

## **MOST COURSES ARE NOT BORN DIGITAL: AN OVERVIEW OF THE QUALITY MATTERS PEER REVIEW PROCESS FOR ONLINE COURSE DESIGN**

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### **Abstract**

The explosion of online course offerings has driven anxiety over quality. The Quality Matters (QM) program was initiated in Maryland as a rubric for peer review and certification of online courses and is now used by institutions internationally, including consortia that share resources. This paper will discuss benefits of and barriers to online learning, summarize the emergence of QM in response to concerns about quality, outline the QM higher education rubric, explain how the collaborative QM peer review process facilitates online course design and certification, report on the development of a statewide consortium in Ohio, and explore future trends in online courses.

### **Introduction**

Today's students may have been "born digital," but most courses were not. While students graduating from high school today may not remember a time before computers, their courses are probably being taught by faculty that most certainly do. And even innovative faculty may not be aware of best practices for using digital technologies to enhance hybrid or totally online courses. Such best practices do NOT include uploading a slide presentation that could be a useful tool in a face-to-face presentation but in an online environment becomes "death by PowerPoint." Brilliant content experts and gifted lecturers are not necessarily knowledgeable about tools that will enhance online learning and the resources that online students must have access to. But the growth of online learning is not the first time that a change in technology has led to the prediction of an overhaul of education.

### **From on Ground to Online: Benefits and Barriers**

In the past it was predicted, "Books will soon be obsolete in the schools. Scholars will be instructed through the eye...Our school system will be completely changed in 10 years" (Saettler, 1990, p. 98). Thomas Edison made this prediction a hundred years ago! While Edison was talking about the motion picture, similar predictions are being made about digital content and online learning, and bookstores and print media are going out of business as digital consumers learn to access information in alternative ways. As usual, emerging technologies introduce both benefits and barriers.

## Benefits

Technology was not new 100 years ago. In Paleolithic times, fire and stone tools were technology. In ancient times, we had the wheel and later, writing. Technologies let people accomplish what they want to do better, meaning faster, more efficiently, less expensively, or with higher quality. Learning technologies are just one more example of this.

Distance learning dates back at least to the early 1700s, when correspondence courses were introduced (Fishman, 2013, p. 1). Distance learning degrees have been available at least since 1858, when the University of London established a program offering worldwide degree completion. A recent fictional treatment of such programs was featured in the BBC series *Downton Abbey*, situated in England around the time of WWI, with a subplot focusing on a servant secretly studying typing via correspondence. Today, with easy access to the Internet and the proliferation of personal computers and other web-enabled devices, distance learning has almost become synonymous with online learning. Distance learning exists because there is a need for it, and that need centers around student access.

In the past, Higher Education in the U.S. was typically restricted to middle and upper class students, whose families had the resources to see them through school. The prototypical college student would enter immediately after high school, live on campus, attend full time, not work, and graduate in four years. That prototype has changed. Today, according to the U.S. Commission on the Future of Higher Education, full-time residential undergraduates constitute only 16% of enrollments, with the majority therefore composed of “‘non-traditional’ adult learners juggling jobs and family while studying part-time and working full-time or part-time” (Stokes, 2006, p. 1). A recent report on U.S. Census data indicates that of 19.7 million undergraduates in 2011, 72% of undergraduates worked, with 20% working full time (Davis, 2012, p. 1).

These students have different lives and different needs than higher education students in the past, and online education can fit their needs. The Sloan Consortium reports, “The proportion of students taking at least one online course is at an all-time high of 32.0 percent” (Allen & Seaman, 2013, p. 4). Although total enrollment in U.S. degree-granting postsecondary institutions dropped .1% between fall 2010 and fall 2011, online enrollment increased 9.3% (p. 17).

Two universally recognized benefits of online learning are convenient access and flexibility. Online courses enable learners to access course material and work on assignments when it fits into their schedule and avoid the time and cost involved in commuting to campus, battling weather, and searching for parking. For individuals in the workforce that have shifting schedules, or for caregivers whose loved ones have shifting schedules, online courses can reduce the stress of needing to be two places at once. Furthermore, online learning allows students to complete programs that they began on ground or initiate programs that may not be offered locally. The University of Akron, for example, in spring 2013 advertised on its landing page “Never finished your degree? UA makes it easy to restart. We

can put you on the fast track to graduation with flexible enrollment, online courses, and transfer and work credit. Reconnect now!”

### **Barriers**

Despite the fact that students are “voting with their feet” and enrolling in online courses at high rates, administrator and faculty acceptance is not keeping pace with enrollment. The Sloan Consortium reports in 2013 that “almost one-quarter of all academic leaders polled, continue to believe the learning outcomes for online courses are inferior to those for face-to-face instruction” (Allen & Seaman, 2013, p. 24). Those academic leaders also believe that faculty are resistant, and growing more so: “Only 30.2 percent of chief academic officers believe their faculty accept the value and legitimacy of online education. This rate is lower than the rate recorded in 2004” (Allen & Seaman, 2013, p. 6).

Polls of the faculty themselves demonstrate similar concerns. In 2012, over 44.6% of the faculty reported that it required more “time and effort to teach an online course,” up from 40.7 percent in 2006 (Allen & Seaman, 2013, p. 22). In contrast, the percentage of academic leaders at for-profit institutions who believe online teaching requires more time and effort is falling, perhaps because “by building online courses from scratch, and designing them to be taught by a large number of (perhaps adjunct) faculty, they may have better optimized the level of effort that will be required” (Allen & Seaman, 2013, p. 23).

It also appears that online education is not a good fit for all students. Those who do not have home Internet access cannot take full advantage of the flexibility online learning offers. In particular, students at community colleges may experience challenges. Xu and Jaggars (2013) found that community college students in face-to-face courses displayed greater persistence in course completion and had higher grades than in online courses, concluding, “the online format had a significant negative impact” (p. 22). And the Sloan Consortium reports that in 2012 88.8 percent of academic leaders agreed, “Students need more discipline to succeed in online courses,” up from 80% agreeing with that statement in 2007 (Allen & Seaman, 2013, p. 29).

While both institutional and student-centered barriers to online education exist, there are strategies to overcome them. For example, Xu and Jaggars (2013) recommend a team-based approach to course design and an expansion of student support services (p. 23). They also identify an “urgent need” for future research that links course quality to course outcomes (p. 24) in order to give institutions the guidance they need for improvement.

### **The History of Quality Matters**

The exponential growth in online course offerings, coupled with the concerns of administrators and faculty, has motivated the development of standards encouraging quality in an online environment. Several systems have emerged, but that which has gained the most traction in the United States is Quality Matters (<http://www.qualitymatters.org>).

Quality Matters (QM) came about when MarylandOnline, a statewide consortium of institutions of higher education in Maryland that offered online courses, sought to ensure that students enrolled in any consortium course were enjoying comparable quality online experiences. Through a federal government grant sponsored in 2003 by the Fund for the Improvement of Postsecondary Education (FIPSE) over three years, Maryland educators used research and accepted best practices and principles to develop a faculty-centered peer review process and training in its use. A rubric at the heart of the process could be used by faculty as a guideline for good online course design and by experienced online faculty to review and certify their colleagues' online courses as meeting expectations for quality design. Although it began as a state initiative, the Quality Matters (QM) program is now a self-supporting non-profit used internationally by institutions of Higher Education, some of which have formed consortiums to allow for use of shared resources. The program has expanded from a focus on Higher Education to now include similar processes for continuing and professional education and also for K-12 and publishers' materials.

### **The Quality Matters Rubric for Higher Education**

While QM has copyrighted its rubric, it is possible to share the eight General Standards of the 2011-2013 rubric, each of which is associated with from four to eight Specific Standards for a total of 41. Each of the specific standards is explained in the Rubric Workbook that is offered to each participant in the entry-level training "Applying the Quality Matters Rubric" (APPQMR). This rubric can be used to guide instructors who are developing brand new online or blended courses, converting on-ground courses to online, or improving existing online courses. Reviewers conducting a QM course review also use it. All of the standards are written so that faculty and reviewers are encouraged to approach a course through student eyes. In the Rubric Workbook, detailed annotations on each specific standard provide more information and examples of situations that would or would not meet QM expectations.

#### **General Standard 1: Course Overview and Introduction**

General Standard 1 reviews whether a student can easily understand how to begin a course, what the course is about, who the instructor is, and what the student and instructor can expect from each other. A metaphor I use when offering APPQMR training is that of a long road trip that they will take: if the course is the trip, do the students know where and when they meet for the start of the trip and who will be driving?

#### **General Standard 2: Learning Objectives (Competencies)**

With the 2011-2013 edition of the rubric, there is a very strong emphasis on learning objectives as the foundation upon which the course is based and with which multiple other standards must align. The objectives, both at the course and module levels, must be written from a student perspective, summarizing the skills that a successful student will demonstrate by the completion of the course. QM's theoretical framework for the creation of learning objectives is Bloom's well-

known 1956 taxonomy demonstrating a hierarchy of levels in the cognitive domain that relate to course outcomes. The road trip analogy would be awareness of a final destination, and intermediate destinations along the way.

### **General Standard 3: Assessment and Measurement**

The fact that Assessment and Measurement is the General Standard that immediately follows Learning Objectives is a clear indication of the importance QM places on the objectives and on the ways in which assessment will align with them. As students, we have all been in courses where we wondered about the relationship between the work we were required to do and what had been covered in class. As faculty, we shake our heads when students ask, “Will this be on the exam?” In each case, what is questioned is the alignment between where the course appears to be going and how students are asked to demonstrate concept mastery. The road trip analogy would be whether students can show that they have made it to their intermediate and final destinations; in the past that might have meant a postcard, but today it would probably mean sending a cell-phone picture at a landmark site or checking in via Facebook!

### **General Standard 4: Instructional Materials**

The fourth General Standard like the third reviews alignment with learning objectives, the focus of General Standard 2. It focuses on whether instructional materials provide an adequate resource for students to achieve the course’s stated learning objectives and considers whether materials are thoughtfully selected, current, and demonstrate multiple perspectives. The road trip analogy would be what the driver or travelers have packed to aid them on their journey.

### **General Standard 5: Learner Interaction and Engagement**

The fifth General Standard is another one that contains an alignment standard; it seeks to verify if all activities and interactions further the attainment of the learning objectives. These interactions are of multiple types: with content, with the instructor, and with other students. The road trip analogy would be whether the car is full of individuals who are interacting with the driver, each other, and the sites they pass along the way, or whether individuals are sitting in their own spaces, ear-buds in their ears, and more or less oblivious to their surroundings and each other.

### **General Standard 6: Course Technology**

The sixth General Standard is the final one to review alignment with learning objectives. It ensures that course technologies are being used to achieve learning objectives in an optimal way. These technologies include both tools of the learning management system being used to support the course and any other tools used for course content, interaction, or student projects. One road trip analogy might be the use of a GPS whose maps had not been updated since it was purchased five years ago. Would its maps and points of interest get the travelers where they needed to go as efficiently as possible, or would old maps and information provide barriers to the trip?

**General Standard 7: Learner Support**

The seventh General Standard focuses on the types of learner support made available to the student through the online course. Specifically, it focuses on information about or links to academic policies and services and student support services offered by the host university, and how students can access them. While on-ground students may know what building they can go to for such services as tutoring, registration, or computer repair, online students need to be made aware of online resources that will offer them similar services. A road trip analogy might be the service plaza where travelers can find maps and a phone for hotel reservations.

**General Standard 8: Accessibility**

The final General Standard looks for documentation on the accessibility of the learning management system and other course tools and also an assurance that course materials and activities are accessible to all. A road trip analogy might be a traveler with a physical disability who could arrive at a site but not be able to get in due to stairs, narrow doorways, or other obstacles to access.

**The Quality Matters Peer Review Process**

The QM Rubric can be used informally to guide online course design or conduct internal, unofficial course reviews. In addition, it can be used for official QM reviews by a trained peer review team that can QM certify courses that “meet expectations.”

Individuals interested in becoming peer reviewers begin by taking the entry APPQMR course, which can be taken either face-to-face or online. Successful completion allows them to advance to the next course, the Peer Review course, which is offered solely online. In this course they learn how to apply the QM Rubric to an online course and decide whether or not it meets expectations for individual standards, and how to write feedback that can be used by the course developer to improve the course. Those who wish to serve formally as peer reviewers must also verify recent experience teaching online, so that official course reviews are truly accomplished by faculty peers. Those who wish to serve as a review Team Chair must first serve as an official reviewer at least twice and then complete a Master Reviewer course.

A review team is composed of the course developer (who will henceforth be referenced as the faculty member), the QM Institutional Representative (IR) at the faculty member's institution, and three peer reviewers, including a team chair, a subject matter expert, and an external reviewer outside of the faculty member's institution. It is possible for one reviewer to serve all three of these roles but the team must include exactly three reviewers. The review process begins at the institution of the faculty member, who communicates with the institutional representative and completes a course developer worksheet. A review team is then formed, the IR makes sure team members are given access to a clean course shell (without student activity), and the team chair organizes a pre-review

conference call in order to discuss the course with the faculty member and establish deadlines.

Each of the three reviewers works independently to decide whether the course meets expectations for each of the 41 Specific Review Standards. The standards are worth from one to three points each, and points are awarded for each on an “all-or-none” basis. In other words, it is not possible to award 2 out of 3 points for a standard that is not completely met. Instead, reviewers are asked to apply the 85% rule: if a standard is met at the 85% level, roughly the equivalent of a grade in the B or B+ range, then the standard meets expectations and the points for that standard are awarded. Reviewers are strongly encouraged to add comments to each standard and must add comments for any standard that does not meet expectations and therefore is not awarded points. The reviewers independently enter their decisions and comments into an online form. Consensus is not necessary. If at least two of the reviewers believe a standard has met expectations, then that standard is determined to have met expectations for the review as a whole. If at least two of the reviewers believe a standard has not met expectations, then that standard is determined to not have met expectations for the review as a whole. If the course has accumulated at least 85% of the total points possible and met expectations for all 3-point Specific Review Standards, then the course meets expectations as a whole and can be QM-certified.

A key feature of the QM review process is that the reviewers are peers, with each being an experienced online instructor. The philosophy of the process is “continuous improvement,” meaning that even a course that meets expectations can benefit from incorporating the feedback of the review team, and a course that does not meet expectations can be revised and resubmitted.

The QM collaborative peer review process has gained in credibility as institutions adopt or adapt the rubric for course design and submit their courses for informal or formal reviews. Puzziferro and Shelton (2008) noted, “The Quality Matters rubric is an excellent guide for creating a design standard, or an evaluation system, and can be customized and adapted as needed” (p. 25). One online for-profit American university has a thermometer prominently displayed on its webpage indicating what percentage of its courses is QM certified.

There is a subscription fee for institutions to join Quality Matters, and each time a course is submitted for review the offering institution is also responsible for paying members of the review team. This is why in some states consortia have provided financial support to member institutions that want to join QM. For example, Fishman reports that when Minnesota Online began providing such assistance, QM membership jumped from 8 to 31 out of 37 institutions in that state (Fishman, 2013). This has the effect of creating a supportive culture: “The more faculty members go through the Quality Matters process, the more they tell other professors to consider developing and teaching an online course” (Fishman, 2013, p. 15).

### **The Ohio Quality Matters Consortium**

The Ohio Quality Matters Consortium is a statewide consortium that has demonstrated both commitment to the QM program and innovation in managing reviews at a state level.

#### **History of the Ohio Quality Matters Consortium**

In 2006, Brenda Boyd, currently the Director of Professional Development & Consulting for Quality Matters, introduced the QM rubric at the Ohio Digital Commons for Education Conference, a state wide annual conference organized by the non-profit Ohio Learning Network (OLN). OLN's role as a state-sponsored organization was to aggregate services and resources related to educational technologies and online learning for the state. The presentation on QM was voted "best session" by attendees and inspired many to think about ways they could implement QM at their own universities.

In 2008, six Ohio universities met with OLN to explore the creation of a pilot program on the QM review process for any interested Ohio institution. OLN also created a website for the consortium and funded membership fees, training, workbooks, and an annual meeting for Institutional Representatives.

Unfortunately, due to state budget cuts in Ohio, the OLN was disbanded in 2011, and the QM institutions were faced with managing themselves. Members at four of those institutions sought to continue the Ohio QM initiative by assuming a leadership role and sharing key responsibilities as the "Ohio Quality Matters Consortium" (OQMC) and devising a way to manage reviews through a cost-effective bartering system. As stated on its website, the purpose of OQMC "is to provide Quality Matters (QM) support to our member institutions through dialogue, professional development, active engagement, and assistance in building a culture of quality and continuous improvement in online and blended course offerings."

The OQMC offers discounted QM subscriptions, training, and a within-state course review bartering system. By 2009, the Consortium had grown to over 40 institutions; in April 2013 the consortium had 75 institutional members, making Ohio the largest QM consortium in the world.

#### **The Ohio QM Bartering System**

A major innovation of the Ohio QM Consortium has been the development of a bartering system for course reviews. Normally, with official QM reviews, the offering institution must pay the review fee for the three reviewers. Within the OQMC, however, institutions trade points. When an institution provides a reviewer for another institution's course, it earns points; when it has a course reviewed by someone from another institution, it pays out points. Currently, a team chair "costs" 3 points while other reviewers, including the subject matter expert, cost 1 point. Thus, a review could cost an institution up to 5 points if it did not supply any reviewers itself. This motivates institutions to encourage their own faculty to become reviewers by taking the appropriate QM training. In



addition, there is an upper limit to how much an institution can be “in debt” to the barter system.

One issue currently under discussion is whether QM facilitators should also be included in the bartering system. The OQMC covers the cost for training APPQMR facilitators who offer this course in state. However, when an Ohio APPQMR facilitator travels to another Ohio institution to offer training, the facilitator’s home institution may incur unreimbursed expenses. One solution would be to include facilitation in the bartering system; however, it would also increase the responsibility of the institution hosting the bartering database.

### **Future Trends**

As online learning grows, more courses are being born digital, and courses that were not born digital are converting with varying degrees of success. Simultaneously, faculty, administrators, and students are seeking assurance that online courses represent the same quality expected in face-to-face offerings. This is even more important for the newest version of the online course, Massively Open Online Courses (MOOCs), which have the capacity to reach tens of thousands of students simultaneously. As Mazoue points out, “Addressing the quality of the learning experience that MOOCs provide is...of paramount importance to their credibility and acceptance” (2013).

Parallel to the growth of online learning and MOOCs has been the growth of the QM program as a trusted and reliable method of ensuring quality. As a result of its peer-centered process and growing international adoption, QM was chosen to provide course reviews for MOOCs developed with awards from the Gates Foundation’s fall 2012 request for proposals. Deb Adair, QM’s Managing Director, identified the ability of MOOCs to facilitate student learning as “a critical question for the field to answer in understanding [their] potential role” (Quality Matters Program, 2012).

With respect to any type of online offerings, assurances of quality that are recognized by all shareholders in education—including institutions, faculty, students, and potential employers—will facilitate student degree completion by allowing a seamless transfer of credits. Within the United States, the New America Foundation promotes the shared-contract approach of state consortia to make program administration more affordable (Fishman, 2013) and recognizes the ability of the Quality Matters approach to encourage faculty buy-in. Such an approach could be successful on an international level as well, and lead to innovations that would make education even more accessible and affordable to students.

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