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## The Development of a Holistic Online Course Development Model (Year 1)

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This article includes a reflection on the experiences, both positive and negative, in using a collaborative approach to the development of an online instructional design model. It outlines the processes and points out the challenges associated in the creation of courses to be taught on the Internet using this model. There are reflections on the practical application of this model within a higher education setting for both faculty and administrators. Moreover, an evaluation of the model and its effectiveness for distance learning courses are discussed. Lastly, conclusions and implications for expansion and further use are presented.

### DEFINITION OF TERMS

A constitutive definition of collaboration derived from the experience of implementing the process at Winston-Salem State University is included next to help clarify the document:

The “Collaborative Approach” is defined as the support for course development within the organization. This includes the symbiotic discussions with the professors, Chairs of Departments and Deans, the Center for Innovative Teaching, Technology, Learning and Evaluation (CITTLE) and the Division of Lifelong learning. It involves working with one another to approve programs, evaluations, and online course offerings. The interplay of administrators and academicians within different roles are an integral part of the process for course development and approval.

### HISTORICAL PERSPECTIVE

Historically Black Colleges and Universities (HBCUs) are defined by Jackson and Nunn (2003) in *Historically Black Colleges and Universities: A Reference Handbook* as private and public two-year, four-year, graduate and professional degree institutions that were established specifically for the postsecondary education of people of African ancestry in the United States (Jackson, Nunn, 2003).

After many years, WSSU started online course offerings through a variety of delivery methods: E-college, video, and correspondence. Online education has become increasingly more present in higher education (Raphael, 2007), and as a result, Winston-Salem State University (WSSU) a historically black university ranked among the top comprehensive colleges in the South—Bachelor Category by *U.S. News & World Report* for the fifth consecutive year, is taking steps to reach the global community put forward by Friedman (2006) through online learning. After many years, WSSU started online course offerings through a variety of delivery methods: E-College, video, and correspondence. WSSU was opened as a Historically Black College or University in 1892. In 1998, Blackboard was adapted as the primary learning management system software for online course delivery.

In early 2001, after a review of student evaluations for online courses, the WSSU Distance Learning Strategic Planning Committee (DLSPC) assembled a task force to identify and address an issue of quality assurance in online course development. It was determined that technology driven distance education was ineffective and based on the literature did not suffice as a replacement to proper pedagogy-driven approach to redesigning courses. (Im, 2007)

Over the next few months, the committee met, brainstormed, researched, and evaluated instructional design models and their pedagogy. The consensus was to implement a “design before development” template, one that was specifically for an online environment. Yang and Cornelious (2007) stated that “To ensure the quality of online instruction, the online learning environment must be designed first before the instructor embarks on the online course delivery” (p.7), this allowed the administration of all the aspects, from creation to evaluation, in all our online courses. A review of the literature in the field revealed two models that would provide a foundation for course development with an emphasis on pedagogy. These models were the “Designing Instructional Strategies for the Web, FDI” model from Virginia Polytechnic Institute and State University ([Virginia Tech], Oliver, 2002), and the “Rubric for Online Instruction CSU, Chico” model (CSU, 2003). By the fall of 2003, a prototype was conceived—it was titled: “The Course Training, Design, Development Package” (CTDDP). A review of the literature revealed that general guidelines for creating quality online instruction are not specific enough in comprehensively organizing and ensuring quality. (Mariasingam & Hanna, 2007) Therefore, the CTDDP was intended to provide the faculty with a systematic process of creating and evaluating web-based instruction. A series of benchmarks were devised to ensure accountability. As argued by Mariasingam and Hanna, “Establishing appropriate updated standards and benchmarks for evaluating the quality and impact of online degree programs is now essential” (p. 2).

It contained procedures and materials that were useful in analyzing and organizing a course, designing a syllabus, specifying learning outcomes, goals, and objectives. It also provided the means for connecting those objectives to instructional strategies and then made available a framework for aligning those objectives with the most appropriate technologies. The CTDDP also provided administrators with the tools to evaluate courses that have been created using this package.

## THEORY AND MODEL/PEDAGOGY

The CTDDP was given the name based on the design before development philosophy. Specifically, the CTDDP was broken up into the following components, which will be reviewed in more detail later in the article:

1. Context Analysis
2. Designing the Syllabus
3. Designing Instructional Strategies
  - a. Writing Learning Outcomes/Goals
  - b. Writing Objectives
  - c. Performance Assessment Worksheet
  - d. Selecting Instructional Strategies
  - e. Selecting the Technologies
  - f. Selecting Assessments for the Technologies
4. Evaluation Worksheet (containing the following evaluation criteria for which the course will be evaluated upon completion)
  - a. Content (syllabus information, objectives, materials, learning experiences, handouts, consistency of tests, grading system, teacher student feedback, organization of study material)
  - b. Design (technology and objective alignment, innovation in technology use, scope & sequence)
  - c. Technical (layout, fonts, graphics, navigability, working links, etc.)
  - d. Course Management/Learner Support (instructor accessibility and facilitation of learning to students)

The CTDDP is used as a supplement for Benchmark meetings that occur approximately every two weeks to a month over the span of a semester. At each meeting, the faculty member is expected to produce certain deliver-

ables based on an agreed upon schedule with the Instructional Technologist, Distance Learning coordinator, and director of Distance Learning. The first two Benchmarks focus primarily on the design of the syllabus, objectives, and the transition of the language of the course to be more befitting of an online environment. These occur within a month. Over time, the checklist illustrated in the Figure 1 has been updated and made into an electronic process.

Figure 1 includes an example of a checklist that is used to assess a faculty member's progress through the course development process.

Benchmark Date:		Next Benchmark Date:	
11/21/05		11/29/05 2:30-3:30	
Bench Mark I Review for:			
Yes	No	Course Description	Notes:
<input type="checkbox"/>	<input type="checkbox"/>	Instructor and Course Name	Someone else may be teaching this course
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Meeting Times, Online Office Hours,	"
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Prerequisites/Minimum Skills	Will post to the course
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Document Format Requirements	Will post to the course to the Read Me! area
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Chart Outline of Course Sequence Navigation (Student Instructions)	Will post to the course
Yes	No	Syllabus	Notes:
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Online Attendance Policy/Netiquette	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Rationale	will post to the course
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Grading System and Scale	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Assignments	Assignments are not completed
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Honor Code	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Evaluation Procedures	Rubric on the syllabus will post to the course
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Learning Outcomes	will post by 11/29
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Learning Objectives	Departmental Objectives
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Learning Experiences	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Instructional Strategies	Will post by 11/29
<input type="checkbox"/>	<input type="checkbox"/>	Instructional Resources (text, videos, CDROMs)	Will bring videos 11/29/05 or 11/30/05
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Downloadable Files (.pdfs, images, articles, graphs, etc.)	

Figure 1. Benchmark 2 delineating the deliverables due by the instructor

By the third benchmark, the faculty member should have completed all the necessary pedagogical materials and is either producing or finalizing any technological considerations on the course. It is at this stage where most multimedia and electronic production begins toward the course.

The fourth benchmark is considered the final review for the course. At this meeting the instructional technologist, distance learning coordinator, and faculty member give the course a last look. They will either recommend or contest the submission of the final iteration of the course to be submitted for evaluation.

If the course is given approval either the faculty (peer review), chairs of the department or the deans will evaluate its content. Kidney, Cummings, and Boehm (2007) posited that quality assurance comes from the peer review of content, rigor, and andragogy. Summative evaluation typically lasts a week to two weeks. During this time the faculty member is restricted to student status in his online course. Their instructor status is restored at the completion of the evaluative period.

## BLACKBOARD TRAINING AND DESIGN

The purpose of this part of the process is to provide performance based learning principles by offering Blackboard training to course developers.

According to Volery (2000) before becoming successful at online instruction requires an awareness of ones qualifications. Instructors must “upgrade their technical skills” in order to stay at the cutting edge of technological growth (p.7). It is for this reason that each course developer is required to attend Blackboard training. The Blackboard training sessions are broken down into three separate sessions: Novice, Advanced User, and Assessment. The general objective of Novice training is to provide an overview of the Blackboard system and to implement planned and designed instructional strategies. During this training session instructional design principles are introduced.

Blackboard’s technology features are introduced in the Advanced User session. Asynchronous and synchronous features such as chatrooms, discussion boards, and e-mail features allow the instructors and students to

communicate in this virtual learning environment. These features are primarily covered to give the student and the instructor opportunities to facilitate small breakout discussions with either assigned or self-selected groups to conduct public and private messaging. It is also demonstrated how they offer users the ability to view documents during an online meeting, such as a PowerPoint presentation or web site.

The Assessment training provides a basic overview on how to create online tests in Blackboard. The training exposes the course developer to innovative ways to gain access to a student's competencies and redesign student's learning activities as needed online.

Another purpose of this part of the process is to provide assistance with course design. During the first two benchmarks the course developer is asked four major questions:

1. Who are the learners? (Characteristics of the learner)
2. What do you wish the learners to demonstrate? (Objectives)
3. How will the subject matter or skill be taught? (Instructional strategies)
4. How do you establish the degree to which learning is achieved? (Assessment)

The purpose of the questions is to identify the framework for systematic instructional planning. According to literature, Smith and Ragan (1999) stated that there are several advantages to using a systematic approach:

1. Encourages advocacy of the learner.
2. Supports effective, efficient, and appealing instruction.
3. Supports coordination among designers, developers, and those who will implement the instruction.
4. Facilitates diffusion/dissemination/adoption.
5. Supports development for alternate delivery systems.

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6. Facilitates congruence among objectives, activities, and assessment.
7. Provides a systematic framework for dealing with learning problems.

Those theoretical basics are applied into the everyday working relationship with faculty as illustrated in the following paragraphs.

In 2003, Dr. Howard Barnes agreed to develop an online course titled World Civilization. Dr. Barnes has worked for Winston-Salem State for over 35 years. He had very little experience with computers. He actually had a brand new Dell computer sitting in his office in a box unopened.

For six months, Dr. Barnes was taught the basics of Blackboard. He learned how to upload his syllabus, post assignments, post announcements, and create discussion boards. Dr. Barnes was one of the first instructors at Winston-Salem State University to create video lectures in his online course. The video lectures consisted of a synchronized video lecture with a Power-Point.

After the course was developed, Dr. Barnes was taught how to better organize his online course. He was also taught how to create individual folders for his students on his computer. The purpose of the individual folders was to have electronic copies of the students' work.

Dr. Barnes has been a trooper in the course development process because he has gained a wealth of knowledge during the process. He even provides suggestions to new course developers about course development.

## ADMINISTRATION AND INSTITUTIONAL COLLABORATION

Instructors are generally receptive and open to new ideas and on the whole course development remains a positive process. From the models inception it was decided that for courses to be considered quality they would need to contain fundamental components.

Faculty members rarely have much disagreement to the inclusion of such items on courses. Much of the work has involved commitment from the Dean and his vision of the College of Arts and Sciences. This has also

established a position of Distance Learning Coordinator within the College. Negotiations between chairs of the eight Departments allowed the department head to choose their content experts. The outline of the expectations and monetary benefits are discussed. Some of the departments have elected or nominated course developers. This integration within the infrastructure of the institution of the College has offered greater acceptance of the development of the Web and web-assisted courses. Monetary reward has also reinforced the Benchmarks in the CTDDP model. Continual dialogue and development of rapport has contributed to staff choosing to venture into the unknown.

Even though this can take some time, the best selection of experienced teachers has strengthened the status of Distance Learning in this College. This vision is attributed to the use of a departmental syllabus, one's peer, and lastly, a departmental head's input in the evaluation. As development of a course takes a few months, it allows faculty to discuss with peers their input into each of these projects. Input and frequent discussions with the professor developing the course by the Distance Learning coordinator has also provided moral support and buffer to issues that may not be addressed during Benchmark meetings.

Regular progress reports based on Benchmark achievements have also provided accountability to department heads and the dean. The attitude of openness and the decision to explore the use of technology has enabled many full-time faculty and adjunct staff to not only complete projects but also be champions in WSSU's course development. Fine Arts, Social Sciences, Humanities, English, Physical Sciences, Chemistry, Biology, and Mathematic departments have provided willing content experts to take on this challenge. A few of the departmental heads have taken on the challenge to better understand the system of development and be advocates within their departments. This integration has provided over 20 courses in development within 18 months.

## DISCUSSION AND REFLECTION

Since its inception, the CTDDP has been introduced to approximately 40 faculty members from a variety of departments.

## PURPOSE OF THE SURVEY

The purpose of the survey was to determine the following from course developers who were taken through the process of the CTDDP:

1. Benefits of online instruction and the added value to instructor and instruction.
2. What is the incentive for online course development?
3. Participant's satisfaction with the course development process and Blackboard training.
4. Level of support from CITTLE, the Division of Lifelong Learning and the Collegis Helpdesk.
5. Participant's level of satisfaction with policy and regulations regarding online course development.
6. Participant's level of satisfaction with the availability of workshops from CITTLE.
7. Participant's level of satisfaction with the experience of teaching online.
8. How useful and effective is the training? (usefulness/effectiveness and learning curve).
9. Participant's level of satisfaction with the time allotted for course development.

The evaluation was done in three parts, to gather data from course developers that were trained and administrative and contractual services offered to assist their teaching online. Twenty-five (25) electronic surveys were distributed between January and March 2005 to 25 full and part-time faculty over a 2 week period with an 80% return.

From these surveys we were able to determine the following:

1. overall, the online course developers feel supported and are satisfied with the CTDDP;

2. the CTDDP is beneficial as an improvement to already existing instruction.
3. although course developers believe there is sufficient policy in place to regulate course development, they would like tighter restrictions on plagiarism and copyrights; and
4. course developers display a deep interest toward the improvement to existing instruction based on the results of professional development as an incentive for participating in the CTDDP.

Experience has also revealed that considerations need to be made in the following areas:

1. consequences for missed Benchmarks;
2. evaluation and Institutional Support;
3. incentives;
4. copyright, course ownership; and
5. applying stricter procedures toward the monitoring of course developers and delaying payment.

A final consideration for the future of online course development at WSSU involves how policy makers will handle course ownership. The question that distance learning administrators must ask is, "Once an instructor leaves the university and has developed an online course that has been properly evaluated and taught, what then happens when a new faculty member joins the university faculty in the same discipline and will be teaching the same course?" Lastly, because of the capacities and various roles they play within the university, one of the constraints for faculty members has predominantly been time. Also, because of the offering and the demand for these courses, it has raised some concerns about the level of quality among faculty members who have not taught using this medium.

Obviously, there are a number of questions that still need to be addressed. In the future, policy makers will need to take all of these and more into consideration when developing online courses.

## CONCLUSION

The experiences gained from implementing this process present to the current disciplines of distance learning, instructional technology, and education, a direction that can be used for future research and development. These disciplines will benefit from the understanding gained in this document.

From the results of the survey, it can be seen that faculty see the use of a model of this type to be an overall satisfying experience. Faculty's perceptions on the use of sound instructional design principles indicate its' importance in higher education for best practices to be incorporated in distance learning courses and that those practices to be centered around pedagogical principles. With that in mind the model can better prepare faculty to develop courses for both online and face-to-face environments.

It can be further noted that there are implications for the design of online instructional environments that warrant further research. When faculty, administrators, and instructional designers give proper consideration to these implications using a collaborative approach, only then can the needs of the target audience be met; and this will ensure higher levels of success for distance learners in web-based classrooms.

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