Research on the Impact of the Quality Matters Course Review Process

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Introduction

Higher Education institutions face increasing demands from both internal and external constituents to engage in meaningful quality assurance to demonstrate the value and impact of their efforts. The expectations for quality assurance of online education are, perhaps, even higher, in view of its relatively recent development and the rapid growth of student interest. The Quality Matters Program, focusing on quality standards for online course design and a peer-based, course review process, is one manifestation of the response to this need. Given the resources and time required to make the Quality Matters process work, it is important to validate its positive impact on those who participate, on the design of courses and on student success.

The Quality Matters Rubric, initially developed under a three-year grant (2003-2006) from the Fund for the Improvement of Postsecondary Education (FIPSE), is a set of 40 specific standards that address primarily matters of the design and organization of the online materials for fully online and hybrid courses. These 40 specific standards are grouped under 8 general standards that address the following areas:

1. Course Overview and Introduction
2. Learning Objectives
3. Assessment and Measurement
4. Resources and Materials
5. Learner Engagement
6. Course Technology
7. Learner Support
8. Accessibility

The rubric treats five of the general standards as linked and interdependent. General standards 3-6 must align with and support the stated learning objectives (General Standard 2) in a course.

The Quality Matters Rubric is applied to mature online/hybrid courses, that is, courses that have previously been offered at least several times, in a process that involves a team of three peer reviewers. These peer reviewers—faculty with online teaching experience and instructional designers—go through extensive training in the interpretation of the rubric. At least one member of the team must be from an institution other than the sponsoring institution of the course being reviewed, and one reviewer must be a content area specialist. The other reviewers need not be familiar with the subject area of the course, since all reviewers are asked to adopt the perspective of a student, rather than that of a specialist.

The results of a review consist of a score, based on the 40 standards, and a series of comments and recommendations for the course to meet the standards. This is not an evaluation process, but rather a collegial process to enhance the instructional design of a course. The goal of the process is to stimulate
the refinement of online and hybrid courses, not to pass judgment on either courses or instructors. Poorly designed courses may improve dramatically through this process, but even well designed courses can be marginally improved as the result of a Quality Matters review.

One of the foundations of the Quality Matters Rubric is that the 40 standards are based on the findings of the extensive and growing body of research on online education. The majority of these standards focus on characteristics of online/hybrid course design that can be shown to influence student learning positively, improving student performance, satisfaction and retention. The Quality Matters Website publishes a Research Matrix that maps research findings to each of the 40 specific standards: http://www.qualitymatters.org/Documents/Matrix%20of%20Research%20Standards%20FY0506.pdf. This matrix is periodically updated with the latest research findings.

While the research literature has deeply influenced the identification and refinement of the Quality Matters standards, the QM rubric and the process for applying it are now, themselves, the subject of a growing body of research. Survey research now documents the impact of participation in Quality Matters course reviews on their developers and on the peer reviewers. We are also beginning to see studies of the impact of QM recommended course revisions: Do they really enhance student learning, etc.? In the remainder of this session, we will report and comment on some of the more interesting findings, and speculate about the future directions of research on the Quality Matters Rubric and review process.

**The Impact of Quality Matters Reviews on Instructors and Peer Reviewers**

During the FIPSE grant period, the project peer-reviewed 111 online courses from 29 institutions (18 institutions in Maryland, 11 institutions in 5 other states.) Approximately 53% of the courses met quality expectations upon the initial course review, a percentage that was consistent from Year 1 to Year 3. Most of the remaining 47% have now met expectations through revision. The results of the reviews have indicated some common problem areas for online course design and provide direction for targeted faculty training. Here is a list of the standards most commonly unmet:

- 22% of courses lacked an instructor self-introduction.
- 22% of courses lacked activities that foster student-to-student interaction.
- 24% of courses did not clearly state pre-requisite knowledge and technical skills.
- 24-27% of courses did not have links to academic support, campus tutoring services or student support services.
- 27% of courses did not state learning objectives or outcomes at the module/unit level.
- 32% of courses lacked any netiquette standards.
- 38% of courses did not provide students with any self-check with feedback on their progress.
- 54% of courses lacked any black and white or text alternatives to color content.
- 59% of courses did not provide adequate text alternatives to sound and graphical content.

Since the end of the grant period, with a wider range of courses under review, a smaller percentage of courses are meeting standards without revision, but the items listed above remain the most common deficiencies.

At the end of the FIPSE grant period, John Sener, of Sener Learning Services, the external consultant to the project, conducted surveys of instructors whose courses had been reviewed and of active peer reviewers: http://www.qualitymatters.org/Documents/Final%20FIPSE%20Report.pdf (pp. 6-7 and Appendix C). His findings indicate the positive impact of the QM standards and the process itself. Ninety-one percent of faculty respondents (n=47) whose course was reviewed made revisions in the course as a result of the review. Indeed, these faculty members embraced the notion of continuous quality
improvement, with 38% of respondents making improvements in their course prior to the review process and 31% making improvements after the review even though their course initially met QM expectations. Eighty-nine percent of faculty respondents ($n=47$) whose course was reviewed felt that the quality of course design improved as a result of the review and would also recommend the QM review process to others.

Sener’s survey of peer reviewers indicates that participation in the course review process benefited them as well. Seventy-five of respondent Trainees ($n=240$) indicated they made revisions to their own online course as a result of attending the training. Seventy-three percent of respondent peer reviewers who had reviewed a course ($n=90$) indicated they made changes to their own online course as a result of their service as a peer reviewer. And 100% of respondent Peer Reviewers ($n=55$) indicate their involvement as peer reviewers was a valuable professional development activity.

The clear implication of these results is that the Quality Matters Rubric is stimulating both the instructors of peer-reviewed courses and the peer reviewers themselves to enhance their online and hybrid courses. We believe that the application of the rubric, and the workshops that prepare faculty to participate in this process are stimulating productive thinking about the way we plan and organize online instructions.

**The Impact of Quality Matters Standards and Course Revisions on Students**

The FIPSE grant also enabled QM to sponsor a number of small research projects to assess the value and impact of various standards in the Quality Matters Rubric. A summary of these projects may be found at: [http://www.qualitymatters.org/Documents/Research%20Projects%20Summary.pdf](http://www.qualitymatters.org/Documents/Research%20Projects%20Summary.pdf) Various unanticipated difficulties were encountered by these projects, including poor research design and the lack of data for comparison between pre- and post-QM review offerings of the same courses with the same instructors and a similar student population. In a number of cases, one or more of these variables could not be controlled. However, we will focus on three of the more productive of these research projects:

1. **Quality in Design: Impact on Student Achievement**
   
   **Institution:** College of Southern Maryland  
   **Leader:** Jean Runyon

   The course *Information Age: Emerging Technologies*, developed and taught by the project co-leaders, was the focus of this project. The goal of the project was to investigate the impact of learner-content interaction on student achievement.

   Fundamental to the Quality Matters approach, design issues are seen as crucial to the development of course content in an online course. Instructional materials developed must be "sufficiently comprehensive to achieve announced objectives and learning outcomes" (QM Rubric, IV). The effective design of learner-content interaction is essential to learner motivation, intellectual commitment (QM Rubric, V) and, ultimately, student achievement.

   This project studied learner-content interaction to determine whether learner-content interaction related to student achievement, and examined whether the level of learner-content interaction is a predictor of course completion. Each learning module of the large enrollment (200+ students per year) ITS 1015 course was revised in 3 ways: 1) creation of a Learning Guides (explicit roadmap), 2) reorganized presentation and design, and 3) addition of classroom assessment techniques (CATs). WebCT’s Track Student functions were used to document student interaction with various aspects of the online classroom, in the course both before and after the redesign.
The chief finding of this limited study was that more students accessed the content to a greater extent in the redesigned course. In addition, these changes appear to have affected student achievement in the course: More students received a grade of A and fewer students received a grade of F in the course.

2. The Effect of a QM Reviewed Course on Student Evaluations

_Institution:_ Prince George’s Community College (MD)

_Leader:_ Diane Finley

The goal of this project was to investigate the value of course navigation directions (QM standard I.1). Will making changes recommended during a Quality Matters review of a course impact student learning outcomes? What differences to student outcomes will course revision make?

An online general psychology course, previously reviewed by QM and found to be deficient in standard I.1, was revised in 2 ways: (a) the navigational design and instructions were simplified and streamlined, and (b) the navigation bar was redesigned. Three pieces of data were examined with respect to organizational aspects in four pre-redesign classes and two post-redesign classes: (a) student course evaluation data, (b) qualitative student questions and comments, and (c) the number of student questions during the first weeks of the semester.

Overall, students in the redesigned course asked fewer questions, expressed less concern about what they needed to do to succeed, and were less confused about how to navigate the course, find information, and locate the course requirements. In addition, student learning and satisfaction increased in the redesigned course.

3. Measuring the Impact of the QM Rubric on Student Learning Outcomes

_Institution:_ State University of New York at Canton

_Leader:_ Molly Mott

The goal of this study was to explore the relationship of student learning and online course design. The project evaluated the impact of the QM rubric on student learning outcomes. An online undergraduate course at the State University of New York at Canton was the focus of the study. Both quantitative and qualitative measures were used to evaluate the impact of the QM rubric on student learning. Semi-structured interviews were used to gain student perspectives following their application of the QM rubric to a set of online courses. This study was composed of two parts.

First, four students were interviewed following their review of an online course that had not previously been evaluated using the QM rubric. The interviews indicated that three standards (I – The Course Overview and Introduction, III – Assessment and Measurement Strategies, and V – Learner Engagement) were most often noted by the students as lacking in the previously un-reviewed course. This result suggests that clear navigation, timely feedback, and faculty presence and immediacy were of importance to online students. These elements also have implications for student success, engagement, and retention.

Second, students in an online course that had previously been recognized by QM were asked to use the QM rubric to evaluate it. The students did not note deficiencies in standards I, III and V. In this particular case there was a congruence of student perceptions and QM standards.

**Future Directions of Research on the Quality Matters Rubric and Process**

With the continued and accelerating growth of the Quality Matters Program, opportunities for QM-related research will increase, and both the scale and sample sizes of future studies will undoubtedly be greater. More work is needed to identify the relationship between the incorporation of particular rubric standards
in a course and the resulting student performance, persistence and satisfaction with greater precision. Studies planned and currently underway are moving in this direction and will also explore the interface between course design and course delivery and the correlation of student satisfaction surveys and student perceptions of whether courses meet the Quality Matters standards. We look forward to learning the results of these studies and using the feedback to further refine the Quality Matters Rubric.

Biographical Sketches

Ron Legon is Executive Director of The Quality Matters Program and Provost Emeritus of the University of Baltimore (UB), where he served as Provost from 1992 to 2003. He also served as Director of the MBNA e-Learning Center, which launched the first AACSB accredited fully online MBA program in 1998, and Director of the Helen P. Denit Honors Program. Dr. Legon has taught history and humanities at Brooklyn College, the University of Illinois at Chicago, the University of Chicago, and UB, where he teaches online, hybrid and face-2-face courses. He has published widely in the field of Greek History and, in recent years, on the subject of online education.

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Jean Runyon is the director of the Innovative Teaching Center at the College of Southern Maryland. She coordinates the faculty development program for full- and adjunct faculty and oversees CSM’s distance learning initiatives, including the training to develop and deliver web-based and web-hybrid courses, telecourses, and telewebs. She served on the Quality Matters training committee and is a master peer reviewer. She is the Northeast Region board member for the Instructional Technology Council, president of the Maryland Distance Learning Association, and the co-chair of MDLA’s Instructional Design Affinity Group.

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