

Virginia Community College System

Guidelines and Best Practices for Development and Use of eLearning in the VCCS

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(with March 2012 Corrections)

Contents

I. Introduction and Purpose	3
A. Goals of eLearning	3
B. eLearning Modalities in the VCCS.....	3
II. Guidelines & Best Practices	4
A. Technical Requirements	4
1. Interactive Classroom Video Delivery Requirements	4
2. eConferencing Delivery Requirements	4
3. Online Delivery Requirements	4
4. Hybrid Delivery Requirements.....	4
B. Student Authentication.....	5
C. Section 508 (Student Accessibility).....	5
D. Program/Course Delivery Guidelines	5
E. Support Services.....	6
<u>Guidelines</u>	
1. Testing & Assessment	6
2. Technical Support	6
3. Technical Support Standards	7
4. Library and other Learning Resources	7
5. Books and other Learning Materials.....	7
<u>Best Practices</u>	
1. Models for Advising Online	7
2. Tutoring Services.....	8
3. Virtual Clubs and Extracurricular Activities.....	8
4. Virtual Career Exploration and Job Announcements.....	8
5. Online Library Services.....	8
6. Testing Services.....	9
7. Online Orientations.....	9
8. Online Admissions, Registration, Drop, and Withdrawal	9
9. Recruitment and Information for Prospective Students	9
10. Online bookstore services.....	9
11. Financial Aid	10
12. Orientation.....	10
13. Distance Learning Evaluation.....	10
14. Admissions & Records.....	10
III. Best Practices for Planning, Developing, and Delivering eLearning Courses (BIG HOLE)	11
A. Training and Pedagogy	11
B. Blackboard	11
C. Copyright and Fair Use Laws and Intellectual Property.....	17
IV. Glossary of eLearning	18
V. Appendices	19
Appendix A. eLearning Collaboration Models	19
Appendix B. Intercollege Agreements for Sharing Courses	20
Appendix C. Course Coding in the VCCS Student Information System.....	22
Appendix D: Supporting Software	31

I. Introduction and Purpose

The purpose of this document is to provide individuals and institutions with guidelines, best practices, and resources related to eLearning within the VCCS.

A. Goals of eLearning

Overall, the goals of eLearning are:

- To maximize accessibility to courses and programs by removing the barriers of location and time.
- Maintain flexibility, convenience and quality of course content delivered via eLearning.
- To advise, support and coordinate professional development opportunities for faculty and staff.
- To provide additional access to academic and student services.
- To promote the utilization of existing and emerging technologies to enhance the teaching and learning experience.

B. eLearning Modalities in the VCCS

The guiding principles of the VCCS eLearning Management Model are:

- That the model should reflect what is in the best interest of the student.
- That it should keep administrative bureaucracy and paperwork to an absolute minimum.
- That it should provide participating incentives for both the receiving and delivering institutions.
- That it should recognize student choice and student access as fundamental.
- That it should take into account the diversity of eLearning options.

II. Guidelines & Best Practices

A. Technical Requirements.

In order to offer eLearning experiences, it is suggested that the following technology be in place.

Guidelines

1. Interactive Classroom Video Delivery Requirements

- A typical classroom size is 25-30 students using a minimum of two-way audio and video technology. All classrooms will be equipped with a large display for student viewing, a computer for instruction, a document camera, DVD player, and phone/fax for support.
- Helpdesk phone numbers for video support will be posted prominently in the classroom and support staff will be available to provide assistance when necessary.
- Each video classroom should be equipped with a fax machine and/or speakerphone. These will be used to contact students at remote sites in case of technical problems and to hold audio classes as a backup.
- An instruction sheet will be housed in each interactive video classroom describing step-by-step instructions as to how to turn on and shut down the equipment, and trouble-shoot common site problems.
- Each site will continue, at a minimum, a parts maintenance contract in case of a malfunction.
- All faculty delivering via video conference will plan for alternate delivery in case of technical problems such as continuing the class by speakerphone, taping the class, or assigning make-up class work via fax, phone, e-mail, or Blackboard.

2. eConferencing Delivery Requirements

There is no typical classroom; however, a computer classroom or a classroom equipped with laptop computers would work. Each student, wherever their location, needs access to a computer that meets the standards for the eConferencing software used for delivery. In addition, headphones, microphones, and/or headphone microphones need to be used for two-way audio. Typical software used throughout the VCCS for eConferencing includes Bb Collaborate, WebEx, Centra, and Adobe Connect (Breeze) conferencing systems.

Students enrolling in eConferencing courses need to contact their local college for support if they need to use college equipment or services for the course.

3. Online Delivery Requirements

All online courses are developed and delivered through a learning management system and they must adhere to the college's quality assurance guidelines.

4. Hybrid Delivery Requirements

Hybrid delivery follows the online delivery standards in that material delivered asynchronously is delivered via the current VCCS learning management system and adheres to the college's quality assurance guidelines.

B. Student Authentication

- Colleges should seek to assure the integrity of student work. According to SACS “When examinations are employed (paper, online, demonstrations of competency, etc.), they take place in circumstances that include firm student identification. The institution otherwise seeks to assure the integrity of student work.”
- Proctored activities may be required on a college by college basis for fully asynchronous learning.

C. Section 508 (Student Accessibility)

All colleges are required to be in compliance with the Americans with Disabilities Act (ADA). All college web sites should also be in compliance with Section 508 of the Rehabilitation Act.

D. Program/Course Delivery Guidelines

- For a list of currently used eLearning collaboration models, refer to Appendix A.
- It is recommended that the delivering college receives 100 percent FTES credit for courses with a prefix in the student’s major. General education courses and other non-major components of a curriculum may be offered by receiving colleges, with appropriate FTES and tuition distributions as for synchronous or asynchronous courses. Cooperating colleges may alter FTES and tuition distributions if agreed upon in a Memorandum of Understanding (MOU).
- Faculty costs (for courses with a prefix in the student’s major) should be the sole responsibility of the delivering college unless a difference is agreed upon through a MOU. General education courses and other non-major components of a curriculum may be offered by receiving colleges, with appropriate cost sharing distributions as for synchronous or asynchronous courses.
- Costs for course instructional materials (other than those purchased by students) should be the sole responsibility of the delivering college. Cooperating colleges may alter instructional materials cost sharing distributions, if agreed upon in a Memorandum of Understanding.
- The delivering college (curriculum host college) is the college of record for graduation of the student.
- Another option for some students within the VCCS is to take distance courses through the SSDL program. SSDL stands for Shared Services Distance Learning. It is a pilot program across the VCCS where NOVA’s ELI instructors share their courses with other colleges who have chosen to partner with NOVA. The highpoint of this project is the seamless way students can enroll in, pay for, and access their course. The partner colleges clone the NOVA course so it is in their SIS. They include the NOVA faculty as the instructor of record. The student enrolls in the course through their home college’s infrastructure and pays their home college tuition. Their financial aid is applicable just as it would be for any of their courses. The course appears in Blackboard under their home college tab. NOVA and the partner college share FTE’s and tuition.

- Sample MOUs can be found in Appendix B.

E. Support Services

All participants in programs and courses delivered via distance learning must have equal access to educational support services.

Guidelines

1. Testing & Assessment

Placement Testing & Advising

Home campuses are responsible for providing information about placement testing, placement counseling, and course and program advising. For collaborative eLearning programs, the MOU should specify who makes placement decisions for students at the receiving college.

Course Testing

The arrangements for the proctoring of course assessments are generally the responsibility of the delivering college. The agreement among the Virginia Community Colleges is that proctored testing is a shared resource and each college supports any student request for testing services from other Virginia Community Colleges as though they were their own students. Students without access to either the delivering or receiving college may arrange proctoring through the delivering college with another entity. A sample proctor form may be adapted for a particular college when students request proctoring at another institution. The link below is to a sample form for one of the VCCS colleges:

http://www.rcc.vccs.edu/distancelearning/documents/ProctorRequestForm_001.doc

2. Technical Support

Help Desk

Colleges should clearly identify how and where to access technical support.

Faculty and Staff

Through the college technology plan developed yearly, a replacement cycle of technology equipment is developed to ensure that faculty have the computer equipment and instructional technology equipment to teach their students. In addition, each college through its annual technology plan sets aside funds to support instructional design and help desk services. For more information, contact your college's Information Technology Office.

Students

Through the college technology plan developed yearly, a replacement cycle of technology equipment is developed to ensure that students using college resources have the equipment necessary to support their educational program and goals for today and tomorrow. In addition, each college through its annual technology plan sets aside funds for help desk services.

3. Technical Support Standards

Colleges will clearly identify the minimum technical requirements for students to participate in any eLearning course.

All VCCS college employees will use VCCS or college-supported email. All students must use VCCS email as their standard for course and college email communication as noted in the following VCCS policy.

<http://www.vccs.edu/Portals/0/ContentAreas/PolicyManual/Sec6.pdf>

4. Library and other Learning Resources

Online access to library resources from either the delivering or receiving college is the ideal.

Supplemental course materials for eLearning courses will be provided by the course instructor electronically unless other arrangements are made. Instructors must follow copyright and fair use guidelines related to both print and non-print course materials as noted in the following VCCS policy:

<http://myfuture.vccs.edu/Portals/0/ContentAreas/PolicyManual/sec12.pdf>

Special needs for materials in collaborative eLearning courses and programs will be outlined and agreed upon through the MOU process.

5. Books and other Learning Materials

Arrangements for student purchase of books and other learning materials for collaborative eLearning courses and programs will be outlined in the MOU.

Best Practices

1. Models for Advising Online

Some guiding considerations for advising online are:

- Should be easy to access and easy to use
- Should be accessible any time
- Should be equal to services available on campus
- Should ensure security for privacy and FERPA requirements
- Should provide opportunity for one-to one advising by telephone or face-to-face if requested
- Should be designed for student to have easy access to own records
- May have an interactive calendar that allows student to immediately link to information, forms related to items due (example – deadline to apply for graduation linked to graduation application)

Information on current VCCS virtual advising activities is available at

http://system.vccs.edu/itde/virtual_advising_centers.html.

You can search for courses and programs available at other VCCS colleges that are not available at your college at <http://courses.vccs.edu>.

Possible online advising activities may be:

- Selection of major/program of study
- Interest and skill inventories for self-assessment
- Transfer information
- Prediction of GPA
- Degree audit/graduation work sheet
- Real-time chats with advisors
- Access to an online catalog

2. Tutoring Services

Guiding considerations for tutoring services are:

- Tutors available day/evening/weekends
- Access to live person by telephone and real time chat
- Online tutorials, including audio and video demos where needed (i.e., math, accounting)

Possible online tutoring activities may be:

- One-on-one real-time tutoring, including the use of a white board for demonstrations
- On-line tutorials in specific subject areas
- Online study skills, test taking, and time management workshops
- Opportunity to connect with a live person by telephone

3. Virtual Clubs and Extracurricular Activities

Possible online virtual club and extracurricular activities may be:

- Club web sites
- Blackboard organizations with online meetings and discussion boards

4. Virtual Career Exploration and Job Announcements

Colleges can maintain a current local job listing and links to other job data bases.

The Virginia Education Wizard will provide comprehensive and individually tailored information on the breadth of education and career options that stem from the offerings of Virginia's Community Colleges by delivering quality information to citizens in areas concerning college admission, advising, programmatic offerings, financial aid, student transfer, and career development.

Possible online career advising activities may be:

- Interest inventories for self-assessment
- Online career exploration resources
- Online job data bank access
- Links to other online job search tools
- Resume writing tutorial
- Announcements of current jobs
- Skills portfolio
- Interview techniques

5. Online Library Services

The MetaLib service is available at <http://metalib.vccs.edu:2048>. This service allows students to search all of the library catalogs available within the VCCS and subscriptions services available outside the VCCS.

Possible online library services may include:

- Catalog search
- Access to online journals
- Easy search and access to digital materials
- Clear directions for accessing library resources online
- The opportunity for one-on-one consultation with reference librarian or library assistant
- Ability to submit research questions via email or telephone
- Online reserves

6. Testing Services

Possible online testing services may be:

- Online appointments (the ability to make and cancel appointments online)
- Proctored online testing

7. Online Orientations

Guiding considerations for online orientations are:

- Provide same kind of introduction to the college that is experienced by on-campus students
- Should include opportunities for students to interact with each other

Possible online orientation activities may be:

- SDV100 online (CEED grant course available for colleges)
- Virtual campus/college tours

Samples of what colleges in the VCCS are doing for online orientation activities can be found at

PVCC

http://www.pvcc.edu/distance_learning/blackboard/student.php/tutorial/

VWCC

<http://capture.virginiawestern.edu/Panopto/Pages/Viewer/Default.aspx?id=ccdd0ac7-c291-4ded-94b1-8e9d005ed303>

JSRCC

http://www.jsr.vccs.edu/jsr_cde/Default.htm

8. Online Admissions, Registration, Drop, and Withdrawal

Possible online admissions, registration, drop, and withdrawal activities may be:

- Submitting an application online
- Online placement testing
- Practice placement tests (<http://college.measuredsuccess.com> and <http://www.act.org/compass/sample>)
- Frequently asked questions
- Searchable course schedule
- Degree audit
- Online academic calendar

9. Recruitment and Information for Prospective Students

Possible recruitment information and information for prospective students online may be:

- A virtual campus tour
- A distance learning web site
- An online catalog and complete course schedule
- An online application process
- A tuition and fees explanation

10. Online bookstore services

Possible online bookstore services are:

- Searching for books for courses
- Purchasing textbooks

- Purchasing software and other supplemental materials
- Ordering books by telephone or fax

11. Financial Aid

- The guidelines for federal financial aid apply to all students, including those enrolled in eLearning courses. Students who desire financial aid should consult with their financial aid office. Financial Aid Consortia arrangements and agreements may be written for individual students. Campuses assume joint responsibility for monitoring individual students under consortia arrangements and agreements.
- All campuses are responsible for providing financial aid counseling. The college granting the financial aid is responsible for application processing services, award disbursement services, refund processing services, and monitoring satisfactory academic progress.

12. Orientation

Colleges should ensure that students receive adequate orientation to eLearning, specific course procedures and to the skills necessary to be successful in the course(s) for which they are enrolled. Students should also be advised where to get help and informed of the types of academic and technical assistance available. SDV100 online (CEED grant course) available for colleges.

13. Distance Learning Evaluation

Course Evaluations and Assessment

- All instruction and content should be evaluated in the same way as traditional classroom instruction. In addition, colleges may develop evaluation plans and assessment instruments to be completed by faculty and students each semester for evaluation of the delivery of eLearning courses. Evaluations can include assessments of communication between instructor and students, the availability of library and learning resources and other educational support services, and the delivery system.
- Colleges are responsible for developing and implementing eLearning plans to assess student outcomes, the comparability of courses and programs with on-campus counterparts, the technical quality of course delivery and support, instructional effectiveness, and faculty and student satisfaction.

Faculty Evaluations

- All faculty, regardless of instructional method, will follow their college's procedures for faculty evaluation.

14. Admissions & Records

A student's primary institution (determined the same as for a traditional student) is responsible for providing application processing, domicile determinations, transfer credit and transcript evaluations, registration services, and graduation evaluations. The VCCS is responsible for providing Student Information System (SIS) services to colleges.

III. Best Practices for Planning, Developing, and Delivering eLearning Courses

Each college should have procedures and recommended best practices for proposing, planning and developing eLearning courses. Proposed courses are often required to receive approval from a combination of division dean, vice president of instruction, and/or curriculum committee before being produced and added to the course schedule. The structure and exact steps of this planning and approval varies based on the college size and structure.

See Appendix B for examples of procedures for the planning, developing, and delivering of eLearning courses

A. Training and Pedagogy

- All colleges should assure faculty have the appropriate training in pedagogy and technical requirements to deliver quality eLearning instruction.
- The VCCS currently offers four courses that help to prepare faculty for the rigor of online instruction: TOP: Teaching Online Program; IDOL: Instructional Design for Online Learning; MODEL: Multimedia for Online, Distance and E-Learning; and ENROLL 2.0: Engaging Online Learners using Web 2.0 Applications.

B. Blackboard

Customizing the Menu & Tools

- Blackboard empowers instructors to customize the appearance of their course menu in a variety of ways. Instructors can manage the course menu by accessing the “Manage Course Menu” option in the control panel. In this area, instructors can add, remove and modify all of the items in the course menu.
- A best practice for instructors is to simplify the menu as much as possible. If you do not use a tool or content area, remove it from the menu options. Often students will enter an unused content area and assume something is supposed to be there. Their second assumption is that their computer or the college network is preventing them from seeing the material. Instructors should also rename items to match their references. If Course Information is referred to as a Course Outline, change the menu item to read Course Outline. Simple modifications to the menu can make course navigation more intuitive for students.
- The same idea applies to tools. If you do not use a tool like the Virtual Classroom or Discussion Board, remove it from the menu or the tools area in Manage Tools.
- Anything you remove or alter in the menu or tools area can be restored if you later decide to use it in your course.

Benefits of changing the names on the course menu

You can change the names on the course menu to better reflect their contents. Instead of “Assignments,” you may want to call the section “Book reviews” if you are teaching a literature course or “Experiments” if you are teaching a Chemistry course. This should make the course layout clear and help students navigate the site more easily.

Benefits of adding tools or external links to the menu

Students may spend much of their time looking at specific websites for your course. You can make a direct link to the site on the navigation menu, so your students can have faster access to certain websites. For example, a public health class could have a direct link to the National Institute of Health website on the front page of the course. Adding frequently used tools to the navigation menu will also make it easier for your students to access them.

Adding a folder

The Add Folders tool lets you create folders that organize and sort your course content. Folders make it easier to find documents by grouping similar items together. You can organize your materials in two main ways: content based and chronological order. Once a folder has been created, documents can be moved into it. Also, folders can be added within other folders.

Adding an item (or attaching a document)

- The Add Items tool lets you add content to your course site. You can upload files in their original format, so when students click on these links, they will download the files onto their computer. You can also add HTML or web-supported files (such as .jpgs, .gifs, .swfs, or .movs) that your students can view directly within Blackboard.
- All files should have a three or four letter file extension (such as .doc or .html) that designates its file type. File names should not contain spaces or special characters, except for the underscore (_) and only one period before the file extension (such as HomeWorkOne.doc).
- You can upload just about any file type to Blackboard. However, the type of document that you upload affects how your students can view it. If you upload documents that you have created and saved in specific software programs such as Word or Excel, your students must have that particular software installed on their computer to view the documents. For example, if you upload a PowerPoint document, your students will have to download and open the file in PowerPoint or the PowerPoint viewer. However, if you save and upload your files as HTML (.html), your students can view the documents within Blackboard.

Using Graphics on Blackboard

In general, use .gif or .png format for graphics that have few colors, graphics that contain text or type, or graphics that have large areas of a single color. Use .jpg format for graphics that have many colors and lots of fine detail, such as photos. You should not use .bmp graphics with Blackboard. These files are very large and are slow to load, especially for modem users. Many scanners create .bmp files on their default settings, so check this setting if you scan photos or images. Blackboard also uploads all graphics in their original size. Make sure you have appropriately sized your graphics for your course site.

Adding an External Link

The Add URL tool lets you place links to outside websites in any of the content areas. Placing external links on Blackboard lets you direct your students to relevant websites and saves them time from searching the Internet.

Opening an External Link in a new window

There are two main reasons to open a website in a new window: copyright concerns and ease of navigation. Copyright scholars frown upon "framing." Framing is opening a website within the framework of another website. Many websites do not mind being framed. Educational institutions usually have more leeway than commercial organizations. You should ask permission before framing a website. To be safe, open the website in a new window. Opening a

website in a new window also lets your students move back and forth between websites without losing their place.

Assignments

The Add Assignment tool lets you create an assignment for your students to complete. It automatically creates an item in your Gradebook so you do not have to. When your students finish and upload their assignment, the Gradebook will update the students' completion status and will have a link to their uploaded file. You can then download, view, and grade the assignment directly from the Gradebook and give your students detailed feedback about their assignment.

Announcements

The Announcements tool lets you post time-sensitive information such as deadlines, changes, corrections, clarifications, and schedules. By default, your students will see this page first when they enter your Blackboard course, so it is a useful place to post important information.

Adaptive Release

- Adaptive Release provides controls for the course instructor to release content to users based on rules created by the instructor. Rules may be based on dates for release, group membership, gradebook items, and review status.
- *Adaptive Release*: Creates basic rules for an item. Only one rule per item can be created
- *Adaptive Release, Advanced*: Create advanced rules for an item. Multiple rules from basic adaptive release may be used for each item.

Assessments

- The assessments area within Blackboard (Bb) allows instructors to create and post tests, quizzes and surveys. Assessment creation can be achieved in several different ways: Test Manager, Survey Manager, Pool Manager or importing questions with the use of a third-party software application.
- The Test Manager enables instructors to create a test by entering new questions using the Test Canvas or importing questions from a question pool. The Test Manager supports many different question types and can generate tests questions randomly from a question pool. Blackboard will also grade tests that offer a finite answer scheme such as a multiple choice or fill in the blank.

Importing Test Questions

- Test questions can be imported from publisher provided test banks and existing tests used in the traditional classroom setting. However this does require the use of a third-party software product such as ExamView or Respondus.
- ExamView is used by most textbook publishers and allows an instructor to export a compressed file of the question pool. The instructor is often required to save the file to their computer and then import the file into Bb using the Pool Manager.
- Respondus allows instructors to create tests from scratch or import questions from existing tests that are in electronic format such as a Microsoft Word document. Users are required to reformat existing tests adhering to strict format guidelines. Despite the tedium of reformatting your text documents, this method is often much quicker than creating new tests within Respondus or Blackboard. Another convenience feature is Respondus' ability to deploy tests directly to Bb. After the initial setup of the software, instructors can publish tests directly to Blackboard, set the test options and make the test available to students.

Gradebook

- One of the greatest benefits offered by Blackboard to both instructors and students comes in its Gradebook functionality. Instructors can keep their Gradebook online and post grades for students to see anytime. This can cut down on the number of phone calls, emails and office visits by students inquiring about their grades.
- Items like multiple choice tests that grade themselves in Bb will automatically populate the appropriate column with grades. Other items such as discussion boards and assignments will automatically create Gradebook columns at the time the item is created and allow for easy access for instructors to input grades.
- The Gradebook can be setup to accommodate any type of grading scheme and/or scale. It also allows for weighting grades and will automatically average grades based on your criteria. This can save valuable time at the end of the term and eliminates the need for creating a custom spreadsheet.
- The Gradebook can also be exported to an Excel file for an instructor's records.

Discussion Board

The Discussion Board is an asynchronous communication tool that allows students and instructors to participate in online discussions without requiring all class participants to be online at the same time. Conversations are grouped in threads that contain a main posting and all related replies.

Instructors can use the discussion board in Blackboard to:

- continue class discussions outside of class.
- promote an online community.
- develop team or individual student facilitated discussions.
- post and discuss case studies.
- post student papers for peer evaluation and critique.
- post homework questions.
- provide a public forum for students to post questions.
- provide a forum for a guest Speaker Q & A.
- create an online social forum for the course.

Other Communication Tools

Communication Tools in Blackboard enhance interaction between students and instructors. The group communication tools promote collaborative learning and cooperation among students.

E-mail

An e-mail distribution list is automatically created within each Blackboard course.

Instructors and students can send an e-mail to individuals who participate in the course from the Send E-mail page.

Collaboration Tools

The collaboration tools in Blackboard provide a synchronous communication area that enable users to participate in online collaborations with instructor and students. The collaboration area includes a Virtual Classroom and a Chat tool.

Group Pages

Creating Groups for a course can give an added dimension to student interaction and course discussions, as well as give students tools to collaborate online on cooperative learning projects. Blackboard groups have their own self-contained e-mail, discussion groups, collaboration and file exchange area.

Content System

- The Blackboard Content System gives instructors the ability to store, access and share files and folders within Blackboard. For instructors with Blackboard course sites, the Blackboard Content System provides seamless integration for management of class materials.
- For example, an instructor can save a single copy of a class document on the Content System and simply link to it from multiple Blackboard course sites, and optionally, give access to the document to individual colleagues. Since there is only one instance of each source document, edits only need to be done once and without any re-uploading; all links automatically open the updated version.

Archiving Courses

Your system administrator should have access to archives of your courses. It is always a good idea for the college to keep an archive of courses at the end of each semester. Faculty may export their courses if they wish to keep a copy. Courses are live for 4 semesters and archived for two years. Colleges can archive on a server or DVD longer at their discretion.

Difference between Export and Archive

Export allows you to choose which parts of your course you wish to save (i.e. Course Documents or Tests). This saves only the content, not student data. To save student data, you must use the archive option.

Restoring an archive

If you need to restore an archived course for any reason, please contact your System Administrator.

Backing up the Gradebook

If you use the Gradebook in your course, it is important that you keep a back-up copy. Blackboard allows you to download your gradebook as an Excel or CSV file for easy back-up.

Problem-Based Learning

Group requirements for completion of a project that requires cooperative learning. Blackboard components that may be used include the Groups feature, the Discussion Board, Email, and the Assignment feature.

Interactive Courseware

Interactive courseware such as factory simulators, police defense simulators, and flight simulators can be used as a means to not only reinforce learning, it can also be used as a tool to engage students.

Online/Small Group Discussions

Include a participation grade for discussion board postings.

Self-Directed Learning Activities

Have students create questions for group and class discussions. Have students research and suggest topics for online discussions. Have students contribute potential exam topics and questions.

Announcements vs. Email vs. Discussion Board

- When to use Announcements
 - Assignment deadline reminders
 - Special events that relate to the class
 - Announcing changes in class schedule, meeting cancellations
 - Assessment reminders
- When to use Email
 - One-on-one communication with students
 - As a follow-up to posting a critical announcement
 - Collecting and returning assignments
- When to use the Discussion Board
 - Ice-breaker
 - Course participation
 - Peer support

Deploying Online Assessments

- Instructors should always test drive their assessments before making them available to students. This will give the instructor an opportunity to uncover any typographical errors, problems with passwords, or any ambiguity that may confuse students.
- Allow students to take a practice test. Many students (especially older students), may have little or no experience taking a test online. A simple practice test can alleviate student anxiety and provide a valuable learning experience for students. Allow multiple attempts and a variety of question types to assist students in familiarizing themselves with the medium.
- Educate students about common problems with online testing and the appropriate action that should be taken. Problems do occur with online testing, everything from dropped Internet connections and blocked firewalls to simply human error (ie: click the wrong button).

Anti-Cheating Strategies

- There will always be students attempting to cheat on exams regardless of the delivery methods. However there are some practices instructors can initiate to make cheating more difficult:
- Use question pools and randomize the question selection. This will allow instructors to make each student's test at least slightly different from the next. The greater the number of questions in the pool, the more randomization that can occur.
- Make the test available for a short time period. There are two ways instructors can achieve this effect. They can place a time limit on how long students will have to complete the test within the Test Options area of Bb, such as 1 hour. They may also control the amount of time students have to access the test by limiting the dates of availability.
- Present one question at a time. Any item presented on a computer screen can be copied and printed including your tests. One way to deter this from occurring is to present one question at a time and prohibit backtracking. This allows a student to see only one question on the screen at a time and they are not allowed to navigate back to a previous question once it's answered.
- Use a lock-down browser. Currently the VCCS uses the Respondus LockDown Browser to secure online tests. This software is administered at an enterprise level and will keep students from copying and/or printing tests, switching windows, accessing other URLs and blocks other applications from running. This option will require that students go to a testing center in order to take their tests.
- Require a proctor. Instructors can require students to take the tests in a proctored environment. This can usually be setup with another school, library or testing center. Proctors are provided

with password access to your test and specific instructions regarding what a student may do or use during the assessment.

Course Cartridges

- Course Cartridges are pre-packaged course materials, ready to use in Blackboard. They contain a variety of materials that can include slides, documents, multimedia files, links to related websites, test banks, and quizzes, all of professional editorial quality. The cartridge materials often correlate to a textbook or eBook, although some cartridges are meant to be used stand-alone. All Cartridge materials can be customized once they've been downloaded to your specific course site.
- In the Blackboard Cartridge Catalog (<http://www.blackboard.com/extend/ccart/>), each publisher has provided a general description of each cartridge. In many cases, the publisher has also included information about demos, trials, and information on how to obtain a Download Key. Publisher contact information is included for each cartridge. You can also work through your school's publisher representatives.
- Please note that if you use a course cartridge, it is very important that the correct books are ordered for your students. Some cartridges require the students to have an access key in order to access the course material. Keys are usually purchased with a new book, though your bookstore can opt to sell keys separately.
- Cartridge material generally does not copy from one semester to another, so you may need to request a new cartridge each time you offer the course. You also may need to have multiple download keys if you are teaching multiple sections.

C. Copyright and Fair Use Laws and Intellectual Property

- Faculty who use the Web for educational purposes should understand the implications of "Fair Use" provisions in U.S. copyright law for online course materials. In order to take advantage of "Fair Use", the college must have their copyright policies posted publicly.
- The TEACH Act defines how accredited, nonprofit educational institutions may use copyright protected materials in distance education courses without obtaining permission from the copyright owner. The section on the TEACH Act Best Practices Using Blackboard on the ALA website describes the TEACH Act and provides both interpretation and guidelines on posting materials on online course sites.
In short, this may include:
 - restricting access to copyright materials to students officially enrolled in the course
 - limiting access to copyright materials to the duration of the course
 - informing students that the creation of more than one copy of course materials under copyright is prohibited, without express permission from the copyright holder.

Further information about copyright law, Fair Use guidelines, and educational technology, is available at the following sites:

- "Copyright in Cyberspace: Introduction" Prof. Stacey L. Dogan (Northeastern University School of Law) (<http://www.cyberspacelaw.org/dogan/index.html>)
- "Summary of U.S. Copyright Office Report on Distance Education" by Kenneth D. Crews 1995-2001 The Trustees of Indiana University (<http://net.educause.edu/ir/library/html/edu9935/edu9935.html>)

IV. Glossary of eLearning

Online – 95-100% of the course content is online either through synchronous or asynchronous delivery.

Hybrid – The SCHEV definition where 51-100% of the course content is electronically delivered.

The electronic delivery can be either asynchronous or synchronous. (Note: SACS defines anything less than 100% face to face as a distance learning course.)

Synchronous – Same time, any place. Courses are delivered at one scheduled time, but students and instructors may be in different locations.

Asynchronous -- Any time, any place. Courses can be online, print based, video or CD/DVD delivery. The student does not need to be in the same location as the instructor or fellow classmates or be available for instruction at the same time.

Web-Enhanced -- Any in-person (face-to-face) course that supports instruction with the use of Internet technology.

Internet Delivered Web-based courses – Courses delivered completely online through a course management system such as Blackboard, an eConference instrument such as Adobe Connect (Breeze), Centra, or Elluminate, or another product.

Interactive Classroom Video (Live Two-Way Audio/Video) – Courses delivered via video to two or more sites. Students may be at a different location than the instructor.

Memorandum of Understanding (MOU) – An agreement between more than one entity detailing the structure, strategies and delivering of an eLearning course or program. Sample MOUs can be found in Appendix C.

V. Appendices

Appendix A. eLearning Collaboration Models

[Collaborative Programs-for NED.xls](#)

Appendix B. Examples of procedures for the planning, developing, and delivering of eLearning courses

Danville

<http://system.vccs.edu/itde/DCC-DL-handbook%20adl.doc>

John Tyler

http://system.vccs.edu/itde/JTCC_DL_Policies.htm

Northern Virginia

<http://eli.nvcc.edu/fservices.htm>

Patrick Henry

http://system.vccs.edu/itde/PH_FacultyHandbook4DLCourses.pdf

Piedmont

http://www.pvcc.edu/distance_learning/

Southside

http://system.vccs.edu/itde/SVCC_DL_Policies.htm

Appendix C. Intercollege Agreements for Sharing Courses

1. MOU Sample and Forms

Samples

VCCS Distance Learning MOU and VCCS Shared Services Distance Learning Pilot - MS Word Template:

<https://docs.google.com/leaf?id=0B9r4K9bTLge->

[ZWNhZGQ3MjktZWFiNi00YWE2LWlxM2UtOTI1MTc2Mzc1ZGMx&hl=en_US](https://sites.google.com/a/email.vccs.edu/ssdl/mou)

<https://sites.google.com/a/email.vccs.edu/ssdl/mou>

Forms

Standard Distance Education MOU:

<http://system.vccs.edu/vccsit/Archive/VDENAdmin/mouapp.pdf>

VCCS Distance Learning Faculty Credential Certification:

<http://system.vccs.edu/vccsit/Archive/VDENAdmin/faccred.PDF>

VCCS Shared Services Distance Learning Pilot MOUs

<https://sites.google.com/a/email.vccs.edu/ssdl/mou>

2. Procedures for the Sharing of Courses

Inter-College Agreements

CVN Courses:

Call or send E-mail to the Distance Education Contact at the delivering college to request to receive a list of courses posted on the Web, or A Schedule of Courses and Offerings

The Distance Education Contact at the delivering site then completes the Memorandum of Understanding after negotiating the minimum and maximum enrollments, signs the form, and delivers the form to the receiving institution a minimum of two weeks prior to the start of the course(s).

The Distance Education Contact at the receiving institution signs the Memorandum of Understanding prior to the start of the course(s), makes a copy, and returns the original to the delivering institution.

The delivering and receiving colleges keep agreements on file.

The colleges should agree on procedures for setting up video conferencing calls, MCU scheduling, and technical support.

All other distance learning courses:

Call or send E-mail to the Distance Education Contact at the delivering college to request to receive courses.

The Distance Education Contact at the Delivering site then completes the Memorandum of Understanding after negotiating the minimum and maximum enrollments, signs the form, and delivers the form to the receiving institution a minimum of two weeks prior to the start of the course(s).

The Distance Education Contact at the receiving institution signs the Memorandum of Understanding prior to the start of the course(s), makes a copy, and returns the original to the delivering institution.

The delivering and receiving colleges keep agreements on file.

3. More Examples of Agreements between Colleges

Memorandum of Understanding between Blue Ridge Community College and Thomas Nelson Community College:

https://sites.google.com:443/a/email.vccs.edu/ddlc/Home/BR-VT_MOUforTNCC2006Cohort.doc?attredirects=0&d=1

VWCC-LFCC Joint Venture Dental Hygiene Program

<https://sites.google.com:443/a/email.vccs.edu/ddlc/Home/LFCC-VWCCContract06-08.doc?attredirects=0&d=1>

Nursing Program Course Agreement among JTCC, GCC, BRCC, and VWCC

<https://sites.google.com:443/a/email.vccs.edu/ddlc/Home/CNPhostcollegeassignments.doc?attredirects=0&d=1>

Nursing Program Application to Partner Form

<https://sites.google.com:443/a/email.vccs.edu/ddlc/Home/applicationtopartnerwithCNP2.doc?attredirects=0&d=1>

VWCC-DCC Joint Venture Dental Hygiene Program

<https://sites.google.com:443/a/email.vccs.edu/ddlc/Home/DCCContract07-09revisionsrecbyWade322071-b%26w2.doc?attredirects=0&d=1>

Appendix D. Course Coding in the VCCS Student Information System

Course Coding in the VCCS Student Information System

1/8/2008

The following Course Coding procedures should be followed by college personnel when they enter their courses into SIS.

DESIGN ACADEMIC STRUCTURE

Each campus that is identified for a particular college must describe an actual physical location. For example Rappahannock College has two campuses Warsaw and Glens. Each campus can have multiple Location Codes to which it is linked. The definition of the location codes and the terminology is determined by each college, but each campus must include a Location Code of VIRTUAL and a Location Code of VIRTUAL-RT. The VIRTUAL Location Code is used for distance learning classes **that do not require any face-to-face meetings**. The Location Code VIRTUAL-RT is to be used for those distance learning classes that take place in the online environment but in real-time (synchronous). These courses have no on-site elements.

1. Define campuses as physical locations i.e. Warsaw
2. For each campus that is identified, a Location Code of VIRTUAL and a Location Code of VIRTUAL-RT should be created
3. Virtual Campus - Colleges should not create campuses called "Virtual". Courses need to be tied to a physical campus that is responsible for the administration of that course.

Location Code	Description
VIRTUAL	Virtual Location
VIRTUAL-RT	Virtual-Real Time

COURSE CATALOG

Credit Courses

Before entering a course into the SIS Course Catalog, verify that the course is listed in the VCCS Master Course File (<http://courses.vccs.edu/mcf/>) and that the prefix, course number, and course title match that shown in the VCCS Master Course File. Also verify that the number of lecture, laboratory, and credit hours for which you are entering the course is within the approved configuration shown in the Master Course File for that course (in other words, if the course is listed as 3-4 credits variable, choose either 3 or 4 credits). If the course is not listed in the VCCS Master Course File, then it is not available to be offered by colleges.

When creating/entering courses in the Course Catalog, the LMS File Type on the Components panel should be BLANK.

Non-Credit and CEU Courses

Before entering a course into the SIS Course Catalog, verify that the Subject Code is listed in the approved WDS Catalog Subject List. The most up-to-date WDS Catalog Subject List can be found on iModules Website. Download Center > WDS Policy and Procedure > WDS Business Processes > WDS 2005 Standard Subject Codes

(<http://www.wdscommunity.vccs.edu/s/262/index.aspx?sid=262&gid=1&pgid=14&cid=80&curdir=2.1&catid=70>)

When creating/entering a course in the Course Catalog, the LMS File Type on the Components page should be BLANK.

SCHEDULE OF CLASSES

Scheduling a class needs to follow specific data entry rules to avoid scheduling conflicts and enrollment conflicts within a college and across colleges. Data entry rules must also be followed for statistical purposes. Class scheduling should follow parameters established at the college, with the following clarifications and requirements:

Tab: Basic Data

Panel Section: Class Sections

Campus

The "Campus" field should be the administrative (parent) campus of the course. Terms listed under "Campus" need to be an actual campus, for example JTCC may list MIDLOTHIAN. OR a college may use MAIN as a campus.

Location

LOCATION is the field used to determine if the enrollment is On or Off-Campus. As of the Fall 2008 semester, to meet SCHEV reporting requirements, LOCATION and INSTRUCTION MODE will be used to determine the "Course Delivery Sites" of on-campus, off-campus, hybrid and online for the SCHEV Course Enrollment (CE) file.

The "Location" drop down should list all options for actual locations where courses are taught. If MAIN is listed as the "Campus" value, then under "Location", MAIN should also be listed, plus all of the off-campus sites used. "Location" options should also include VIRTUAL and VIRTUAL-RT. The location of VIRTUAL should be used for distance learning classes ***that do not require face-to-face meetings***. VIRTUAL-RT should be used for online courses that occur at a scheduled time. VIRTUAL-RT are real-time, synchronous courses. ***Courses that carry the VIRTUAL or VIRTUAL-RT Location code must meet virtually. If a course has a compulsory whole class in person meeting at a campus location for an event such as an orientation or, a proctored exam that can only be completed on the delivering campus, then the course is not VIRTUAL. The course can be considered virtual if the proctored exam or orientation is provided in a supervised setting suitable to the instructor, such as the delivering college's learning lab OR any accredited college's learning laboratory. A virtual course cannot mandate a student come on campus for any traditional class activity, without providing the student with an alternative that is near their residence.***

For Hybrid courses (see Instruction Mode), colleges should use a physical location in the LOCATION field. For Hybrid courses, the INSTRUCTION MODE of Hybrid must be selected and the Course Attribute of DED and DLM, and their associated values, must also be selected. See the Course Attribute section below.

Examples:

Harry is a student on board a U.S. Navy Aircraft Carrier stationed in the Persian Gulf. He is taking Surgical Pharmacology - SUR 250 from one of our community colleges. The course material is on Blackboard. However, Harry must meet with his study group twice a semester in a synchronous online classroom, like Bb Collaborate, Adobe Connect, Centra, or Elluminate. The class is 100% online and it uses a real-time synchronous interface; it is therefore a VIRTUAL RT class. Harry must also take three proctored exams this semester. Two are paper, and one is online using Blackboard. Since he is not near a Virginia community college, his commanding officer has agreed to proctor Harry's exams. He receives the tests from Harry's instructor and corroborates that it is Harry alone completing the exam. Harry provides a prepaid envelope for the return of paper tests to the instructor. Taken in a timed environment with his commanding officer making certain Harry does not cruise the Internet for extra help, is the online test requirement.

Hilda is a college student in Louisiana who wants to complement her course load with an online English Composition course. She signs up for ENG 112 from one of the community colleges. She must attend an orientation for the course but there is an online alternative, which she completes. She also takes four proctored exams in the LSU testing center having arranged this with her online instructor and her college testing center before her class began. Proctoring forms and guidelines are available for download on her community college distance learning website. This is a VIRTUAL course as it is 100% online and does not require any synchronous or face-to-face classroom meetings.

Instruction Mode

The following are the Instruction Modes and their definitions. Note that Instruction Modes are tied to Student Financials and additional setup may be required before using an Instruction Mode, particularly with WWW ER because it is used to calculate the E-Rate for out-of-state students.

Hybrid –In Person & Web (HY) – Hybrid is the combination of face-to-face and electronic delivery where 50-99% of the course content is electronically delivered. The electronic delivery can be either asynchronous or synchronous.

Interactive Classroom Video (CV) – Interactive classroom video courses are synchronous distance learning and either offer students access to a program not offered at their home campus or the ability to attend a course at any campus or center where it is offered. Courses taught via CV are two-way real-time video and audio, also known as interactive television. Classes and programs taught via CV can be received by and sent from any other college within the VCCS.

Independent Studies (IS) - Independent Study is planned study, highly individualized, not addressable through any other course format, accepted for supervision by a faculty member, and approved by the student's academic adviser and the teaching unit at the beginning of the semester.

In Person (P) -- Classroom lecture

Media Delivery (VT) – These courses are delivered using media such as videotapes, CD's, or DVDs. Media Delivery courses are asynchronous. They may employ content that originally aired on broadcast television. Content of a Media Delivery course is the same as that of an on-campus course, but the study materials are specially prepared and may vary in topic sequence. Some Media Delivery courses require individual appointments with the instructor.

Print Based (PB) - Course is presented via a package of printed materials sent to the student. Student is self-directed with limited instructor interaction

Telecourse (TV) – These courses are broadcast over a local television network or cable station. Telecourses are synchronous and typically consist of two 30-minute programs shown in a one-hour block each week and are repeated during the week. Class meetings or meetings with the instructor may be scheduled two to four times during the semester.

WWW Online (WW) – Instruction for these courses is online using the internet. Most courses are taught using Blackboard, but may also include the World Wide Web, PowerPoint, special software, listservs, and email.

World Wide Web ER (ER)- Use of the E-Rate is optional for colleges. E-Rate courses are offered exclusively over the web. World Wide Web ER (E-Rate) is selected for online courses that have been designated by the college to be E-rate courses. The E-rate is the tuition rate charged to out-of-state students enrolled in designated online (ASYNC) courses. The financial set-up is triggered off of this instruction mode and the student's residency. An E-Rate course would have a Location of VIRTUAL and Course Attributes DLM and ASYNC. For more information on the set-up for E-Rate in SIS see:

http://www.vccs.edu/admin/Controller_Office/Fiscal_Services/602SetUpforSpecial%20Rates-E-Rate.pdf

For distance learning courses, the following are the primary options to be used:

Hybrid

Interactive Classroom Video

Print based

Media Delivery

Telecourse

WWW Online

World Wide Web ER

If the distance learning course uses more than one distance learning mode, select the dominant mode.

For site-based courses that are not considered distance learning, the following Instruction

Modes should be used:

In Person

Independent Studies

Panel Section: Course Attributes

Credit Courses:

For credit courses, the Course Attributes and Values, in conjunction with Instruction Modes, are the essential fields for identifying distance learning courses for data purposes. The drop down for Course Attributes provides many options, but if the course is a distance learning course, the following must be included:

Course Attribute

Add rows for multiple values:

DED - distance ed delivering institution

DLM - distance learning mode

Course Attribute Value

- Corresponding to DED above: List of VCCS agency initials/agency codes, should be considered the detail of the "Course Attribute" DED above
- Corresponding to DLM above: Either "ASync" or "Sync"

"DED" and "DLM: data elements are required for both synchronous and asynchronous courses that are considered distance learning courses.

Non-Credit/CEU:

Non-credit and CEU classes are not required to use the DLM/DED Course Attribute coding. Non-credit and CEU distance learning courses are identified through the Location of VIRTUAL. For Non-Credit/CEU Course Attribute requirements, refer to WDS Course Attributes documentation: <http://www.wdscommunity.vccs.edu/s/262/index.aspx?sid=262&gid=1&pgid=14&cid=80&curdir=2.1&catid=70>

Tab: Meetings

For classes with the Location Codes of VIRTUAL or VIRTUAL-RT there does not NEED to be Meetings information, i.e. Facility ID, Pat, etc. but Meetings information COULD be provided based on other college requirements such as Adjustment Calendar options. If Meetings information is provided, it must follow the format described below under Option 2.

Panel Section: Meeting Pattern

Facility ID

Based on a recommendation from 11/11/2004 DDLC Meeting:

1. Colleges use By Class Length % Adjustment Calendar option.
2. Virtual Class meeting times do not have to be staggered as long as the Facility ID and Class Meeting Pattern day is omitted based on the college implementing recommendation #1.

Option 1 :

If Colleges have implemented the above recommendations, Facility ID, Class Meeting Pattern, Mtg Start and End, and Meeting Days can remain blank with no impact on census data.

For classes with an Instruction Mode of HYBRID, colleges may elect to enter multiple meeting patterns to reflect the virtual and face-to-face aspects of the course.

Option 2 :

However, colleges may continue to enter Facility ID information. Entering Facility ID data requires Mtg Start and End data to also be entered. With virtual classes, this means the creation of one minute duration courses. If colleges elect to enter Facility ID information, **the information should follow the naming structure below:**

In keeping with the naming structure used for physical locations (College ID letter + Building ID – Room #), “Facility ID” for virtual classes needs to follow this structure:

College ID letter + VIR – TUAL. For example the Facility ID for a virtual class at LFCC would be IVIR-TUAL. Facility ID must contain the College ID letter to distinguish it from other colleges. This naming structure would apply to courses with Location of VIRTUAL and would also apply to courses with Location of VIRTUAL-RT.

Pat

Can be VIRT or other college defined term.

Mtg Start and Mtg End

To avoid schedule conflicts for virtual classes, “Mtg Start” and “Mtg End” should be a one-minute duration at an early morning hour for Virtual classes. Colleges should define procedures that would prevent time conflicts if a student registers for multiple distance learning (virtual) classes, i.e. each division uses a one-hour block of time in which classes are scheduled consecutively in one-minute increments. For example, the Business division has the time slot from 1am to 2am and so schedules classes starting with a 1:00 to 1:01 am slot and then the next class is 1:01 to 1:02.

Meeting Days (M T W T F S S)

Days can be checked as deemed appropriate by the college.

Since information on this panel can be used to generate schedules for students, language must endeavor to accurately describe the class.

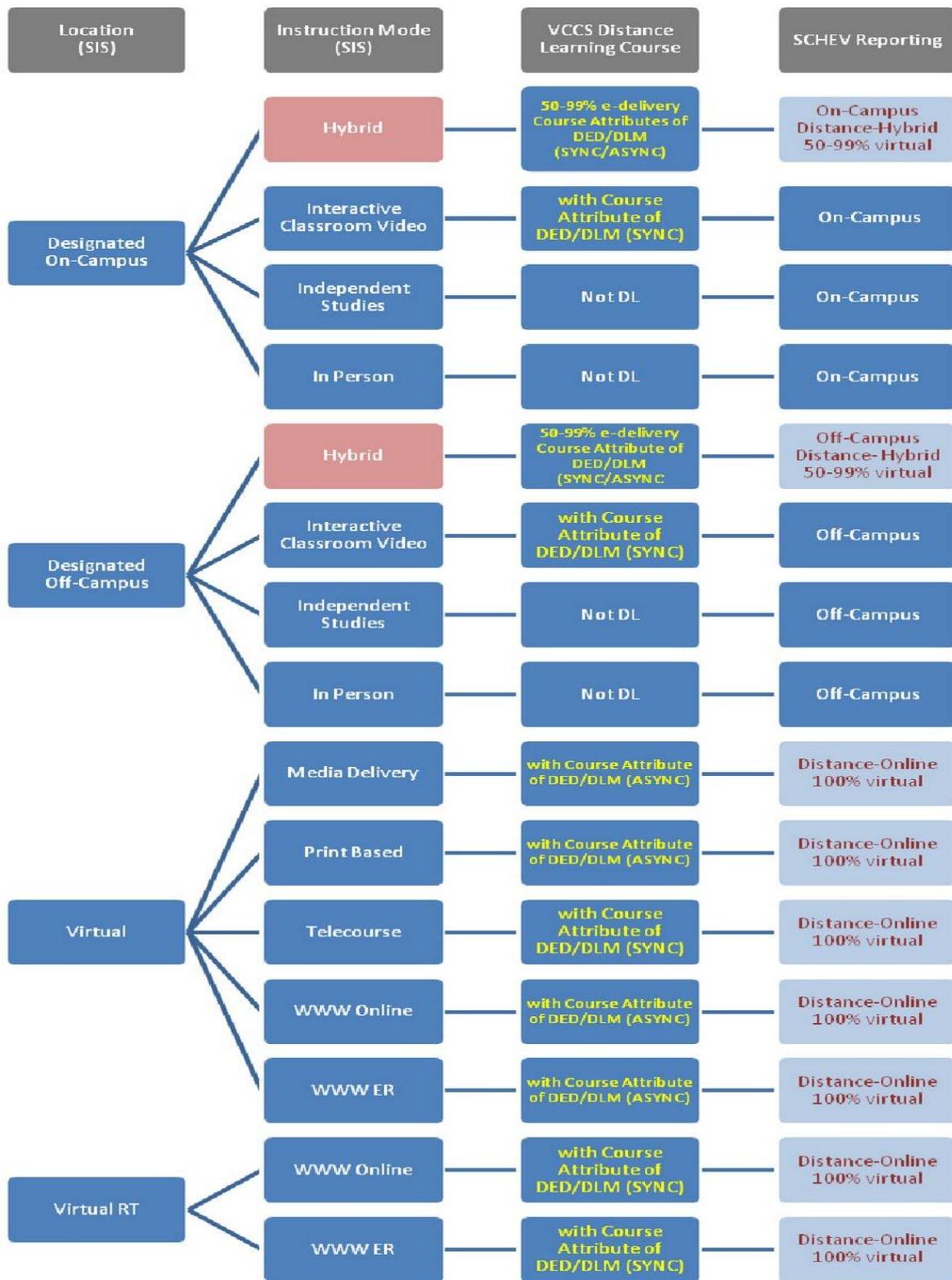
Tab: Notes

Panel Section: Class Notes

Copy Note options include "Required access to the Internet" others may be created; or, use other free form text relating to distance learning requirements or student info

Tab: LMS

Alternative methods for identifying courses that will be entered in the CMS (Course Management System) are being explored. It is not necessary at this time for colleges to use the LMS panel.



VCCS Distance Learning Courses

Distance learning credit courses in the VCCS are identified for research purposes through Instruction Mode, Course Attributes, and Course Attribute Values . For courses with Instruction Modes of Hybrid, Interactive Classroom Video, Media Delivery, Telecourse, WWW Online, and WWW-ER the course is counted as a distance learning course if it has an attribute value of SYNC (synchronous) or ASYNC (asynchronous)

Non-credit and CEU classes are not required to use the DLM/DED Course Attribute coding. Non-credit and CEU distance learning courses are identified through the Location of VIRTUAL.

Course Attributes and Course Attribute Values are open tables in SIS. Colleges can elect to add Course Attributes/Values for their own data tracking purposes.

SCHEV Reporting

SCHEV has made changes to data fields that are part of the Course Enrollment file. The changes are the for the 2007-2008 submission in August 2008. The changes affect Course Site and Course Type. The codes for Course Site have been expanded from three to four, see SCHEV's definitions below. The Course Type data will cross-walk to Instruction Mode.

On-Campus: Significant site attendance required; 50% or less of the course content is electronically delivered.

Off-Campus: (In-state or out-of-state sites) Significant site attendance required; 50% or less of course content is electronically delivered.

Hybrid: 51-99% of the course content is electronically delivered.

Distance-Online: No face-to-face meeting; 100% of course content is web-based delivered.

Appendix E: Supporting Software

A. Impatica

Impatica for PowerPoint makes it easy to add narrated PowerPoint presentations to Blackboard. Impatica converts the PowerPoint file into a compressed format that is optimized for streaming over the Internet. The Impatica file is typically 95% smaller than the PowerPoint HTML files. It supports most of the features of PowerPoint, including text, graphics, transitions, animation effects and, of course, narration.

A download link for Impatica and installation instructions can be found in Blackboard on the Teach tab. A user's manual can also be found there.

B. Respondus

Respondus allows instructors to create tests from scratch or import questions from existing tests that are in electronic format such as a Microsoft Word document. Users are required to reformat existing tests adhering to strict format guidelines. Despite the tedium of reformatting your text documents, this method is often much quicker than creating new tests within Respondus or Bb. Another convenient feature is Respondus' ability to deploy tests directly to Bb. After the initial setup of the software, instructors can publish tests directly to Bb, set the test options and make the test available to students.

C. Softchalk

Softchalk is software that makes creating interactive web pages easy by adding formatting, images, and styles to web pages using basic text editing. It is an accessible tool for creating engaging learning materials including on-line comprehension quiz questions, text annotations, and activities. Activities that Softchalk can create include matching, flash cards, ordering, crosswords, seek a word, and drag and drop. Softchalk files can easily be uploaded into Blackboard.

D. Studymate

StudyMate is a tool similar to SoftChalk for creating interactive web pages quickly and easily using a Flash based format. This tool will also let you create activities for use on iPods, Sony Playstation Portable (PSP) and other small screen devices. The VCCS has a temporary system license and you can download the software from the Teach tab in Blackboard. This software may replace SoftChalk when the results of the pilot are assessed.

E. Wimba

Web-based voice tools facilitate and promote vocal instruction, collaboration, coaching, and assessment. Increase the interaction and student engagement level of any online class by allowing faculty and students to easily embed vocal interactions into any Blackboard course.

F. iTunes University

Distribution system for lectures, language lessons, labs, films, audiobooks, virtual tours, etc. iTunes University houses over 350,000 free lessons.

G. Google Apps

Free to the VCCS, Google apps provides multiple collaboration tools such as document sharing, calendar sharing, web site design, blogs, and videoconferencing.

H. Blackboard Collaborate

Provides a collaborative tool for instructors to deliver real-time lessons and discussions. Instructors can create online lectures, classroom discussions, virtual office hours, and virtual groups that allow students synchronously collaborate.