Putting Your Class Online

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Chapter 1

Getting Started

If you have taught in a standard classroom, distance education can be a little different. You somehow need to bridge the gap of not being in front of a student but you still need to interact with a student according to that student's needs.

You also will need to take classroom material and chunk it down into sections so that online students won't be overwhelmed by the material that they need to have covered. I often think of it as not hitting the student with a whole loaf of bread at a time but instead doling it out to them a slice at a time.

1.1 Interacting with your online students

With online student instruction regardless of the LMS, there are various ways to fill-in for not actually being

present in the classroom. One of the big advantageous of online education is that it does not have to synchronous in that all of your students don't normally have to be on at the same time. But with this there are also some obstacles because you aren't there with the student. So, keeping this in mind, here are some important features to remember when constructing an online course:

- Make a strong first impression.

- Make it seem to the student that you are leading them through the course.

- Be accessible to your online students and respond to them in a timely manner.

- Make sure that your own personality can be seen in your course.

The major tools for online communication with a course are text, images, audio/video, forum discussions, online chats, online activities and blogs.

A long time promoter of Distance Education, Lisa Dubuc's[1] Basic Ingredients for Online Quality Instruction include:

- Instructors with the right skills and abilities

- Measureable Student Learning Outcomes

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[1]SUNY-Niagara County Community College, Online Education Guide, 2012

- Presenting Contents for 21st century students

- Provide Multiple Assessment Opportunities to Engage Students

- Provide a Framework for Interaction

- A visible and attentive online instructor

1.2 Being Ready for Different Types of Students

One method of classifying types of students is the Kolb Learning model defining the type of instruction that can be used:

- **Concrete Experience** - the learner prefers to gain something of a practical nature; so they want "real world" examples and audio/video

- **Reflective Observation** - the learner prefers to read and thinks; so they normally want written texts and standard exams

- **Abstract Conceptualization** - the learner perfers abstractions; so they normally want Forums and Discussions with class interaction

- **Active Experimenter** - the learner prefers hands-on or simulated experience; so they want models and activities

When you create an online module, you may want to try and stimulate each learning experience type to make your online module more effective for all learners.

Chapter 2

Different Types of LMS Systems

A Learning Management System (LMS) is just an online way to organize your class into folders, sequences of events, chat and interactive areas plus usually a calendar system. For the instructor, there will also be an online grade book, an assessment system for tests, quizzes and online forums, plus a way to organize material based on dates/times or assessment goals. A good LMS normally has hooks to add material such as images, audio, audio/video, items from YouTube, interactive items like Flash files, and additional sundry items.

The three main LMS systems that we are going to look at in this class are the Angel LMS used at Iowa Valley, Blackboard which is currently one of the bigger and more traditional LMS providers, and Moodle which is the most popular public domain LMS system.

Angel was an up-and-coming LMS system in the mid-2000's and was bought out by Blackboard in 2009 but many sites still use and prefer the Angel LMS. The Angel LMS system is famous for ease-of-use and for its ability to handle both standard HTML, YouTube connections and Flash objects plus being instructor-friendly and having forum discussion boards that are easy to grade.
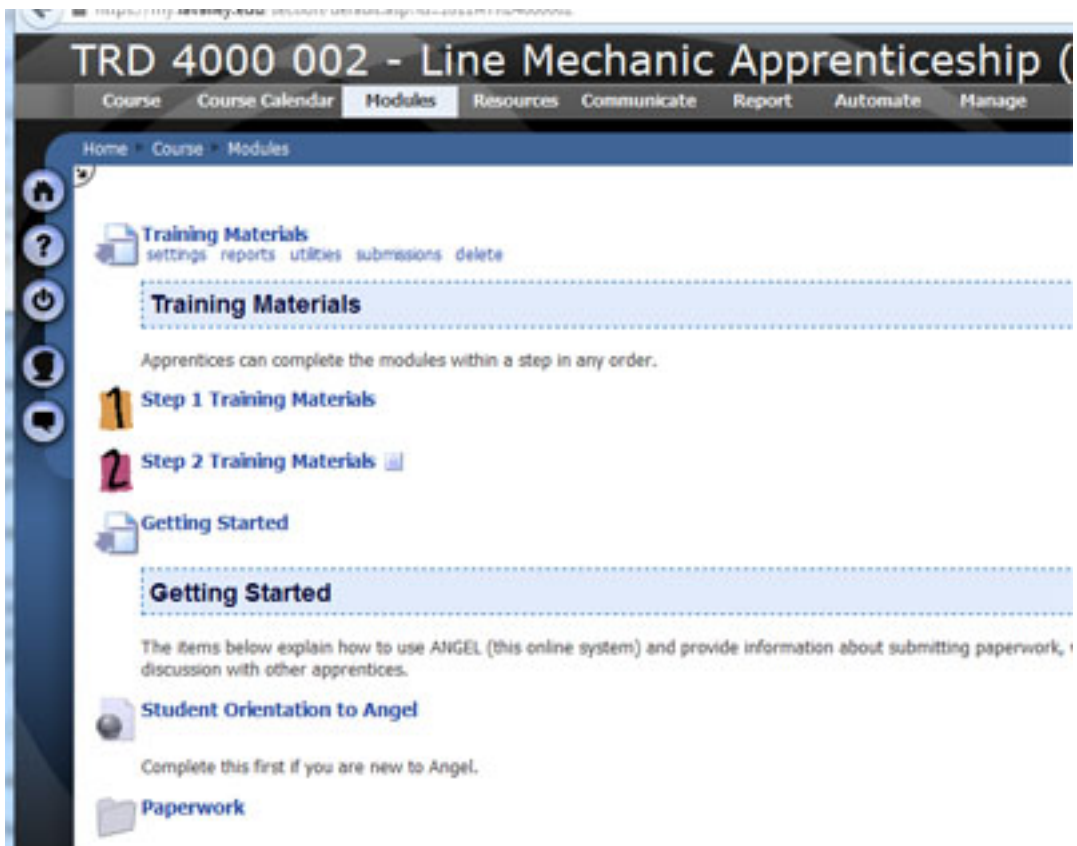

Figure 2.1: An Example Screen in the Angel LMS

Blackboard has been the dominant LMS system for many years but its use has wained recently due to its higher price and also because of the variety platforms that use the Blackboard system which make it slow to change and thus has stalled its development. Blackboard is available for free use by intructors of smaller classes through `coursesites.com`.
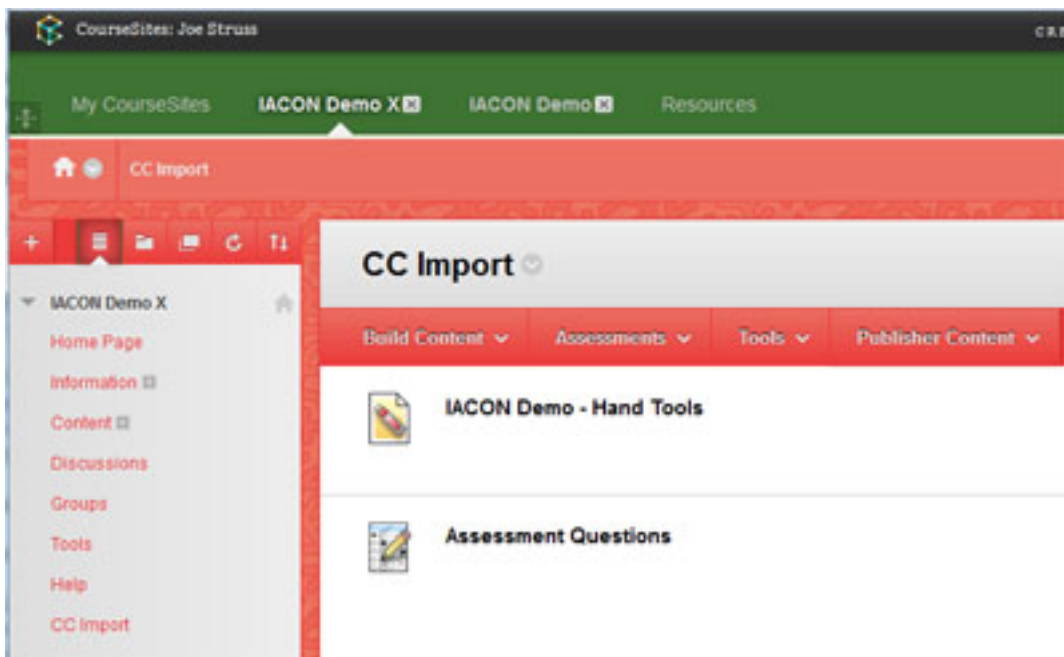

Figure 2.2: An Example Screen in the Blackboard LMS

Moodle is a public domain LMS that is available for free download from the Moodle web-site: `www.moodle.com`. Most web space providers normally have a package that can install a new Moodle system with just a few clicks of a button in just about fifteen minutes. Due to the public

nature of Moodle, most of the moodle system development is rather chaotic and the plain moodle system is useful but not overly exciting to view.
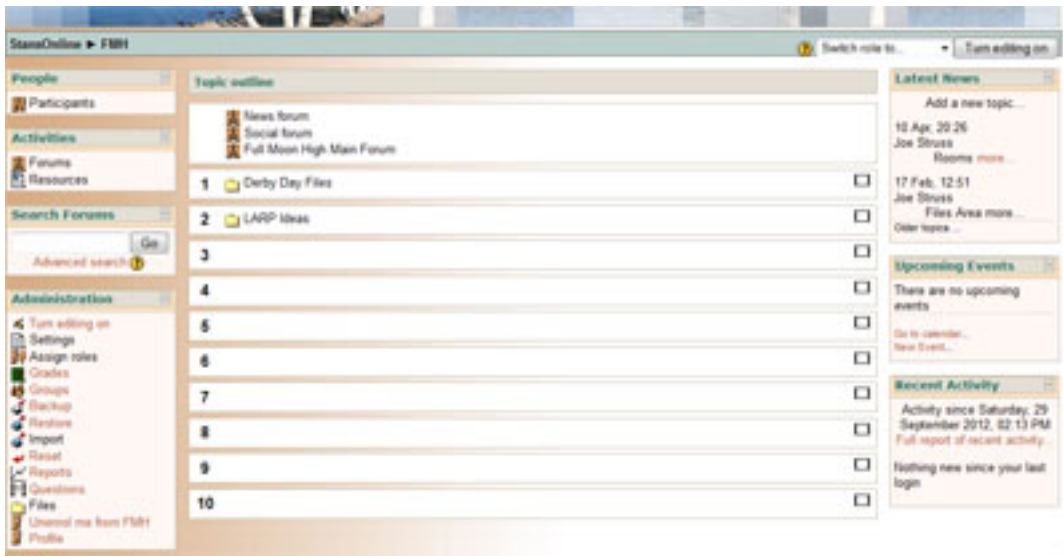
Figure 2.3: An Example Screen in the Moodle LMS

Cloud-based LMS systems like Canvas, Desire2Learn and Softchalk Cloud are more recent developments. These LMS style systems do not require you to run the base system on your local system or desktop but instead both instructors and students access the LMS facility via the internet. This type of system looks to be the future of LMS development.

All LMS have the same types of features. An LMS should allow you to:

- Organize Data and Arrange Material
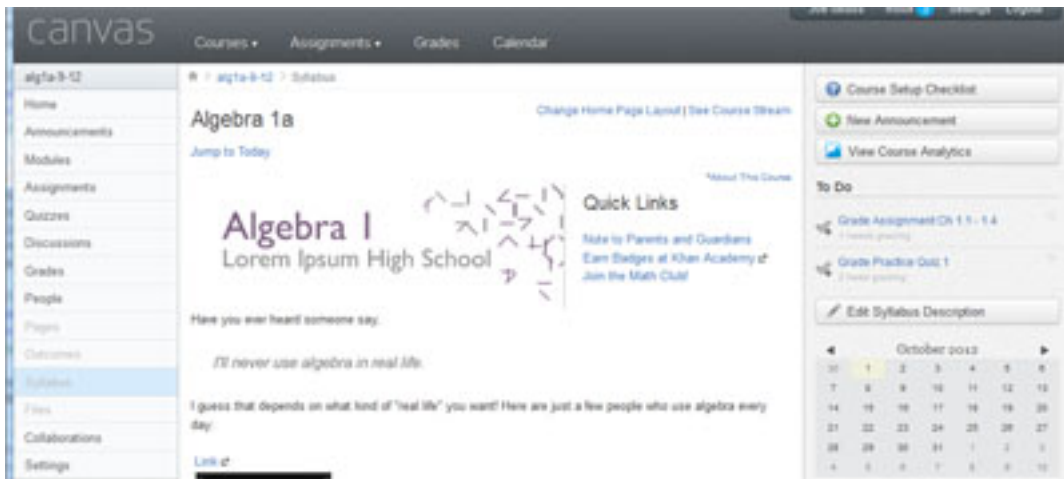
Figure 2.4: An Example Screen in the Canvas LMS

- Present the material in a sequential order

- Have date/time or proficiency feature that allows timed/dated release of a materials

- Allow online Discussion via Forums and Chats

- Present links to other material such as YouTube, Flash files, Audio/Video files, or internet links

- Have some sort of grading and attendance features

- Frequently have a feature that allows you to see things from a student's viewpoint

Chapter 3

Sectioning Out Your Class

3.1 Organization

When you are putting together an online class, organization is the key. You will probably want to take a step back from your material and see what materials can stand on their on and which may require additional audio/video examples or discussion interactions. If this is a long class, you may want to take a class worth of material at a time and put that into separate folders online. When a student completes one week's worth of material or when a certain amount of time elapses then the next week's folder opens. This week-to-week style is popular for college classes.

Looking at your material, you probably want to parcel your material out from a normal class in sequences of three to seven minute "normal class" segments. You would want to follow this with some sort of graphic, ac-
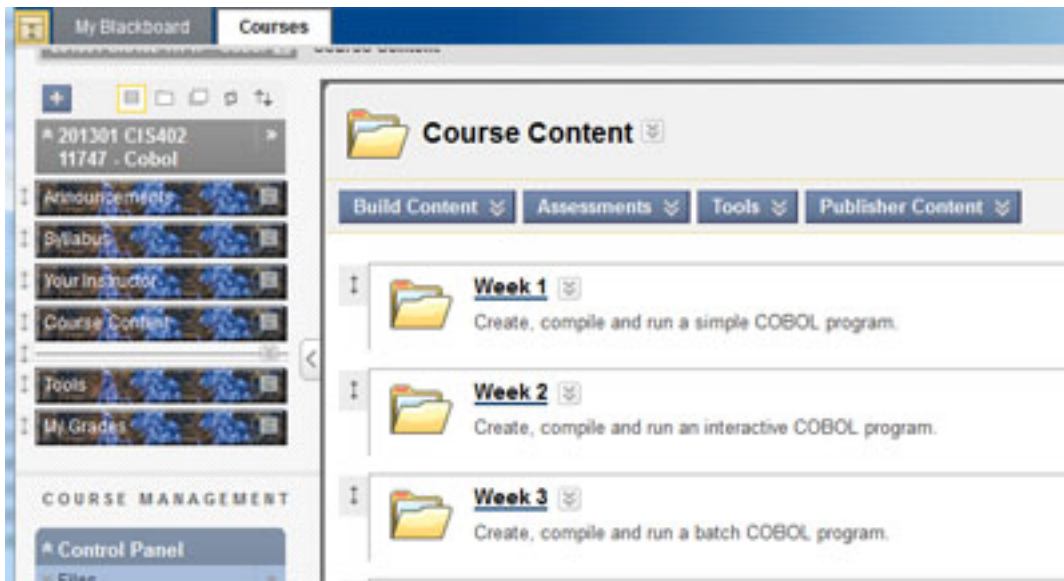
Figure 3.1: Week-to-Week Class Example

tivity, interaction or assessment. It doesn't have to be something long but different types of learners like to learn the material in different ways and you want to connect with as many of your students as you can using their preferred mode of interaction.

3.2 Starting Out

3.2.1 Welcome to Class

At the very start of your interaction with the students, you want to welcome them to the class and then give them some sort of motivational material which covers something related to the class that day plus something that

organizes the material that they are going to learn.

For example:

> *Welcome to class this week. We looked last week at job opportunities for Construction workers online and posted to the Forum possible jobs of interest that were found on the internet.*
>
> *This week we are going to see a video of a shop foreman going over job qualifications that the foreman is looking for in an employee, cover basic resume construction then post a resume to the forum.*
>
> *For next time, post a finished resume to the forum, complete the online quiz over Chapter 2 and read Chapter 3 from your book.*

3.2.2   Introduce Yourself

You will also want to introduce yourself. Almost all LMS systems have a place for a class syllabus and a place for an instructor introduction. The introduction can be short and sweet but it can be more effective if it just a little longer, tells something personal about the instructor and includes an image or a short video from the instructor.
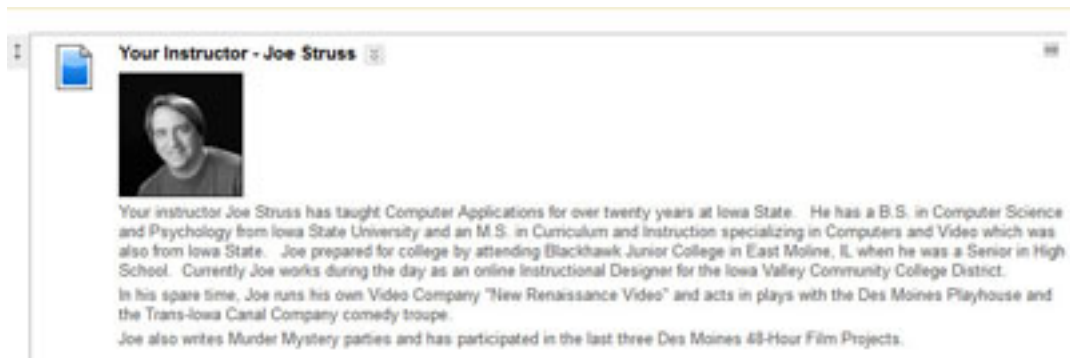

Figure 3.2: Instructor Introduction Example

Workshop: Go ahead and write an introduction for yourself and add it to the LMS. At coursesites.com, we first need to create the course itself. Login to coursesites.com and click on the **Create A Course** button. Then click **Create a New Course**, putting in basic information for the course then click **Save and Continue** then **Customize Course** and **Apply Changes**. Your new course should now be there for you.

In the Blackboard LMS, to add an introduciton to yourself just click on **Information** from the menu on the left then pull down under **Content** to **Create: Item**
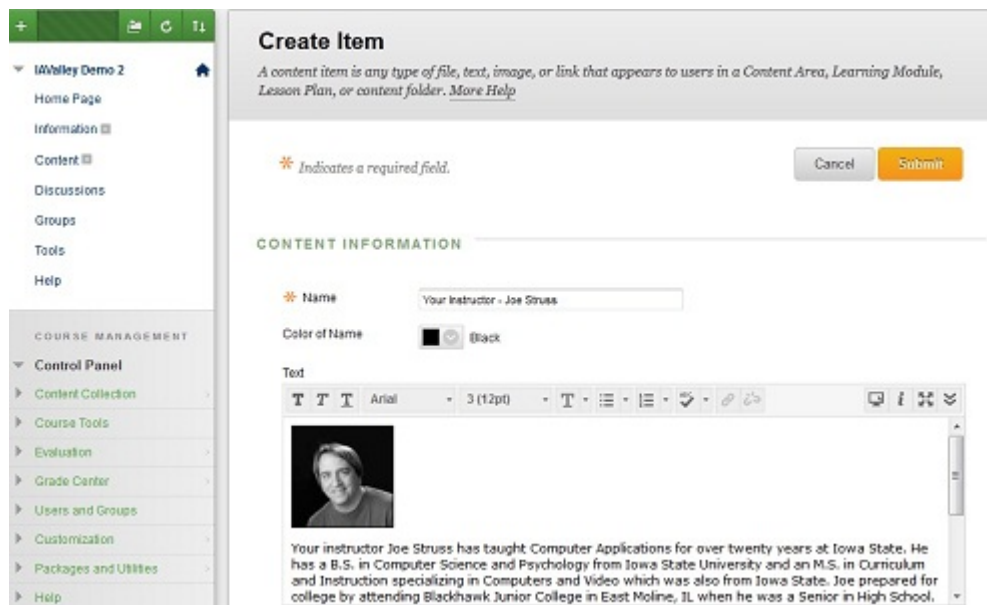

Figure 3.3: Instructor as a Section Heading in Blackboard

Special: A common tactic to use with students is to send them an e-mail before class even begins that wel-

comes them to the class and gives some basics as to what your are going to cover and what the computer system requirements will be. This can really help the student "set-up" for more effective online education.

Hi,

Welcome to my "Introduction to C++" class whose first meeting is tonight in Building 8, Room 17 from 6 to 7:30pm (Web blended). I hope you had a great summer and are now rested/relaxed and ready to learn. Tonight we are going to learn some C++ basics, go over how to get to access Blackboard, plus learn how to use the Visual Studio software that is installed in the classroom to run C++ programs. I'll hand out the class syllabus and calendar as well. See you tonight at 6pm.

Sincerely yours,

Joe Struss
jastruss@blah.edu

Figure 3.4: A Standard Style Welcome E-mail

3.2.3 Theming

Most LMS system allow you to personalize LMS construction with a theme or color scheme. You want to choose one that complements your teaching style, the subject that you are teaching and still allows the material to be easily read and shown on a screen.

Within Blackboard, themes can normally be found next to the **Edit Mode** button on the upper right or

within the **Control Panel** under **Customization** then click on **Teaching Styles**.
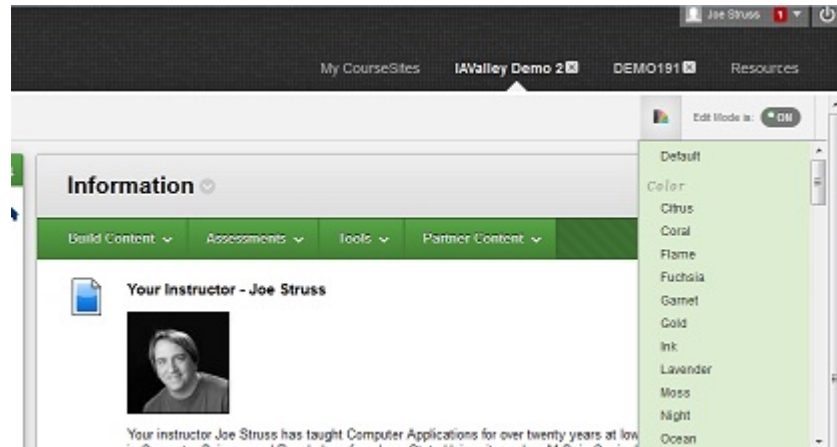
Figure 3.5: Choosing a Theme in the Blackboard LMS

Since we are over there, the Edit Mode button is a toggle button within Blackboard. You want to turn it **On** when you are making changes to the course and you can turn it **Off** if you want to see your course as a student would see it.

Workshop: Try a few different themes and see if you can find one that you like. Try also turning your **Edit Mode** off and on.

3.2.4 Adding Content

Workshop: Add some material to your class by clicking on the **Content** item on the left then pull down under

Bulding Content to add an **Item, File, Image, Video or Web Link**.

Files are normally PDF files or word files, Images are standard internet image files like .jpg files, video links allow you to connect to items on YouTube or upload your own video resources, and web links go out to other pages on the internet normally in a new tab or window.
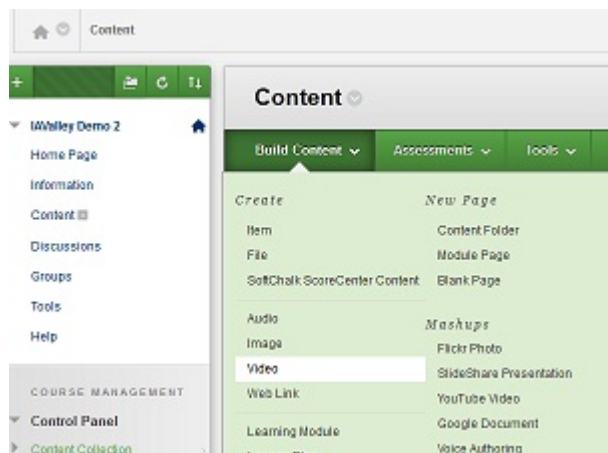
Figure 3.6: Adding content to the Blackboard LMS

Under **Build Content** → *New Page*, you can also create New Folders to section out your material into groups and Black pages to create full page instructions on activities.

It is important to have a good mix of material on a page to appeal to a wide variety of learners. A good page mix normally includes a couple of paragraphs to read followed by some sort of interaction be that of a graphic,

audio/video file, forum or some kind of assessment.

3.3   LMS Tricks of the Trade

A useful device on most LMS systems is that folders that allow you to group content activities and some additional content type modules allow you to set a starting and ending date on them. This makes it so that a folder or module does not appear before a particular date or time. It sounds kind of trivial but it makes it so that a complete lesson which includes fourteen units is not seen by the student all at once but are simply given to them one at a time. It makes it so that the lesson as a whole is less imtimidating and also requires the student to work on the lesson on a regular basis. To access the date feature within Blackboard, just use the down arrow next to a content item then pull down to **Edit**. Next just fill in the **Display After** or **Display Until** information, click the **checkbox** then click on **Submit**.

Another feature you might use in Angel or Moodle is putting a password on the module so that they have to do an activity that contains the password in order to access the module. In Blackboard, you can only do this on quizzes and exams.

A different type of access feature allows you to open
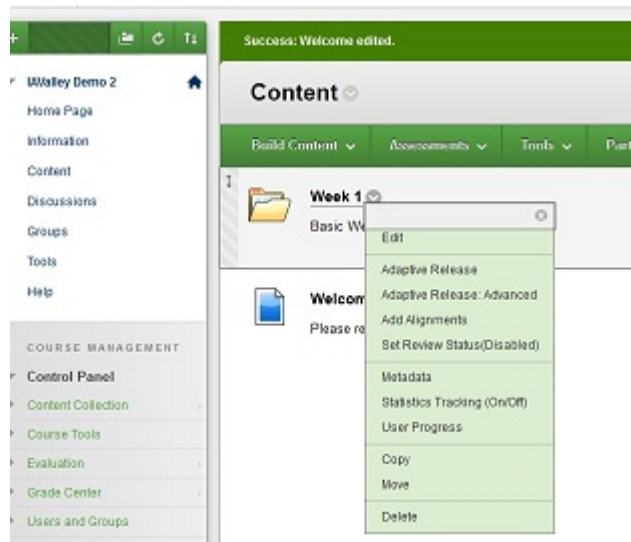
Figure 3.7: Editing a Content Item on Blackboard

up a folder or module based upon an assessment score or completing some sort of activity. To do this for an item in Blackboard, use the drop-down arrow for the item and pull down to **Adaptive Release**.

Generally speaking for most of these alterations, you want to work off of a content item and then add whatever requirements you want before the area can be viewed or accessed.

3.4 Assessments

Go under **Assessments** and select **Test** on the Blackboard LMS system and click on **Create**. *Name* your test, type in a instructions and a descriptions then click

on **Submit**.

There you will find the various question tools that you can use on the system. These tools include multiple choice, true/false, matching, ordering, algrotihmis, fill-in-the-blank, plus short answer and essay.
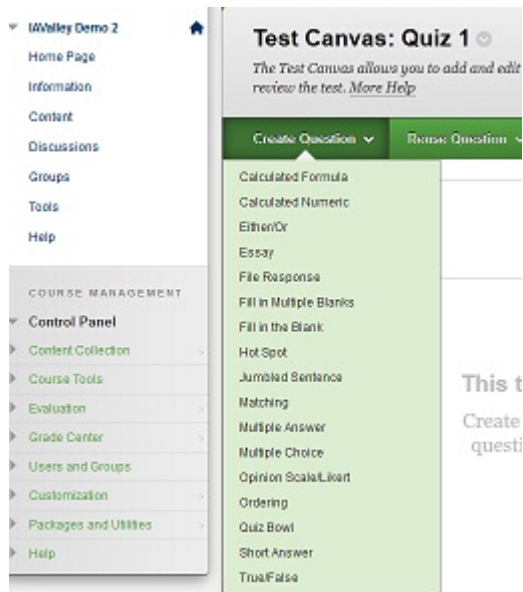
Figure 3.8: Assessment Tools on the Blackboard LMS

Short answer and essay tools have to be graded individually but they do add a personal touch in giving feedback to your students. Most of the other various tools can be graded automatically by the system, in fact, you can allow the system to show the answers or even give the student multiple chances to get the answer correctly depending on the design of your course.

Similar features can also be added to both Angel and

Moodle classes as well. Angel has an assessment module pull-down with similiar options and Moodle assessment options can usually be seen on the Moodle sidebar.

Workshop: See if you can create a simple test or quiz and then test it out to see if it actually works.

3.5   Chats, Forums, Wikis, Surveys and Blogs

Chats (Coursesites Live) and Forums are a great way to add interactivity amongst your students or between you and your students. You can have an activity where students are sent out to find information on the web on a particular subject or area, place it in a forum and then discuss it on the forum with other students. The nice part about this is that this can occur asynchronously whenever your students have a chance to participate.

Online chat allows you to give time for a student to chat with you via text messaging on a system. This sort of indivudal contact with the instructor can greatly enhance the student experience for an online class.

A wiki is a web page that becomes a group activity. You simply start the page and the students in your class are allowed access to the page to edit the information as much as they would like. It can be used to come to a group consenous and can get students involved in a group

activity.

A survey is usually just a quick little online survey to get an opinion from the people in your class. It can be used as an introduction to a module or just as a quick engagement tool for your students.

A blog is an online diary of sorts where a student or the instructor can reflect about the course. Some students really prefer thinking about what they have learned and then relfecting on that information in a blog to share with the instructor. In a longer class, a blog can be used by the instructor to inform the class concerning weekly updates such as items that are due or things that are coming this week in an effort to keep the student engaged.

Online chats, forums, wikis, surveys and blogs are available on nearly all LMS systems and can be easily integrated into many courses. Within the Blackboard LMS, you can find them under **Tools** for all of them also click on *More Tools*.

Workshop: Try adding a discussion forum to your course. Discussion forum have two parts so they are a little tricky to create within Blackboard.
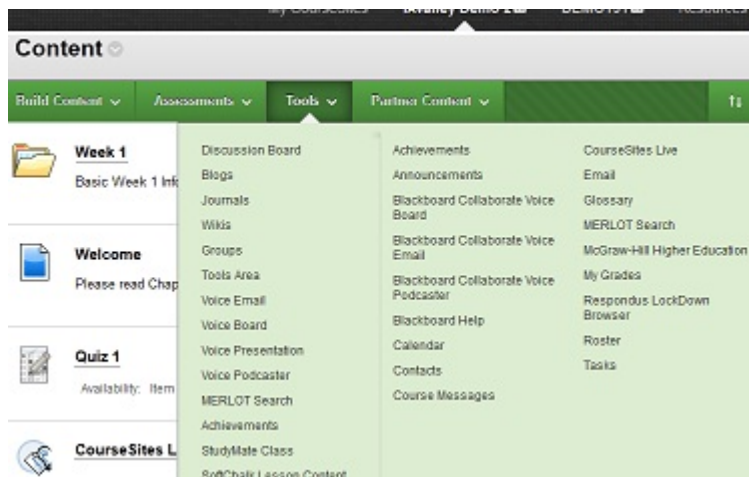
Figure 3.9: Adding a Tool in the Blackboard LMS

3.6   Sequencing Material

You can manipulate the sequence or order of the material in any LMS normally by just changing the order that the material appears within a particular folder or module of a lesson.

In the Blackboard LMS, just click and drag an item in a folder or area to change its position. This is the same thing that you do on the Moodle LMS system. On the Angel LMS, you use the **Rearrange** feature at the top of most pages where you have instructor access. You can then use the click and drag mechanism provided to alter the order of the material.

Chapter 4

Tools

The world of LMS is constantly changing and new tools are being developed that make it easier to add images, audio/video, interactions and content to your online class.

My online essentials include:

- The Print Screen Key and an Image Editor like Photoshop

- A tool like Camtasia that grabs on-screen activity and saves it to a file.

- A Web Page Development tool like Dreamweaver

Some of my favority new tools include:

Softchalk `softchalk.com` Integrates an HTML editor with a educational module creation system that allows you to create content modules for almost any LMS (including using them on an iPad or now creating an online instructional "e-book" for the iPad). It is a great

tool for integrating audio/video into a lesson or for creating lesson modules on the fly that are held together by a cohesive style. Softchalk also includes a set group of activites that can be added to almost any kind of lesson. It is, however, kind of expensive.

Check out some example SoftChalk lessons at:
`http://softchalk.com/showcase/sample-lessons`

VoiceThread `voicethread.com` Tool for having conversations around media. Sort of a like a chat session where the medium that you are looking at is in the center of the screen and avatars or live face shots are around the edge of the screen. Very effective in promoting a class-like feeling for distance education. Many different ways to comment within VoiceThread including text, sketching or audio/video; plus the discussion can be captured or re-use later on.

Screencast-O-matic `http://screencast-o-matic.com` Web 2.0 HTML5 style screen capture mechanism that is easy to use and doesn't need a lot of setup. Allows you to record audio while you capture the screen and then you can output to a variety of sources or upload it to the cloud. Other options include adding notes during screen capture playback and simple, capture editing and enhancement tools.

Jing `http://www.techsmith.com/jing.html` Younger sister to Camtasia and SnagIt allows you to do a quick screen capture and recording. Includes capturing audio narration on the fly and adding text to your recording.

Tablets iPad and Android tablets are becoming increasing popular and making your class available or at least accessible on these devices is quite desireable. You need to restrict your audio/video to particular types and not use Flash files with most tablets but the increased accessibility by the student and the introduction of new app's just for tablets to access LMS systems on tablets can help quickly outweigh any negatives.

Using smart phones and tablets... to make quick videos. Create a quick video and then upload the video to your lesson to the Iowa Valley Helix Server (`hml.iavalley.edu`) or to YouTube when you are finished. 21st Century students like to see new material within a class and also to see that the instructor is currently creating new material within the class. To help with this, make videos that don't take a long time to create and create new videos whenever you have even minor changes.

Online Textbooks, Open Textbooks Many starting the transition from standard textbooks to online textbooks. Students are good at finding cheapest option be

that of a textbook rental or an online textbook or a textbook rental. Some online textbooks have a lot of add-on features that are not always in the standard textbook.

Students finding ways to get online textbooks even if the instructors don't know about the available options. Safari books `www.safaribooksonline.com` seems to have an unlimited option for online textbooks for students to access on a flat, yearly basis fee.

Rice University has a grant for backing OpenStax college which has free, open textbooks that are peer-reviewed and available for many standard college classes like History, Biology and Psychology— `www.openstaxcollege.org` which looks like a really interesting option in this area.

Many of the other open textbook sources have problems with keeping up-to-date or not being peer-reviewed.

Quality Matters QM (`http://www.qmprogram.org/`) is a faculty-centered, peer review process that is designed to help create high-quality online and blended courses. National QM certification is one of the highest benchmarks that an online class can obtain within the QM certification framework. Completing national certification allows one to put the National QM certification seal on the online class and gets the class listed on QM's National Course Certification Web site. It also gives the faculty member important feedback from their peers on

the content and design of their online coursework. To date, six courses have received National QM certification at Iowa Valley.

Justin TV `www.justin.tv` Broadcast a live video or desktop session with your students. Currently a free service with advertising and cannot restrict who is attending the session. A number of other online, streaming video services are becoming available in this type of area.

Chapter 5

The Wrap-Up

Students normally take an online class in order to learn certain material or to be certified that they have been taught a sequence of things. Students also liked to provide feedback to an instructor as to how they preceived the course and whether or not their course needs were met. It is therefore important for your module to have both a goal and a feedback mechanism.

5.1 Module Goals

A module goal might include some sort of a test for the student or some kind activity that they have to complete. The instructor is normally also there to provide feedback to the student and to suggest future avenues of inquiry or other things that they could try to accomplish or ways that they could make their final result better.

Many online modules skip this step but it is an important one to keep. Having the student complete a concrete goal normally gets them to reflect on their educational journey and how they could integrate what they have learned into their normal lives.

5.2 Feedback and Thanks

One of the other things that a good online instructional module does is that it gives the student a mechanism to provide feedback about a course. No course is ever perfect and students who have taken a course normally have good insight on what could make the course even better. Plus it makes a student feel that their viewpoint is being respected.

Another mechanism that online instructors use is a thank you note. Usually just a quick little e-mail thanking the person for attending the online class and possibly suggesting some future courses for them to take. Again this allows you to get feedback from your students and makes the student feel good about accomplishing a goal.

Appendix A

Example Template

Here is an example template that I have used for some of my online classes. The template uses a weekly approach and emphasizes every week that I have at least one: Learner-to-Content Interaction, Learning-to-Learning Interaction, and Learner-to-Instructor Interaction.

`www.wpi.edu/Academics/ATC/Collaboratory/Teaching/interaction.html`

Learner-to-Content interactions include presenting the material in more than one format, audio/video clips, additional web links for further information, live class events / interactions, guide students into making their own contents, self-tests and discussion items that require reflection. You have to be a little careful here about keeping the format of your lessons consistent but also offering some variety.

Learner-to-Learning interactions include discussion forums (prefer post-first discussion forums), group work,

allowing a student to lead a discussion or online chat and allowing students to share and get feedback on the work they have done.

Learner-to-Instructor inactions include presenting a welcome and friendly atmostphere online, providing for more than one way for students to contact you, providing clear and thorough information for students, maintaining a presence but not dominating a discussion forum, using synchronous techniques for chat or online office hours, and providing thorough feedback.

That is a lot to hit someone with all at once. But here is the basic design that I like to use:

- Divide the class into Weekly folders and release the folders one week at a time.

- At the start of the weekly folder in a small paragraph area— list the objectives / due dates for the week in a summary format.

- The second item item goes over specific homework assignments, quizzes and other assessment activities. Re-iterate when things are due and where they can ask questions even if it is covered somewhere else. Point out times when you will be available to answer questions either offline via e-mail or online via a chat session.

- The third and following items are usually the course modules for the week. If at all possible, it should include text, video and web links for further exploration.

- After that, I normally have a discussion item (post-first) based on the above material that I keep track of during the week. I normally require that the student post once or twice and respond to two or three other student's posts.

- Near the bottom are the assessment items for the week plus homework items and drop-boxes for the homework with a clear explanation what work needs to be completed and when items are due.

- Next to the bottom of the weekly folder is normally a link to my weekly blog. This is where I more casually highlight what we are going over during that particular week, what is expected from the students and usually something that is personally happening with me or happening on campus that week.

- At the bottom of the folder, I normally preview the following week and add a reminder about the online chat time plus e-mail contact information.

I generally don't allow student to work ahead but open up the new week's folder on Sunday at around noon. This helps

encourage the students to login every week and makes sure that all the discussion interactions remain relevant for that week. I normally leave folders open for the remainder of the course once they become available.

Appendix B

Online Tips

Just some quick extra online tips:

- Give some personal or professional areas of information / interests in an "About the Instructor" area. This gives the student an extra chance to connect with the instructor and can lead to an extra channel of discovery between the student and instructor.

- Stay on top of e-mail and online chat follow-up from your students. There is nothing more disconcerting to a student then to send in a question and have it left unanswered for over a week.

- If it is a new course, plan to stay at least two weeks ahead of your students. You don't need to have the whole course completed but you do need to not impede the on-going progress within the course.

- Once you have compeleted an online class for the first time, prepare to make changes. Allow your student to send comments to you about the course anonymously and take the comments seriously. Also look at your own notes and make

changes to your course to accomodate what you need to change. The biggest changes to any online course usually occur after you have taught it for the first time— just like a traditional class.