphone - please select “single talker” if you are a remote student using a headset, and “multiple talkers” if you are the professor using the speaker microphone
 - If you are a student in the live class, don't use Elluminate on-line as this adds load unnecessarily. However *one* student should do so to ensure the transmission works and to watch for remote students raising their “hand” or asking questions, in case the professor misses it.
 - Close off all other Internet applications, for the same reason – e.g. Skype, email, downloads, social networking etc. Sometimes they run in the background so you are not even aware of them.
6. Allow lots of time before the class starts. If you turn on your machine a few minutes before class time, you will have no time to fix problems and you will almost certainly not be ready in time. Typically start it up 30 minutes beforehand and leave it running - there is no need to turn it off waiting for the class to start.

For Students

7. Contact your professor and UNENE to inform them you will be taking the course via distance ed. Do this several weeks in advance. We advise you to attend the first class in person.
8. Make sure you have a student password from Lori or your professor so you can log in to your professor's MacLive virtual office at <https://maclive.mcmaster.ca/> for your course. You can find it by paging down (look for “[your professor's name] virtual office”) or by typing his/her surname in the search window – note that it is case-sensitive - or the word “UNENE”, and then look for your course number. When you find it, click on the link, and log in as a “Guest/Participant” with your email address, your own name (please use your real one so your professor knows who is present), and the password you got from Lori or your professor. After a few minutes you should see a whiteboard with various controls on the top and left side. As discussed above, you should *first* set up your audio/video (Tools – Audio – Audio setup wizard). Then test various controls. It is not all that obvious how to do things and you may have some difficulty deciding which miniature icons do what. Try them out. In particular note the microphone icon at the bottom left of the screen – you need to turn it on

- (microphone facing upwards) if you want to talk. Also note the “hand” button (if you want to ask a question); or use the chat window on the left if you prefer texting. Your “hand” goes up automatically when you join or re-log-in, so click on it to put it down. Note that the arrow points to what you want the hand to do, not its current state – so if there is a red arrow pointing down, your hand is up. When you are finished the class, you must click the icon at the extreme lower left or your session will stay open.
9. If your professor is transmitting a video (e.g. of him/herself), you'll need to open the video window from the menu. Sometimes it can disappear – hitting “Alt-Tab” will usually let you locate it.
 10. If you miss a lecture or want to review it, your professor will likely have recorded it, as long as there are students taking it by distance ed. To get to the recording, go to <https://maclive.mcmaster.ca/>, click on the “Recordings” tab at the top right, and you’ll see a list of recordings for that day. Then click on the calendar if you know the day your class was given (or click on “This Month” below the calendar to see all lectures), find the one you want, and click on it. You’ll need a password – the same as the password for logging in remotely as a student. It will then open an Elluminate window and the lecture will play on your browser. You can pause, stop, rewind it etc. using the indicator bar at the bottom. Jumping around in the lecture can be quite slow as the server software has to skip through a compressed video/audio stream – this is not something we can fix, so just be patient.

For Professors

11. You should ensure that you have a virtual office on the McMaster server, at <https://maclive.mcmaster.ca/>. If not, ask Lori for a user name and password. Then you can log in as a moderator and test everything out as described above. Note that you can log in as a moderator at the top of the page, where it says “User ID” and “Password” – or also just by clicking on your virtual office. The latter is preferred as you have to do it anyway to get to the Elluminate screen.
12. Once you have your own virtual office on the McMaster server, Lori will create a student password (different from your moderator password) and let you and your students know. If you change either password, let Lori know – we need to keep master list of passwords as part of UNENE's responsibility for the service – and so I can help you if things go wrong.
13. Elluminate is not always intuitive, so you can contact Muriel McKay for first-time on-line training once you have the hardware working. Her extension at Mac is 26970 and her email is mckay@mcmaster.ca. She can train you remotely using the software. Highly recommended.
14. You will need to test your setup. We should talk well before your first class so I know what stage you are at and how long it will take to set up. I will usually volunteer to run a test from your house/office to mine. We *should* also meet at UOIT-Durham the week or at very least the day beforehand to make sure there are no local issues – the worst thing is to be debugging the setup while a class of

- students fidgets. We have had two whole years of successful distance ed. and students expect the professors to be knowledgeable about it by now.
15. Ask your remote students to set up and test their equipment beforehand. If they are not ready, neither of you will have time to do so on the day of the class, and they will miss it.
 16. At UOIT-Durham, we have a locker containing the speaker-mike, headset, webcam and other supplies you might need. Lori will give you the locker number, location and combination. That means you can leave them there after each class instead of taking them home and trying to return them to UNENE at the end of the course.
 17. You will need to get connected to the Internet. The wired connexion is straightforward and more stable and you don't need a password to access the Internet (you'll still need to log in to the McMaster server).
 18. Step by step setup in the Whitby Lecture Hall (the order seems to matter!). The podium has a power outlet but no Ethernet. There is a set of controls and a "smart screen".
 - a. First plug your laptop into the AC power outlet on the podium
 - b. Connect the SVGA cord from the podium into your laptop. Don't connect the small audio cable.
 - c. Using the UNENE Ethernet cable (it's stored in our locker there), connect your laptop to an Ethernet port on one of the front desks. They don't all work. The one just to the left of the centre aisle works (your left, when facing the class).
 - d. Start up your laptop and make sure you have Internet access.
 - e. Push the main "Power" button on the control box on (your) left of the podium. This will also automatically lower the screen and turn on the projector.
 - f. Push the "RGB" button on the same control box
 - g. Use the settings on your computer to select the main and remote displays (e.g. Function+F5, but it varies with your machine), so your desktop is shown on the room projector
 - h. Now log in to Elluminate as usual.
 19. The wireless connexion at UOIT-Durham works but the setup is complex and is inherently less stable. We suggest you don't use it. If you insist, I can send you the instructions from UOIT-Durham. Lori will give you (yet another) password for the wireless. It takes about half an hour to set up the first time. Once you have it set up, though, it is easier the next time. Your browser and Elluminate will retry if the connexion is lost but it interrupts the flow of the class.



"Durham College
logins.pdf"

20. There are several ways of using your overheads in Elluminate.
- a. You can upload them (just) before the class to the whiteboard. You need at least MS Office 2003 on your machine to do that, and must wait for the conversion to the “wbd” format that Elluminate uses. It works well but the upload can be slow, and any special effects such as animation will be lost. Note that it is *not* persistent - if you upload them the day before, the slides will be gone when you log in next. However once they are in whiteboard format, you can mark them up as you lecture. You can also download the wbd files to your local machine so that uploading is faster next time, as no conversion is needed. The big advantage of this method is that it uses the least bandwidth.
 - b. An alternative (and essential if you have an older version of Office) is to fire up any application (e.g. PowerPoint) on your laptop and then share that application live - for those of you who have used NetMeeting, this will be familiar. The sharing icon is at the top of your screen and looks like a computer monitor with an arrow in it. You click on it and then choose which application to share. The nice thing is that your remote student can share one of his/her applications also - e.g. if he/she wants to show you something or give a presentation to the class. Also you can share any application - not just PowerPoint. The downsides are that it uses up more bandwidth; and if you go into “slide show” mode, you can't mark up the slides as you talk. Using PowerPoint in edit mode is fine – the slides are not too small and you should be able to mark them up as you go. You could also convert your PowerPoint files to pdf on your laptop, share Acrobat, and use Adobe's markup tools to write on them. If you use these methods, your students may complain that they can't see the whole slide – actually they can move it around on their local desktops independent of where it is on yours. If that doesn't help, you may have to shrink it a bit.
 - c. Or you can forget about the Elluminate whiteboard and just share your entire desktop, as you do in a “live” class. Some professors prefer this. You can also use Windows Journal (if you have it), or an equivalent, as a whiteboard. Make sure you don't cover up the Elluminate controls on your screen or you can't see if a remote student is trying to get your attention.
 - d. Elluminate is supposed to support OpenOffice uploads also but I have not gotten it to work.
21. It is a good idea to have your webcam on at the beginning of the course so the remote students can see you. Most professors turn it off after a short while. If you need to show movies, especially in AVI or MPEG formats, chances are that the remote class won't see a thing due to bandwidth limitations, and you may kill the sound also. Instead put the movie on the course web page before the class, so that

- the remote students can download it and view their local version. Obviously if the material is protected, you need some administrative control of further distribution, as the students will have a local copy on their computer. Simple animations or QuickTime movies *may* work – best to test them first.
22. Students (not just the ones who miss a class) will depend on you to record the lecture. There is a pop-up reminding you to do this when you first fire up the software, but you can also ask a student to remind you. If you forget, you can start recording manually using the red button at the bottom of the screen. Remember to pause recording during lunch and coffee breaks, and to stop it when the class is over.
 23. In the class itself, you may find it difficult to manage the both the remote students and the live class. One suggestion: ask one of the local students to keep an eye on Elluminate so you don't miss a remote student trying to get your attention by raising a hand or through the chat window.
 24. Re sound: when you run the Audio Setup Wizard, choose the option (toward the end of the wizard) to allow multiple speakers. There is a high-quality speaker-mike in the UNENE locker - attach it to your computer so you can walk around a bit. The effective range is about 6 feet – if you wander further than that, the remote students won't hear you. We also have a wireless microphone if you prefer. Some professors use headsets, which give very good sound quality for the remote students but makes the lecture somewhat impersonal if you sit at the desk all the time. None of these will pick up questions asked by the live class, especially from the back of the room, so please always repeat them for your remote students. Similarly if you have a headset, you'll also have to repeat questions asked by the remote students for the benefit of the live class.
 25. The sound can lag quite a bit (depending on the quality of the connexion) - somewhat like an overseas phone call via satellite - delays can be a second or two. You'll need to pause for a few seconds if you are expecting a reply from the remote students, and to allow enough of a gap for questions. They may also prefer to use the chat window – see point above.
 26. Most of us are used to drawing on the blackboard. Of course your remote students can't see that, so if you do it a lot, you can buy (or ask UNENE to loan you) a drawing tablet – e.g. Wacom. UNENE will reimburse you if you give it back to us at the end of the course. When you use it, the drawing appears on the Elluminate whiteboard. It takes some getting used to but at least all your students can see it. We tried pointing the laptop webcam at the blackboard in the class – it was visible remotely once and was illegible once, so we now suggest you don't do that.
 27. Your virtual office expires after 12 months. To make sure it's still valid, go to the normal sessions page at <https://maclive.mcmaster.ca/index.html>, log in as moderator (top right of screen) using the name/password Lori has given you, and look for your virtual office in the list - usually under your UNENE course name. There'll be a pencil icon just to the left of your virtual office name, in the "Tools" column. Click on that and you'll go to a configuration page - besides resetting the expiry date of your Elluminate session, you can turn on automatic recording.

When you've made the changes, hit the "Update" button at the bottom. For more details, see <https://c1l.mcmaster.ca/maclive/pdf/Edit%20Session9.7.pdf>

For Professors - When Things go Wrong

28. If the projector won't work:
 - a. To make sure the problem is not with your computer, ask a student to test his/her computer.
 - b. If you need further help, the I.T. Service Desk is available by the phone in the lecture hall x3333; choose option 1. Or from your cell phone, dial 905.721.2000 ext 3333; please choose option 1. The I.T. Service Desk is available during the summer weekends from 9-1.
 - c. If all this fails (e.g. burnt-out projector bulb) you can ask the local students to log in to Elluminate and follow along with you, using their own laptops.
29. If the Whitby Internet connexion fails: The remote students won't see anything and you will not be able to record the lecture. I am going to test an alternate recording software (BBFlashback) and will ask all of you to install it as a backup to Elluminate, so you can post the recording after the session.
30. If your computer fails: you can usually ask a local student if you can borrow their machine for the lecture, and use his/her copy of the lecture notes, or the ones you have already posted on the UNENE web site.
31. You are welcome to call me at home or on my cell, although remote diagnosis and fixing things in real time while the class waits does not have high success probability.

Further material to be added as we learn more.

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