

# PREPARING STUDENTS FOR ONLINE EDUCATION: A Case Study of a Readiness Module

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**Abstract:** Online education should foster a sense of autonomy, initiative, and creativity for students while encouraging questioning, critical thinking, dialogue, and collaboration. Two theoretical approaches that are particularly applicable in online learning are constructivism and active learning, which suggest that learners actively create knowledge and meaning through experimentation, exploration, and the manipulation and testing of ideas in reality. In order to have students experience and explore the online environment, Delgado Community College (Delgado) students will demonstrate an understanding of the technical skills needed for online courses by successfully completing the assignments within the learning module Online Ready. Students with an understanding of the online learning environment at Delgado have a greater rate of success in their online courses than other students.

## 1 INTRODUCTION

The Student Readiness and Retention subcommittee of Delgado Community College (Delgado) was charged to find/develop an online proficiency testing device for prospective online students in order to assess their readiness for taking courses online. This group was also to determine the processes for administering the test and retrieving data and suggested strategies for reporting the information. In 2008, the committee adopted three main objectives:

- Develop a “Self Help” feature to assist students
- Administer end-of-semester surveys and collect other data
- Create Self-Assessment and/or placement (recommendation) test

The committee created Delgado’s Online Readiness Module (DORM). It is an online learning module that was developed to give students access to online technical techniques and learning success tips as well as library research skills. It is self-guided with assignments including discussions, e-mail, and tests.

DORM contains a combination of automated features and interaction with instructors. The overarching purpose is to share the necessary tools that students use in the Course Management System and are needed in distance education in order for students to succeed in their credit bearing courses.

## 2 INSTRUCTIONAL AND INSTITUTIONAL PROBLEM

Delgado faces the problem of lack of classrooms available as the population of students continues to grow from nearly 10,000 in Spring 2006 to over 20,000 students in Fall 2011 (Distance Learning Statistics, 2011). In 2005, nearly 45% of the physical campus (40% were classrooms) became nonoperational due to damages from Hurricane Katrina (Hurricane Katrina Chronicles, 2006). Only one of the closed buildings has reopened and three others were destroyed to allow for one new building that has yet to be built. Classroom space is a major issue.

The lack of classroom space and the growing population of students forced more online courses to become available. Students are ill prepared for this transition. Many students that register for online classes are unsuccessful (Diaz, 2002).

According to Distance Learning Statistics (2011), nearly 30% of students report needing help with the Course Management System, study skills, and/or other assistance. Because classroom space is an issue, the available courses during late registration (the period of two days after classes start) are generally online courses. Sixty four percent of students that register during late registration fail their online courses.

It has become clear to the committee that students need certain level of preparedness in order to succeed in their online credit-bearing courses.

The combination of lack of student preparedness and scarcity of classroom space are persisting problems to the institution. Conversely, they also present the opportunity to use DORM to prepare students to maneuver through their courses and college commitments.

## **2.1 Instructional Goal**

The purpose is for Delgado students to demonstrate an understanding of the technical skills needed for online courses by successfully completing the assignments within Delgado's Online Readiness Module (DORM).

## **2.2 Instructional Objectives**

Using DORM, Delgado students will demonstrate the appropriate computer skills for success in the online component of the Course Management System necessary for successfully performing in an online course.

Using the Course Management System, Delgado students will identify the components of the Course Management System site and will be able to use them accurately for the course.

## **3 LEARNER ANALYSIS**

The learners are students from Delgado who are enrolled in online courses for the first time or have not successfully completed an online course. Success is defined as having a final grade of "C" or better using Delgado's grading scale. The purpose is to use DORM to show students how to technically maneuver around their online courses and expose them to study and library skills. It contains various information regarding the expectations of an online course as well as study skills specific to online learning.

During the pilot phase, thirty eight (38) percent of students responded to a survey regarding the DORM. Other information came from statistics available from the College as well as a questionnaire sent to online students at the beginning of the semester. These sources gave information that was used in analyzing the learners.

### **3.1 Entry Skills and Prior Knowledge**

In order to accomplish the goals set forth in this instructional design, students at Delgado must possess certain skills. Any student can take an

online class. There are no prerequisites to taking online classes at the community college or requirements that students have to take remedial or developmental courses prior to enrolling in an online course. While there are no formal requirements, it is expected that the student knows how to use a computer and maneuver the internet.

Presently, in addition to admission general requirement, students do not need to provide verification of any entry level skills prior to taking an online course. The understanding is that students must have minimal computer skills. Any further skills can be acquired through the method of instruction provided in DORM.

### **3.2 Attitude toward Content and Academic Motivation**

Students certainly have predisposed opinions about online learning. Many students believe that they can do an online course simply because it is online. Others think that it may be easier (Smart & Cappel, 2006). However, there are certain computer and internet skills required to be successful as well as possessing study skills (Roper, 2007). This misconception of online learning creates friction between the student, faculty, and Course Management System.

Students were surveyed and they responded to the need for a course that would incorporate teaching technical and study skills. Some of the comments involved the suggestion that this should be for new online students only since they "already had experience with the Course Management System prior to attending Delgado" or even with Delgado. The suggestion of having only students new to online courses take the module was helpful in determining the next phase of DORM. The first cohort was first time freshmen until it was determined that students with no prior successful online experience at Delgado should be included.

Other students view the technical aspect as cumbersome and had comments that involved "the Course Management System site [being] poorly designed." Does this comment mean that the student is experienced with online learning enough to say that it is poorly designed or was so cumbersome for the student that it is viewed as a poor design? Or, is it may be cumbersome because of the lack of technical skills? Only further questioning would answer that. However, taking the latter option will help more students. This is why it was decided to focus on very specific technical tasks.

In 2004, a policy from the Louisiana Community & Technical College System suggests

that all schools must have an online student orientation for electronically-delivered courses (Student Orientation/Courses as Prerequisites for E-Learning Instruction, 2004). However, Delgado cannot mandate that the module be taken prior to an online course due to various logistical reasons. Instead, it is being strongly encouraged with students being automatically enrolled in order to satisfy the policy stating that students should have an orientation.

Students made comments that they “did not get credit” for completing the survey, thus showing the importance for earning some sort of reward for the completion of non-required activities. This reward could simply be built into the course by the faculty member. When offering success in online courses is not enough of a reward, further investigation on what motivates students and what the College can do to motivate students is necessary.

### **3.3 Educational Ability Levels**

Generally, online courses carry the same level of passing success as classroom sections. This indicates that the ability of the students to succeed in online courses exists. Learning in the environment in which performance is to be expected may be very helpful to the students.

Eleven percent of students from the Spring 2009 survey report taking online classes because it is the only section available. This is a combination of online being the only mode of instruction for that course that semester along with classroom sections being full at the time the student registered for classes.

Twenty-eight percent of students reported needing technical, study, and/or computer skills prior to starting an online class (Richard, 2009). Students realize that they need assistance when it comes to taking online courses. Because a high percentage of students fail online classes after registering late and a third of our students want training, emphasis was placed in having DORM offered during the first week of class.

### **3.4 General Learning Preferences**

Some students suggested that the orientation should be given in person while others expressed that it would be helpful to have an orientation in the same environment as their course. This is interesting as in-person help is available at the beginning of the semester. This suggestion from students tells us that the in-person help needed to be better advertised; it is now.

In addition, students expressed an interest in learning by going through PowerPoint presentations and a virtual tour of the site. These suggestions helped guide the incorporation of these elements into DORM.

After exploring the notion of offering DORM to first time freshmen, the target student became those without online course experience. DORM was launched with students that have not been enrolled in online classes in the past. Students that have not failed or withdrawn from an online class were excused from taking the module.

A questionnaire was administered to place this group into three categories: (1) those that must take the module, (2) those that could use the module, and (3) those that do not have to take it, but have access to the information. We also created a standalone version without instructor interaction where all students have continued access to these resources.

## **4 ASSESSMENT PLAN**

There are different levels of skilled students in DORM. The instructional goal is for Delgado students to demonstrate an understanding of the technical skills needed for online courses by successfully completing the assignments within the learning module.

The Assignment section contains a brief overview of the deliverables that the students will be responsible for. The Course Deliverables which must be completed in order to successfully pass the module are:

1. Written Assignment
2. Discussion Assignment
3. Send and Receive E-mail Activity
4. Am I Online Ready? Quiz

The assignments have clear instructions on how to complete them as well as direct students to three places where they can get help: (1) the Course Management System Skills folder in the Course Documents tab (2) the Delgado Live website under the Help button, and (3) the Ask the Instructor section.

Assignments are aligned with the goals and objectives set forth by the committee in order to solve the original problem. Assignments should be completed in this order with the Written Assignment being first and the Quiz being last. Once the e-mail activity is done correctly, students receive a password in order to take the quiz. The quiz is graded automatically and it assesses students on previous tasks.

The performance assessments were designed to be attempted as many times as needed in order to complete the assignments successfully. This type of practice along with the proper feedback helps students succeed in order to master the various tasks. Those that do not achieve mastery on their first attempt, will continue to attempt it using the feedback given and the other assistance tools in order to complete the assessments successfully. The students complete the assignments in order and if done effectively, they pass DORM.

## 4.1 Description of Instruction

This course-like module was designed to provide students with information and applications in three major areas: (1) Study Skills for Online Students (2) Course Management System-specific Knowledge, and (3) Library Skills. DORM is not mandatory; therefore, making sure students understand the purpose of the module and how beneficial it is for them is crucial.

Students are informed via email that they are enrolled in DORM. There are also signs on campus guiding students to check out the DORM. Within DORM, clear instructions are given in the form of an initial announcement letting students know where and how they will start the course. Students are directed to explore by using the tabs of the course menu. Under the Assignments, students will find a set of steps to guide them through the course in order to experience the Course Management System-specific areas.

The students follow various tabs where they find information regarding what types of items can be found in those same tabs but in their credit-bearing course. The first tab includes the Announcements. This is followed by Course Information where the students see information regarding what a syllabus is, the differences between online, hybrid, and traditional courses, as well as information on quizzes, discussions, assignments, and more.

The next tab contains the contact information for the staff member facilitating the module. It has a description of what type of information can be found in this section. The next tab contains the majority of the content. The Course Documents tab has a brief description of what items are normally found in this folder. It also contains three folders with videos, PDF documents, power point presentations, and other information dealing with the three major areas previously stated. The content is presented in various ways so that the students can find the learning method they feel most comfortable with.

In order to have the most students complete the module, the help of instructors will be needed. The students will see the course in their Course Management System course list. They receive an e-mail letting them know that they are enrolled in this module and its purpose, and their regular course instructors let them know of this module opportunity. The important part is to relate the relevance of DORM to their online learning success.

While most of DORM is meant to be an automated function, there is a faculty member assigned to facilitate the course. The faculty member is tasked with reviewing questions and comments that may come via e-mail or discussion. The faculty member is also responsible for monitoring site activity and guiding students through difficult situations as well as offer announcements that may help students successfully complete the module.

Students are assured that help is just fingertips away. It is important to let them know that they have several tries and that they can feel free to seek help. Questions are generally answered by guiding students back to the content where they can locate the information they seek. This is done so that students can be self-subsisted and break the reliance on the instructor.

After DORM, students receive a survey to see what they think of the module and determine how it benefits their online learning. In addition to the survey, the students' performances in the module are correlated to their midterm status and grades as well as their final status and grades.

## 4.2 Formative Evaluation

DORM ran in three phases: (1) test, (2) pilot, and (3) implementation. The test run was given to administration and a few students. Administrators were selected because of their relationship to the committee and vested interest in the module. In addition to this group, a few faculty members that are not online instructors were asked to participate in the test. A few students who are part of the Student Government Association were asked to participate. The participants of the test run were asked to answer six questions regarding the module in order to help improve it.

The pilot was conducted with the students of subject-matter expert faculty members. A formative evaluation questionnaire was delivered electronically to students asking them to share their opinions of the material, the assignments and tasks, and provide any general comments. Students also

were asked to describe how helpful, if any, they found DORM to be for their academic success.

During its first implementation, all incoming freshman students were enrolled in order to continue to modify the offerings. The success rates were similar to that of the pilot where 80% of students completing DORM passed their credit-bearing courses.

The need for a Library Services section was identified and this section has since been added to DORM. Data collection was a tremendous part of the work accomplished. The need arose to house the data being collected in an easier to use manner. Our current Student Information System (SIS) is being used to house the completion rate of students. A field under "Testing Information" was created and named ONRED. Three reports have been created to facilitate this effort:

- CSV format file of online students with a final grade of "C" or better in any previously completed online course and no ONRED TEST ID. This job produces transactions to update ONRED TEST ID
- CSV format file of online students for a semester with no ONRED TEST ID. This is used to populate DORM
- CSV format file of online students for a semester and grades. This is used to populate ONRED with DORM completion rates and grandfather code

Using the reports above made it easier to upload and download data and therefore identify first time online students.

Most recently, during the Fall 2011, there were 2,372 first time online students. In DORM, the following data was collected:

- Over 62% of students enrolled in DORM accessed the course
- Of these students, nearly half of them were unique users that accessed tutorial pages
- An average 30 clicks per person in tutorial material content pages were used
- Over 23% of students actively participated in discussions
- Only 4% of students had issues and/or posted questions

Since DORM's implementation, 77% of students that completed assignments in the DORM successfully completed their credit-bearing courses with a final grade of "C" or better. This shows the continuous display of the previous data of 80% of DORM students being successful in credit-bearing courses during the pilot. In comparison, 71% of all online students not in

DORM successfully completed their credit-bearing course with a final grade of "C" or better.

While the above may not be such a significant difference, this shows that DORM continues to assist students with the technical skills necessary for Online Learning success.

## 5 CONCLUSION

The committee will continue to assess the current effectiveness of the module. Using an instrument within the module a profile of students can be created. This is correlated to different variables such as grade, major, class status, and previous online experience in order to determine if the product we have developed continues to be useful.

Determining the level of usefulness is important. This can be done by comparing various student groups: (1) those that did not take the module and see how they did in their online course(s), (2) those that did take the module and passed their online course(s) for the semester, and (3) those that did take the module but did not pass their online course(s). This will help shape the future of DORM and help determine the classification of students that should be taking the module.

The focus has been the successful student and now we are shifting to further analyzing the unsuccessful student. For example, data to explore include the correlation between those that ask questions and those that are not successful in online courses as well as determining the success ratio of those who access the DORM, those who access material as compared to completing and not completing assignments.

The next step for the DORM involves expanding this tool to Flex and Hybrid courses with the eventual intention of having all students enrolled in this Readiness Module.

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