

Creating a Virtual Learning Community

Fall 2000 - Volume 2, Issue 1

Improved Development Techniques for 50 Community Courses in 2000-2001

Building on the ten-course library created last year, the Virtual Learning Community has selected fifty courses to produce in 2000-2001. The fifty titles include all of the courses necessary for Associates degrees in Business Administration and Information Systems. After this year, every college in our system will have curriculum to offer these degrees entirely online.

Last year's experience and resulting improvements in development techniques are key to this year's aggressive development schedule. These improvements include:

- Smaller, more focused development teams of two to four people.
- Development beginning from a pre-built template in CourseInfo that will allow developers to focus on subject content.
- Better advance training for developers.
- A longer development time frame.
- An established CourseInfo server hosting development from start to finish.
- Examples (the first ten courses) on which to model development.
- Encouragement to re-use existing courses and materials instead of creating every course from scratch.

The other new component is the use of course development centers. Each of six centers will lead creation of eight to ten courses. A coordinator, released part time from usual college duties, will arrange training, monitor progress, provide consulting, and complete final editing for teams supported by the center.

The colleges that will host development centers were carefully chosen from a pool of excellent proposals based on college experience with on-line learning, faculty available to run the center, facilities and plans for support of development, and how well the college's online experience fit the courses they proposed to develop.

Each development center will tackle courses that fit within a broad instructional theme. The six colleges selected as this year's centers will be announced in our next issue.

The next step is selection of developers from faculty nominations submitted from around the system. Selection is under way, and developers will be listed in our next issue.

Center One:

Computer Programming, Networks, and Maintenance

CIS 115 Introduction to Programming & Logic
CIS 215 Hardware Installation/Maintenance
CIS 216 Software Installation/Maintenance
CIS 286 Systems Analysis & Design
CSC 134 C++ Programming
CSC 139 Visual Basic Programming
CSC 148 JAVA Programming
NET 110 Data Communications/Networking
System Office Representative: Eldon Meacham

Center Two: Accounting and Mathematics

ACC 120 Principles of Accounting I
ACC 121 Principles of Accounting II
ACC 150 Computerized General Ledger
BUS 225 Business Finance
CIS 165 Desktop Publishing I
ECO 252 Principles of Macroeconomics
MAT 115 Mathematical Models
MAT 161 College Algebra
System Office Representative: Carolyn Snell

Center Three: Communication and Humanities

ACA 111 College Student Success
BUS 260 Business Communication
COM 110 Introduction to Communication
ENG 112 Argument Based Research
ENG 113 Literature Based Research
ENG 114 Professional Research & Reporting
ENG 131 Introduction to Literature
HUM 115 Critical Thinking
MUS 110 Music Appreciation
System Office Representative: Edith Lang

Center Four: Computer Applications

BUS 121 Business Math
BUS 238 Integrated Management
CIS 111 Basic PC Literacy
CIS 130 Survey of Operating Systems
CIS 147 Operating System-Windows
CIS 152 Database Concepts & Applications
MED 121 Medical Terminology I
MED 122 Medical Terminology II
OST 136 Word Processing
OST 236 Advanced Word/Information Processing
System Office Representative: Ken Farmer

Center Five: Business Management and Marketing

BUS 137 Principles of Management
BUS 153 Human Resource Management
BUS 230 Small Business Management
BUS 239 Business Applications Seminar
CIS 169 Business Presentations
MKT 120 Principles of Marketing
MKT 123 Fundamentals of Selling
MKT 220 Advertising & Sales Promotion
System Office Representative: Jennifer Frazelle

Center Six: Applied Social Sciences

BUS 115 Business Law I
BUS 116 Business Law II
CJC 111 Introduction to Criminal Justice
CJC 121 Law Enforcement Operations
HIS 122 Western Civilization II
HUM 110 Technology & Society
LEX 110 Introduction to Paralegal Study
POL 120 American Government
System Office Representative: Sharon Thompson

Online Testing: Best Practices from the Field

At first glance, online testing seems problematic. How can cheating be prevented? How do you stop students from using books and other materials to answer questions? Online instructors around the North Carolina Community College System have answers. Here are eleven ideas to make online assessment work:

1. *Bring a new mindset to online assessment.*

Traditional approaches to testing don't work well online. A new mindset is needed. That's not bad; most education experts agree that rote memory testing is not the best measure of learning in any environment.

In online courses, treat every test as if it were "open book." Use questions that challenge students even if they use resources when forming their answers. This practice is more like our real life tests anyway.

Treat online testing as a means, not an end. Assessments should not only measure learning, but serve as part of the learning process.

2. *Publicize content, format, rules, and honor codes to students in advance.*

Students are less prone to cheating if they understand what to expect on tests. Ensure that they are appropriately prepared.

Post the question formats, test length, and time limitations well in advance. Post study guides that students can use to prepare. In addition, announce rules for the test, especially limitations on the resources students can use. Finally, post your college honor code so that students are aware of the implications of cheating.

3. *Ask questions that require application of knowledge.*

The most important way to overcome online cheating (and realistically assess student understanding) is to use application level questions. Essays, case studies, and other complex question types can be challenging to answer even if you are looking at the book.

4. *Only use memory-testing questions to facilitate student progress.*

There is room for some rote memory questions in online courses. These questions confirm student understanding and establish common context for learning. Instructors can use memory questions to gauge the pace of the course and identify students who are lost.

5. *Use software with test administration features.*

There are many kinds of online testing software. These packages produce consistent test formatting and grade most questions. Use administration features in these

programs to enhance the practice of online testing.

For instance, Blackboard CourseInfo has mechanisms to not only grade tests, but also provide feedback so students can learn from the questions they miss. For this to work, test writers must include quality feedback and turn on the appropriate options. Other common options include timers, the choice to allow one try or multiple tries at the test, and password protection.

6. Design alternate forms of the test. In CourseInfo, use question pools.

One simple but important rule for test security is to make different forms of the test available. Alter question order or write tests with slightly different questions. Once a test is online, it only takes a minute to create alternate forms with cut and paste features.

In CourseInfo, build question pools. When constructing tests from pools, you can randomize sequence or pull a different set of questions (but the same number of questions) from the pool for each student. Once a question is in a pool, it can also be pulled onto other tests in the course.

7. Learn the writing style of students before testing.

A great deal of written communication passes between online students and the instructor. Pay attention to the writing style of students and save samples. Online instructors report that with a little awareness, it is easy to recognize work that is not the student's own.

8. Use questions that require personal input from students.

Require some personal opinions from students in answers. Ask students to provide examples from their own lives. These kinds of personal de-tails are difficult to fake.

9. Set a reasonable time limit for completion.

Limiting the amount of time for which students can access a test makes any form of cheating difficult to implement. Don't be too restrictive, but don't give students forever either. In CourseInfo, do not make the test available until the day you want students to begin taking it.

10. If security is critical, consider local proctoring.

Some colleges use local proctoring. When a test is given, students must either visit the college or find a local proctor to monitor their test. For instance, the fire prevention program at Coastal Carolina CC uses firehouses around the state to monitor the tests of online students.

This approach works if you have willing proctors and time to mail tests to them, but can also create problems. Many students take online classes because they cannot physically attend a course at specified times. Requiring them to test at a particular location precludes the very reason they signed up for the course. So please, use this approach with care.

11. Don't worry too much.

Finally, online educators emphasize that online testing is more problematic in theory than in practice. They report that the range of scores is similar for online students and classroom students. Test achievement by individual students is consistent with performance in other course assignments. Incidence of cheating is no more frequent than in face-to-face courses.

Design online tests with care, prepare students fairly, and take a few reasonable anti-cheating precautions. Success is likely to follow!

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CourseInfo Corner

Blackboard CourseInfo is the software platform for the Virtual Learning Community. Beginning in this issue, this column will appear regularly to answer questions about CourseInfo. This issue's column uses questions generated by experiences in the last year, but in the future, we will answer questions from real people. Send questions to hollandsn@ncccs.cc.nc.us.

Question: When should our college upgrade to CourseInfo 5 on our server?

The initial release of version 5 had significant bugs. Colleges that tried immediate upgrades experienced problems. The most important factor in deciding to upgrade is whether student coursework could be disrupted. Changes between versions 4 and 5 of CourseInfo are not so large that this disruption is worth risking. Pick a time to upgrade when significant work in online courses will not take place for three or four days.

Most of the problems in the first release of version 5 were fixed by the 5.0.1 release in mid-September, but version 5.0.2, coming in mid-October, will bring further solutions. Version 5.5, scheduled for November, further enhances the functionality of the program. Colleges might consider waiting for this version before converting.

Question: CourseInfo has so many options—how should I begin the design of my online course?

First, you could try starting from the Online Course Template built for the Virtual Learning Community. In the template, much of the course site is already filled. Instructors can focus on the course content. The template includes directions about how to complete course design.

If you prefer your own creativity, start on paper. Outline the folders, subfolders, and documents you need in the Course-Info categories of Course Information, Course Documents and Assignments. Since it can be tricky to move documents to new folders or break folders into subfolders after they are created, you save time by mapping the course in advance.

Online Learning Enrollment Figures for 1999-2000

Do you wonder if online learning is a fad? Are you waiting a little bit longer before you try it? Don't wait too long.

In 1999-2000, the number of students enrolled in online classes in North Carolina Community colleges increased by 80%, rising to 17,251 enrollments. Experts around the System are optimistic that these growth rates will continue in the next year. The Virtual Learning Community is committed to fueling that progress.

Blackboard Server for Community in Place; Course Template Available

The permanent home for development and storage of Virtual Community courses was installed early this summer. Supported by Larry Butts and Brian Vanlandingham of the System Office, the CourseInfo server has specifications that will support collective efforts for years to come.

The server, at <http://www.ncccs.cc.nc.us:1677> can be accessed by guest login (type "guest" on both the username and password lines). Instructors are welcome to preview Community courses on the server before requesting transfer of them to their college's server for use.

The server features our "Online Course Template," a Blackboard course site meant to serve as the basis for development of online courses. The template contains developer and instructor hints, pre-built policies appropriate for online learning, and a variety of other materials designed to allow builders of online courses to focus on course content. A copy of the template can be moved to any Blackboard server in the system.

Although the System Office server cannot be used to provide courses for students at colleges, it can be used to train faculty in Blackboard use. To reserve some training accounts, contact Neil Hollands at hollandsn@ncccs.cc.nc.us.

Distance Learning at the Instructor's Conference

On October 8-10, instructors from around the system will converge on Greensboro's Koury Convention Center for the 2000 Instructors Conference. The theme is "Technology and Learning."

Fitting with that theme, online learning experts will be out in force with dozens of fantastic presentations. The Virtual Learning Community will have three presentation labs running on October 9 and 10 with hands-on sessions. In other rooms, instructors from around the state will present on a variety of topics, sharing techniques and relating online learning to subjects from across the curriculum.

For more information about this important event, visit http://www.ncccs.cc.nc.us/Programs/instructors_conference.htm

Timesaving Techniques for Online Instructors

In their first attempt, many instructors find that it takes more time to teach a course online than it took to teach the same course in the classroom. This isn't surprising—when they first taught the course face-to-face they also spent more time than they did on later attempts. How can online instructors minimize time and maximize results?

1. *Funnel student questions into the course site.*

When one student has a question, others will ask it later. Post the answer in appropriate places on the course site and email the answer to all of the students at once. When a student asks a question that is answered by the course site (or could be found on another Internet site), instead of retyping the answer, send them the link to the site with the answer. Over time, this teaches students to use course references to locate their own solutions.

2. *Create discussion forums for student support; have students monitor them.*

Every course has students who have skill with technology or experience with the course content. Offer these students extra credit or another reward in exchange for helping their classmates. Student discussion forums can also be very useful as a place for students to blow off steam, confirm their understanding, and build

relationships with others. If they communicate with each other, they will send less email to the instructor.

3. Group students together for assignments and support.

Try the buddy system in online courses. Assign partners at the start and then require students to ask their partner for help before coming to the instructor. Many students are more comfortable asking questions of other students anyway. In checking with a partner, they may get the answer, but at minimum will confirm that their question needs to go to the instructor.

Many students learn socially and need contact with others to enjoy a class and succeed. Small group assignments facilitate this. Group projects actually work better online because the instructor can monitor (through email carbon copies or discussion forum viewing) group interaction. This enables them to confirm that workload is distributed fairly. An important side benefit is that groups of students produce fewer assignments to grade than individuals working alone.

4. Be very specific about assignment specifications.

Failure to provide explicit directions for assignments results in confusion, requests for clarification, and work that has to be redone. These mistakes cost instructors large amounts of time. Include resources, step-by-step instructions, formatting specifications, and submission guide-lines with every assignment. Advance information about grading also reduces questions.

5. Keep reasonable caps on enrollment.

Most instructors report that it is difficult to handle more than twenty to twenty-five students in an online course. In the classroom, one student asks a question and the others hear the answer. In an online course, everyone must interact individually with the instructor. Help administrators understand this issue so that they can provide adequate support through enrollment caps. In your first semester online, consider even smaller enrollments.

6. Collect and advertise support resources.

There are thousands of resources online that students can use for technical help, research and reference, background reading, or supplements for topics of special interest. People who are willing to help can be accessed by email. Collect lists of resources and save them. Send them to the class in email messages. Post them with

assignments. Good resources serve as an instructor substitute, saving critical time.

7. Establish course patterns early, both for students and yourself.

Create patterns in the course content, kinds of assignments given, deadlines for assignments, and course communication practices. Online students who find a rhythm know what to expect next, and as a result become more secure. This security, in turn, reduces the number of questions and facilitates faster progress. Create patterns for yourself as well. Read email at certain times of day. Provide a consistent style of response. Patterns of organization will help the course progress smoothly for everyone.

Training in Online Instruction is Now Available

Learning opportunities are available around the system for instructors who want to know more about online learning.

The Center for Teaching and Learning at Central Piedmont Community College offers "Introduction to Online Learning," an online course of five modules that takes about 15 to 20 hours to complete. Other titles are in development. For information, contact Phil Rasmussen at phil_rasmussen@cpcc.cc.nc.us.

Bill Hess of Rockingham Community College has offered the three-week "Course Construction Using Blackboard" over the Internet. For information about future offerings, contact Merea Bridges, bridgesm@rcc.cc.nc.us.

"Principles and Techniques of Online Instruction," a semester length online course covering a wide range of online instruction topics is in development with the Virtual Learning Community. Opportunities to take this course will be announced in the near future.

If your college offers courses in online teaching and learning practice, please submit them for advertisement in future issues.

The Community at a Glance

The Virtual Learning Community is a collaborative effort of all 58 North Carolina community colleges, sharing resources and expertise to expand access to quality online courses and support services. Benefits to colleges include:

- A library of online credit and non-credit courses that can be offered as-is or adapted to local needs;
- Access to Blackboard CourseInfo for development or delivery of online courses or support materials;
- Online and face-to-face faculty training;
- Tips for effective online course delivery;
- Help materials for online students;
- Online student support services;
- A web listing of online offerings from each college, with links back to local web sites;
- Newsletters, online discussion, and mailing lists to spur communication;
- Evaluation materials for online courses.

In the Next Issue

- Course development centers and developers announced
- Intellectual property in the Virtual Learning Community
- More hints for working in CourseInfo
- Evaluating online learning
- Blackboard server support in the North Carolina Community College System

[Back to previous page](#)