Online Course Design Review: Quality e-Learning Practices in Higher Education

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Abstract

This article presents the importance of online course revision to improve best practices in distance higher education, increase student success and raise retention rates. A year-long, systematic, unified approach to online course review was conducted by a committee of Humanities professors. The aim of this paper is to share the significant enhancements made to an online course design, using the 7th Edition of Quality Matters Higher Education Rubric, to boost student engagement, performance, and satisfaction. This study discusses how each standard was applied to refine an online course. The purpose of the revision was to systematically address the standards as proposed by the QM rubric. Findings revealed areas to strengthen in each of the eight general standards resulting in the actualization of the course design to be more accessible and practical for student use. A few of the specific enhancements made as a result of the revision were the creation of a course content map, clear and predictable design, weekly email reminders, and rubrics. Student feedback confirmed positive outcomes after the successful implementation of best practices using the QM rubric.

Keywords: online course design, course review

Resumen

Este artículo presenta la importancia de revisar el curso en línea para mejorar la calidad del diseño del curso a distancia, promover el aprovechamiento académico y aumentar las cifras de retención. En conjunto, con un comité de profesores de Humanidades se realizó un enfoque sistemático y unificado de revisión de un curso en línea, durante un año. Se aplicaron los estándares de "Quality Matters" (QM) a una revisión de un curso en línea utilizando la 7ma edición de la rúbrica de educación superior para aumentar la motivación, la ejecución y la satisfacción estudiantil. En este estudio, se discute cómo cada estándar fue aplicado para refinar un curso en línea. El propósito de la revisión fue abordar sistemáticamente, los estándares propuesta por la rúbrica de QM. Los hallazgos revelaron aspectos a mejorar en cada uno de los ocho estándares generales. Algunas de las mejoras incluyeron la creación de un mapa del contenido del curso, diseño claro y predecible, recordatorios semanales y rúbricas. La actualización del diseño del curso resultó en uno más accesible y práctico para el uso estudiantil. De igual forma, la retroalimentación de los estudiantes confirmó resultados positivos después de la implementación exitosa de las mejores prácticas, al utilizar la rúbrica de QM.

   Palabras claves: diseño de cursos en línea

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With the increase in online course offerings in higher education, it is vital to not only create online courses, but also to evaluate their effectiveness with the goal of supporting student success (Baldwin & Ching, 2019). The collective understanding of best practices in online education is continuously being refined by the latest research in the field of distance education, making reflection and evaluation essential for online course development. On May 2, 2023, a $24,854 Spotlight Grant from the National Endowment for the Humanities was awarded for a committee of Humanities professors in the English Department to utilize the Quality Matters (QM) rubric to begin a unified approach to course revision. Quality Matters was chosen as the benchmark for this revision due to its internationally recognized quality assurance program that provides clear general and specific standards to guide a thorough review while incorporating the importance of peer collaboration. Another reason for choosing QM is that the cycle of course reviews could begin with members of the department, or internal reviewers, and later by external, formal QM reviewers. Both internal and external reviewers would use the same rubric to measure the quality of the online course.

The aim of this paper is to share the significant improvements made to an online course design using the 7th Edition of Quality Matters Higher Education Rubric which includes eight general standards and 44 specific standards as a lens for course evaluation. Each of the eight standards will be discussed in the following sections in terms of how it was applied during the revision process to improve the online course design and delivery.

A clear and consistent online course design is fundamental to student success as it is the framework that connects the student at a distance to course materials, recorded lectures,

assignments, assessments and collaboration with the instructor and classmates (Fischer, et al., 2022; Mucundnyi, 2021). Online course design is defined as the organization of course content so that it aligns with student learning outcomes resulting in effective learning. (McMahon, 2021; Sanga, 2019, Sandanayake, et al., 2021; Tamilarasan, et al., 2021). Haphazard online course design can lead to disengagement, lowered motivation, poor academic performance, and ultimately, course desertion as evidenced by lower retention rates in online courses (Al-Freih & Robinson, 2024; McMahon, 2021; Mucundanyi, 2021).

Method

To address the overall course design, it was vital to use a comprehensive, top-down approach for the review provided by the QM rubric. The standards and indicators acted as guideposts to evaluate the degree with which the course was meeting them. Each evaluator was given a reviewer's evaluation table which listed each general standard and each specific standard. Reviewers were asked to indicate for each specific standard whether the standard was met, partially met or not met. The instructions specified that if a standard was considered partially met or not met, then additional comments would be shared to provide an explanation for that rating. The review committee, in conjunction with the professor, would meet monthly to discuss their findings and recommendations. In addition, students were provided with a midterm student evaluation questionnaire listing the eight general standards and the 44 specific standards. They were asked to rate whether they completely agreed, agreed, disagreed, or completely disagreed that the course met each standard. The discussion of this course review will focus on specific and significant adjustments that were

made to the course design using one of the eight general standards and a specific standard to guide the evaluation.

The revision process began with the creation of a course map also known as a content map overview (Wright, 2022; Smith 2014). The entire course was outlined to provide a visual representation of each module, including its name and number, general and specific objectives, educational materials, evaluations, and due dates. This organized overview of the course allowed the professor and review committee members to see how topics were organized and distributed throughout the course. It also provided an alignment and sequencing tool for assuring that learning outcomes, activities and assessments were purposefully connected (Wright, 2022).

Discussion

Course Overview and Introduction

Since having prior experience in online courses was not a requisite for enrollment, a welcome email was sent to all students with key information such as the learning management system homepage, Moodle, and directions for accessing the course. To facilitate navigation of the platform, a video tour was created by the professor to help students navigate the course structure, alert them to the format of the platform and demonstrate how to locate weekly modules easily. The aim of the video tour was to motivate students by showing them what could be expected on the platform and lower the anxiety of beginning a new course.

According to the QM standard, it is also equally important that course content is streamlined for greater student understanding of how each module contributes to the overall achievement of general course objectives. To incorporate course design readability, the

course was broken down into fourteen modules, or lessons, for a 16-week semester where each Monday, a new module would open and would always close on the following Sunday. One of the factors that appeals to online students is the flexibility that studying online provides, utilizing a manageable weekly timeframe, students can more readily integrate their studies into their lives (Al-Freih & Robinson, 2023; Garris & Fleck, 2020). Consistent opening and closing of modules provided students with a routine time frame within which they would be engaging with new content and demonstrating their achievement of module objectives.

The course menu, listed in a column on the left side of the screen, clearly identified each module with a label of the number of the module and its title for quick access. The first module was titled "Course Information" where students were directed to the "start here" activity where the professor introduced themself with a picture, a video introduction, and a written welcome statement (Mucundnyi, 2021). Students were also introduced to the purpose of the course, prerequisites, and course policies. The second module, "Course Introduction," presented students with the e-textbook that would be one of the main, but not exclusive, resources for the course. An e-textbook was chosen to support the development of digital information literacy skills and the use of Open Educational Resources (OER). Originally, the texts were uploaded using a PDF document, however after the course revision an e-textbook was adopted for both online and face to face courses, adding congruence to both modalities of the same course. Rubric indicators for the general standard of Course Overview & Introduction, prompted various course design enhancements to achieve greater accessibility for course users from the onset.

Thirty-one (31) students enrolled in the online course completed the midterm student evaluation questionnaire. When asked if the course met standard 1.2 "Learners are introduced to the purpose and structure of the course", 77% of the students were completely in agreement (Quality Matters, 2024).

Learning Objectives (Competencies)

Course objectives in all modalities outline specific targets for students to follow that will lead to the achievement of both general and specific course goals. Course transparency is facilitated by directly and explicitly informing students of course objectives and how they will be expected to meet them (Fischer, et al., 2022). During the course revision process and by using the course map, each module objective was verified to assure that it could be directly linked to a general course objective. The content map that outlined the overview of the course was used to rewrite module descriptions to clearly state how the content materials, activities and assessments related to achieving the objectives of said module. The description of each module stated the objectives, the assessment to be completed and the purpose of the assignment for obtaining those objectives. Course transparency has been shown to increase both focus and confidence in students (LaForge, 2022). By framing objectives in a way that students can see these measurable and realizable targets, they are more likely to effectively complete the task. For this reason, each Monday morning students received an email reminder with a description of the module. This weekly overview message contained the purpose behind the topic of the module, objectives for that week's module, and the assessment to address those objectives. The information students received by email every Monday was also located in the module description as well. Weekly reminders supported a digital presence of the course and the professor at a distance,

while encouraging students to stay on track and connected to the course. 97% of students reported they agreed that "the relationship between learning objective, learning activities, and assessments [was] made clear" (Quality Matters, 2024).

Assessment & Measurement

In online courses, assessment is the most utilized gauge to monitor student progress and inform instruction. Since the objectives are short term, obtainable goals, students demonstrated their understanding, analysis and application based on assessments directly connected to that module's objectives. Assessments were varied to include quizzes, a group slideshow presentation, four tasks for the group research report or proposal project, student video presentations, and three business documents. The variety of assessments offered students multiple opportunities to demonstrate their knowledge in both oral and written formats.

Another addition as a result of the revision was related to Standard 3.3, "specific and descriptive criteria are provided for the evaluation of learners' work, and their connection to the course grading policy is clearly explained " (Quality Matters, 2024). This specific standard prompted the creation of rubrics for all assignments, except for the quizzes. The rubrics were available for students from the time they received the assignment until they saw their final grade. Having clear criteria for the expected outcome, students could self-evaluate their work, which is key to reflective learning and critical for online students who do not have such ready contact with the instructor as would a face-to-face student.

In addition, providing students with "timely, specific and actionable" feedback was paramount for guiding students at a distance (Al-Freih & Robinson, 2024, p. 8). The online

course reviewed for this paper has a research and report writing focus. Due to the scope of the investigation project being either a research report or project proposal, the activity was broken into four separate, manageable tasks: task #1 planning template, task #2 annotated bibliography, task #3 rough draft of report or proposal, and task #4 final draft. For each task, online students received specific feedback on what was done well and where improvements could be made. Specific attention is given to task #3, the rough draft, so that students received the necessary orientation to be successful in task #4, the final draft. The course revision signaled the importance of giving opportunities to students to track their learning and progress. "Effective support is given when the support matches the need of the student" (VanLeeuwen, 2023, p.590; LeFebvre, 2023). The feedback provided after each task was personalized and specific to the group's work, which afforded them the opportunity to improve upon their initial work before submitting their final project. Of the student who responded, 48% completely agreed and 39% agreed that standard 3.3, "specific and descriptive criteria are provided for the evaluation of learners' work and their connection to the course grading policy," is clearly explained.

Instructional Materials

The course revision required intentional planning regarding instructional materials that directly contributed to the achievement of stated learning objectives. Each module in the course provided a short video of the instructor teaching the content of that module on a slideshow presentation via short videos to engage in "micro learning" which have been shown to optimize student learning, motivation, and attention. Research has shown that more concise presentation of online course content has a positive impact on making learning more manageable and gratifying (Bao, 2020; Kossen & Ooi, 2021, p. 299; Leslie,

2020). A particular advantage of the videos was that they were uploaded to YouTube (www.youtube.com) which has two features of particular interest to English language learners: subtitles and adjustable speed. The use of subtitles is an additional scaffold to the visual and auditory presentation since if part of the recording is unclear or muffled, students can refer to the subtitles for clarification. The adjustable speed feature is also a learning tool since for some students the rate of speech of the instructor may be too fast. By slowing down the speed, greater comprehension can be achieved. The slideshow was included in PDF format as a resource for students to return to as they completed the assignments for the module. An Open Educational Resource e-textbook was used to supplement the video lecture and presentation as well as additional videos or text resources that were appropriate for that module. One student commented "one of the major benefits of this type of study is that all the material discussed in the course is recorded so if there is something you do not understand well, you have the possibility to watch it again as many times as necessary to understand it all and you will always have the material accessible".

Learning Activities and Learner Interaction

According to Mucundanyi (2021), student interaction is considered the most critical interaction in online courses. Standard five "Learning Activities & Learner Interaction" were addressed by assigning a "study group" at the beginning of the course. Up to five students were assigned to work collaboratively to complete their research project and act as a support system for each other throughout the course. By working on projects in a group, students became a part of a learning community which reinforced communication skills, collaboration, and organization, all of which are necessary skills for 21st century learners (Al-Freih & Robinson, 2024). Their first group assignment was to prepare a slideshow

presentation of a particular subtopic introducing the topic of reports and proposals. Each group contributed specific information that would then contribute to the class's overall understanding of the topic. Each group's slideshow presentation was then shared with the class as a resource for all to use while working on their research project. Once the groups began their research project, they were given the option to meet synchronously with the professor for additional support on the task. Student feedback revealed that 67% of students were totally in agreement that the learning activities provided opportunities for interaction that supported active learning.

The course map created at the beginning of the revision process also showed the distribution of assignments to ensure a balance throughout the course. During the course review, each module's activities were revised to ensure that all learning activities directly contributed to supporting the students' abilities to achieve the objectives. All activities were designed to be practical and based on real-life situations such as creating a business report or proposal, practicing interviewing skills and best practices in document design, which promote meaningful, active learning (Wright 2022). Feedback questions were occasionally posted to foster an ongoing dialogue between the students and the professor. When asked if "the learning activities help learners achieve the stated objectives," 94% of students responded favorably (Quality Matters, 2024).

Course Technology

This particular course used the Moodle Learning Management System (uprb.enlinea). During the course review, student survey feedback affirmed greater ease of navigating the course when all elements were located on the same platform. 67% of students were in complete agreement and 33% in agreement that the technological tools

used were to support student participation and active learning. All forums, quizzes and assignments were located on the platform where students could upload assignments or share a hyperlink to their work. This facilitated how they interacted with the course and avoided potential issues of outside sources not being available.

Because student use of technology is essential, various video tutorials were created to support students regarding particular assignments. For example, at the beginning of the course students had to create a video introduction of themselves to the class. To support students' use of technology a video tutorial of how to make a YouTube video was provided as well as references to various free recording applications for how they could record their video.

Learner Support

Learner support began from the first module labeled "Course Information." Here students were directed to how to contact the professor using the platform, by email or during office hours. This information remained posted for the duration of the course so that students could easily access how to contact the professor for support regarding their questions with timely and responsive replies, reinforcing the professor's support and availability (Robinson et al., 2020). One student wrote "this course is well organized… [the professor] is very accessible and I like the platform's organization."

As part of the video tour, previously mentioned in the course overview, students were informed of how to access the Help Desk for technical support and were directed to various resources regarding how to use the Moodle platform, including quick guides, in both English and Spanish, and the Moodle accessibility statement. Infographics were also included regarding academic integrity, time management and "netiquette." Additional tabs

in the same module led students to how to communicate with the university librarians, along with a form for soliciting assistance. Students were also given a YouTube tutorial on how to request reasonable accommodations and contact information should they wish to apply. Additional student support was offered by the university's Writing Center. The Writing Center provided peer-based tutoring where students can take their work to be proofread and revised for free. Since a process-based approach to writing was being utilized for the research project, this service offered another writing support to students before they submitted their final drafts.

Accessibility and Usability

According to the midterm student evaluation administered to students in the course, after the first offering of the course, 50% of the students were in total agreement that "Course navigation facilitates ease of use" (Standard 8.1), however, after applying the modifications according to the QM rubric, 60% of the respondents to the questionnaire were in total agreement.

In addition to the improvements previously mentioned, icons were used to rapidly draw students' attention to the most frequently visited areas of the course platform. For example, a checkmark icon was placed next to the weekly attendance label to remind students to complete this weekly task. After the course revision, one student wrote "I suggest that [all] assignments are structured like the project where the word "task" appeared before the assignment." The feedback students provided was particularly helpful for constructing course that focused on making it more accessible to them. Many student-suggested modifications were implemented immediately, such as the specific labeling as mentioned

above, whereas other suggestions required further investigation before integrating them into the course design.

Conclusion and Recommendations

"Many scholars …argue that integration of technology into the learning and teaching process is only as effective as the pedagogical choices and principles underpinning its use" (Al-Freih & Robinson, 2024, p. 4; Singh, 2017). By using the QM standards, the review committee was able to address eight pillars related to quality assurance of online course design. The singular attention given to each of the eight standards revealed both the strengths in how the course was designed but also highlighted areas for improvement that had not been previously considered. "High-quality online course design takes planning, training and support" that occur during course revisions (LaForge, 2022, p. 26). Quality online courses are supported through cyclical revisions that result in improvements which have the potential to mitigate many distance education challenges.

The following recommendations may be helpful to educators new to course revision or to QM standards. Enhancements to the online course design as a result of consulting the QM standards, such as weekly email reminders, predictable course structure, rubrics, and created student learning communities, demonstrate careful and intentional course design with the ultimate aim of promoting positive learning outcomes (Al-Freih & Robinson, 2024). It is recommended that the online course be offered at least twice before beginning the review process. According to Baldwin & Ching (2019), after two offerings the course is considered mature and ready to be evaluated. Midway through the semester, students were asked to evaluate the course using the Standards for the Quality Matters Rubric. The decision to request feedback mid-semester was to check in with students on what was

working well and what could be improved before the course was completed. This worked very well for this course review because it allowed for modifications to support learners to be made before the course ended. It also provided the instructor with time to evaluate student comments and incorporate them before the next course offering.

Monthly course review meetings are also recommended throughout the review process for sharing ideas, difficulties, and suggestions regarding the standards. Peer feedback from experienced online course professors was extremely beneficial for exploring various possibilities for achieving the QM standards. Student feedback, professor reflection and peer feedback have been essential to the systematic review as they allowed for clear and useful feedback to guide course revisions as each stakeholder contributed their unique perspectives regarding the course.

Effective instruction in any modality whether hybrid, online or face to face, is supported by continuous reflection on instructional practices that promote positive student learning outcomes. Revising and evaluating a course in terms of the eight QM standards: course introduction, objectives, assessments, instructional materials, learning activities, use of technology, learner support and accessibility & usability, is a framework for reviewing the vital components of course design (Quality Matters, 2024). As a result, the ideas discussed in this paper are not limited to online courses as they relate to effective course design in general.

The study provided a description of a possible route to follow when revising an online course. The QM standards shed light on the various features of course design that are potentially overlooked given the scope of building an online course. The goals set at the onset of the revision process of increasing student motivation through design

enhancements, improving academic performance and raising student satisfaction were accomplished; nevertheless, continued online course design revision is indispensable for enriching both teaching and learning processes in order to provide a quality online course.

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