

Distance Education and Instructional Technology Plan July 1, 2011 – June 30, 2012

Innovation. Efficiency. Accountability.

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Introduction

Columbia Gorge Community College (CGCC) primarily serves students in the region where the Columbia River has formed a deep gorge through the Cascade Mountains and serves as a border between the states of Washington and Oregon in the United States of America. The college is one of seventeen community colleges in Oregon and is supported financially by the state of Oregon as well as the taxpayers in Hood River and Wasco counties. It is the purpose of this document to report on the 2010-2011 school year and to describe how the CGCC will enhance distance learning and instructional technology in 2011-2012. It is the author's hope that this plan lays the foundation for enrichment in the learning spaces, real and virtual, of all students at Columbia Gorge Community College.

2010-2011 Overview and New Trends

Overview

Quantity

Enrollment in distance learning classes continues to increase every year at CGCC. Hybrid, teleweb and online classes were 27% of FTE in the 09-10 school year. The Sloan Consortium reports a similar figure for the average percentage across the United Statesⁱ, so at first glance CGCC looks typical:



Online Enrollment as a Percent of Total Enrollment -Fall 2002 through Fall 2009

On the other hand, the Sloan Consortium also reportsⁱⁱ that CGCC represents a segment of higher education in the United States that produces the least percentage of online courses, since it is an institution with less than 1500 per year.



Online Enrollments by Overall Enrollment

Quality

The quality of CGCC online and hybrid classes continues to improve though the implementation of Quality Matters and innovative uses of other technologies that enhance synchronous and asynchronous modalities. Instructors participated in the fourth Quality Matters (QM) rubric training at CGCC, which was offered online. This training is the first part of certification as a peer reviewer. Taught by one of our own instructors, this was a great opportunity for online faculty to exchange ideas and look at their classes with a "new set of eyes". Also of significance in promoting quality, the first peer reviews of courses by faculty took place in the winter term, with nine completed reviews.

New Trends: Augmented Reality

"The expression augmented reality (AR) is credited to former Boeing researcher Tom Caudell, who is believed to have coined the term in 1990. The concept of blending (augmenting) virtual data – information, rich media, and even live action – with what we see in the real world, for the purpose of enhancing the information we can perceive with our senses is a powerful one.^{",iii} The 2010 Horizon notes that although the technology has been around for many years, the new capabilities of mobile devices will bring AR into the mainstream of education in the next two to three years.

"Augmented reality has strong potential to provide both powerful contextual, *in situ* learning experiences and serendipitous exploration and discovery of the connected nature of information in the real world. Mechanics in the military and at companies like Boeing already use AR goggles while they work on vehicles; the goggles demonstrate each step in a repair, identify the tools needed, and include textual instructions as well. This kind of augmented experience especially lends itself to training or specific tasks."^{iv}

A local group of scientists in the Gorge are interested in re-designing the exhibits at Discovery Center. In order to facilitate an extension of center information, they are considering how to employ AR technology at stations throughout the area which would illustrate scientific concepts and research. In addition the renewable energy technology (RET) program outlined a plan to create an AR campus tour.

Instructional Technology at CGCC in 2010-2011

Instructional Technology at Columbia Gorge Community College can be described as having four major components: distance learning, classroom technology, multi-media production, and library technology resources.

Distance Learning

Introduction

In 2010-2011 Columbia Gorge Community College (CGCC) developed 19 credits of new online and hybrid classes. As of spring term 2011, the college has developed 126 online, teleweb, and hybrid classes.

Online, Hybrid, and TeleWeb Classes

Online students at CGCC are overwhelmingly local and increasingly savvy at distance learning. Of the students who completed *Online Learning at Columbia Gorge Community College 2011* student survey, 95.2% lived within commuting distance to the college. There seemed to be an uptick of students new to online learning. Of the 105 respondents to this survey, 42.9% were taking their first online class at CGCC, compared to 15.6% in 2010. In 2011, 31.7% of respondents had taken an online course at another college or university, down from 35.6% in 2010, but up from 25.9% in 2004. 20% of the students reported having taken more than four online classes from CGCC, down from 31.1% in 2010. 91.3% of respondents reported access to broadband at home and 78.9% would like to see the college add more online classes.

The Student Services Department compiled data about completion rates of all classes for the 06-11 school years. Students complete online classes 3-7% less successfully than onground classes and up to 2% more successfully in hybrid classes.

Student Completion Rates at CGCC:					
	Onground	Hybrid	Online	Diff Onground -Online	Diff Onground - Hybrid
2006-2007	91.40%	90.90%	85.10%	6.30%	0.50%
2007-2008	84.30%	86.30%	81.50%	2.80%	-2.00%
2008-2009	85.50%	87.10%	78.90%	6.60%	-1.60%
2009-2010	84.30%	86.80%	78.10%	6.20%	-2.50%

A successful completion is defined as a grade of "A", "B", "C", or "P". Everything else is unsuccessful. Students who drop (that is, drop from a class in the first 4 weeks) are not counted at all as these courses do not appear on the student transcript. Students who withdraw (that is, drop from a class in week 5 - week 8) are counted as unsuccessful. Other unsuccessful grades are "I", "NP", "D", and "F"

Types of distance learning classes

Online classes take place on the internet, using a software tool called Moodle, which allows instructors to place course content in a password-protected site that only students who are registered for the class can access. Students can access these courses from any computer that has a connection to the internet at anytime, day or night.

Hybrid classes combine live lecture classes with online components. Students meet with instructors in the classroom for some meeting times. Up to 75% of the class time may occur online. Students and instructors interact in the classroom, as well online via Moodle.

Teleweb or video courses combine video-taped lessons, study guides, textbook readings, written assignments, and an online course shell.

Here are graphs showing 1) unduplicated headcount of the number of students who took an online, hybrid, or telecourse, by school year since 2000, and 2) the percentage of credit classes that were either hybrid or online by year.



Figure 1: Duplicated Headcount by school year



Figure 2: Percentage of distance learning for credit classes

The following table lists the online and hybrid classes have been developed and offered at CGCC by spring term 2011:

CGCC by spring term 2011:	Hybrid Class
Distance Learning Classes	Hybrid Class (*Requires
	some
	classroom
	attendance)
Credit Classes	
ANTH 101 Intro to Physical Anthropology	
ANTH 102 Intro to Archaeology and Pre- history	
ANTH 103 Intro to Cultural Anthropology	
BA 101 Introduction to Business	
BA 111 Introduction to Accounting	
BA 131 Computers in Business	*
BA 205 Solving Communication Problems	
BA 211 Principles of Accounting	
BA 212 Principles of Accounting II	
BA 213 Principles of Accounting III	
BA 244 Intro to Records Management	
BA 250 Small Business Development	
BA 223 Principles of Marketing	
CAS 109 Beginning PowerPoint	
CAS 121 Beginning Keyboarding	
CAS 133 Basic Computer Skills/MS Office	
CAS 140 Beginning Access: Windows	
CAS 170 Beginning Excel for Windows	
CAS 171 Intermediate Excel for Windows	
CAS 216 Beginning Word 2007	
CAS 231 MS Office 2007 Publisher	
CAS 246 Integrated Computer Projects	
CG 100C College Survival and Success	*
CG 111 Study Skills for College Learning	
CG 111 Study Skills for College Learning CG209 Job Finding Skills	

CH 100 Fundamentals of Chemistry	*
CH 104 General Chemistry	*
CH 105 General Chemistry	*
CH 106 General Chemistry	*
CH 221-223 General Chemistry	*
CIS 120 Computer Concepts	
CIS 121 Computer Concepts II	
EC 200-202 Principles of Economics	*
ECE 201 Family Partnerships in Education	
ECE 123 Curriculum for Young Children	*
ECE 124 Multicultural Practice	*
ECE 200 The Professional in Education and Family Studies	*
ECE 260 Advanced Practicum Seminar	*
ED 100 Introduction to Education	
ED 112 Intro to Children's Literature	*
ED 123 Instructional Strategies: Reading	
ED 124 Instructional Strategies: Math and Science	
ED 136 Computers in Education	
ED 200 Intro to ED for Paraeducators	*
ED 224 Foundations of Education	
ED 251 Overview of Exceptional Learners	*
ED 263 Portfolio Development	*
ED 268 Intro to Developmental Disabilities	*
ED 269 Intro to Learning Disabilities	*
ED 291 Strategies for Teaching English Language Learners II	*
EET 121 Digital Fundamentals I	*
EET 122 Digital II	*
EMT 100 Introduction to Emergency Medical Services	
EMT 115 Crisis Intervention	
ENG 104 Introduction to Literature	

ENG 105 Introduction to Literature - Drama	
ENG 106 Introduction to Literature - Poetry	
ENG 214 Literature of the Northwest	
ENG 250 Intro to Folklore & Mythology	*
ENG 253 Survey of American Literature	
ENG 254 Survey of American Literature	
ENG 260 Introduction to Women Writers	
ENGR 100 Exploring Engineering	
FN 225 Nutrition	
G 201 Physical Geology	*
G 202 Physical Geology	*
G 203 Historical Geology	*
GS 106 Physical Science: Geology	*
GS 108 Physical Science:Oceanography	*
GS 109 Physical Science:Meteorology	
HE 262 Health, Safety, & Nutrition for the Young Child	
HEC 226 Child Development	
HPE 295 Health and Fitness for Life	
HST 101 Western Civilization	
HST 102 Western Civilization	
HST 103 Western Civilization	
LIB 199 Ace your research paper	
MP 111 Medical Terminology	
MTH 30 Business Math	
MTH 111 College Algebra	
MUS 105 Music Appreciation	
MUS 110 Fundamentals of Music	
MUS 202 Intro to Music and Its Literature	
NUR 110 Nursing I	*
NUR 111 Nursing II	*
NUR 112 Nursing III	*
OS 120: Business Editing Skills	
OS 131 10-key on Calculators	
·	

OS 240: Filing and Records Management	
OS 245 Office Systems and Procedures	
PHL 197 Critical Thinking	*
PHL 201 Basic Philosophical Problems	*
PSY 201 Introduction to Psychology Part I	online and hybrid
PSY 202 Introduction to Psychology Part II	online and hybrid
PSY 213 Brain, Mind and Behavior	*
PSY 215 Human Development	online and hybrid
PSY 222 Family and Intimate Relationships	*
PSY 239 Abnormal Psychology	*
RET 101	
RET 102	
RD 115 College Reading	
SOC 204 Gen. Soc. Everyday Life	
SOC 205 Gen Soc. Social Change	
SOC 206 Gen Soc. Social Problems	
SOC 232 Death and Dying	
SP 111 Speech	*
SP 130 Business and Professional Speech Communication	*
SP 140 Intro to Intercultural Communications	*
SP 214 Interpersonal Communication: Process & Theory Study	*
SP 215 Small Group Communication	*
SP 228 Mass Communications	*
SPA 292A Spanish Composition	*
TA 101 Theatre Appreciation	*
TA 274 History of Theatre	
WR 90	*
WR 115 Intro to Expository Writing	*
WR 121 English Composition	online and hybrid

WR 122 English Composition	online and hybrid
WR 123 English Composition	
WR 227 Technical Writing	*
WR 241 Creative Writing	
WS 101 Women's Studies	*
Small Business Development Classes	
Shoebox Accounting	
Starting a Business in Oregon	
Understanding Your Business Financial Statements	
Writing Your Business Plan	
Total Online/Hybrid Classes Developed: 126	

Other Virtual Learning Environments

Webconferencing

This technology is expected to increase in instructional use and replace interactive television in many sectors of education. In the 2010-2011 school year, the college bought an institutional license for Elluminate as part of a state wide effort to adopt this technology.

Second Life

A "philosophy garden" was created on the Oregon community college island in Second Life during the fall term in 2010 to give CGCC students a way to learn about some of history's most famous philosophers in an experiential way. Computer applications students also used the Second Life island to interact in small groups, recording their discussion for evaluation by the instructor. A video about these projects is available at http://www.youtube.com/watch?v=0GjcvJTeC_Y.

Facilitator Training and Quality Improvement

Facilitator Training

For the purposes of distance learning at CGCC, a facilitator is a person that teaches or directs students via a Moodle shell. This person could be faculty, staff or administrator working for CGCC. A Moodle shell is usually a course, but could be another tool, such as a shell used in advising.

Facilitator training for the utilization of Moodle has three parts:

- 1) online training
- 2) technical training tutorials
- 3) Quality Matters reviews

The online training is designed to help the facilitator in using an existing shell or developing a new shell. Understanding the tools Moodle employs is critical to teaching and learning in this new environment. The training is offered as a series of modules, covering both technical skills and andragogical issues. This course also gives facilitators a chance to be online students so they can better understand what their students will experience.

This four week training is followed by Moodle tutorials, which are conducted by Rob Kovacich, Ron Watrus, and Paula Ascher. The training and tutorials provide instructors with the skills needed to develop classes that meet the Quality Matters standards. Paula Ascher reviews classes under development to assist the faculty developer. A final Quality Matters check is prepared before determining whether the facilitator has learned the requisite skills to meet the needs of the student users. The facilitator may also need to complete the Quality Matters check to complete the requirements of the development contract.

Quality Improvement

Quality improvement in distance learning classes was focused on implementing faculty peer reviews in 2010-2011. Eight instructors took peer reviewer training in the spring "Applying the Quality Matters Rubric" class, and three of this group went on to receive certification training. These three instructors are participating in formal reviews in the summer of 2011.

So far, two instructors have become master reviewers, 31 were trained as peer reviewers, 14 became certified peer reviewers, and nine are qualified as CGCC faculty peer reviewers.

Student Support

According to the *Online Learning at Columbia Gorge Community College 2010* survey, students most often get technological help for an online class from their instructor (60.4%), the CGCC Helpdesk (15.6%), Student Services (6.3%), friends or other students (10.4%). The CGCC Helpdesk has a phone number and schedule published on the website.

Library Services

Through the library's web site (http://www.cgcc.cc.or.us/library/) distance learning students and faculty have access to the library's collection of books, media and research databases. The databases contain citations for articles and full text for most articles and other information. Encyclopedias and a dictionary are accessible on the library homepage. "Ask a librarian a question" is available as an online reference form for getting research assistance from library staff. Links also connect to information on how to use the library, searching tips, evaluation of information, research tips for finding specific types of information and copyright.

Items can be shipped to the faculty or student's home. The student is responsible for shipping the items back to the library at their expense or for dropping them off at the Hood River or The Dalles campus. Articles and books that are not available from the library can be requested by using the interlibrary loan forms on the web site. Distance learning students and faculty can contact the library team with their questions and requests for service or resources by using the "Ask a CGCC librarian your question" link on the library homepage, by email at cgcclibrary@cgcc.cc.or.us or by phone 541-506-6080.

Classroom technology

There are a total of 33 "smart classrooms" at the college, 25 on The Dalles campus and eight on the Hood River campus.

Satellite

The Dalles campus of Columbia Gorge Community College has satellite capability in almost every classroom. This technology is primarily used to host continuing education classes for professional development.

Multi-media Production

More than 400 short videos have been produced by the faculty to enhance their online and onground classes . Videos are hosted in YouTube, which recently added automatic captioning for the hearing impaired and gave the college EDU capabilities.

Library Resources

The library provides a faculty resource room as well as equipment for check out. Faculty resource room equipment includes a computer work station, copier, Scantron machine, color printer, scanner and some supplies.

Development Plan 2011-2012

Distance Learning

The following online/hybrid classes are scheduled to be developed in 2010-2011:

DL			
Classes	2011-2012		
		Credits	Total
Class	Mode	Online	Credits
BA 218	online	3	3
BI 112	online	3	5
CAS 133	hybrid	2	4
CAS 110	online	1	1
CS 133G	online	4	4
CS 160	online	4	4
GS 106	online	4	4
GS 107	online	4	4
GS 108	online	4	4
ECE 185	online	1	1
EC 200	online	4	4
MA 117	online	3	3
MTH 95	online	4	4
PS 201	online	4	4
RD115	online	4	4
SP237	hybrid	1.5	4
	(split		
	contract)	1.5	
		52	

Quality Matters

One peer reviewer training is scheduled for the 2011-2012 school year. Both informal and formal reviews will be conducted.

Other Virtual Learning Environments

Webconferencing

CGCC will continue to develop webconferencing capabilities. This provides the instructor the ability to synchronously broadcast a computer screen, audio, and video. We plan to continue using Elluminate.

Second Life

A site in Second Life was created to facilitate online student study groups, synchronous class discussions and connections to academic support staff by the Oregon Community College Distance Learning Association. In 2011-2012 school year, CGCC will offer PHL 201 Philosophical Problems again as a hybrid class, with synchronous student interaction taking place in Second Life.

Multi-media production

Mulit-media training and production assistance is available by request to the distance learning and instructional technology coordinator. Video Camp 2011 has been scheduled in August with a focus on collecting video for an augmented reality tour for the RET program.

Library Resources

All smart classrooms are maintained by Information Technology Services, however, the library will continue to provide check-out service for technology. The library staff assist students and faculty and oversee maintenance of some classroom technology, along with the Information Technology Department.

Classroom Technology

New smart classroom technology is not scheduled for installation due to budget constraints. Grant funds are being sought.

Appendix



Distance Learning Course Design Review

Before CGCC develops a distance learning (online, hybrid, or teleweb) class, the distance learning coordinator ascertains that the class has been approved by PCC. Faculty contracts for developing distance learning classes are proposed by Department Chairs and signed by the Instructional Director and Chief Academic Officer.

Before first term course is offered: Quality Matters standards will be used as a design tool in the development of distance learning classes. All distance learning classes will be evaluated using the Quality Matters standards by the Distance Learning Coordinator and Instructional Coordinator (DLITC) two terms before the class is delivered. The DLITC will inform the department chair if the course does not meet standards.

After the course is offered for the second time, the instructor may request a review by QM peer reviewer. Instructors are encouraged to take Quality Matters peer reviewer training.

Each course will be evaluated every three years by a QM peer reviewer. The instructor may ask for a formal evaluation by a team of three faculty peer reviewers per QM review standards. A successful formal review results in a nationally publicized QM recognition of a quality course.



Guidelines for Teaching Distance Learning Classes

The instructor is expected to:

1. Evaluate and return graded assignments in a timely manner and provide feedback on assignment to facilitate student preparation of future assignments.

2. Give an explanation of the evaluation process.

3. Maintain a list of active resources and links to appropriate on-line resources within the course shell.

4. Keep a record of all graded activities in a secure, private, and accurate manner.

5. Respond in a timely manner to questions regarding the course or learning materials, within a 48-hour period on weekdays, daily during the first week of the term.

6. Monitor the discussion forum activities and provide direction when asked by the participants or as appropriate.

7. Design learning activities that promote CGCC core learning outcomes.

8. Where appropriate, encourage student-student collaboration and interaction.

ⁱⁱ Ibid (13)
ⁱⁱⁱ Johnson, L., Levine, A., Smith R., & Stone, S. (2010). The 2010 Horizon Report. Austin Texas: New Media Consortium. (21)

ⁱ Allen, Elaine I. and Seaman, Jeff (2010) Class Differences: Online Education in the United States, 2010 The Sloan Consortium (13)