

EXISTING CRITERIA DETERMINING COURSE QUALITY IN DISTANCE EDUCATION

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ABSTRACT

Today, while governments mostly focus on indicators such as productivity, cost effectiveness, social satisfaction, and accountability as quality indicators, higher education institutions take into account fundamental indicators such as student output, learning and teaching processes, student and staff support, assessment, evaluation, and resources. These fundamental indicators can be varied institutional-based, program-based or course-based. In the context of higher education, quality assurance of distance education actually requires different quality indicators and different regulations from traditional higher education. On the other hand, quality assurance in distance education is more debated than traditional education. Currently, people do not trust the quality of distance education. Therefore, initiatives to increase the quality of distance education may be increased the assurance in distance in distance education.

The aim of this study is to examine the studies which provide criteria to evaluate online courses for creating or improving quality standards in online environments in the context of higher education and also to make a descriptive analysis by presenting differences and similarities between the course quality measures of these studies. This study is expected to guide the online course developers, faculty, and administration of higher education institutions to improve or to redefine the quality of their proposed online courses.

Keywords: Distance education, Quality Assurance, Accreditation, Quality of courses.

INTRODUCTION

Quality assurance is designed to improve and prove the quality of methods, educational products and outputs in an organization. A quality assurance system includes standards to be awarded and documented procedures for all defined processes, as well as defined ways to respond to a number of problems, and significant accountability for outputs (Kirkpatrick, 2005). Quality assurance in online distance learning requires different quality indicators from traditional education, as well as evaluations in different settings, and also readiness for e-learning (Stella, Gnanam, 2004; Latchem, 2014). Different views on quality assurance in open and distance learning are pioneers to the development of pedagogical paradigms in open and distance learning. These different views are summarized as follows (Latchem and Jung, 2012: 13-14): (1) distance education and face-to-face education should be assessed with the same criteria and methods, (2) the quality assurance criteria and mechanisms used in traditional education cannot be applied to open and distance learning, since aims, institutional structure, registration, procedures are different, (3) certain guidelines and standards are required for e-learning, (4) the basic principles of learning and teaching do not change at open and distance learning apart from technology, (5) quality assurance in open and distance learning must be compulsory, accountable and managed externally, (6) quality assurance in open and distance learning must be optional, runs internally and should be developed a culture of institutional quality, (7) it is the duty of the providers of open and distance learning to prove that the processes and outputs of open and distance learning are at least as good as traditional institutions, (8) traditional learning and teaching methods are old fashioned, more learning-centered, so structural and connectivist methods should be applied and then the most appropriate one must be selected from practical, face-to-face or technologically enhanced learning methods. In the light of these discussions, we can say that there is a consensus on the idea that "online courses require additional attention to detail".

Zawacki-Richter (2009) asked 25 experts (at least 10 years of professional experience in the field of distance education) from 11 countries (Australia, Brazil, Canada, China, Fiji, Germany, Ireland, New Zealand, South Africa, UK, and USA) to identify distance education research priorities and classified them as macro, meso, and micro levels. He stated that accreditation as a collegial process based on self and peer assessment for public accountability and for improvement of academic quality and quality standards in distance education have a meso level research priority. He also addressed that "course evaluation" is as a common research theme. Wright (2003) presented the criteria for evaluating the quality of online courses by asking specific questions. For example, at the beginning of the course, do the learners have enough general information that will assist them in completing the course and also in understanding the courses' objectives and procedures? How accessible is the course material? Does the material organize in such a manner that learners can discern relationships between parts of the course? Does the level of the language proper for the intended audience? etc.



Higher education institutions take into account of the main indicators for quality assurance and accreditation such as student outcomes, curriculum, courses and educational software, learning and teaching, student and staff support, assessment and evaluation, internal quality assurance systems, management, staffing, and resourcing (Chalmers & Johnston, 2012; Latchem, 2014). According to Chalmers and Johnston (2012), these indicators should be measured adequately and one should not be considered as a priority over the others. Besides, in a study conducted by Lagrosen, Seyyed-Hashemi and Leitner (2004), the authors have stated quality indicators such as institutional cooperation, information and responsiveness, offered courses, campus facilities, teaching practices, internal evaluations, external evaluations, computer facilities, collaboration and benchmarks, post-university factors, and library resources in the context of higher education.

Furthermore, the quality assurance indicators of online courses can be differed from various aspects of processes, approaches, and networking from country to country (Campbell and Rozsnyai, 2002; Stella& Gnanam, 2004). Besides, these quality indicators are different from traditional education in some aspects (Phipps & Merisotis, 2000; Kidney, Cummings & Boehm, 2007). In order to build trust on the quality of distance education, countries such as the United Kingdom, the United States and Australia are assessing distance education programs as rigorously as traditional institutions. For example, the British Open University has to meet the same quality assurance standards as other traditional British universities. These standards, which are set by the British Quality Assurance Agency (QAA), are getting up the British Open University to higher levels in terms of teaching quality, mostly similar in the USA universities (Stella, Gnanam, 2004; Mills, 2006).

On the other hand, activities to be adapted by higher education institutions in order to establish quality assurance in open and distance learning are evaluated in terms of curriculum, staff support, and student support and outcomes as follows (Kirkpatrick, 2005):

In terms of curriculum and teaching: Determining academic standards and qualifications, establishing standards in designing and admission process of programs, creating a cycle in which overall programs can be viewed by various aspects, establishing of mechanisms for the evaluation of the effectiveness of learning, teaching and evaluation strategies, developing strategies to monitor the processes that the learners are involved in, creating quality control systems to monitor the performance of online tutors and assessors.

In terms of staff support: Training all staff such as teachers, course designers, online instructors, consultants, and administrators, who are in charge of open and distance learning, improving the use educational design and pedagogy, information and communication technologies of teaching staff, providing training on institutional policies and operations, training all staff in the learning management systems, procedures and policies that they are connected to, identification of the necessary experience and competencies for administrative and academic staff and establishment of reliable systems for communication purposes.

In terms of student support: Establishing of performance standards and document processes, documentation of the content and structure of student and staff records, and giving responsibility for monitoring them, establishing the procedures to monitor the operations in downloading and uploading materials and student records, creating procedures, policies and timelines for setting and acceptance of the assignments to students, establishing of procedures and timelines for the development of learning materials (including printing, production and distribution), establishment of communication and monitoring standards for students to access tutors, determination of student support services (including location, scope, service standards, accessibility), establishing of performance indicators regularly.

In terms of students outcomes: establishing of student continuity at reasonable rates, mechanisms for monitoring student continuity and strategies for responding to students' problems, ensuring that students are improving, and also developing strategies to monitor their performance standards in course subjects and throughout lectures and programs, identification of external benchmarks or standards, developing and monitoring policies on assignments, grading (such as certificate, bachelor's, master's degree) applications and degree distribution.

The aim of this study is to examine the studies which provide criteria to evaluate online courses for creating or improving quality standards in online environments in the context of higher education and also to make a descriptive analysis by presenting differences and similarities between the course quality measurements of these studies.



STUDIES TO DETERMINE COURSE QUALITY STANDARDS IN DISTANCE EDUCATION

Quality standards or rubrics in distance education involve a set of criteria to guide higher education institutions through the development, evaluation, and improvement of online and blended courses. These standards (rubric) and guidelines are used as online course evaluation materials. There are several universities and organizations which propose quality standards or guidelines for online courses via rubrics. Some of them are listed as follows (http://fod.msu.edu/oir/evaluating-online-courses):

- Quality Matters from Michigan State University,
- Quality Online Course Initiative from University of Illinois,
- Online Course Evaluation Project from Monterey Institute for Technology and Education,
- Online Course Development Guide and Rubric from University of Southern Mississippi Learning Enhancement Center,
- Online Course Development Guidelines and Rubric from Michigan Colleges Online,
- Chico Rubric from California State University,
- Online Course Assessment Tool from Western Carolina University,
- Online Learning Consortium Standards,
- E-learning Rubric from E-campus Alberta, Canada.

These rubrics or guidelines identify the issues for faculty when developing online courses based on best practices. Besides, these rubrics are utilized as a self-assessment tool by faculty or an organization when offering online courses. Using these rubrics can represent a developmental process for online course design and delivery. The rubrics covered in the study are introduced below:

Quality Matters Rubrics for Higher Education & Continuing and Professional Education

Quality Matters (QM) is a quality assurance organization, initiated in 2003 as a non-profit subscription service. The services are adapted into different rubrics such as higher education, continuing and professional education, K12 and educational publishing. Each rubric focuses on different components. In this study, higher education rubric as well as continuing and professional education rubric will be examined.

Higher Education rubric (QM HE) and Continuing and Professional Education (QM CPE) rubric are common on five standards such as learning objectives (competencies), assessment and measurements, instructional materials, course activities and learner interaction, course technology which should be worked together to ensure students' achievement of desired outcomes. This requirement named as alignment. A standard course review process of QM HE to catch this alignment is shown in Figure 1.

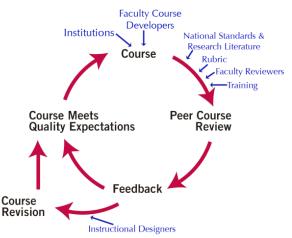


Figure 1. Course Review Process of QM (QM, 2014)

In addition to alignment standards, QM HE has extra three general standards for determining course quality such as "course overview and introduction", "learner support", and "accessibility and usability" (Standards from the QM Higher Education Rubric, 2014).

QM CPE rubric, which released in 2013, can be used to evaluate massive open online courses (MOOCs), noncredit competency based courses, and continuing education learning offered by colleges and universities. Besides, it can be used to improve develop training run by businesses, or professional development courses managed by associations which are not concerning with academic credit. This rubric is based on the QM HE, but also adapted to the requirements of continuing and professional education (Standards from the QM CPE Rubric, 2015). It is essential for competency-based education, and competencies in this rubric are acted like learning



objectives.

The Online Course Evaluation Project Standards

The Online Course Evaluation Project (OCEP) is a project of the Monterey Institute for Technology and Education (MITE) funded by The William and Flora Hewlett Foundation, and is aimed to provide a criteriabased evaluation tool to assess and compare the quality of online courses in higher education. OCEP focuses on the instructional and communication methods, and the presentation of the content and the pedagogical aspects of online courses. OCEP employ a team approach in evaluating courses; subject matter experts evaluate the scholarship, scope, and instructional design aspects of courses, while online multimedia professionals are used to consider the course production values and technical consultants are established and evaluated the interoperability and sustainability of the courses (OCEP, 2010).

OCEP has eight categories to evaluate online course quality; (1) course developer and distribution models (developer organizational unit, distribution of the course, licensing models), (2) scope and scholarship (audience and grade level, breadth of coverage, writing style and accuracy, course orientation and syllabus, learning objectives clearly stated, exercises, projects, and activities, additional text material required or optional, instructional philosophy, rights of use and copyright associated with course content), (3) user interface (navigation, course progress indicator for the student, placement of elements and presentation consistency, playback control of media and elements), (4) course features and media values (pedagogical features, media presentation effectively presents course concepts, text, video, animation, graphics, audio, simulations and games, accommodates variety of media types and learning styles, student interaction with the content), (5) assessment and support materials (assessment availability, assessment methods, assessment grading, grading rubrics provided, test item types, feedback loop for test items, support materials for the instructor and for the students), (6) communication tools and interaction (course environment, communication tool access, content to utilize communication tools), (7) technology requirements and interoperability (course format, operating systems and platforms supported, browsers supported, server-side requirements, required applications or plug-ins, learning object architecture or modular course elements, interoperability standards, accessibility), (8) developer comments (general comments and differentiating features, course effectiveness, course structure, additional services, test item availability, hours of student work and study, content authoring environment).

Online Learning Consortium Standards

The Online Learning Consortium (OLC) is a professional online learning society devoted to improve the quality of American higher education and also the international field of online education since 1992. In 2014, their name is changed from the Sloan Consortium (Sloan-C) to the Online Learning Consortium (http://onlinelearningconsortium.org/). OLC has criteria for administrations of online programs named Quality Scoreboard. This scoreboard also includes quality indicators for online courses in evaluation categories such as technology support, course development/instructional design, course structure, teaching and learning, social and student engagement, faculty support, student support, and evaluation and assessment (Quality Scoreboard, 2015).

E-campus Alberta e-learning Rubric

E-Campus Alberta e-learning rubric is originally developed in 2000 to support the establishment of quality online curriculum including course standards, support standards, and institutional & administrative standards in the context of post-secondary level. It was updated in 2013 and named as "Quality Standards 2.0". Then, support standards and institutional & administrative standards have been removed from the original rubric. They are still being evaluated in terms of alignment with current literature. This rubric is expected to assess existing courses or for the courses in development process. It is also expected to be a guide for faculty, instructional designers and online curriculum developers (E-learning Rubric, 2013).

E-learning rubric course standards have seven categories such as course information, organization, pedagogy, writing, resource, web design, and technology. These standards are ranked as one of three levels – Essential, Excellent, or Exemplary. Essential means "these standards are integral to a successful online course". Excellent means "these standards contribute to the efficiency or effectiveness of a learner's online experience". Exemplary means "These standards enhance the quality of a learner's online experience and increase accessibility for all learners" (http://rubric.ecampusalberta.ca/).

Chico Rubric

The Rubric for Online Instruction (ROI) is a tool which developed by a committee of Chico State faculty, administrators, staff and students of California State University in 2003 (revised in 2009) to create or evaluate the design of a fully online or blended courses (http://www.csuchico.edu/eoi/). This rubric presents a developmental process for online course design and delivery to support a faculty's effort in developing expertise in online instruction. This instrument contains six categories such as learner support and resources, online



organization & design, instructional design & delivery, assessment & evaluation of student learning, innovative teaching with technology, and faculty use of student feedback. Each category can be ranked as one of three levels – baseline, effective, or exemplary (ROI, 2009).

METHOD

This is a qualitative research using descriptive analysis. It is aimed to describe the data and characteristics that studied about the quality of online courses in the current literature. This study describes standards and criteria of rubrics using in online courses and also discovering relationships between existing rubrics for online courses which aim to determine quality in distance education. The standards and rubrics to be studied in the scope of this study are as follows:

- Quality Matters Rubrics for Higher Education (QM) and Continuing & Professional Education (QM CPE)
- Online Learning Consortium Standards (OLC)
- Online Course Evaluation Project Standards (OCEP)
- E-campus Alberta E-learning Rubric (Alberta)
- Chico Rubric (Chico)

Careful attention has been paid to the fact that these samples are produced up-to-date. A comparative analysis has been conducted to determine the differences and similarities between the indicators of these rubrics.

FINDINGS

The similarities and differences between the indicators of rubrics examined in this study are as follows:

Comparison of QM key features with other rubrics

When compared QM rubric criteria with the standards of other rubrics examined in this study such as OLC rubric, e-learning rubric, Chico rubric and OCEP rubric (Table 1.), no specific consistency have been exactly determined in other rubrics. However, the standards such as course overview and introduction, learning objectives (competences) are playing a part in other rubrics except Chico rubric. Chico also has no support for instructional materials that enable learners to achieve stated learning objectives or competencies in their rubric. Additionally, there is no emphasis on course technology in other rubrics such as the tools used in the course support, course tools, technologies required in the course, and links that provided to privacy policies for all external tools required in the course. Besides Alberta rubric and OCEP rubric do not provide learner support in the course instructions to link for technical support, the institution's accessibility policies and services, institution's academic support services and resources, and the institution's student services and resources.

QM Rubric Criteria	OLC	Alberta	Chico	OCEP
Course Overview and Introduction	+	+	-	+
Learning Objectives (Competencies)	+	+	-	+
Assessment and Measurement	+	-	+	Not totally
Instructional Materials	Not totally	+	-	+
Course Activities and Learner Interaction	-	+	-	+
Course Technology	-	-	-	-
Learner Support	+	-	+	-
Accessibility and Usability	+	Not totally	-	+

Table 1. QM rubric criteria come nearer with other rubrics

Comparison of OCEP key features with other rubrics

OCEP evaluation categories are considerably different from other rubrics examined in this study (Table 2.). The categories such as "course developer and distribution models" and "developer comments" are not provided by the other rubrics. However, some of the quality indicators in three evaluation categories such as "scope and scholarship", "communication tools and interaction", and "assessments and support materials" take in part in other rubrics.



OCEP Rubric Criteria	Chico	QM	Alberta	OLC
Course Developer and Distribution Models	-	-	-	-
Scope and Scholarship	+	+	Not totally	Not totally
User Interface	-	-	Not totally	-
Course Features and Media Values	-	-	Not totally	-
Assessments and Support Materials	Not totally	+	-	Not totally
Communication Tools and Interaction	Not totally	+	+	-
Technology Requirements and Interoperability	-	Not totally	-	+
Developer Comments	-	-	-	-

	Table 2. OCEP	rubric	criteria	come	nearer	with	other	rubrics
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Comparison of OLC key features with other rubrics

Some of the quality indicators of OLC Quality Scoreboard are similar with indicators in other rubrics examined in this study (Table 3.). According to "course structure" criteria of OLC, an online course must include the outline of syllabus, library and learning resources, assignment completion, grade policy, and faculty response to students, technical support, instructional materials, and alternative instructional strategies for students with disabilities, tools for student-student collaboration, rules and standards appropriate for online students. Most of these indicators are also supported by other metrics.

Moreover, QM, Alberta and OCEP agree with the criteria in "technology support" including electronic security measures such as password protection, encryption, secure online exams, and system downtime tracking, supporting in the development and use of new technologies etc, and "student support" including accessing the course design with minimum technology skills and equipment, accessing to training, information and technical support staff throughout the duration of the course, providing frequently asked questions to respond the students most common questions, providing non-institutional support services such as admission, financial assistance, registration/enrollment etc., supporting students with disabilities, accessing required course materials in print and digital format, providing guidance/tutorials for students in the use of all forms of technology used for course delivery. Besides, they agree with "evaluation and assessment" including intended learning outcomes at the course level, assessment of student retention, feedback on the effectiveness of instruction, feedback on quality of online course materials.

OLC Rubric Criteria	Chico	QM	Alberta	OCEP
Technology Support	-	+	+	+
Course Development / Instructional Design	+	-	Not totally	-
Course Structure	+	+	Not totally	+
Teaching & Learning	-	-	Not totally	Not totally
Social and Student Engagement	+	-	-	+
Faculty Support	-	-	-	+
Student Support	+	+	-	+
Evaluations & Assessment	+	+	-	+

Table 3. OLC rubric criteria come nearer with other rubrics

Comparison of E-campus e-learning rubric key features with other rubrics

When compared the quality indicators of e-Campus Alberta e-learning rubric with the other rubric examined in this study, it can be said that course information standards of this rubric are exactly complied with other rubrics (Table 4.). Course information standards of e-learning rubric are such as providing a course outline/syllabus and course description, communication of learners with the instructor, stating achievable, measurable, relevant learning outcomes/objectives clearly, presenting grading information at the beginning of the course, and explaining the role of instructors and learners respectively. Besides, technology standards such as basic hardware and free software plug-in requirements, and providing orientation of delivery technology somewhat comply with the other rubrics.

Web design standards (logical and consistent design format, facilitating legibility and readability in design, consistent, predictable and efficient navigation) and writing standards (content is free to bias related to age, culture, ethnicity, sexual orientation, gender, or disability, positive tone of the writing, cited academic contents, clear and readily comprehensible language, correct grammar, punctuation, and spelling) are not structured in other rubrics.



Organizational standards such as "establishing a learning path, organizing learning materials, informing learners about time commitment, and pedagogy standards" such as "providing instructions for all activities graded and non-graded, providing clear details of marking criteria, incorporating interactive activities into the course, designing instructional strategies to meet different learning needs and preferences, establishing formal and informal feedback to learners throughout the course" are not exactly complied with other rubrics (E-learning rubric, 2013).

Table 4. E-campus Alberta e-learning rubric comes nearer with other rubrics

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E-learning Rubric Criteria	OLC	QM	Chico	OCEP		
Course Information Standards	+	+	+	+		
Organization Standards	Not totally	Not totally	-	-		
Pedagogy Standards	Not totally	Not totally	-	Not totally		
Writing Standards	-	-	-	Not totally		
Resource Standards	-	+	+	-		
Web Design Standards	-	-	-	Not totally		
Technology Standards	+	+	Not totally	Not totally		

Comparison of Chico rubric key features with other rubrics

The indicators of Chico rubric as learner support and resources comply with the other rubrics examined in this study (Table 5). These indicators are containing information for online learner support and links to campus resources, providing course-specific resources and contact information for instructor, department or/and a program, offering resources supporting course content and different learning abilities.

Table 5. Chico rubric comes nearer with other rubrics					
Chico Rubric Criteria	OLC	QM	Alberta	OCEP	
Learner Support & Resources	+	+	+	+	
Online Organization & Design	+	-	-	Not totally	
Instructional Design & Delivery	+	-	Not totally	+	
Assessment & Evaluation of Student Learning	+	+	-	+	
Innovative Teaching with Technology	-	-	-	Not totally	
Faculty Use of Student Feedback	-	-	-	+	

Table 5. Chico rubric comes nearer with other rubrics

CONCLUSIONS

The evaluation of online courses involves many of the same criteria applied to traditional classroom courses but also requires the use of new criteria based on the online environment (http://fod.msu.edu/oir/evaluating-online-courses). Although traditional classroom courses are usually planned with a draft outline of topics and assignments, online courses needs planning, monitoring, management, and resource allocation, and careful selection of learning materials as well as students' pre-entry guidance, communication and feedback (Alstete & Beutell, 2004). According to King (2011) improving learning standards means changing measurable learning outcomes.

Higher education institutions are more likely to see an increase in student engagement and learning with welldesigned and well-structured online courses. The factors that affecting the quality of online courses are course design, course delivery, course content, institutional infrastructure, learning management systems, faculty readiness and student readiness (https://www.qualitymatters.org). Rubrics have indicators to evaluate these factors. They are created to help course developers, instructors, faculty, staff, entire organizations, and students for running online and blended courses in higher education.

This study presents a comparison of five different rubrics which share a common desire: to advance the quality of open and distance learning courses. Although there are many differences between the criteria of these rubrics, they all agreed on such criteria: Course information standards and learner support and resources.

Additionally, at least four rubrics are agreed that online courses must have the criteria below;

- Course Overview and Introduction/ Course Structure
- Learning objectives (competences)
- Assessment and Measurement/ Evaluations & Assessment
- Instructional Materials
- Accessibility and Usability
- Scope and Scholarship



- Communication Tools and Interaction
- Technology Support/ Technology Standards
- Student Support
- Assessment & Evaluation of Student Learning

In recent years, course criteria are being an important aspect of the accreditation in distance higher education. However, it has been a lack of emphasis on integrative ideas and synthesis across existing criteria of open and distance education courses. This study can be a guide for course developers in distance education, and also for any distance education institution which wants to conduct its own evaluation standards for distance courses. This study is expected to guide the online course developers, faculty, and administration of higher education institutions to improve or to redefine the quality of their online courses.

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