

New Distance Learning Classroom at CNM

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Abstract

This report provides an integrated literature review of current online-teaching-and-learning Best Practices and makes recommendations for the rollout of the CNM DL Classroom, in accordance with the requirements of the summer 2013 DL Classroom Ambassador project. To provide context, the report outlines the current state of online course design at CNM and peer institutions. A detailed examination of Best Practices for online course design is also included. Our findings are that the DL Classroom provides an excellent model for common course design due to its alignment with Quality Matters (QM) standards, as well as its adherence to Best Practices in the field. In order to meet the fall 2014 institution-wide implementation of the DL Classroom, Deans are provided with a database that will allow them to work with Associate Deans, Chairs, and DL faculty to create individual timelines for the transition to the DL classroom. The report also contains recommendations for further research into the use of mobile devices, and the full implementation of the QM-peer review process at CNM.

New Distance Learning Classroom at CNM

Central New Mexico Community College (CNM) has provided online classes since the beginning of this century. This year, CNM committed to move from an unstructured design model to a new, structured online classroom that will bring more consistency for students and faculty. Because there are over 600 online instructors at CNM who teach courses ranging from one class to as many as seven, the transition to the new classroom must be carefully managed to meet the deadline for 100% transition by fall 2014.

In this project, we were tasked to document what is happening in Distance Learning in peer institutions and document the current state of the distance learning classroom at CNM. We reviewed current literature to determine best practices. We have met with the Deans and other institution-level administrators, as well as faculty and staff, to determine best practices for developing a roll-out plan for the Distance Learning classroom.

The new Distance Learning Classroom configuration is tailor-made for Quality Matters (QM) standards. QM is recognized nationally as a benchmark for online classroom delivery. The new classroom environment is a template that provides the same structure across disciplines, which will make it easier to master navigation and meet course needs for both teacher and learner. It will greatly improve alignment between syllabi, course descriptions, learning objectives, assignments and tests.

As of August, 2011, Marketdata Enterprises characterized Distance Learning as a \$60 billion industry that was being used by 6.2 million students (Enterprises, 2011). While overall enrollment has decreased in recent years, growth of online use is still significantly outpacing face-to-face classrooms (Lytle, 2011). Nationally, many community colleges and universities have adopted, or are planning to adopt a structured approach to online course design. The DL Classroom will provide structure based on QM standards of course alignment in order to improve CNM's online course offerings across the board. In adopting the DL Classroom, CNM will take a leadership role in online course design relative to other New Mexico community colleges.

Current State of Distance Learning at CNM

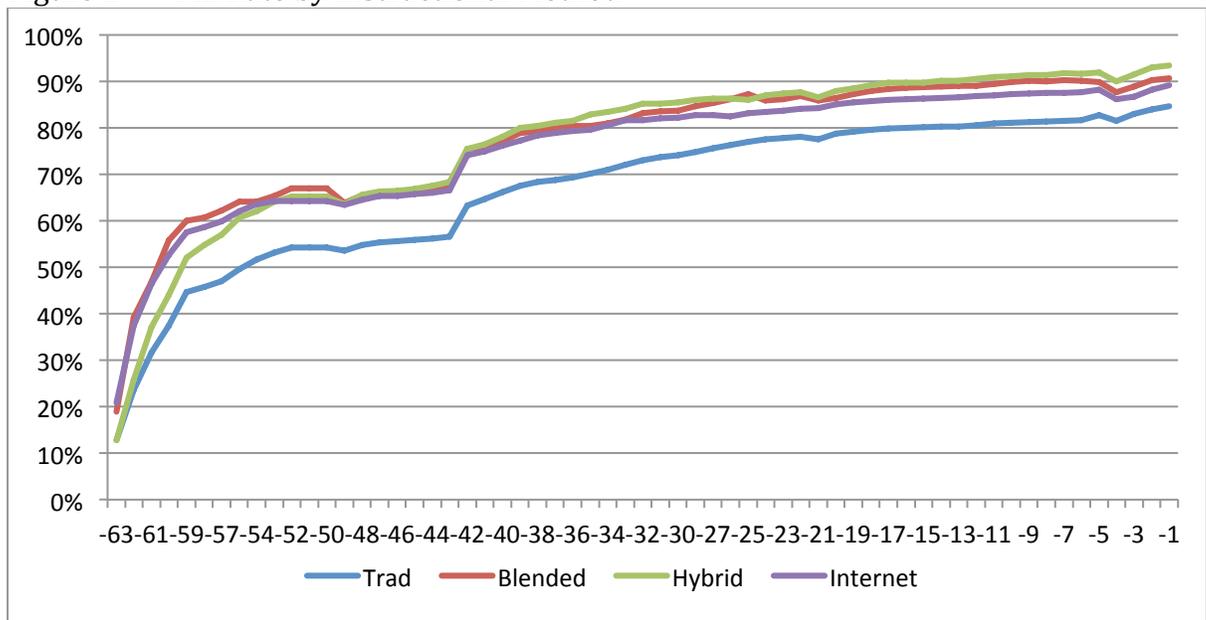
At CNM there were 539 online courses taught in spring of 2013, and by the summer of 2013 online courses accounted for nearly 24% of all courses, according to data provided by the Distance Learning Division. Further, even though an exact number is not currently known, it is estimated that a significant number of faculty are using Blackboard for tests and assignments in face-to-face courses. The use of Blackboard in face-to-face delivery is a significant point in future planning.

Classroom retention data are also significant. Statistics provided by the Distance Learning Division compared distance learning classes with non-distance learning classes from fall of 2010 through summer of 2012. Distance Learning classes maintained higher retention rates. The results can be seen in Table 1.

Rates	Fall 2010	Spring 2011	Summer 2011	Fall 2011	Spring 2012	Summer 2012
Non-Distance Learning Rates	64.9%	65.3%	68.1%	68.5%	70.7%	73.2%
Distance Learner Rates	80.9%	78.9%	81.3%	79.2%	77.2%	81.1%

Glenn Damiani, Senior Director of Enrollment Services also provided some evidence that the majority of online classes fill more quickly than traditional classes. Figure 1 below is a general overview of Spring 2013:

Figure 1 Fill Rate by Instructional Method



Numbers on the horizontal axis represent calendar days relative to first day of the term. Day -1 is the day before the start of the spring 2013 term. Day -63 is the first day of registration for spring 2013.

The current distance learning design model at CNM is a fully autonomous approach. For this reason, course organization varies dramatically from one discipline/course to another. Many courses look entirely different. This approach allows a lot of freedom for instructors but causes confusion among students and performance suffers (Lee, Dickerson, & Winslow, 2012). It also makes it difficult to evaluate, and can cause a reputation for inconsistency and disorganization (para. 8). The new distance learning classroom that will be fully implemented by fall 2014, is identified in the literature as a Basic Guidelines Approach (para. 9). It still allows creativity in content delivery but significantly speeds the learning curve for students in terms of course navigation and also facilitates new faculty that may be designing courses for the first time (para. 10). It also provides a strong baseline for quality control (para.

10). The Basic Guidelines model differs from a highly specified approach which is fully standardized. Course designers develop the course and the approach is the same by all instructors who teach the course (para. 12).

Distance Learning at Peer Institutions

To place peer institutions' practices in context, it is important to consider the different approaches to online course design that higher education institutions follow.

As noted above, there are currently three prominent models for course design in online educational settings: Fully Autonomous, Basic Guidelines, and Highly Specialized. In the Fully Autonomous approach, individual instructors have complete control over the work-flow organization of their courses, although their institution may suggest certain parameters. Typically the result is that online courses vary greatly in layout, an outcome that can create confusion for students as they try to learn how to navigate each individual course. The Basic Guidelines model centers on the use of a course template (or templates) that provide common course organization across the institution's online offerings, while still allowing individual instructors the freedom to build their own content and assessments based on personal teaching style and the best practices of their academic discipline. With this approach, students' learning curve at the beginning of the course is greatly diminished and they can focus on course material and assessments rather than learning to navigate the online learning environment. Finally, the Highly Specialized model standardizes content and assessments, as well as course layout and design. This approach provides the most consistency across an institution's online offerings, but also allows for the least instructor creativity and autonomy (Lee, Dickerson, & Winslow, 2012).

Research has shown that course design is an important factor in students' ability to learn successfully in an online environment. According to Anthony (2012), robust, straightforward, and consistent course design is the **most** vital factor for student interaction in the course (a key indicator of learning and success online). Researchers at Monroe Community College in Rochester, New York, have found that the number one reason for failure cited by students in online education settings is that they "got behind and it was too hard to catch up" (Fetzner, 2013, p. 15). Among the possible solutions to this problem is the incorporation of a required online orientation for students, as well as a standardized course design model at the institution (Fetzner, 2013, p. 17). Although many instructors struggle with the idea of implementing a design template for their course due to concerns about academic freedom and personal pedagogical styles, most also recognize that some level of standardization greatly improves student success and retention in online courses (Itibout, 2013).

Once instructors understand that the template (Basic Guidelines model) supports academic freedom, most of them like the idea of standardized course design because of the benefits that it provides to students, as well as to themselves. Contrary to popular belief that "the online classroom can manage itself," online instructors "must actively participate in all dimensions of the online classroom" (Baghdadi, 2011, p. 110). In order to maintain such a presence, "core teaching material, resources, and instructional strategies need to be in place prior to the start of the class" (Baghdadi, 2011, p. 110). In following a standardized model for course design, instructors are able to complete these tasks prior to the start of a given term with much more efficiency than under the Fully Autonomous model.

Nationally, many colleges and universities are moving away from Fully Autonomous design in favor of Basic Guidelines or Highly Structured models. At the Blackboard World 2013 conference, for example, several sessions illustrated best practices for implementing structured models of course design in higher education. In one such session, “Begin at the Beginning,” Kathy Saville, Director of Instructional Technology at St. Mary’s College in Indiana, explained the design template adopted at her institution. In line with the current literature, the St. Mary’s template adheres to Quality Matters (QM) standards of course design in order to facilitate teaching and learning. Additionally, the template was designed with the specific goal of providing a clear starting point to decrease the anxiety levels of both instructors and students (Saville, 2013). The presence of a clear starting point for online classes is also a key QM standard.

To further contextualize national benchmarks for online course design, a brief description of QM is in order. Quality Matters (QM) is a non-profit organization created by Maryland Online to provide a benchmark for the design of online courses. It is comprised of a faculty-centered peer review process that is designed to certify the quality of online and blended courses. Working from the premise that no course will ever be perfect, the QM process promotes opportunities for the constant improvement of course design. The central focus of QM is the **alignment** of objectives, assessments, content, and technology. The DL Classroom uses QM standards as a basis for promoting logical alignment of content, objectives, and assessment with the goal of promoting student learning (Quality Matters, 2013).

As indicated above, CNM has previously followed the Fully Autonomous model, but the DL Classroom will implement a Basic Guidelines approach. We have investigated the Distance Learning programs at Doña Ana Community College (DACC) in Las Cruces, Northern New Mexico College (NNMC) in Española, and Santa Fe Community College (SFCC), and found that each of those peer institutions currently adheres to the Fully Autonomous model as well. Despite the autonomous approach, each of these institutions provides a level of instructor support to ensure quality course design. All three use the Quality Matters Rubric as a benchmark. The QM program, however, is not required for instructors at those institutions. Also of note, NNMC uses the Blackboard Learn learning management system (LMS); DACC and SFCC use the Canvas LMS.

At NNMC, the Distance Education department provides a default course menu for all instructors, but they are not required to use it. They do have access to QM materials as a set of resource guidelines for online course design, but, again, they are not required to adhere to them. Additionally, instructors have access to course design consultations in a hybrid (20% live, 80% web-based) professional development series (Snyder, 2013). Much like the current system at CNM, at NNMC instructors receive support from the Distance Education department but are not required to use a course design template.

DACC follows a similar model, but provides online support materials through its Virtual Learning and Instructional Technology department (VLIT). Such support consists of live training sessions, online tutorials and help screens, and an instructor quick start guide (<http://dabcc.nmsu.edu/vlit/for-faculty.shtm>). Similar aids are also available for students. Although representatives of VLIT did not return an email request for more information, based on their website it appears that DACC follows the Fully Autonomous model for course design.

Finally, SFCC’s Distance Learning department also failed to reply to an email request for information on their approach to course design. Based on their website

(http://www.sfcc.edu/distance_learning), however, it is clear that instructors are directed to base their autonomous course design on QM standards. In order to ensure that the benchmark is met, instructors may opt to open their courses up to a QM-style peer review process. Additionally, both faculty and student tutorials are provided.

As noted in the previous section of this report, CNM's current approach to online course design is also autonomous and many of the support features available at peer institutions are also offered at CNM. The [Virtual Lab](#), designed by Distance Learning staff, provides a Blackboard-based student orientation. Although internal research has shown that the Virtual Lab has significantly increased student success rates in online courses since its introduction in fall 2010, it is not required for students enrolled in DL courses. Conversations about whether or not to require the Virtual Lab are ongoing among DL Department Staff and faculty involved in the DL Advisory Committee.

The Distance Learning Classroom template will require instructors to map out learning objectives, content, assessment, and course outcomes in a uniform manner, in line with QM standards for course alignment. This low-level standardization promises to alleviate student concerns with course navigation, and instead allow them to focus on course engagement. By implementing the DL Classroom, CNM will take a leading role in New Mexico in creating a more robust, assessable, and dynamic online learning program for its students.

Best Practices

As of 2011, over 6 million students were taking at least one online course (Enterprises, 2011). It seems obvious that growth in use will continue. Online education is an evolving field where new possibilities are continuously discovered. Various Learning Management Systems (LMS) comprise the landscape of the online education industry. Blackboard Learn accounts for 51% of the market as of 2011, with MOODLE in second place at 19% (Green, 2011).

According to major trends in the literature, organization and student engagement are the benchmarks of best practices. Blackboard Learn identified the best practices for course development as:

- developing and populating all content in the LMS course prior to the start of classes
- clearly defining and articulating learning objectives throughout the course
- considering the learning objectives and determining if the content provided will enable students to meet those objectives
- ensuring that learning objectives are properly assessed with appropriate feedback
- developing an assortment of content that will appeal to various learning styles
- Including activities that promote student collaboration and engagement (White, 2012, p. 6)

All of the above benchmarks for best practices are addressed in Quality Matters (QM). Quality Matters endorses a rigorous peer review process for online courses that includes recommendations for improvement and design (Shattuck, n.d.). Quality Matters currently has at least 600 subscribers in 45 states as well as internationally (p.3). Their research showed that adherence to the QM rubric affected learner satisfaction, evidenced by significant decreases in questions about course navigation and how to succeed in the course (p.5). An ongoing study at the University of District of Columbia is tracking

withdrawals and passing rates for online courses using QM. Researchers there have noticed a decrease in course withdrawals (Harkness, Soodjinda, Hamilton, & Bolig, 2011, cited in Shattuck, n.d., p. 10).

According to a Best Practices study completed by the University of Maryland, there are eight key principles for positively impacting online teaching:

1. Make learning goals and paths clear to students
2. Differentiate in modes of learning until skills are mastered
3. Provide prompt and constructive feedback
4. Balance challenges and support
5. Elicit active and critical reflection on the student's growing experience base
6. Linking inquiries to genuine problems or issues of high interest to learners
7. Developing learners' effectiveness as learners. Reinforce course concepts through different resources and establishing relationships between topics and experience
8. Create and institutional environment that supports and encouraging inquiry (Learning, 2006).

Learning paths include architecture and navigation of the course. Most of the literature mentions the importance of providing clear pathways for students from the beginning to the end of the course. It is important not to confuse students with too much information at one time (Belafiore, 2007). There is a general consensus that an introduction from the instructor, a map instructing students where to go next, and a clearly organized content collection method (Learning Modules in the CNM DL Classroom) that keeps students on schedule are all essential factors in quality course design. These elements all encourage engagement between peers and instructors. Finally, to keep the courses moving along with robust engagement and participation (crucial activities that promote online learning), there must be frequent assessments and assignments.

In addressing the total learning institution, one study sponsored by the Alliance of Higher Education Competiveness used research information from 21 institutions to identify leading course design elements that lead to success in online courses. They were:

- Consistency of Internet supported learning with institutional mission (64%)
- Competitive pressure to provide Internet-supported learning (64%)
- Intention to grow enrollments through Internet-supported learning (59%)
- Administrators and faculty are clear that Internet-supported learning is a long-term commitment (91%)
- Administrators are actively involved in leading the efforts and administrative support for success is perceived as adequate for success (82%) (Academic Partnerships , 2011)

One study included in the 21-institution research base added that, “the secret sauce’ that appears to be most critical for an institution in achieving success is taking a programmatic approach. Focus on getting full programs online, rather than single courses, greatly increases the chance of achieving overwhelming success by a four to one margin” (p. 25). The creation of full online programs should be an additional matter of institutional focus at CNM following the implementation of the DL Classroom model.

According to the Hanover Research Council (Council, 2009), best practices for online instruction start with good planning (p.12). Throughout the literature, the first step of that process is the development of learning objectives. The Hanover study suggested general guidelines for development of learning objectives: they (a.) are written in observable behavioral outcomes and communicate expected outcomes, (b.) explain the expected behavior, performance and level of comprehension, (c.) should be specific, targeting one aspect of understanding at a time, that includes providing the resources for the student, (d.) should be measurable and include conditions for student assessment (p.12, 13).

The next best practice mentioned in the report was that the course must provide for modes of student interaction between students and the instructor, including collaboration on assignments (p. 15). In most of the literature reviewed, student engagement is a factor mentioned as a critical part of the process. Engagement has to be ongoing to maintain momentum in the course. Formats for student-student and student-instructor engagement include discussions and forums. Discussions and forums are important for injecting critical thinking and problem-solving exercises. They also encourage higher-level thought processes (p. 17).

The Hanover Research Council also identified several areas where instructors should provide opportunities for online students to prepare for course. These include orientations on the technology and instructional methods used in the course, contact information, preferred communications and standard response times, online office hours, guidelines for participation, and links to resources (p. 18).

The DL Classroom template at CNM satisfies many of the Council's best practices findings. All of the practices are also recommended measures in QM Standards Rubric. The QM Rubric reflects current research findings and national standards for ways to connect course design to successful online learning. The rubric consists of a set of 8 general standards with 41 specific standards used to evaluate the design of online and blended courses.

Literature reviews showed that course navigation was one of the top ten elements for effective web based design across the board (Sener & Shattuck, 2005). Sener and Shattuck's QM-based research also supported five other standards that represent best practices:

1. Clear and consistent course structure is a major factor that contributes significantly to student attainment in online classes.
2. Learners judge their instructors based on clarity and how organized the structure is with clear timelines and expectations.
3. A well written syllabus
4. Students felt that clarification of grading and expectations were most important.
5. Addressing learning styles, prior knowledge, and experience are important. Learning is influenced by context, active learning, tools and scaffolds (p.2).

Recently, another trend has gained momentum in distance learning: the use of mobile technology. This was a major topic at the 2013 Blackboard World Conference in Las Vegas. The technology is expanding at a very fast pace and is applicable to both online and face-to-face course delivery formats. It is common knowledge that students of all ages use mobile devices to look up information, ranging from social media activities to consultation of online dictionaries and making Wikipedia queries. Research has shown that research and communication on mobile devices can become powerful learning tools.

“Already, a number of institutions have experimented with universal adoption, i.e., where every student in a particular course or program is given a tablet to use in class” (Mang & Wardley, 2012, p. 302). Such findings are of particular importance since many of the classes studied are either hybrids or web-enhanced face-to-face courses. The use of mobile technology in the classroom applies to all delivery formats, not only to fully online courses. Mobile devices can be used for online courses by faculty to assign work and for students to do the assigned work and take exams. Traditional and hybrid classes can use it for class lectures, distribution of lecture materials and many class activities. Mobile devices can make it possible for exams to be proctored in the classroom without scheduling lab time. Ultimately, the possibility of universal adoption should be researched at CNM for fully online, hybrid and traditional classes.

In summary, the literature on best practices provides support and validation for CNM’s implementation of the DL Classroom. From the faculty perspective, the Basic Guidelines approach facilitates the creation of content prior to the beginning of a given term in a manner that is easily navigable and that provides alignment between objectives and assessments while still providing for academic freedom and creativity. The DL Classroom will provide instructors with more time and freedom to focus their attention on teaching, rather than on addressing questions about course design. Additionally, the DL Classroom diminishes the learning curve for new online faculty, the course pathways are high quality, and the template provides a format that is more easily evaluated for accreditation purposes (Chicchino, 2009). From the student perspective, at least one roadblock to learning will be eliminated by the DL Classroom. Students have reported that their number-one reason for failure in an online course was the feeling that they “got behind and it was too hard to catch up” (Fetzner, 2013). The DL Classroom will eliminate navigation woes from the students’ point of view and allow them to focus on the course content and assessments. The DL Classroom will be a powerful tool for improving the success of online teaching and learning at CNM.

Roll-out of New Classroom

At the beginning of the summer term 2013, we collected a database from the Distance Learning Division which listed all DL-certified faculty and organized them into lists by school. We then enlisted the help of the Deans from each school, who updated the list as accurately as possible. The revised database reflected the number of active courses taught by each faculty member. We then organized the lists with the goal of providing each Dean with a tool to manage the transition to the DL Classroom in a systematic way. Three columns have been added to the far right of each list starting with fall 2013, then spring 2014, and summer 2014. The number of classes taught by online instructors ranged from 1-7. This list should be useful in tracking progress of the transition phase to meet the fall 2014 deadline. These lists can be found as a separate addendum to this document. Deans and other school administration should help faculty members devise a timeline that will allow them to personally make the transition over the next few terms. By planning ahead, we can ensure compliance by the fall 2014 target date.

The Distance Learning Division has already developed some Webinars on the DL Classroom that are archived in the Bb Faculty Resources Shell. They also have DL Labs at the beginning of each term for faculty to drop in for extra help. It is important that all faculty teaching online courses take advantage of these resources. As an outgrowth of this process, regardless of when current online faculty members were originally certified, the next goal should be to certify all online faculty in Quality Matters (QM) and recertify them in online instruction periodically, as recommended by the Distance Learning Division. QM

certification is important for all DL instructors because the DL Classroom is designed to complement QM standards. As an additional part of this effort, CNM should strongly consider implementing the full peer review component of QM to maintain rigor and program integrity. With this new requirement there will be a greater need for distance learning oversight which might necessitate future expansion of the DL Staff. This could be augmented by utilizing experienced faculty to assist in course design with the use of course releases. As per the QM program, peer review will necessarily be an ongoing project, and it will require faculty members to take time to review the courses of their peers in a constructive manner. QM takes the position that no course is ever perfect and that all need some form of constant improvement and updating.

Finally, we recommend that CNM assess both the value and cost of integrating mobile technology into all phases of classroom instruction (by entering into an arrangement with Apple, for example, to provide iPads for students and faculty). Mobile technology is quickly becoming one of the leading trends in distance learning.

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