



E-learning and Moodle

1. Goals

By the end of this presentation, you will have

- An overview of e-learning tools, focus on what they are good for, what they are not good for, how to play to their strengths, and common mistakes to be avoided.
- A solid introduction to using Moodle for teaching, so that you feel comfortable using the core tools, know how to use them effectively, and can explore new areas of Moodle with confidence.

You will also be familiar with some terminology related to Moodle and e-learning tools in general, and leads for your own research and experimentation. This training is not a closed book, but a starting point. This course is a collective learning experience, and I hope to learn from this course as well – from questions, suggestions and things you will discover that I would have never thought of. As a result, the next course will hopefully be better. And perhaps the next Moodle will be better too!

2. Introduction – Learning Online modes

- Blended: Face to Face (F2F) + online
- Paper + online distance education
- Pure online

2.1 What is online learning like?

Still bound to the written word, but a different medium. The written word of the book era (good text combined with well thought out images) is an excellent tool for communicating complex concepts. We have hundreds of years of experience with it. Luckily, a lot of the strengths of the written word still hold online. Some things are different though:

- Harder to read – low resolution, flickering screen, fixed positions. Awkward to scan, skim, zoom in/out, annotate, share, etc. *Make online content printable.*
- Publishing is immediate. It is trivial to edit/reedit/correct on the fly, and if allowed, anyone can edit/re-edit/correct. *This can be opened to participation.*
- Can foster or discourage interaction. The glass screen cannot be annotated like paper, but online tools can allow annotation and interaction beyond what paper allows.

Of course, online learning can use rich media like Videos, Flash movies, Powerpoint content, etc. These media are *interactive* and, if designed carefully, they can help explain complex concepts via visuals and interactions, and they often get people *very excited*.

Just like images, however, after the initial impression bad rich media can be worse than text. Rich media also presents barriers to participation – turning to a TV or video mode with the student just *consuming content*. Truly *interactive* content is rare and hard to create... most of the time we have *interpassive* content.

The smart question is: *how much does it help learning vs how much does it get in the way?* which we often rephrase as ***Don't be distracted by the shiny stuff.***

2.2 Good Content Strategies

The mode of use of the Internet encourages our hunter-gatherer instincts aimed at information.

- Provide plenty of reading material plus a guide indicating core readings.
- Edit and expand online content during the course as needed. If the changes are significant, let people know.
- If some of the materials are external and unedited, use them anyway – just indicate they are *raw*.
- When writing or editing, use journalistic writing style to compensate for harder on-screen reading, skimming and scanning. Borrow from the journalistic-style inverted pyramid approach. The first few paragraphs should summarise the reading, use short sentences, avoid indirect modes.
- When linking to other pages/areas/activities use clear names/wording to give students good cues.
- Use jargon where needed, and link to definitions or explanations.

2.3 Interacting online

Learning is a social activity, like teaching, trading, publishing, singing and dancing. Interacting in an online environment for learning has some interesting aspects that often complement the dynamics of F2F.

- Shy students often feel more confident
- More time to think and reflect
- More focus on ideas and expression
 - Written word is a better reflection tool than spoken word (*visual display, time*)
 - Less/weaker prejudice – *minorities often take advantage and shine*
TALK ABOUT THIS
- Discussions still get heated. *Needs explicit strategies to discourage flamewars.*
- Weaker rapport if purely online. *Needs explicit strategies to break the ice and build rapport.*

Social learning strategies shine in online environments, and have emerged as the best way of using them. They are often used in f2f environments, especially in seminar courses.

- In cyberspace, nobody can hear you snore through the lecture
- Preparing learning materials for their peers means
 - Engagement
 - Intelligent discussions
 - Write/rewrite/interpret/show-and-tell
 - *none of the above can be faked...*

Funny names

The best practices around online learning discussed above are known as Social Constructionism or Social Constructivism. Try those terms on Google Scholar and on Google.

2.4 Discovery and Research

Independent reading and research are core strengths of online tools today. Reward hunter-gatherer-sharer behavior...

- Clearly outline the *core* materials everyone must read
- Put a lot of resources and links / leads for more research
- Encourage reading and summarizing for the group
- If possible, have online libraries with specialist material to complement high-quality open resources like Wikipedia and Google Scholar
- Teach students online search skills. A short *Google tricks* intro can work wonders. For specialist online libraries, a quick intro to their (often complex) interfaces is paramount.

2.5 Project Diary

For students engaged in long-term research or development project (for example in architecture school) a project diary documenting their ongoing discovery, experimentation, theorization is a perfect match for the strengths of the online world. It helps students keep a steady pace and course over the project, and provides excellent opportunities for self-assessment and analysis.

2.6 More on Content: Lectures online and group video

Delivering lectures online is often not as good as F2F. Rapport and nuance are lost, and it is *difficult* to answer questions and expand into poorly understood areas. However, for distance education or for night students that cannot attend the lectures it is a very good option. In those cases,

- Make sure your lecture materials have been through a few F2F lectures and enhanced with the feedback.
- It is *complex and time consuming* to get a lecture into video format the first time. It will take several attempts until you get it right. Budget time to experiment.

Group video conference is not technically feasible with everyday connections and computers – but it works nicely in a fully equipped lab. So if you have the equipment and you are certain it will work straight away, you can use it. *Do not rely on synchronous video, and have an alternative plan if it is not working within the first 10 minutes of your lecture.* Often trying to fix a technical issue will distract everyone for a long time, and the lecture time will be wasted.

Face to face and online lectures can be supplemented with online materials and interaction.

- Lecture notes, background reading
- Audio or video recording after the lecture, transcript
- Questions and feedback

2.7 What about evaluation?

Computers have gotten big and fast. However, they are still stupid. Anything that is complex enough to be interesting enough to learn (and for us to teach) is beyond the reach of the computer.

However,

- they can help/support complex evaluation and grading tasks
- they can perform trivial evaluations like multiple-choice questionnaires
- actually, some multiple-choice thingies can be quite sophisticated...
... *but never intelligent*

3. Course Management Systems

The CMS is the main tool providing the facility to run a course using all these tricks we talked about. A good CMS must help you do these things right, and you will have other tools you will use as well.

Funny names

we also use **Learning Management System**, especially because CMS also stands for “*Content Management System*”.

Some well known CMSs

- BlackBoard
- WebCT
- Sakai
- ATutor

3.1 Why Moodle?

- Mature
- Dynamic
- Flexible/Open
- Feature rich
- Community
- Critical mass
- Outstanding project lead – Martin Dougiamas
 - Natural leader
 - Outstanding programmer / systems architecture
 - Educationalist
 - Studied via School of the Air – distance education
- Dev team is a mix of skills and interests

3.2 What is in a CMS

- Users
- Courses
 - Course page
 - Resources (content)
 - Activities
 - Tools
- User – relation to – course

3.3 Further Reading

- *Using Moodle* J. Cole – Chapter 1 Introduction
- Edward Tufte – *Beautiful Evidence*
- <http://docs.moodle.org/en/Philosophy>
- **Interpretive analysis of an internet-based course** constructed using a new courseware tool called Moodle.
<http://www.ecu.edu.au/conferences/herdsa/main/papers/nonref/pdf/MartinDougiamas.pdf>

4. Using Moodle

4.1 Your personal profile

Very important part of breaking the ice and building rapport. Upload your photo and a friendly description of your scholarly and personal interests.

- Discuss options, required fields, optional fields, visibility, password recovery.
- Contextual help
First alternative when needing help.

4.2 Course Homepage

Work with

- Teacher documentation
http://docs.moodle.org/en/Teacher_documentation
- Course homepage
http://docs.moodle.org/en/Course_homepage
- Course Sections
http://docs.moodle.org/en/Course_sections
- Course Settings
http://docs.moodle.org/en/Course_settings
- Blocks
http://docs.moodle.org/en/Blocks_%28teacher%29
- Explore:
 - How does your course appear in the category listing?
 - Join the course of a peer – try with and without enrolment keys
 - Look at the participants list
 - Discuss availability, visibility, enrolment period, etc
 - Look at the *courses block* in Moodle homepage
 - Download and restore the Sample Features course

4.3 Moodle Homepage

- Differences with Course Homepage
- My Courses

4.4 Resources

Work with

- Resource Types
<http://docs.moodle.org/en/Resources>
- Discuss: using good names for resources
- [Using Moodle Chapter 3: Creating and Managing Content](#) under Effective Content Practices (p45)

4.5 Activities

- Forums
 - Using Moodle – Chapter 4 – Using forums, chats and dialogues
 - Discuss breaking the ice, creative uses, negative behaviour
- Glossary
 - Using Moodle – Chapter 9 – Glossaries
 - Glossary practices
- Assignment
 - Using Moodle
 - Practices: project diary, assignment, grading
- Chat
 - Let's run a chat
 - Sync vs async interactions
 - Practices: weekly chat to engage and motivate
 - Archival
- Quiz
 - Using Moodle
 - Practices: evaluation, question banks
- Wiki
 - Using Moodle
 - Discuss: collaborative writing dynamics, ownership, attribution, Dfwiki

4.6 Blocks

- Go easy on blocks
 - Slow performance
 - Less distraction – more focus on content
 - Gain visual space disabling one column
- Interesting blocks
 - Calendar
 - Recent Activity
 - Upcoming events
 - RSS
 - HTML

4.7 Messaging

- Use it. Send a message to each user in the Participants list.
- Use, misuse, dynamics

4.8 Grades

- Using Moodle

4.9 Logs and reports

- Reading activity logs
- Participants list

4.10 Advanced course administration

- Backup and restore
- Enrolment practices
- Spotting students who are falling behind
- Delving into a particular student's activities
- Communicating effectively
- Metacourses

5. Effective courses

- Course homepage layouts
- Effective linking and description of resources
- Using filters: autolinking, media
- Using blocks
- Open social spaces, breaking the ice
- Running simple polls
- Advanced use of glossary and wiki
- Using mod/feedback

Read and discuss

- Course Teaching Checklist
<http://moodle.tokem.fi/mod/book/view.php?id=5116&chapterid=256>
- Teaching Do's
http://docs.moodle.org/en/Teaching_Do%27s
- Teaching Don'ts
http://docs.moodle.org/en/Teaching_Don%27ts

5.1 Commissioning rich media

- Know your goals: *Wow!* vs participation vs content.
- Show the context and provide access to your CMS
- Bandwidth and latency
- Moodle supports standard formats – but content must still be explicitly tested
 - SCORM
 - IMSCP
 - Most widely supported rich media formats are also supported: Flash, Quicktime, Windows Media.
 - All of the above depends on users having the appropriate plugins.
- Scenarios where you may want to use
 - Flash
 - Quicktime / Windows Media / MP3

- SCORM
- IMSCP

6. Where to learn more and find help

- Use the online help!
- docs.moodle.org
- Books: *Using Moodle* (J.Cole), *Moodle* (W.Rice)
- Google.com – also check out video.google.com / youtube.com
- Join “Using Moodle” course on Moodle.org
 - Join teaching techniques forums
 - Join module-specific forums
- Organise a MoodleMoot or come to one
- Good content strategies:
 - Research on writing effectively for the web. Jakob Nielsen's useit.com website is a good starting point. Though focused mainly on marketing content, the main concepts apply to all online content. See
 - Inverted Pyramids in cyberspace
<http://www.useit.com/alertbox/9606.html>
 - How people read on the web (note that refers to users looking for specific information, not students).
<http://www.useit.com/alertbox/9710a.html>
 - Edward Tufte's books are an excellent guide for designing effective content.

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