

Blackboard Online Learning
a series of Instructional Modules

Instructional Development and Production
IT 5110
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Instructional Model/Approach

Analyze—Design—Develop—Deliver—Evaluate—Revise

My model for instructional design will be based on the traditional instructional design model (ADDIE). This model was chosen for several reasons. To me, this model is very rational. It lays out in step by step fashion the process I would go through in designing instruction. As one new to instructional design, I am leaning towards a model that may appear more visually simplistic, although as I look at the other models discussed in class, I believe that the processes involved with this instructional approach are as thorough as others.

Overview of the ADDIE Model

Step One: Analyze

Before I begin the process of actually building the instruction, I first must consider who the target audience will be. Several facts to know will be age of the audience, size of group, and the length of instruction. How will the lesson be delivered will be considered next. Several questions to be answered include will this be a web-based lesson? Will it be part of an online course, presented through a specific online course management system? Will this be a face-to-face instruction, or a combination of both computer-based and classroom setting? By understanding the audience, their current skills, and the setting in which they will use them, I will then move on to the next step in the process, which is design.

Step 2: Design

The first part of this step is to determine the overall purpose or objective of the instruction, in other words define the goals and objectives. If I can answer the question: ‘what is it that I want the learners to be able to do?’ at the conclusion of the instruction, I will clearly define the purpose of the instruction. If there are specific standards that must be met with the instruction, those will be also be factored in to the design phase. One aspect of the design step that I would like to borrow from the model by Dick, Carey and Carey is “based on performance objectives, develop assessments that measure the learners’ ability to perform the skills described in the objective.” This is a part of the design process which I will need work on developing at this point of the process, but it makes sense to incorporate assessment in this phase. After this, I will be ready to move toward the next step, which is developing the instruction.

Step 3: Develop

In the previous step I defined what the goals of the instruction would be, followed by objectives, or the means to how those goals will be accomplished. The lesson will need to be constructed to reflect how those objectives will be accomplished. Specific procedures within the lesson plan will be included to insure the objectives are met.

Step 4: Delivery

After the lesson has been developed, it must be delivered to the target audience.

Step 5: Evaluate

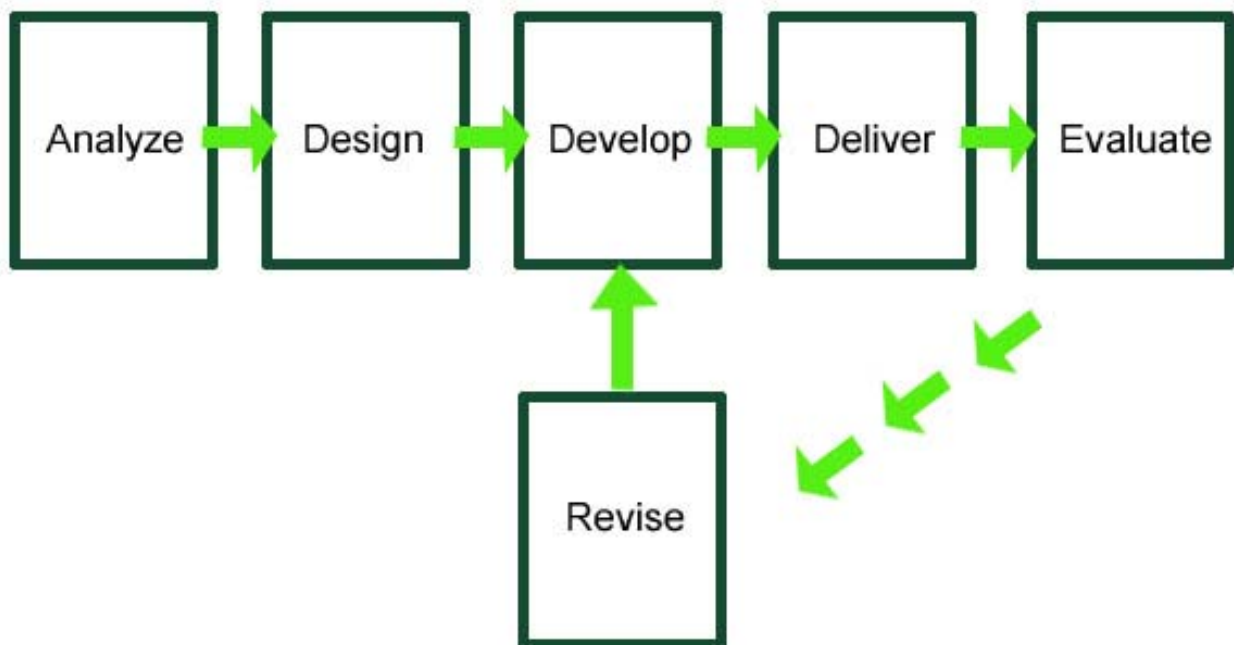
Finally, after the lesson has been delivered, the plan for evaluating the effectiveness of the instruction must be carried out. The use of formative evaluation, with one-on-one contact or small-group evaluation could be implemented. A written evaluation, or online evaluation, if that

is what was chosen in the Design stage for the user to complete, would be provided at this point in the process.

Step 6: Revise

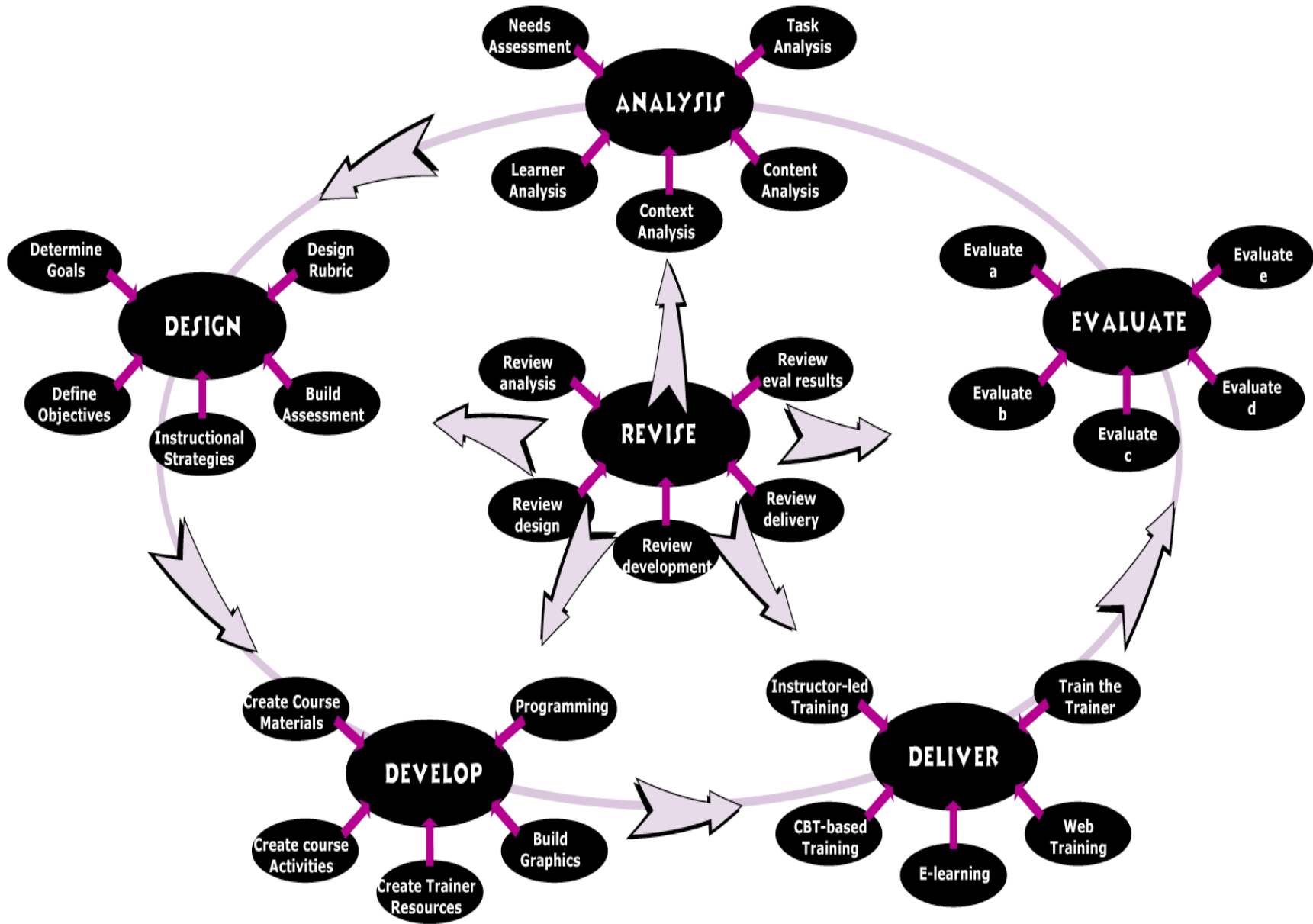
I would like to borrow from Dick, Carey and Carey an additional step, that of revising the instruction. The results of the evaluation need to be utilized toward improvement in future instruction, which may include Revisions in the Analysis, Design, Development or Delivery Phases.

Following is the Visual Representation of my original instructional design model, based on the ADDIE Instructional Model.



As this project has evolved, so has my understanding of an instructional design model. The following represents my visual representation of my revised model. I shall call it DADDIE Instructional Model.

I now view the instructional process as a continuum, represented with a circular versus linear design of the original model. The individual phases that make up the entire instructional design process weave into each other, with a strong connection in the revision phase between each part of the process that not only happens at the end of the process, but throughout the entire instructional design.



THE ANALYSIS PHASE

Define the Internal/Institutional Goal

At a local community college, there is a growing offering for online courses. Currently there are over 400 online courses offered each semester through the Blackboard e-learning portal. There are face-to-face workshops offered each semester for new and returning online students. These workshops generally last 1-1/2 hours, and are offered 5-6 times at the beginning of each semester. These face-to-face workshops, although assumed to be valuable to those attending, serve only a small number of the more than 3000 students who are participating in online courses each semester. Currently 1 full-time position exists to assist faculty and students with the ongoing, daily challenges of teaching and learning online. The demand for the e-learning manager's time in the development of faculty training materials and constant system-wide training limits the hours available for teaching these face-to-face workshops. Alternative instruction must be developed that will utilize online venues for teaching these student workshops that have historically been taught in a classroom setting.

Define the Learner Goal

The primary goal of this instruction is to enable student learners to more effectively learn the Blackboard online learning environment through a self-paced learning module.

Needs Assessment

In order to meet the Learner goal described above, learners will need to do the following:

- A. Log-in to the Blackboard portal.
- B. Navigate through the various areas of the Blackboard portal.
- C. Use the email functions in the Blackboard portal.
- D. Participate in an online discussion in the Blackboard portal.
- E. Use the digital dropbox to send an assignment in the Blackboard portal.

Learner Analysis

Based on the past four years of personal interaction with the students participating in the face-to-face sessions, I know the following about the intended training audience:

1. These are primarily students who have never taken online courses in the Blackboard course management system or,
2. These are students are seeking a refresher in the Blackboard interface.
3. Students range in age from 17-60+ years of age.
4. Many of these users have expressed interest in taking classes online because they are also working adults with full-time careers.
5. Students are highly computer-literate, or know very little of the basics of computer use, including word processing and file management.

Students who have never taken online courses before may be timid in approaching the Blackboard portal. They will be completely unfamiliar with the layout of an online course and will be new to the terminology used in online education. Thus, there will be a need for straight-forward language, and the inclusion of a glossary of terms to help familiarize them with the online environment.

Students seeking a refresher course in the Blackboard interface may want a module that lets them pick and choose the specifics of what they need retraining on.

Because of the vast age differences, the approach to online training will be considered. The use of a highly interactive learning activity may be appropriate for a student in their teens or early twenties, as they have already been exposed to interactivity online. But for the adult learner, an approach with less “bells and whistles” may be more productive for learning.

The fourth characteristic of the learners listed above indicates the need for a practical, time-efficient approach to the online module. These online learners do not want to spend several hours going through a module to learn the how-to of online learning. They want to the point instruction so they can effectively work in the online environment.

Finally, the fifth characteristic of our training audience indicates they possess a wide range of computer skill levels. Although the scope of this project will not include a module component for word processing and file management, these are considered basic computer skills. They are necessary skills to have prior to beginning an online course, or the student must have a plan to gain these skills early on to promote success in the online learning environment. A list of prerequisites will be provided in the online learning section of the web site to address this.

Content Analysis

Existing materials and resources

Currently a 1 to 1-1/2 hour workshop is presented 5-7 times at the beginning of the semester. At this workshop, a one-page outline is provided to the students, along with a set of practice exercises to be completed throughout the training.

There is also a web page document that provides information about logging in to Blackboard, and other basics available at <http://www.arapahoe.edu/online/orientation.html>. The web page is informational only-it does not include any practice exercises.

The current online support area has provided a self-assessment for anyone interested in taking online courses at <http://www.arapahoe.edu/online/selfassessmt.html>. All potential online students are encouraged to review this information to determine if the online environment is right for them prior to the start of classes.

Finally, a list of technical requirements for taking an online course is at <http://www.arapahoe.edu/online/techreqs.html>. This provides the student the opportunity to assess their current computer access. Although it cannot be assumed that all online students have taken time to do these assessments, self-motivation does play a role for successful learning within the online environment.

Because these resources currently exist, they will be defined as prerequisites for all online students. It will be recommended that all new users complete the self-assessment to determine if they are appropriate learners for the online environment. Secondly, all new users will be asked to review those technical requirements for online learning. If the student does not have updated

hardware and software, they will need to purchase those things prior to the start of class, or make arrangements to use the open lab on campus. If both new and returning users are unable to satisfactorily complete the self-paced learning module developed for this project, they will be encouraged by their online instructors to attend the face-to-face sessions for Blackboard while they are still offered.

Task Analysis

In this project, there will not be a task analysis performed.

THE DESIGN PHASE

Define the Learning Objectives

Based on the analysis, following are my defined learning objectives. These will be used to build the course's design, learning activities and assessments.

Goal: The learner can log-in to the Blackboard portal.

Objectives:

1. The learner will successfully log-in to Blackboard.

Goal: The learner can navigate the Blackboard portal.

Objectives:

1. The student will locate the syllabus and identify the objectives of the class listed in the syllabus.
2. The student will locate the Course Information and identify 3 sections within this area.
3. The student will locate the Announcement section and identify the date of the 1st announcement posting.

Goal: The learner can participate in an online discussion.

Objectives:

1. The student will respond to an existing threaded discussion.
2. The student will begin a new threaded discussion to introduce themselves to their classmates.

Goal: The learner can use the email functions in the Blackboard portal.

Objectives:

1. The student will create a new email and send to their course instructor.
2. The student will create a new folder within email and rename it Saved Messages.
3. The student will move a current message into the Saved Messages folder.

Goal: The learner can use the digital dropbox to send an assignment.

Objective:

1. The learner will send a completed scavenger hunt to the instructor via the digital dropbox.

Now that the learning objectives have been defined, I will describe the learning strategies planned to accomplish these objectives.

Define the Instructional Strategies

How will I teach to those objectives? The approach will be two-fold:

1. the development of an online instructional module within the Blackboard portal;
2. the development of a downloadable Learner Guide.

The online module will be developed to include several short lessons, including brief descriptions and screen shots directly within the Blackboard portal. This will give the learner a verbal and visual representation of the navigation and use of the portal, and a chance to have hands-on application leading to knowledge of how the system works and how they will be working within the system.

The downloadable learner guide will be a supplement to those students who do not feel as comfortable jumping right in to the online environment. By providing them a manual that they can utilize while they work through the above module, they will have both the “traditional” approaches to learning through a written in-hand supplement along with a digital, online hands-on approach. The downloadable manual will combine step-by-step instruction for using the Blackboard portal along with screenshots of the portal interface.

The online module will be set-up for all students to access. They will all be “enrolled” in the Blackboard Online Learning course. They will view the learning modules, download a copy of the Scavenger Hunt and complete it. At the completion of the module, they will then utilize the digital dropbox to send the completed Hunt to the instructor for the training as well as email a copy to their online instructor in their credit classes. This will allow the Learning manager the ability to provide an evaluation of the training and will also give the instructors information about their students’ knowledge level at the beginning of the semester. Some instructors may choose to require this training, and can provide extra credit for all students accurately completing the module.

The following chart illustrates how these instructional strategies interplay with the objectives and the assessment piece, to be described in the next section.

Objective	Instructional Strategy	Assessment
The learner will successfully log-in to Blackboard.	<p>Directions are provided to the user on the Log-in Screen for Blackboard.</p> <p>Camtasia presentation complete with audio created for logging into Blackboard, available under Online Learning on the college website.</p> <p>Instruction will be provided in the Learner Guide, downloadable on the Online Learning section of the ACC website.</p>	Submitted Scavenger Hunt identifies the opening announcement message sentence.
The student will locate the syllabus and identify the objectives of the class listed in the syllabus.	Camtasia presentation complete with audio compressed for online viewing through Flash player	Scavenger Hunt: Identification of the objectives of the class listed in the syllabus.
The student will locate the Course Information and identify 3 sections within this area.	Or Build HTML files and include screenshots with appropriate directions within the Blackboard portal	Scavenger Hunt: 3 sections identified within this area.
The student will locate the Announcement section and identify the date of the 1 st announcement posting.	AND Learner Guide provides screen shots and instructions.	Scavenger Hunt: Date of the 1 st announcement posting identified.
The student will create a response to an existing threaded discussion.		Scavenger Hunt: Response to an existing thread completed and date indicated.

The student will begin a new threaded discussion to introduce themselves to their classmates.		Scavenger Hunt: New threaded discussion started and date indicated.
The student will create a new email and send to their course instructor.		Scavenger Hunt: Email sent to instructor with subject line “Your Name, Class Name” and brief narrative of what they hope to gain from the online learning module.
The student will create a new folder within email and rename it Saved Messages. The student will move a current message into the Saved Messages folder.		Scavenger Hunt: New folder created in Saved Messages and named message moved into folder. Email sent to instructor with narrative of new named folder.
The learner will send a completed scavenger hunt to the instructor via the Digital Dropbox.		Scavenger Hunt: Copy of Scavenger hunt successfully submitted through the Digital Dropbox to the learner’s online instructor.

After the Scavenger Hunt results have been sent to the instructor within the Blackboard Online Learning course, the instructor will need to go to the Discussion Board area and make an observation of who completed what. Also, email received from the student will indicate if they were successful in their efforts to send an email, and create a folder. Ideally, students could take a screenshot of the email area with the new folder, and copy/paste the screenshot into a document. With some very new computer users this may not be a reasonable expectation and additional training and guidance would be necessary. Therefore, this will not be incorporated into the Scavenger Hunt at this time but may be an aspect to incorporate at some later date to facilitate the evaluation process.

Define the Assessment

Following is the Scavenger Hunt that will be given to the student to complete after they have finished the Blackboard Online Learning course. By successfully completing this Scavenger Hunt, and then submitting to their online instructor through the digital dropbox, the course instructor will know if the online student has learned how to use Blackboard.

For those attempting the Scavenger Hunt, but are unsuccessful in completing or submitting it, I will need to develop a plan for some type of follow-up for relearning. This could simply be to instruct the user to repeat the training module, and attempt to complete the Scavenger Hunt. A second approach could be to instruct the student to call the Online Support manager for clarification of specific needs, or their course instructor. Finally, there is a Help section for Blackboard users online that the user could be referred to for further assistance.

Blackboard Online Class Scavenger Hunt

<http://arapahoe.blackboard.com>

Directions:

Go to the ACC Blackboard website, <http://arapahoe.blackboard.com>.

After logging in, briefly respond to the following questions. When completed, use the digital dropbox to send a copy of this file directly to the Online Learning Manager. Also email a copy of this document to all of your Course Instructors.

Your Name:

- Identify the opening message to all users upon logging in to Blackboard.
- Locate the course syllabus. Identify the objectives of the class listed in the syllabus and write those objectives here. Hint: copy and paste the information.
- Locate the Course Information. Identify 3 sections within this area and tell me what sections you found.
- Locate the Announcement section. Identify the date of the 1st announcement posting and tell me what it is.
- Locate the Communications section. Respond to an existing thread written by one of your classmates. Tell me who you responded to, and the subject of the thread.
- In the Communications section, begin a new threaded discussion to introduce yourself to the rest of your classmates . Tell me the date you complete this.
- Locate the Email section. Send your instructor an email with the Subject line "Your Name, Class Name". Tell your instructor what you hope to gain from this class.
- In the Email section, create a New folder, rename it Saved Messages. Move a current message into the Saved Messages folder. Tell me the Subject line of the message you have moved into the folder.
- When you have completed your Scavenger Hunt, use the digital dropbox to send a copy of this file directly to this Course Instructor. Also, please email a copy of your completed Scavenger Hunt to your other online course instructors.

THE DEVELOPMENT PHASE

As planned in the design phase, following is the list of products that will be developed for the learners.

Course Materials

The course materials include all the modules for the Blackboard Online Learning course. The first module is the log-in module, developed in PowerPoint, Camtasia, and Adobe Audition then presented as a Flash movie within an html file. The subsequent modules will be the series of components within Blackboard that the learner will be introduced to. These modules will also be developed in PowerPoint, Camtasia, and Adobe Audition and presented as a series of Flash movies within html files. These html files will be developed in Dreamweaver and linked together.

Also as part of the course materials, the accompanying manual for the Blackboard Online Learning course will be developed. This manual will be developed within Microsoft Word, using the screenshots from the PowerPoint presentations, and written instructions which reflect the above modules. When completed, this manual will be saved as a pdf file in Acrobat.

The Blackboard Online Learning course that all students will be enrolled in to access these training materials will need to be developed within the Blackboard content management system. This includes setting up an initial shell for the course, choosing the overall look and design of the navigational buttons, and adding all of the above content to the course.

A short survey will be developed for all users that complete the online training. This survey will be presented within Blackboard and will be used to evaluate the course effectiveness.

Course Activities

The Blackboard Online Class Scavenger Hunt will be developed in Microsoft Word as outlined above in the Design phase. It will be provided as a downloadable document in the Online Learning Module.

THE DELIVERY PHASE (IMPLEMENTATION)

The context for the delivery of the instructional modules will be online. The initial Flash presentation for logging-in to Blackboard will be provided in the Online Learning section of the College website. The entire series of learning modules will be available in this same location. Although the preferred method for obtaining the information will be for the learner to access these modules after logging into the Blackboard portal, there will be the timid computer user who would prefer reviewing all of the information prior to even attempting to log-in to Blackboard. The Scavenger Hunt will only be available within the Course Documents of the Blackboard Online Learning course.

The step-by-step Manual discussed in the Development phase will also be available through the Online Learning section of the College website. This will allow the learner to download and print the manual as an in-hand guide to utilize while they participate in the Learning Module.

Opportunities and Challenges

One of the biggest challenges facing any type of learning is the need for instruction to be accessible for everyone. The online needs of the visually and hearing impaired are often overlooked especially as the technologies to create bells and whistles become increasingly affordable and available to the masses. To facilitate this learning challenge, the Learning Manual planned in pdf format for downloading should also be available in an alternative format, such as .doc or .rtf—formats more easily read by screen reading software. A copy of the Manual in .doc format will also be sent to Disability Services to assist learners.

An opportunity for reaching out to other Distance learners could be the placement of the entire Learning Module, including the Log-In piece and the Manual on a CD-R. Although distance education is available to anyone with a computer and an ISP, there are users who only have a dial-up modem. This makes even small compressed Flash files and pdf documents time-intensive for downloading. For those individuals who request it, a CD could be mailed to their home.

THE EVALUATION PHASE

Why is it necessary to evaluate your learning product? How might an evaluation help with this particular lesson?

It is critical to evaluate the learning product, to know if you have accomplished what you set out to do, primarily to meet the learner goals and objectives. You also want to know if your analysis was on target, and if you were able to effectively design, develop and implement the instruction. For my specific instructional lessons, I need to know if these lessons have value. If they don't have value, I need to determine what change is necessary in order to add value for my learners. As for the organization, several individuals would like the training department to have more support for the online students and faculty. If these instructional modules prove to be of value, it will justify not only the current staff hours which have been dedicated to design/development, but it could justify the need for further support, benefiting the learners as well as the faculty.

Provide a brief explanation of what model you would choose to base your evaluation plan on.

I am choosing the Kirkpatrick model as I believe my project more effectively lends itself for application at Level 1 and Level 2 of this model of evaluation. Based on the results of the survey that is available in the Course Documents at the end of the modules, I can evaluate the learners' attitudes about the learning modules, which correlates with Level 1 of the Kirkpatrick model. Based on the results of the Scavenger Hunt assessment piece that has been designed for the learners, I can compare the objectives that were laid out with that assessment result and evaluation model to determine if learning has been achieved. This correlates to Level 2 within the Kirkpatrick model.

Briefly describe an activity you would plan to evaluate your product. Provide details about what type of data you would collect, how you would collect the data, and how you might analyze this data to achieve the desired results.

The learners have been instructed to use the digital dropbox to submit their completed Scavenger Hunts to the Online Learner Instructor. The results of these Scavenger Hunts can be entered into a spreadsheet, and then be analyzed. Specifically what will be compared are the answers to each of the questions with the objectives that were set forth in the design phase. For example, if there were 50 submissions of the Scavenger Hunt, and 100% of the learners correctly identified the opening message to all users upon logging in to Blackboard (Scavenger Hunt question 1), this would indicate that 100% of these learners successfully logged-in to Blackboard. Further, this would indicate that objective one has been met. I might deduce that the log-in module is adequate and will not need further revision. However, if only 50% of the returned Hunts indicated the correct answer, but the rest of the Hunt was completed, I should review the instructions within the Hunt and recheck the Learning Course to assure that the message is properly displaying.

A further example might be the following: out of 50 submissions for the Scavenger Hunt, only 50% of the learners successfully participated in the Discussion area. I should review the Learning Module for the Discussion Board to find what needs to change to clarify the instruction.

The second approach for evaluation would be to ask the learners how they benefited from this training. After the student submits the Scavenger Hunt, the final module will be to ask for their input through an online survey within Blackboard. The results of the survey will be compiled in a spreadsheet format within Blackboard, and this file can then be downloaded by the instructor of this training and analyzed.

THE REVISION PHASE

After implementing these Instructional Modules, and evaluating their effectiveness for the learners, the overall project will be revised as needed. This may include revisions that start at the initial Analysis phase of the project, all the way through the Implementation. Clearly, if the goal for the learners is not met a plan for revisions will be discussed and then implemented.

A second aspect of the revision phase is that which takes place throughout the entire project. Through each phase of this project, I have had opportunities to step back and ask if I am on track. At those points in the process, I have done revisions, especially in the design stage of this project.

CONCLUSION

The application of a chosen Instructional Design Model to the Blackboard Online Learning instructional modules project has been very educational. One of the primary reasons results from the process of thinking through each phase of the model and then thoroughly discussing the application of that particular phase to this project. As I continue to have new experiences in this field and through the Instructional Learning Technologies program, it will be worth watching for the further evolution and application of the model that resulted from this early project.