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Getting Started with Distance Education Technology

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

General

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). We strongly recommend a wired rather than a wireless connexion for greater stability. Most common browsers (e.g. Firefox) work fine. We have found that MS Internet Explorer does not work well and ask the instructors *not* to use it.

2. You will need a working *noise-reduction* or *noise-cancelling* headset to hear/speak. You can buy one for about $35 (we supply the professors with one). Web-cams are also required - plan on spending about $70 (again, we supply one for professors). Install and test the software/hardware beforehand, and on the *same* machine you will be using for the class. Students should not use computer speakers and a microphone – you may set up a loud audio echo which will annoy everyone in the class. Professors will disconnect anyone who causes an echo. Professors can alternately use the Snowball microphone and external speakers and I will show you how to set them up to avoid an echo.

3. Install the latest Java software from http://www.java.com/en/download/index.jsp. You need this because BlackBoard 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. Also old versions of Java have big security issues. Make sure Java is enabled in your browser.

4. We have had some problems with sound. These are mostly avoidable if you do the following:

   • Set up the audio *each time* you start a BlackBoard 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, BlackBoard may well choose the wrong one - web-cam mikes are usually not very good and may 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 BlackBoard 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.

5. 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

6. Contact your professor and UNENE to inform them you will be taking the course via distance ed. Do this at least a week in advance. You are *required* to attend at least one weekend session in person.

7. Lori will send you an Internet link before the class. You do not need a password to use it. Try it out beforehand. When you join the real class, please use your full name – professors will eject anyone they do not recognize. 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, and similarly for video). 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 talk button at the top left of the screen – you need to turn it on (pushed "down") if you want to talk. Also note the "hand" icon (if you want to ask a question); or use the chat window on the lower left if you prefer texting.

8. If your professor is transmitting a video (e.g. of him/herself), you'll need ensure the video window is open (top left). Sometimes it will be minimized – hitting the tiny downward pointing arrow will restore it.

9. If you miss a lecture or want to review it, your professor will have recorded it, as long as there are students taking it by distance ed. If you are a remote student and have logged in to the live class with your valid email address, you will automatically be emailed a link to the recording the day after the class. If you are a "live" attendee, this won't happen, so Lori will email all attendees with the link. Jumping around in the recorded 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

10. BlackBoard will email you a set of links for the course. They appear to come from Lori but are computer generated by BB. You can identify them by the email title: "Blackboard Collaborate Invitation". The text starts off: "You are invited to attend the following Blackboard Collaborate

session: Name: Unene Unxxxx". In the text of the email, the first link is what you want as an instructor, the one just below "To join the session, please click on the link below within 30 minutes of the session start time." It is an Internet link that takes you directly to BlackBoard, puts you in the right course, and recognizes your Moderator privileges. Please do not give this link to anyone else. You do not need a password. Don't use any other links, as either they won't work, or you'll appear to be someone else.

11. The next link in the BB email (below the one you use) is the one the students use. It is located just below "To invite others to join the session, e-mail the following Guest Link:". Lori will send this link out to the students so you do not have to do anything.

12. If you also teach a refresher, you may receive a *different* set of links from BB just for that.

13. 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 volunteer to run a test with you between your house/office and mine. We *should* also meet at UOIT-Durham an hour before your first class 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 three years of successful distance ed. and students expect the professors to be knowledgeable about it by now. However every first-time setup has had a few glitches.

14. If you feel that you need more advanced training in Blackboard before the course, please contact Greg Van Gastel (eCollaboration Coordinator, McMaster Institute for Innovation & Excellence in Teaching & Learning, Mills Library, Teaching Commons - Room 504/F, McMaster University). His email is vangasgj@mcmaster.ca and telephone is 905-525-9140 ext. 26970.

15. You will need an SVGA port on your laptop (to connect to the overhead projector) and a standard Ethernet port (to connect to BlackBoard via the Internet). Do not use wireless. If your ultra-modern laptop does not have these ports, please bring adapters. Our speakers connect via mini-RCA plugs, and the Snowball microphone uses USB. The speaker-mike uses USB. Bluetooth devices tend not to work with Blackboard.

16. To avoid issues where remote students can't hear clearly, please consider the following: If your lecturing style is to stay in one place at the podium or desk, the Snowball microphone gives excellent sound and the separate speakers allow the remote students to be heard by the class. If you like wandering around as you talk, please use a headset.

17. We also have two speaker-mikes – they are an alternative to, but not as good as, the Snowball microphone, so don't use them unless you have some compelling reason. They attach via USB. You can daisy-chain the two speaker-mikes (wire them in series) and place one near you and one in the middle of the class. Appendix B shows how to do that.

18. None of the devices 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 use a headset, you'll also have to repeat questions asked by the remote students for the benefit of the live class.

19. 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. It is their responsibility to make sure their equipment is working.

20. At Durham college, we have a locker containing a Snowball microphone, two speaker-mikes, a headset, webcam, four-port USB hub, speakers, Ethernet cable, and other supplies you might need. Lori will give you the locker 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. To find the locker (there are hundreds there in no particular order): come into the main entrance and walk straight down the hall. When you come to the end, turn right and go through the glass doors into the machine shop. Turn right immediately, and right again, and you should see a bank of lockers on your right. Ours is #592 at the floor level. Open it like the old school combination lock (turn clockwise several times before pausing at the first number; then turn anticlockwise *past* the second number until you get to it *again*; then turn clockwise to the third number and stop).

21. Step by step setup in the Whitby Lecture Hall (the order seems to matter!). The podium has a power outlet and Ethernet. There is a set of controls and a "smart podium".

    a. First plug your laptop into the AC power outlet on the podium

    b. Connect the SVGA cord from the podium into your laptop.

    c. Connect the Ethernet cable from the podium to your laptop (in case that does not work, you can connect to one of the front desks using our long cable. The desk just to the left of the centre aisle works (your left, when facing the class)).

    d. *Don't* connect the small audio cable.

    e. Start up your laptop and make sure you have Internet access.

    f. 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.

    g. Push the "RGB" button on the same control box.

    h. 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.

    i. Now connect to BlackBoard as usual, using the link Lori sent you.

    j. Run the Audio Setup Wizard each time to make sure your equipment is chosen correctly. Choose the option (toward the end of the wizard) to allow multiple speakers

22. Please don't use the wireless connexion at Durham for Distance Ed. as the setup is complex and is inherently less stable.

23. You may want to use the Smart Podium (touch screen with pens) on the podium. This overcomes one of the major disadvantages of using BlackBoard, which is the inability to use a blackboard – since you can now sketch with a pen on the screen. However it's fiddly to set up. To use it, connect the USB cable on the podium to your laptop, and install drivers as per the instructions in Appendix A.

24. There are several ways of using your overheads in BlackBoard.

    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 BlackBoard 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. Most professors use this method. To do this, click on Tools – Application Sharing – Start Sharing. 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 (you have to give them permission in Blackboard to do this by clicking on their name and selecting the appropriate icon). Also you can share any application - not just PowerPoint. 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 BlackBoard 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 BlackBoard controls on your screen or you can't see if a remote student is trying to get your attention.

d. BlackBoard is supposed to support LibreOffice uploads also but I have not gotten it to work.

25. It is a good idea to have your webcam on at the beginning of the course so the remote students can see you. You can 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.

26. 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 "record" button at the top right of the screen. You may want to pause recording during lunch and coffee breaks, and to stop it when the class is over – but if you pause it, please remember to restart. Also remember to have your "talk" button (top left of screen) pushed down or the remote students won't be able to hear you (and there'll be no sound on the recording).

27. 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 BlackBoard so you don't

miss a remote student trying to get your attention by "raising a hand" or through the chat window.

28. The sound can lag a bit (depending on the quality of the connexion) - somewhat like an overseas phone call via satellite - delays can be up to a second. 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.

29. Most of us are used to drawing on the (real) blackboard. Of course your remote students can't see that, so if you do it a lot, you can use the Smart Podium. If your laptop has a touchscreen, you're home free, of course. If not, 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 BlackBoard whiteboard. It takes some getting used to but at least all your students can see it. We tried pointing the laptop webcam at the real blackboard in the class – it was visible remotely once and was illegible once, so we now suggest you don't do that.

When Things go Wrong

30. If the projector won't work:

    a. To make sure the problem is not with your computer, ask a student to test the projector with his/her computer.

    b. If this fails (e.g. burnt-out projector bulb) you can ask the local students to log in to BlackBoard and follow along with you, using their own laptops.

31. If the Whitby Internet connexion or the BlackBoard server fails: The remote students won't see anything and you will not be able to record the lecture. There is a free alternate recording software (BBFlashback Express – see http://www.bbsoftware.co.uk/BBFlashBackExpress.aspx) and you can install it on your laptop and use it as a backup to BlackBoard, so you can post the recording after the session. Some students use it personally to record the class audio, and it works fine. *Please make sure you have this installed as a backup before you teach your course.* You don't need to use it unless BlackBoard fails.

32. 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.

33. If you need further help, particularly if internet access is inaccessible, the number that you call when on campus is ext. 3333, then select Option 1. There is a phone at the room entrance. If you cannot get a hold of anyone in IT, call Melissa Leathley (Conference Services, Durham College/UOIT Residence & Conference Centre, 32 Commencement Drive, Oshawa, ON L1G 8G3). Her cell phone is 289-685-1425.

34. You are welcome to call me at home (905.824.6236) or on my cell.

35. Please let me know of any good ideas or problems that are not covered in this FAQ. The technology is somewhat fiddly, but for most of our remote students it is essential.

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Appendix A – Drivers and Instructions for SmartPodium

See

http://downloads01.smarttech.com/media/sitecore/en/support/product/smartnotebook/smartnotebooksoftware10windows/releasenotes/relnotesproductdrivers108v26aug11.pdf

http://downloads01.smarttech.com/media/services/quickreferences/pdf/english/using-the-smart-podium-id422w.pdf

Appendix B – How to Daisy Chain the Speaker-Mikes

Here is how to connect the two USB speakers together so you can position one near you and the other one closer to the middle of the class.

Speaker 1: (the one connected to your computer):

Note the position of the little black plug. The black cord connects to speaker #2. The white USB cord connects to your computer USB.

Speaker 2 (the one further away).