



QUALITY OF ONLINE COURSES

Afsaneh Sharif

Dipòsit Legal: T 1222-2014

ADVERTIMENT. L'accés als continguts d'aquesta tesi doctoral i la seva utilització ha de respectar els drets de la persona autora. Pot ser utilitzada per a consulta o estudi personal, així com en activitats o materials d'investigació i docència en els termes establerts a l'art. 32 del Text Refós de la Llei de Propietat Intel·lectual (RDL 1/1996). Per altres utilitzacions es requereix l'autorització prèvia i expressa de la persona autora. En qualsevol cas, en la utilització dels seus continguts caldrà indicar de forma clara el nom i cognoms de la persona autora i el títol de la tesi doctoral. No s'autoritza la seva reproducció o altres formes d'explotació efectuades amb finalitats de lucre ni la seva comunicació pública des d'un lloc aliè al servei TDX. Tampoc s'autoritza la presentació del seu contingut en una finestra o marc aliè a TDX (framing). Aquesta reserva de drets afecta tant als continguts de la tesi com als seus resums i índexs.

ADVERTENCIA. El acceso a los contenidos de esta tesis doctoral y su utilización debe respetar los derechos de la persona autora. Puede ser utilizada para consulta o estudio personal, así como en actividades o materiales de investigación y docencia en los términos establecidos en el art. 32 del Texto Refundido de la Ley de Propiedad Intelectual (RDL 1/1996). Para otros usos se requiere la autorización previa y expresa de la persona autora. En cualquier caso, en la utilización de sus contenidos se deberá indicar de forma clara el nombre y apellidos de la persona autora y el título de la tesis doctoral. No se autoriza su reproducción u otras formas de explotación efectuadas con fines lucrativos ni su comunicación pública desde un sitio ajeno al servicio TDR. Tampoco se autoriza la presentación de su contenido en una ventana o marco ajeno a TDR (framing). Esta reserva de derechos afecta tanto al contenido de la tesis como a sus resúmenes e índices.

WARNING. Access to the contents of this doctoral thesis and its use must respect the rights of the author. It can be used for reference or private study, as well as research and learning activities or materials in the terms established by the 32nd article of the Spanish Consolidated Copyright Act (RDL 1/1996). Express and previous authorization of the author is required for any other uses. In any case, when using its content, full name of the author and title of the thesis must be clearly indicated. Reproduction or other forms of for profit use or public communication from outside TDX service is not allowed. Presentation of its content in a window or frame external to TDX (framing) is not authorized either. These rights affect both the content of the thesis and its abstracts and indexes.

DOCTORAL THESIS

Afsaneh Sharif

QUALITY OF ONLINE COURSES

Universitat Rovira i Virgili



Department of Education

Afsaneh Sharif

QUALITY OF ONLINE COURSES

DOCTORAL THESIS

Supervised by Dr. Merce Gisbert

Department of Education



Tarragona, Spain

2014

Acknowledgments

I would like to express my deepest gratitude to my supervisor Dr. Merce Gisbert for the continuous support of my PhD study and research, for her motivation, support, enthusiasm and immense knowledge. Her encouragement got me started on the journey of doctoral study and her guidance throughout my research helped me to arrive at my destination with more knowledge and interests in the field. I could not imagine having a better advisor and mentor for my PhD study. You are wonderful and thank you for all your support all the way.

I would like to thank my instructional designer colleagues in Canada who willingly participated in my research and provided me with constructive feedback throughout the study. I would also like to thank the research group at the Universitat Rovira i Virgili and instructional designers in Spain, from Rovira i Virgili, Murcia, Balears, Lleida and Jaume I of Castello universities, who participated and contributed significantly to the research. As well, I am grateful to the Spanish students registered in the Masters of Educational Technology at Universitat Rovira i Virgili who participated in this research and enriched my results.

Last but not least, I would like to thank my family members, relatives, and friends for being patient with me and supporting me throughout my study. Words cannot express how grateful I am to have you all in my life. I would like to say a BIG thank you to my husband and my daughter, Ardalan and Andisheh, for supporting me and loving me while I was lost behind my computer and piles of books and papers and for finding me and being there when I needed them.

Table of Contents

Acknowledgments	iv
Abstract.....	viii
Chapter One: Introduction	1
Statement of the Problem.....	1
Research Questions.....	3
Significance of the Study	4
Defining Variables.....	4
Chapter Two: Literature Review	7
Instructional Design and Different Instructional Design Models.....	7
Online Learning: Current Standing and Future Development (and How It Impacts Instructional Designers' Tasks).....	10
Quality of Online Learning.....	12
Review of Existing Rubrics for Quality of Online Courses	14
Instructional Designers and other Factors in Quality (i.e., Culture).....	15
Chapter Three: Methodology and Justification.....	17
Instructional Designers, Their Identity and Actual Practice (Survey Questions).....	17
Key Elements for Quality Design: Designers' Perspectives in Canada (Rubric Questionnaire).....	20
Key Elements for Quality Design: Designers' Perspectives in Spain (Rubric Questionnaire).....	21
Key Elements for Quality Design from Learners' Perspectives (Rubric Questionnaire).....	22
Deeper Understanding: Most Useful Resources for Instructional Designers (Interview)	23
Research Design.....	26
Limitation of Method.....	27
Objective of the Interview	28
Outline of the Interview Process.....	28
Data Analysis.....	29
Report of Data.....	32
Conclusion	37

Chapter Four: Quality Guidelines/Framework	39
Selection of Platform: Why Wiki?.....	40
Course Development Phases/Instructional Design Model: Inspired by the Analysis, Design, Develop, Implement, Evaluation (ADDIE) Model	40
Course Development Cycle	41
Phase 1: Planning.....	42
Phase 2: Design and Development	45
Phase Three: Production	49
Phase Four: Implementation	52
Phase Five: Evaluation.....	55
Chapter Five: Conclusion.....	67
References.....	71
Appendix A: Hearing From Instructional Designers: Our Identity and Actual Practice.....	78
Appendix B: Quality Assurance in E-Learning Programs	96
Appendix C: Quality of Online Learning: Adding MOOC into the Mix?	108
Appendix D: Quality Assurance in e-Learning Environments	117
Appendix E: Quality of Online Programs: Cultural Differences' Impact on Instructional Designers' Practice and Perspectives.....	121
Appendix F: Questionnaire — Quality Matters Survey	133
Appendix G: Quality of Online Learning through Instructional Designer's Lens.	136
Appendix H: Students' Questionnaire	147
Appendix I: Interview Consent Form.....	150
Appendix J: Interview Questions	151
Appendix K: Course Planning.....	152
Appendix L: What Should a Quality Online Course Look Like? The First Step in Design — Course Planning	157

Abstract

This study takes a comprehensive look at the key elements for quality online courses within the field of instructional design by examining the core elements of effective design in existing guidelines and benchmarks while taking into consideration the impact of instructional designers' cultural and educational backgrounds. The research also explores key factors for a quality online course in different phases of the course development process. To gain a better understanding of the ways in which designers approach their work and strive for a good-quality result, different research methods were used in this study. A quantitative approach, which included surveys in different steps and locations, was used to gather the elements that 52 designers focus on and find critical in their quality design. The surveys were conducted in both Spain and Canada to examine the impact of culture on core elements of design. A qualitative approach, an interview, was the main focus of this study and was used to explore the views of a good-quality course, examining the backgrounds and experiences of eight instructional designers and their views of "an ideal course". The study and observation of the evolution of technology, instructors and learners' roles, and designers' cultural and educational differences led to development of a flexible online course development guideline within this field. The guideline can be found at http://wiki.ubc.ca/Design_Quality_OnlineCourse. The study also provides valuable insight into online learning and how a good online course can be developed through ongoing evaluation and emphasis of key elements in each phase of course development.

Chapter One: Introduction

Each instructional designer has his or her own unique approach when following different instructional design models to create a high-quality online course. From an instructional design perspective, there are three main steps to creating and assessing a quality online course: first, the designer must define quality; second, he or she must explore the phases and the models that will be used to develop the online course; and third, the instructional designer must link the aforementioned steps together to determine their possible relationship.

The main purpose of this study is to conduct an action research to investigate online course development, instructional design stages, and factors that contribute to the development of a high-quality online course. This research will then isolate what instructional designers have that leads them to produce a high-quality course and what they could have more of to perform their responsibilities more effectively. To meet this purpose, this research will a) examine, through the instructional designer's lens, the models and the phases of development of an online course, b) investigate the elements in the course development phases that contribute to the quality of an online course from an instructional designer perspective, c) investigate online learning and its evolution, and d) examine current quality guidelines/frameworks in order to add key elements of online course development that are currently not available or discussed in detail. These four steps led me to the following conclusion: ample research has been conducted to develop tools to help instructional designers create effective courses. However, these tools become outdated as technology and education policies evolve. As a result, I developed an easily accessible and modifiable open source guideline/resource that addresses this problem.

Statement of the Problem

Instructional designers strive to create quality online courses by using different methods and strategies; however, they rarely find the time to reflect on their work and evaluate their final course design. There are three main challenges that instructional designers face while developing online course. First, instructional designers have ambiguity around their

roles, and their skills and expertise are often not used as they fulfill their responsibilities. In my paper, *Hearing from Instructional Designers: Our Identity and Actual Practice* (Appendix A), which relates to the first challenge, I discussed instructional designers' current challenges and explored different instructional design models that are used in the course development process. Second, despite the existence of different guidelines and procedures developed for quality assurance, there are no specific universal steps that an instructional designer can complete to arrive at a good-quality course. This is because each designer may define each step or element differently, and given the fact that these steps/phases are not defined and explained thoroughly, they are taken differently. Third, constant changes with technology and online learning often place the instructional designers in unfamiliar situations. These three challenges require instructional designers to be responsive to everyday shifting demands and to continuously update their skills and knowledge.

Many universities use rubrics or third party services to assess the quality of their online courses. Many universities in North America, for instance, have employed Quality Matters Program (Quality Matters, 2011), others have used rubrics that are developed by Learning Management System organizations such as Blackboard (Blackboard Exemplary Course), and a few others follow the in-house rubrics or guidelines that are developed nationally or in collaboration with other institutions internationally. While there are a vast number of tools that are available for universities to integrate into their course development process, many still have no policy, rubric, or process to check the quality of their courses. Similarly, owing to time and budget constraints, many instructional designers commence and end a project with minimum and often no reference to these guidelines. Furthermore, different stakeholders, such as instructors, administrators, or programmers, do not define and assess quality in the same way, and resource constraints exacerbate the problem. As a result, establishing a concrete definition of quality in an online course is a nearly unattainable task. What is online learning and how is it changing? What are the course development phases and steps? What do we mean by quality when referring to an online course? What is missing in an instructional designer's toolkit that prevents him/her from producing a high-quality course? In this thesis, I have

explored possible answers to these questions and have deduced what defines a good-quality course.

Instructional design is a profession that has yet to be fully recognized by educational society. Through time, the position has been compared to professions such as film director (Gibby, Quiros, Demps, & Liu, 2002), architect, and structural engineer (Gibbons, 2003) in the sense that the aforementioned professions use the best available tools and technologies in different layers and phases of design to attract and engage more clients. Professionals who perform the tasks that fall under the responsibility of an instructional designer outlined in Appendix A have neither the same title nor the same pay scale across countries and at times even within the same university. These titles include Learning Designer, Course Developer, Curriculum Developer, Educational Technology Specialist, Program Consultant, and Director of Program (Gibby et al., 2002).

Instructional designers are often not able to fully share their pedagogical skills and expertise with faculty members and are categorized with information technical professionals. This phenomenon exists because instructional designers are mostly located within a service unit of their organizations or because their universities do not recognize their skills and expertise. Another ambiguity in this position is the process of instructional design; there is no universal design model that all designers follow. While there are different instructional design models, such as ASSURE, Backward Design, Dick and Carey, and Kemp, most of these models are spin-offs or variations of the traditional analysis, design, development, implementation, and evaluation (ADDIE) model (Culatta, 2011). The ADDIE model and its history are discussed in detail in Appendix A of this thesis. Moreover, the majority of instructional design models have similar phases such as planning/analysis, design/development, production, delivery/implementation, and evaluation under different names and titles.

Research Questions

The key question guiding this study is: What are the key elements that instructional designers need to look for in their course development process and instructional design

models in order to develop a good-quality online course? Is a core set of guidelines necessary in order to develop a good-quality course?

Significance of the Study

This study will provide an understanding of the factors that contribute to the quality of an online course from an instructional designer's point of view. It will explore the position of an instructional designer, particularly in a service unit of a large university, as well as the challenges and opportunities that the holder of this position faces while developing an online course. This study is focused on the daily responsibilities of instructional designers with regards to developing an online course from the planning phase to the delivery phase to achieve a good-quality online course.

This study, therefore, will seek to understand the stages that instructional designers in the workplace go through to develop an online course (versus what they have been trained to do or taught) and to identify the elements and tasks required in each phase/stage to increase the quality of online courses.

Furthermore, this study contributes to the existing literature on quality assurance for online programs. Existing literature focuses on online course quality from the points of view of students, faculty, and administrators but lacks focus on the points of view of instructional designers. To gain a better understanding of good-quality online courses, an instructional designer's perspective also needs to be included in the existing framework and guidelines.

Defining Variables

For the purpose of this study the following definitions are used:

Instructional Design: Instructional design is the systematic process of developing and designing instructions using learning and instructional theory to ensure the quality of the learning materials. According to Reiser (2012), the instructional design field covers the analysis of learning problems and learners, the design, development, implementation, evaluation, and management processes, and resources intended to improve learning and

performance in a variety of settings, particularly educational institutions and the workplace. Professionals in the field often use systematic instructional design procedures and employ a variety of instructional techniques and media to accomplish their goals.

Instructional Designer: Instructional designer is one of the professions where its actual practice and identity are not fully recognized within the educational community. Williams, South, Yanchar, Wilson, and Allen (2011) refer to instructional designers as learners who are trying to help other learners while working in complex and rapidly changing circumstances. Richey, Fields, and Foxon (2001) specify four roles for the instructional designer: analyst, evaluator, e-learning specialist, and project manager. Throughout time, the position has been compared to different professions, such as film director (Gibby et al., 2002), architects, or structural engineers (Gibbons, 2003). In other words, all these professions use the best available tools and technologies in their respective fields to attract and engage more clients. In recent years, instructional designers have been referred to as an “agent of social change” and “civic-minded professionals” (Schwier, Hill, Wager, & Spector, 2006; Yusop & Correia, 2012). The profession takes on different titles in different parts of the world or even within the same institution.

Instructional Design Models: Instructional design models provide guidelines or frameworks that help organize structures of procedures in designing and developing instructional activities. There are numerous instructional design models (e.g., Dick and Carey, Kemp, ASSURE, and Rapid Prototyping) that are variations of the traditional ADDIE model (Culatta, 2011). Moreover, they all have similar analysis, design, production, implementation, and evaluation phases, yet use different names and titles.

Online Learning: Online learning or e-learning comprises all forms of electronically supported learning and teaching; it is essentially the computer- and network-enabled transfer of skills and knowledge. E-learning applications and processes include Web-based learning, virtual education opportunities, and digital collaboration, and content is delivered via the Internet and intranet/extranet. Online learning can be self-paced or instructor-led and includes media in the form of text, image, animation, streaming video,

and audio. Online learning is the use of the Internet to access learning materials and to interact with the content, other learners, and instructor to acquire knowledge, construct personal meaning, build on the knowledge, and grow from the learning experience. Leaders in the field of education have argued that online learning can effectively respond to accelerating global competition to increase the quality of learning experiences, to remove situational barriers including time and space, and to be more cost effective (Daniel, 1996; Garrison & Anderson, 2003; Twigg, 2003; Bates, 2005).

Quality: A general dictionary definition of quality is an essential or distinctive characteristic of a thing. Quality is fulfilling the customer's (or in the context of this study the learner's) needs and expectations at all times. Quality is about reliability, consistency, relevance, presence, usefulness, longevity, accessibility, and effectiveness. Jung and Latchem (2012) refer to Harvey and Green's five interrelated ways of thinking about quality to capture the meaning of quality in the context of education: excellence, consistency, fitness for purpose, value for money, and transformation. In his recent book review, Bates highlights and summarizes Jung and Latchem's concluding chapter and emphasizes taking a systematic approach to quality assurance (QA) and seeing QA as a process of continuous improvement with focus on outcomes as the leading measure of quality (Bates, 2012).

The next chapter reviews and synthesizes the literature relevant to the research questions of this study. It is organized to demonstrate my thought process and how I examined different literature relevant to the field to find answers to my study questions.

Chapter Two: Literature Review

This chapter synthesizes the literature review relevant to the research questions of the study. It is important to mention that the literature available for review was limited for some topics, such as the quality of online learning from an instructional designer's perspectives as the topic is very role specific, and the concept of MOOCs, which is a part of online learning and is relatively new.

There are four sections to this chapter based on how I categorize my study and literature review; the first begins by providing a historical account of the instructional design field. This section examines the instructional designer position and its challenges and compares different instructional design models to find their core values and their similarities with respect to the ADDIE model. The second section describes the online learning environment and how it is evolving as the technology changes. These changes also affect the ways the courses and programs are developed and offered online as well as the criteria that are set for quality assurance for these programs. Relevant literature indicates that various stakeholders define quality in online learning differently; this is discussed in detail in the third section. The chapter concludes with a section that examines and discusses the instructional designer role and the factors that affect their designs. It examines the impact of culture on how designers consider quality of online courses; it also emphasizes that all designers, despite their cultural differences, acknowledge the same key elements in a course development process.

Instructional Design and Different Instructional Design Models

In my first paper, "Hearing from Instructional Designers: Our Identity and Actual Practice" (Appendix A), I discussed instructional designers' current status through a brief recounting of the history of instructional design and comparison of instructional design models.

What is instructional design? Although instructional design has roots in the study of educational psychology, the relevance of instructional design was established during and after World War II, triggered by the success of the incorporation of training films in the

United States' Army Air Force. All the existing literature written since the growth of this sector supports that the field of instructional design is not static owing to either constant change in the education system or in technology. For example, Bloom (1956) introduced a taxonomy of educational objectives that provided instructors with a means to decide how to communicate instructional materials to learners in the most effective manner. Shrock (1995) explained instructional design as a self-correcting systems approach that applies scientifically derived principles to planning, design, creation, implementation, and evaluation. Later, in the 1990s, with the influence of the technology movement, constructivist approaches encouraged learners to construct their understanding and meaning of reality and experiences. For instance, Dick (1996) and Lebow (1993) tried to see how constructivist principles could enhance instructional design practice. The use of the Internet for distance learning brought instructional designers to consider how online courses could be designed within the new environment. Instructional design is defined as a systematic approach to develop education and training programs in a consistent and reliable fashion (Reiser & Dempsey, 2007). According to Siemens (2002), instructional design is based on theoretical and practical research in the areas of cognition, problem solving, and education psychology. "It is the art and science of creating an instructional environment and materials that will bring the learner from the state of not being able to accomplish certain tasks to the state of being able to accomplish those tasks."

All the above-mentioned literature, discussed in greater detail in Appendix A, show that the field is dynamic and support the need for a designer to be flexible and more creative. Particularly, the influence of technologies and online tools continues to grow and encourage informal learning, which requires instructional designers to create learning opportunities that may occur anytime and anywhere.

Another key topic for me to study and explore was different instructional design models. Instructional design models provide frameworks that help organize structures of procedures in designing and developing instructional activities. There are many instructional design models, such as Dick and Carey, Kemp, ASSURE, and Rapid Prototyping. Appendix A demonstrates how these models all have similar phases and are all mere variations of the traditional ADDIE model (Culatta, 2011). The comparison

between ADDIE and other models is shown Table 1, which is also presented in Appendix A.

Table 1. Comparison of instructional design models

		ADDIE MODEL PHASES				
		Analysis	Design	Develop	Implement	Evaluation
OTHER INSTRUCTIONAL DESIGN MODELS' STEPS	Dick & Carey	Needs assessment to identify goals, instructional analysis, analyze learners and context	Develop instructional strategy, develop and select instructional materials, design formative evaluation, revise instruction	Write performance activities, develop assessment instruments, develop instructional strategy, revise instruction	Develop and select instructional materials	Conduct formative evaluation, design/conduct summative evaluation
	Kemp	Analysis of instructional problems, learner characteristics and task	Develop and design instructional strategies, design content sequencing, and design the message, design of evaluation instruments	Development of instructions	Instructional delivery and implementation, support services	Formative, confirmative, and summative evaluation
	Rapid Prototyping	Information gathering	Setting objectives, construct prototype, refine	Construct prototype	Use prototype	Review
	ASSURE	Analyze learners	State standards and objectives, select strategies, technology, media, and materials	Utilize technology, media, and materials	Require learner participation	Evaluate and revise
	PDPIE	Planning	Development	Production	Implementation	Evaluation

All these models share core values and procedures that need to be defined and explained thoroughly in order to prevent their misinterpretation when designers in different areas are following them. Given the condition that designers fully understand and recognize the key steps in the model and are able to follow them, each designer should be able to develop a good-quality course.

In the same paper (Appendix A), through a survey I briefly explored instructional designers' challenges with respect to ambiguity in identity and the nature of the actual practice of being an instructional designer. I also explained that there is a discrepancy between the way instructional design is taught and is practiced. For example, Larson and Lockee (2009) explain that skills such as gap analysis and cost-benefit analyses are not seen commonly in job advertisements for this position. One of the biggest themes discussed in the paper was "lack of consistency" in the expectations and identity of

instructional designers. The paper concludes that in order for instructional design to truly secure legitimacy as a field, meaningful standards and flexible design models need to be developed and made universal to avoid misinterpretation.

Online Learning: Current Standing and Future Development (and How It Impacts Instructional Designers' Tasks)

To find the main factors in design of a good-quality course, I needed to study, explore, and understand the online environment fully. Appendices B to D summarize the current standing of the online learning environment, its future development, and how to cope with this dynamic environment. By conducting my study, I discovered that the online learning world has become such a diverse and dynamic world that educators and learners need to learn new methods and strategies on nearly a daily basis. Three years ago, when I initiated my research, my objective was to develop guidelines for quality assurance of online courses. However, what I had in mind to develop at the beginning of my study three years ago became outdated in a short period of time. Evolvement in the field and shifts in technology forced me to redirect my research. In the initial phases of my study, I thought a compiled list of guidelines or quality frameworks for instructional designers would be the end result of my study. However, as I progressed with my study, I noticed that not only many of these lists were under development by groups of people, but also the resources that were developed each year needed to be modified and updated for the next year as the technology and the field evolved.

In the chapter that I wrote for the book (*Teaching and Learning in Digital Worlds. Strategies and Issues in Higher Education*), *Quality Assurance in E-Learning Programs* (Appendix B), I examined and discussed the origin of online learning, its evolving nature, and its future development through Downes' (2012) series of "generations" of technologies and approaches that have characterized the development of online learning over the years. Figures 1 and 2 show generations zero to five.

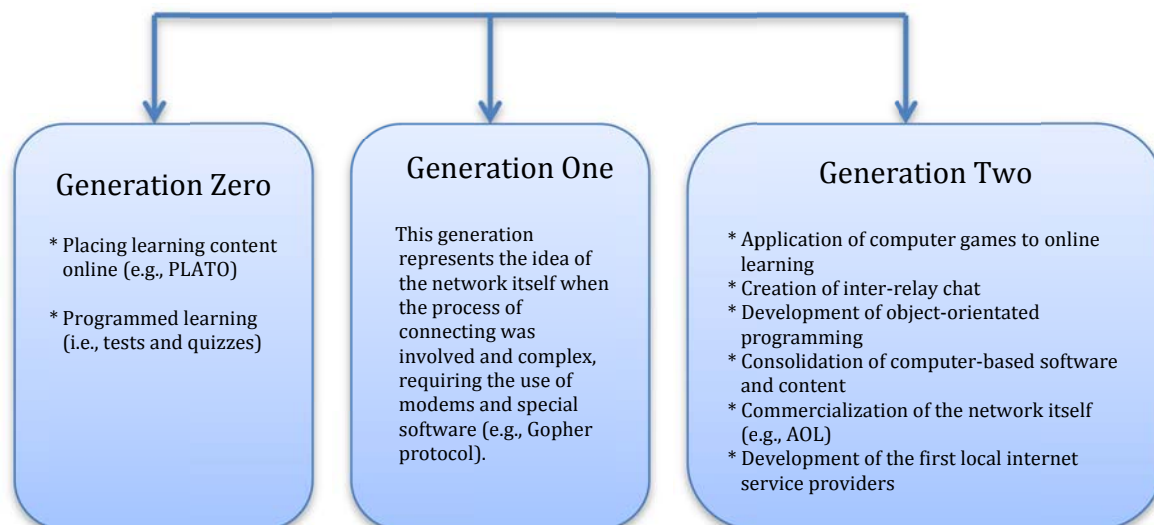


Figure 1. Downes' generations 0-2 of technologies

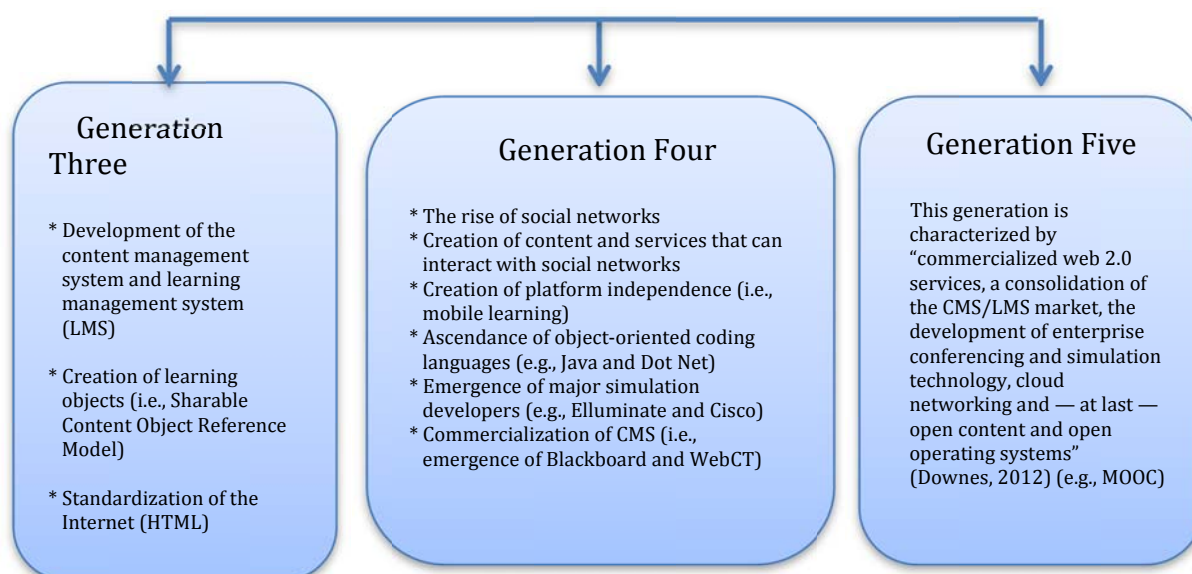


Figure 2. Downes' generations 3-5 of technologies

In the same chapter, I also discussed Downes' (2012) prediction for the next three generations of learning technology that would be based on the idea of flow. "Flow" refers to the idea that content and data become too massive to store and too detailed to comprehend. This prediction relates to Appendix B in which I discussed quality and the concept of massive open online courses (MOOC). Through my findings and literature review for the chapter of the book, I concluded that benchmarks for e-learning quality assurance aim to encapsulate the best practices, experiences, and objectives involved in

teaching and learning; therefore, they need to be continually updated as learning and teaching paradigms shift in their ever-changing environment.

In my paper, *Quality of Online Learning: Adding MOOC into the Mix?*, published in the proceedings of the EdMedia 2013 Conference, a World Conference on Educational Multimedia, Hypermedia, and Telecommunication (Appendix C), I presented a talk on the history of online learning and briefly discussed the concept of MOOCs as the latest phenomena in online learning. I identified the three key characteristics of MOOCs as 1) low cost or no cost, 2) open access, and 3) large-scale participation and briefly discussed the pros and cons around this new evolution of online learning through different perspectives and recent literature. I explained that while learners' roles have changed in MOOCs with more responsibilities around support and peer evaluation, new roles are also emerging for educators, such as those of the curator, supporter of "repurposing" and "remixing" of information, and the moderator, provider of technical support as well as "sharer" of resources (Kop, Fournier, & Mak, 2011). Exploring the current changes in online learning and its future development, I concluded in the paper that designers need to create an environment with scaffolding nurturing, offer a new pedagogy for learner support through created networks, and harness enrollment power for resource creation and sharing to improve the current online learning experience, particularly MOOCs. I also emphasized the importance of responsibilities, collaboration, and peer evaluation in large classes by educating our learners in these concepts as well as building our online environments on these foundations. Appendix C demonstrates how instructors' roles as well as learners' roles change as online learning and technology change. It also emphasizes and identifies the areas that the instructional designers need to pay more attention to in order to respond to all the aforementioned changes.

Quality of Online Learning

It is necessary to define quality when discussing it in relation to online programs; it is also important to identify the area on which quality assurance is focused. As mentioned earlier in this study, I focused on the online program/course development process. The following section of this paper will discuss different definitions of quality.

Quality is a broad term and a relative concept that can be viewed differently by various stakeholders. The four dimensions of quality in education are accountability, curricular alignment, student satisfaction, and assessment. Many educators and scholars such as Frydenberg (2002) and Yang (2012) identified institutional/executive commitment as one of the most important elements of quality for assessing e-learning. Bourne and Moore (2004) suggested student success, student satisfaction, blended environments, and learning effectiveness and assessment as the four elements of quality online education. Others scholars also include technological services, program delivery, program evaluation, student services, instruction and instructor services, and technological infrastructure as the key elements of high-quality online courses (Lee & Dziuban, 2002; Lockhart & Lacy, 2002).

Student achievements in courses, keeping records of student retention and graduation rate, comparing students performance to the intended program outcomes, monitoring faculty and students satisfaction, measuring student competence, and maintaining the cost effectiveness of the program are among the key elements to be considered for quality assurance (Institute for Higher Education Policy, 1998).

In papers, “Quality Assurance in E-learning Environments” (Appendix D) and “Quality Assurance in E-Learning Programs” (Appendix B), I defined quality based on different literature reviews and through different lenses and perspectives. To define quality in higher education, Harvey and Green’s five discrete ways of thinking about quality are frequently cited: excellence, consistency, fitness for purpose, value for money, and transformation. As per Jung and Latchem (2012), quality assurance in higher education is mostly judged in terms of fitness for purpose or value for money; however, it may involve all of the above. Wiesenberg and Stacey (2005) stress the importance of providing three interrelated support systems for institutions seeking to deliver quality online learning: quality teaching support, quality learning support, and quality administrative support. Quality in education is a matter of accountability that governments should mandate, accreditation agencies require, the general public expects, and faculty members need to support their teaching (McKenzie, Mims, & Bennett, 2003). Jung (2011) states, “the quality of e-learning is not something that can be delivered to the

learner but is something that is co-developed by the learner and the provider during the teaching and learning processes”. In my study, I consider quality assurance for an e-learning program as not only a mechanism to proactively establish and modify training and competency guidelines but also a method for continuous monitoring of current practices to correct deficiencies.

Review of Existing Rubrics for Quality of Online Courses

As part of my literature review, I examined and reviewed existing rubrics that addressed the topic of quality in online course. Blood-Siegfried et al. (2008) compared seven exiting rubrics relevant for online courses and concluded while the rubrics had a lot of overlapping critical content, each rubric missed features that they felt important for online curriculum development. Table 2 shows those rubrics that were reviewed.

Table 2: Analysis of existing relevant rubrics for online courses (Blood-Siegfried et al., 2008)

Rubric 1:CSU Chico What does a high quality online course look like? http://www.csuchico.edu/tlp/resources/rubric/rubric.pdf (Committee for Online Instruction, 2003)
Rubric 2: Towson Faculty Peer Review of Online Courses http://www.towson.edu/~mcmahon/peerreview/On-linerubric.pdf (Ashcraft, McMahon, Lesh, & Tabrizi, 2003)
Rubric 3: Assessing Interactive Qualities of Online Courses http://www.westga.edu/~distance/roblyer32.html (Roblyer & Ekhaml, 2000; Roblyer & Wiencke, 2003)
Rubric 4: Grant McEwan College Criteria for Evaluating the Quality of Online Courses (Wright, 2004) http://elearning.typepad.com/thelearnedman/ID/evaluatingcourses.pdf
Rubric 5: University of Wisconsin http://www.uwex.edu/disted/conference/Resource_library/handouts/Forum1.pdf (Swan, Bishop, Wisher, & Trollip, 2003)
Rubric 6: Robert Wood Johnson Partnerships for Training http://pftweb.org/reach/reach_home_frameset.htm (Partnerships for Training, 2003)
Rubric 7: Measuring Success: Evaluation Strategies for Distance Education http://www.educause.edu/ir/library/pdf/eqm0213.pdf (Lockee, Moore, & Burton, 2002)

Blood-Siegfried et al. (2008), after analysis of the existing rubrics, developed their rubric around five major criteria: 1) course organization and design, 2) course content, 3) instruction, 4) interaction, and 5) evaluation and assessment. This rubric was well received in their institution. Another rubric examined was the Quality Online Course Initiative Rubric (Illinois Online Network, 2010), which was more detailed, with an additional criterion on course evaluation. Among rubrics examined, I found the Quality

Matters Rubric (Quality Matters, 2011) the most effective one, with its eight categories/criteria: 1) course overview, 2) learning objectives, 3) assessment, 4) instructional materials, 5) learner interaction, 6) course technology, 7) learner support, and 8) accessibility. Later in my study, I adapted the Quality Matters Rubric and used it as a questionnaire.

Instructional Designers and other Factors in Quality (i.e., Culture)

As a practitioner in the field for more than 10 years, I knew that there were other factors that were affecting an instructional designer's tasks in addition to an instructional design model and a quality framework/guideline. In the paper, "Quality of Online Programs: Cultural Differences' Impact on Instructional Designers' Practice and Perspectives" (Appendix E), I investigated the effect of cultural differences on instructional designers' perspectives of quality in online environments. Although research has been done around cultural issues in online learning, very few studies have been conclusive (Liu, Liu, Lee, & Magjuka, 2010). The word culture is acknowledged in education literature and found throughout many disciplines; however, its evolution does not suggest how instructional designers developed and/or develop cross-cultural training in instruction, particularly those creating online instruction (Grant, 2013; Parrish & Linder-Vanberschot, 2010). Preferably, professionals in the instructional design field need to be more conscious conscientious of their own value systems in response to the materials they design, as this will benefit the quality and impact of online instruction (Chen, Mashhadi, Ang, & Harkrider, 1999; Grant, 2013). Through my study and survey, I deduced that designers in Canada focus more on learner support strategies than designers in Spain. However, it is not clear whether this slight difference is due to cultural differences or other factors such as budget, resources, training, and institutions' commitment. Despite differences in their context and responsibilities, instructional designers in both countries consider the same elements as important and invest resources in them to ensure quality online courses. Through my survey results and literature review in this paper, I concluded that designers make conscious and unconscious decisions based on their native culture, but it is not clear whether their culture, their learning environments, or their levels of technological literacy cause the differences in design decisions. In other words, culture impacts design

but it may not impact the quality of the design; what is considered as a key element in quality design seems to be accepted universally (i.e., aligning learning outcomes, learning activities, and assessment).

Based on the literature review done and my understanding of the field and its needs, I narrowed my focus to better understand the elements that instructional designers find key in quality course development. My objective was to understand elements that either added value to my design or, inversely, prevented me from adding value, in addition to the training that I received and the field that I had studied. I wanted to know how I could evaluate my design and at the end how I could improve the quality of my design. I wanted to investigate the factors such as time, money, and resources that would lead me to a good-quality course and those that would distance me from improvement, such as lack of time to reflect on my design and consult with my peers, as well as detailed descriptive guidelines to refer to. At this stage of my study, I had already mapped out my research, broken it down to fundamentals, and investigated each part. For each part, I had conducted a literature review to uncover existing resources and ideas as well as conducted different surveys to distribute my findings through presentations at international conferences, discussions with other designers in different communities of practice, or publications.

In the next chapter I will further outline the methodology and instruments used in different studies or surveys that I have conducted in the last few years. The chapter is organized to introduce and discuss all research projects conducted for this study along with their findings; the chapter concludes with a section that examines and discusses the main methodology, qualitative, used in this study.

Chapter Three: Methodology and Justification

This chapter covers different research methodologies that were used in this study. The description of each research project is briefly discussed, starting with an overview of the research purpose followed by a discussion of the research setting, including a description of the participants, sampling method, and the instrument used in the study. To answer the research questions, I used a mixed-methods approach with more focus on qualitative methods. This chapter is organized in five sections. I will first discuss the quantitative approaches in the first four sections, and then the last section will be focused on the main method used in this study, a qualitative approach. The methodologies used in this study are presented here:

- Instructional Designers, Their Identity And Actual Practice (Survey Questions)
- Key Elements for Quality Design: Designers' Perspectives in Canada (Rubric Questionnaire)
- Key Elements for Quality Design: Designers' Perspectives in Spain (Rubric Questionnaire)
- Key Elements for Quality Design from Learners' Perspectives (Rubric Questionnaire)
- Deeper Understanding: Most Useful Resources for Instructional Designers (Interview)

Instructional Designers, Their Identity and Actual Practice (Survey Questions)

To find out about instructional designers' challenges, their identity, and the nature of their actual practice, in May 2011 we conducted a brief survey (presented in Appendix A) at an event called "Just Instructional Design". This annual event, hosted in Vancouver, British Columbia, Canada, welcomes all instructional designers from public schools as well as educators involved in the instructional design process from private companies. Participants are generally from post-secondary schools. The event is informal and is

aimed to be a session for instructional designers to exchange ideas, share best practices, and discuss design challenges.

The survey provided an overview of the professionals who consider themselves involved in instructional design and of the general public's perceptions of the role of instructional designers. Thirty-five participants completed the instructional designers' survey.

To identify professionals who are involved in instructional design under different titles, the survey asked the following: "Many jobs are not strictly 'instructional designer' in nature but may be part of the work you do. What is your current position?" Among all the participants, only 23% of instructional designers surveyed self-identified as being primarily instructional designers. Most considered themselves course designers/developers, instructional support/media developers, instructors, or other roles first and foremost (see Figure 3). While there were many participants under titles/positions other than instructional designer, most of the positions carried similar responsibilities to an instructional designer's but under different titles. These titles include learning designer, project manager, educational consultant, instructional development consultant, education program designer, educational analyst, manager (facilitation and process design), educational technology manager, meta designer, faculty learning management systems training coordinator, administrator, curriculum developer, facilitator, program manager, learning consultant, and educational technology specialist.

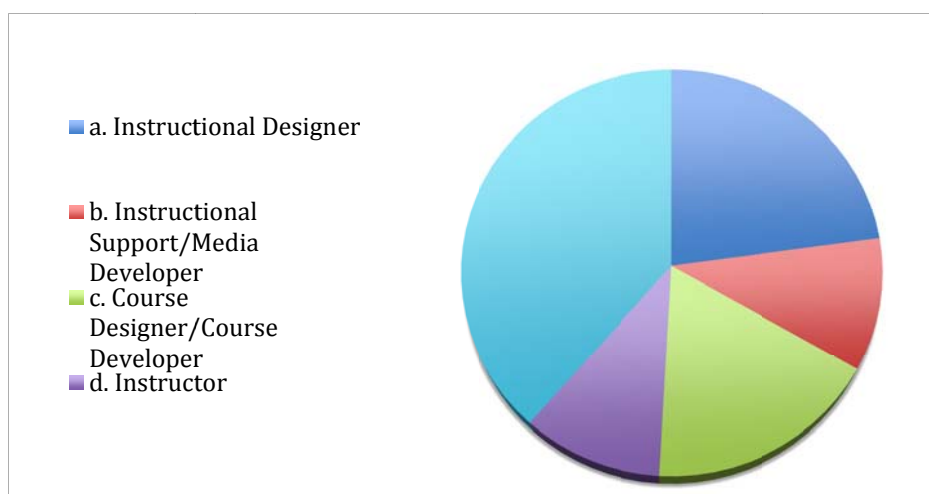


Figure 3. What is your current job?

To understand the ambiguity of the position among people, another question was asked: “In most cases, when you introduce yourself as an instructional designer, what exactly do people think of you?” According to the survey, 52% of instructional designers surveyed responded that most people they introduce themselves to are not aware of what instructional design entails. Once they introduce themselves as an instructional designer, most claimed that people think of them as a “tech” person, a professional who has expertise in information technology, or an instructor (see Figure 4). These findings are supported by Schwier, Campbell, and Kenny (2004); they emphasize that instructional design is a profession that knows itself, but is struggling for identity and acceptance in the larger educational community. Instructional designers seem to have a clear idea of who they are but the clarity is not shared by the organization they serve.

To examine challenges that instructional designers face in their field, the survey asked “What are the main challenges in your work in instructional design? The majority of the participants identified time or involvement in research and innovation as their main challenge in the field (see Figure 5).

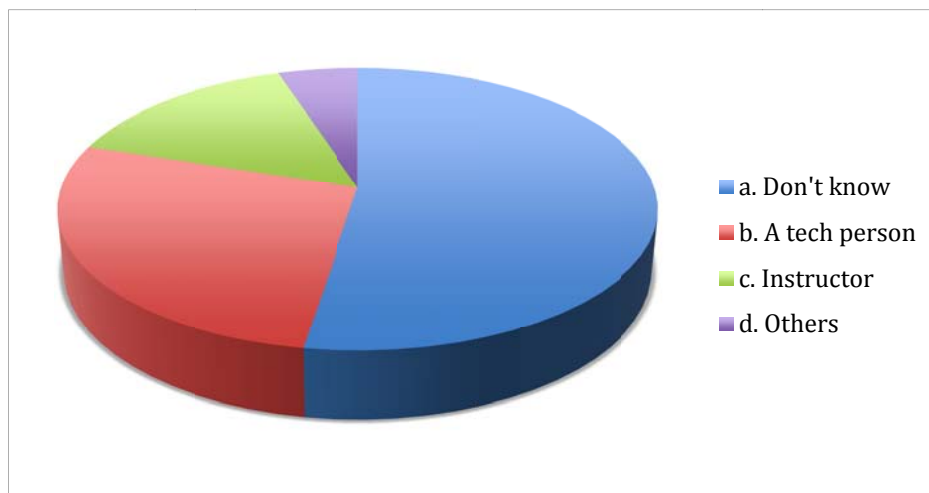


Figure 4. Who is an instructional designer?

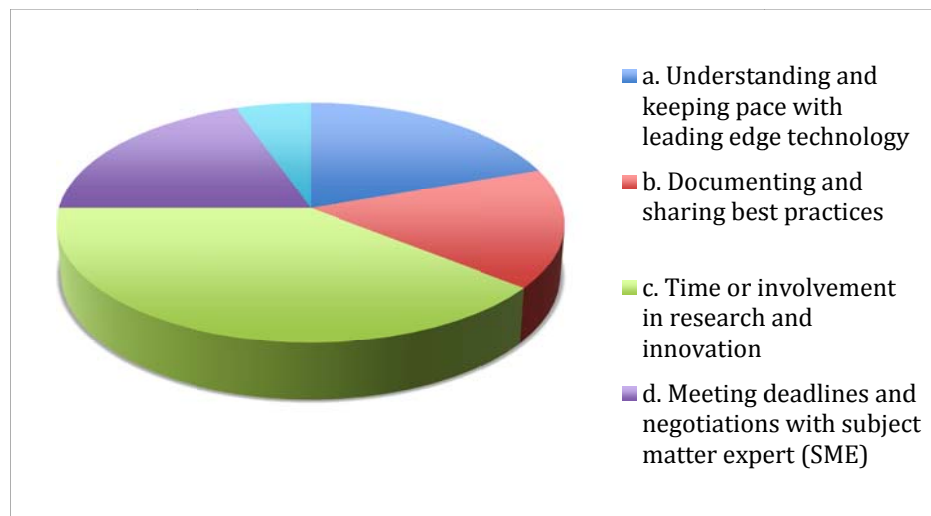


Figure 5. Instructional designers' challenges

The results of the above survey are discussed in detail in Appendix A.

Key Elements for Quality Design: Designers' Perspectives in Canada (Rubric Questionnaire)

The second survey was in June 2012. This study conducted exploratory research on the creation of a set of guidelines and design standards for quality of online course development. The main goal of the study was to gain an understanding of what elements are considered key for quality design by instructional designers and how important the instructional designers consider each element in their course development purposes. In this study, participants were selected purposefully based on their work experience with instructional design. The study instrument was distributed in the annual Just Instructional Design (Just ID) event in June 2012. The instrument developed for this study was a rubric based on the Quality Matters rubric standards 2011–2013 edition (Appendix F). Instead of creating a new instrument, a quality rubric/framework, the Quality Matters rubric was selected based on my earlier literature review and comparison of existing rubrics. The selected rubric covers the majority of the criteria discussed in all other rubrics. Two columns were added to the rubric to gather information from instructional designers regarding their course development practices. In order to validate the survey, the instrument was first distributed among a research group in Universitat Riveria i Virgili.

Upon receiving comments and feedbacks, the updated instrument was then shared among a focus group comprising all instructional designers in British Columbia, Canada, who had participated in the 2012 Just ID event. The instrument was modified based on the feedback received. Two columns were labeled based on the collected data, and the rubric was finalized for distribution among more participants.

Approximately 52 participants at the Just ID event were invited to participate: 33 fully completed the rubric. The results of this survey showed that a majority of designers emphasize course introduction and grading policy as the key elements for quality online course, which are supported by many educators in the field. The results are discussed in detail in the paper “Quality of Online Learning through Instructional Designer’s Lens” (Appendix G).

Furthermore, this research also revealed that instructional designers find learner interaction and engagement as well as course technology to be key performance measures; many educators have supported the concept that learner interactions are important elements in the design of an online course (Fulford & Zhang, 1993; Chickering & Gamson, 1987; Picciano, 2001). On the reverse side, designers, compared to other categories, are less focused on learner support and accessibility. More than 20% of participants did not find variety and currency of instructional materials, state of expected time for assignments, feedback, and access to required technologies critical in their design.

Key Elements for Quality Design: Designers’ Perspectives in Spain (Rubric Questionnaire)

Another survey was geared to investigate the effect of cultural differences on instructional designers’ perspectives of quality in online environments. The findings of this survey are discussed in detail in the paper, “Quality of Online Programs: Cultural Differences’ Impact on Instructional Designers’ Practice and Perspectives” (Appendix E). There were 19 participants from four different universities in Spain: Universitat Rovira i Virgili (URV), Universidad de Murcia, Universidad de les Illes Balears, and Universidad d’Alacant. In the Spanish context, there is no official position of Instructional Designer;

however, considering tasks and responsibilities that instructional designer are involved in, all teachers who have collaborated in the study do the same tasks as instructional designers in addition to their teaching and research. The instrument used for this study was the same rubric used for the Canadian instructional designers, which was based on the Quality Matters rubric standards 2011–2013 edition (Appendix F). For this research method, hypothesis testing was used for each category to compare Spanish designers with Canadian. As per the results, only for the “learner support” category, when comparing Spanish versus Canadian designers, can we conclude that there is enough evidence from the data to suggest that the two groups are different. Nevertheless, it is not clear whether this slight difference in the learner support category in Spain is caused by the culture, training, technology, support, or other factors.

Key Elements for Quality Design from Learners’ Perspectives (Rubric Questionnaire)

To investigate more about quality of online learning, I found that involvement of students is invaluable; therefore, my other survey was focused on students. The participants were 19 students registered in a Master’s Degree Program in Spain. I changed the instrument used for the Spanish designers slightly (Appendix H) towards learners’ perspectives and distributed it among the participants via an online survey in the course. I wanted to find out whether what designers consider key elements for an online course are also acknowledged by learners. Comparing learners’ results with instructional designers’ results in Spain (Figure 6) reveals that the average seems to be equal in almost all categories. The results showed that criteria such as learner support, interaction, course design, and assessments were as important to students as to designers for a quality online learning experience. However, it seems that designers pay more attention to assessment, which perhaps is a strategy to ensure learners achieve outcomes. The findings of this survey were aligned with results from other researchers, who have found interaction, learner support, accessibility, course technology, and assessment very important for students’ satisfaction with an online course (Lao & Gonzales, 2005; Northrup, 2002; Swan, Shea, Fredericksen, Pickett, Pelz, & Maher, 2000; Young & Norgard, 2006).

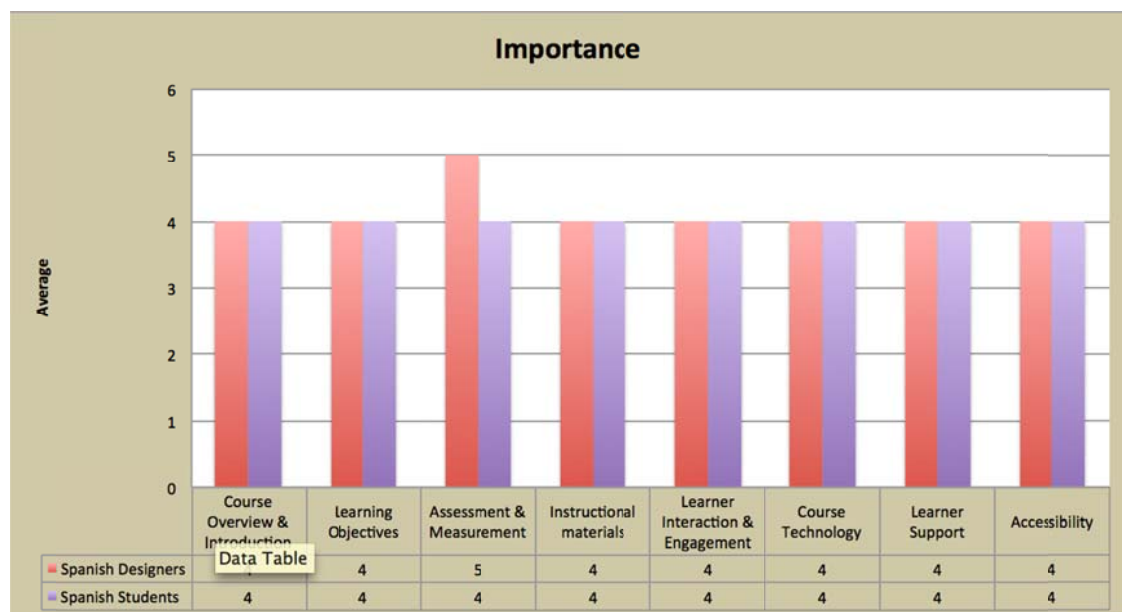


Figure 6. Comparison of Spanish instructional designers vs. Spanish online learners (median)

Deeper Understanding: Most Useful Resources for Instructional Designers (Interview)

For deeper understanding of the field and instructional designers’ perspectives and building on previous surveys/findings, I chose qualitative research as the main research methodology to answer my research questions. In the next few paragraphs I examine qualitative research in general and discuss how I selected different methodologies and strategies in this qualitative research.

Qualitative research is a type of scientific research that seeks to understand a given research problem or topic from the perspectives of the local population it involves; in my case the local population is instructional designers. Qualitative research is an investigation that seeks answers to a question through using a predefined set of procedures, collecting evidence and producing findings that are not determined in advance and are applicable beyond the immediate boundaries of the study.

Qualitative research allows for a deep investigation into the reasoning behind individuals’ behavior and to determine if patterns emerge from the data collected that can be

generalized to a wider population (Creswell, 2009). Qualitative researchers generally have a close interaction with the study participants, as data collection usually involves interviews or focus groups (Cohen et al., 2007). Qualitative research is designed to reveal a target group's range of behaviour and the perceptions that drive it with reference to specific topics or issues. It uses in-depth studies of small groups of people to guide and support the construction of hypotheses. The results of qualitative research are descriptive rather than predictive. Several unique aspects of qualitative research that contribute to insightful results are the dynamic nature of the interview process, which engages respondents more actively, the opportunity to probe, which enables the researcher to move beyond initial responses, and the opportunity to observe and interpret non-verbal communication, such as body language, during interviews. Qualitative research is all about exploring issues, understanding phenomena, and answering questions. It allows one to observe a process in depth.

The three most common qualitative methods are participant observation, in-depth interviews, and focus groups. For the main purpose of this study, the in-depth interview was selected for collecting data on instructional designers' personal histories, perspectives, and experiences in instructional design and course development. According to Cohen et al. (2007), interviews allow participants to express their personal views on a situation, enriching the data collected. Hence, during their interviews, the participants could elaborate on what they considered to be a quality course and explain what resources and guidelines could help them to design one. Prior to the interviews, the interview questions were distributed among three instructional designers from different faculties to ensure that the questions covered the essential elements in course design and instructional design practice. Their comments helped guide the interview questions, as they provided some additional background information concerning instructional designers' educational and technology backgrounds as well as available resources. Such information helped prompt further questions for clarification and elaboration during the interviews, enhancing the richness of the qualitative data collected. Prior to the interviews, an email was sent to the participants to obtain informed consent in writing (Appendix I). Formal informed consent as per Mack et al. (2005), regardless of the sampling method used to identify potential participants and the strategies used to recruit them, is necessary

for all qualitative research methods except participant observation. Interviews were conducted in person, since according to Cohen et al. (2007) telephone interviews tend to be shorter, not allowing respondents the opportunity to reflect deeply before responding. In addition, participants may experience distractions depending on where they are located (Cohen et al., 2007). For these reasons, interviews were held in the university where the participants work to minimize travel required by the participants. While the interviews provided information about the participants' experiences in instructional design and how they perceived quality guidelines to affect their designs, interviews also helped explore other factors that the participants felt influenced their design, such as budget, time, and institutional policy around quality of online learning.

Interviews were audio recorded for transcription purposes, with permission from the interview participants. The names of participants were not recorded on the transcription, and instead written numbers (e.g., one, two) were used to protect anonymity. All transcripts were stored in encrypted folders within a password-protected computer.

Unlike questionnaires, interviews cannot be anonymous, and hence the participants may not be truthful in their responses (Gay & Airasian, 2003). This study used purposeful sampling, and instructional designers were specifically contacted and invited to participate in the study and take part in an in-person interview. Therefore, the study participants were not anonymous to the interviewer. However, as mentioned previously, on the interview transcripts, all names were replaced with one, two, three,... to ensure anonymity in the data presented in any reports or published documents.

Interviews generally take more of the participants' time than questionnaires, since interviews allow for greater questioning and explanation (Cohen et al., 2007). Because they can take more time than completing a questionnaire, a mutually convenient time for the interviewer and the interviewee needs to be determined. Despite the greater amount of time required for interviews and the complexity of determining a convenient time for the participants, this study used interviews rather than relying only on questionnaires so that more in-depth information about the participants' background and the factors that influence their design could be discovered. Furthermore, interview response rates are

typically higher than those for questionnaires, since participants become more involved and, hence, motivated to participate (Cohen et al., 2007). Since the participant sample in this study was small, eight instructional designers, it was important to obtain the highest response rate possible.

Accordingly, interviews were most appropriate. Furthermore, the use of semi-structured interviews rather than open-ended or completely structured interviews was ideal for this study. Semi-structured interviews begin with topic-initiating questions based on the research question and are completed by follow-up questions, thus eliciting a detailed explanation from the participants (Rapley, 2001). Open-ended interviews, on the other hand, would have had all questions spontaneously prompted by the flow of conversation rather than having some questions derived from the research question (Gay & Airasian, 2003), and fully structured interviews would not have provided the flexibility of probing further into an issue that might emerge from the participants' responses (Cohen et al., 2007). Appendix J provides a list of the interview questions that were used in this study to collect the data required to answer the research question.

The following section of the report outlines in brief the summary of findings derived from the interviews conducted with eight instructional designers.

Research Design

The research presented here uses a purposive sampling method. I sought to find instructional designers who have worked within the same organization and region and have developed online courses. The eight participants in this study included four females and four males who had also participated in the original research and answered the questionnaire regarding the key elements of quality online courses (Appendix F). One could argue that by selecting only eight from the original study we exclude other participants and their views, thus making the study less valuable. Although this is a limitation, it allows deeper discussions and understanding of the field and the participants' actual practices and views of a quality online course. Having a small sample size fosters deeper conversation with participants and better understanding of instructional designers' perspectives concerning an ideal course. Four of the interviewees work in a service unit

within an organization, and other four work in different faculties and departments such as Arts, Medicine, and Human Resources within the same university. Although these participants may have a common characteristic and approach in course design, they may not see and talk about the challenges and best practices regarding course design in the same manner. For example, they might talk about an overall theme such as “an ideal course” very differently, depending on their backgrounds, their contexts, and available resources. Although these participants express similar experiences and concerns, they do not speak for all instructional designers. Further, even though the instructional designers vary in educational backgrounds and experiences, the commonality among these instructional designers is, in retrospect, their ability to provide important information concerning design of a quality online course. Consequently, in limiting this study to eight instructional designers, I have attempted to build an in-depth portrait of the metacognitive reflections. This qualitative study uses semi-structured open-ended interviews for data collection in examining experiences and perceptions amongst designers. Each interview was conducted in person and ranged from 30 minutes to 1 hour. Interviews explored the stated research question of this study. Most questions posed to participants should not be viewed as structured interview questions; I used these questions as a way for other questions to emerge from my interactions and conversations with the instructional designers. By this approach, what became most relevant and important was the dialogue between the participants and me, in which the conversation inadvertently answered most (if not all) of the questions originally produced for the participants.

Limitation of Method

One major limitation that can be pointed out concerning my study is the sampling population. Because certain participants were chosen to take part in this research, the participant selection may not be representative of the entire professional community. However, the goal of this study is to explore the notion of a quality framework and key elements in design of a quality online course from designers’ perspectives and to question instructional designers about their importance and impact within their design. The meaningful conversations with participants provided the opportunity to obtain insightful information surrounding this topic and what they need to design a quality online course.

In this respect, the participants should be considered as specific narrative case studies, as they each describe unique experiences and perspectives around this topic, which inform the reader about the meaning of the data. Also, there are not many instructional designers within each institution, and the position is not yet fully recognized by the educational system and community. Furthermore, not having had the opportunity to see the results of using online quality guidelines in their practice could serve as the feedback needed to provide a better foundation to the research study.

Objective of the Interview

The objective of this research was to understand the exact needs of instructional designers to develop a quality online course. The aforementioned survey and study demonstrated that instructional designers emphasize the same key elements in their design; however, to understand what they actually do in their practice to achieve a quality online course, a case/interview approach was taken. Through this interview process, the goal was an attempt to better understand a) what is an ideal/quality course to an instructional designer, b) what resources does an instructional designer need to achieve a good-quality course, and c) do instructional designers need a national or organizational quality guidelines.

Outline of the Interview Process

An email was sent to those who showed interest in the first round of the survey at the Just Instructional Design event in June 2012, and interviewees were those who were willing to participate in the next step/round of the study, the interview. All the participants needed to sign a consent form (Appendix I) to proceed with the interview. There was equal representation of both genders within the participants. Four of the interviewees work in a service unit within one of Canada's leading research universities, which has over 50 000 students from across Canada and around the world, and other instructional designers work in different faculty and departments within the same university. While the interviewees came from a variety of backgrounds such as philosophy, curriculum design, educational technology, filming, and language, the majority of them had experience in

educational technology. All interviewees except one had more than five years experience in the field.

Interview questions were developed based on the existing literature and used in the following ways. In order to maintain accuracy, I requested permission to audio record the interview. The first aim was to establish an understanding of the instructional designers' work and education backgrounds. Second, the designers were asked about the type of models that they employed in their daily activities, the ways that they assured quality in their work, and whether their departments employed models or sets of standards to verify quality in their work. Third, instructional designers were challenged to describe their ideal course given unlimited resources and the quality parameters that they most emphasized. Finally, the questions examined instructional designers' views on universities adopting a policy for quality of online courses. The exact wording of the questions is in Appendix J.

The interviewees were asked semi-structured questions intended to extract helpful data about their perceptions regarding the research questions. Participants were asked to express their ideas and opinions candidly, and if a specific topic was raised I immediately encouraged the new direction and aspired to know more about the topic. In order to preserve the confidentiality of subjects, I eliminated any references that may result in the identification of a specific participant. For references, participants were given numbers such as Instructional Designer One, Two, I kept a copy of the recordings of each participant and created field notes during and after each interview session; these directed me to form the initial themes of analysis.

Data Analysis

Analysis of the data was properly categorized in order to make judgments about the meaning of the data. This process became the unit of coding whereby the participants' responses provided theoretical justification of the research being undertaken. The results of interviews showed that a majority of the instructional designers interviewed did not use a particular framework on a day-to-day basis to design courses. While most admitted to using some kind of framework to assist their role, they stated that this framework

changed depending of the context of their work. The data analysis process allowed me to get very close to the experiences and voices of my participants through my data. I became heavily immersed in their collective perspectives and where these perspectives overlapped in concrete, meaningful ways. The challenge was that that process at times was overwhelming; it took a lot of conceptual work to develop a structure around data collected. The results produced by the eight participants were used for comparative measures, whereby the information was treated as one cohort, relating the experiences, perspectives, and suggestions of all instructional designers, which allowed me to formulate an overall conclusion. A constant comparative method was used to ensure reliability of this study. The data collected leads me to believe that it is important for readers to understand the complexities that are involved in a study such as this one, as interpretations of data sources can be seen and understood very differently by different people. In other words, in qualitative measurement validity is the degree of accuracy of participants' reflection of feelings, opinions, and perspectives in interviews, which leads to appropriate interpretation of narrative data. Also, some readers might have some skepticism about research findings as I not only serve as a researcher in this study but also the bias in the data collection. Therefore, I feel that it is important for a reader to understand how the data were collected and interpreted, and I tried my best to reduce such biases by following certain procedures. At times I felt overwhelmed by data, like many qualitative researchers (Cohen et al., 2011), and unlike the analysis of quantitative data, there are few generally agreed-upon rules for the analysis of qualitative material (Bryman, 2012; Bryman and Bell, 2007). Data analysis is based on dividing the data into parts and then reassembling the data into a coherent whole (Boeije, 2010). Reassembling the data identifies patterns and themes, and explaining why these may exist generates new knowledge or theory. The analysis of my interview transcripts and field notes was based on an inductive approach geared to identifying patterns in the data by means of thematic codes. Inductive analysis means that the patterns and themes emerge out of the data instead of being imposed on them prior to data collection and analysis (Patton, 1980). Analysis of my data was not an isolated activity; it took place iteratively with my data collection and participant selection, and it stretched beyond data management and finding presentation to theorizing from the data toward development of a guideline and future

research ideas. Interview notes were reviewed and additional field notes were made to start sorting and gathering emerging themes. I analyzed the data using the constant comparative method whereby sentence and paragraph segments of the transcribed interviews and field notes were reviewed to decide what codes fit the messages and concepts suggested by the data.

Coding of the data is a method of establishing meaning in a systematic way (Punch, 2005). I started with open coding and reviewed the interview transcripts and field note data to establish broad ideas that seemed to be significant issues and elements for my participants in their designs. For initial coding, I used the audio recording alongside the transcripts to ensure accuracy. I colour coded the text as I reviewed each individual transcription and labeled initial codes. This was an iterative process, going between the field notes, transcripts, audio recordings and the literature.

The next step was focused coding in which the categories were more fully examined to determine which elements of the research were dominant and which were less important (Easterby-Smith, Thorpe, & Jackson, 2008). Therefore, many of the original open codes were clustered/collapsed under emerging dominant themes. This enabled an initial exploration of potential concepts and had a secondary purpose of reducing and reorganizing the data set. The key themes that emerged at this stage involved departmental culture, departmental quality policy, instructional design models, issues around course design, organizational structure, issues around establishing relationships, an ideal online course, quality course, quality standards, faculty buy in, and a set of guidelines. These two steps led to a final stage of theoretical coding (Easterby-Smith et al., 2008), which led to linking of patterns among the emerging concepts. The primary themes of fundamental significance to the core research question were identified, such as using different instructional design models with similar core elements in a case-by-case course design approach, the key elements of an ideal course, lack of policy and standards, the importance of a set of guidelines and standards for designers to follow to ensure quality, and the linkage between guidelines and designers' context and organization culture including faculty buy-in. In summary, themes gradually emerged as a result of the combined steps of becoming intimate with the data, making logical associations with the

interview questions, personal reflection, and considering what was learned during the initial review of the literature. Through this process, I reassembled the data in order to answer the research questions, which led to development of a flexible guideline.

Report of Data

Based on the data collected during the interviews, three themes emerged that characterized the experiences of the participants in this study. These themes included (a) instructional design models, (b) ideal online course, and (c) an organizational quality guideline. The instructional designers whose interviews are presented here speak about themselves in terms of their backgrounds, their experiences, their contexts, and their design. Findings from this study reveal that instructional designers demand to have a flexible quality framework or guideline, which may in fact contribute to the effectiveness and quality of what they design and how they design it. It is important to note that because a series of questions were asked of instructional designers during the interviews, not all questions can be illustrated here. Rather, a few questions have been selected as a way to conceptualize several of the themes being described and best reflect the set conditions of instructional designer in the context of instructional design and quality of online course design. Thus, these questions were selected only after completion of the interviews with all instructional designers. Findings from this study reveal that the instructional designers have a general consensus concerning elements of a quality course design and a flexible framework, which is always to be considered and modified in the light of their context and course subject. The discussion of results here reflects how participants responded to research questions. The following questions were asked:

What instructional design model do you use in your daily work when designing courses?

From the instructional designers' responses it appears that the majority of participants in this study use different models, depending on their faculty and context. For example, Instructional Designer One says

“I don't use a particular model per se as I find that every faculty's needs are different. There are definitely certain theories and models that I follow when

appropriate. For example, I follow Bates' actions model when selecting appropriate technology, I follow Garrison and Anderson's community inquiring model in terms of teaching presence, instructor presence, student presence, and I follow Chickerin's 7 best practices for online environment and that sort of thing".

Instructional Designer Four mentioned that while she did use her department's model as a guide, she found that most models or templates never fully fit the projects. However, among the instructional designers who admitted to choosing a framework on a case-by-case approach, the driving force behind using a variety of models differed. While some instructional designers chose the model based on the content of their project, others chose their model based on their focus on the student learning experience or based on other faculty members' feedback.

Among the frameworks mentioned in the responses, the model used in one of the departments (service unit center) and the ADDIE model were most frequently quoted. Furthermore, some instructional designers emphasized the importance of an *n*-step process as a framework.

When questioned regarding how each instructional designer assessed quality in his or her work, a few points were mentioned more frequently.

How do you check/assure quality in your design? Do you follow any standards or rubrics to ensure quality in your course development? Do you have a policy or a set of standards to follow in your department to ensure good-quality online courses?

Instructional Designer Four said,

"Well I always follow accessibility standards. So I do keep up to date as to what those particular standards are when I am designing the courses. And after the first run of a course I will not only ask for the instructors' input but I try to do a survey for the students to get the input on the design of the course, or even if it is just a change in a particular activity in the course I would do a survey to get their feedback and when available, particularly for online distance education, it is available, I look at the data analytics coming from the use of learning

management systems in terms of how instructors and students are interacting with the different activities within the course based on the learning design is it more content driven or more engagement driven, how does the data inform the type of practice that is happening within the course as well as looking at attrition and course grades and all of that so I would take all of that and then depending on what reports come out of it after the first run we would modify it for the second run and so forth. We also have our quality assurance process, which is basically looking at the learning design, looking at course evaluation grades combined with attrition and course average grades And the use of learning management systems. So we kind of aggregate all that data, and we provide that data over to the department head, and it's up to the department heads how they want to assess that data, so whether to them the data shows that a course needs to be revised or a course does not need to be revised. So we don't really have a set of policies in terms of this is how your course needs to be but we do have a policy in place that we review the distance education courses.”

Instructional Designer Five, in response to departmental standards mentioned,

“I guess the key thing I depend upon for quality assurance is I depend upon the academic review process that is part of our development cycle with the intention that in our context it is really important our academics units feel that they have ownership and direction over what the courses are going to be. We are positioned in our design role as not really having the main card on that so there is a respectful acknowledgement of both academic ownership and the vision for how it will play out and goes back over to the department and there is always kind of a negotiated space. There are times with some instructors or subject experts were invited to be more involved in saying things about the quality or even the design and other times when we are seen we are just helping to bring their vision into design.”

Nearly all the instructional designers mentioned their dependence on an external source as a medium for assuring quality. These external sources were other faculty members, subject matter experts, specific committees set up to help assess quality, reflective processes, etc. Among these mediums, feedback from faculty members seemed to be the dominant source of quality assurance among the eight instructional designers interviewed.

Another common theme was how each instructional designer viewed quality; while some emphasized “content” as an indicator of quality, others focused more on the student learning experience either through engagement or assessment results.

Almost no interviewees believed that his or her department had a policy or a set of quality standards to follow. This can be because either no such standards exist or the policy is not effectively communicated or emphasized to instructional designers or faculty by the establishing department. Therefore, they all agreed that a set of guidelines would be really useful. In all cases, despite the lack of a set of standards, all instructional designers do follow some sort of tool, whether or not it is explicitly stated. A few mentioned, for instance, that they have pseudo policies that they employed. These included letters of agreement that allowed the instructional designers to understand the involved stakeholders as well as the objective of the course or learning outcomes/curriculum. Two interviewees mentioned that although there is no set of standards, there is an “unwritten” expectation from each faculty member to produce quality work. For example, Instructional Designer Two mentioned that data such as grade outcome or attrition of students compiled from the analytics tool were sent to the Department Head to revise portions of the course. Despite the fact that the individual departments did not seem to have a set of standards established for their faculty, all interviewees indicated that they did indeed follow some form of standards to insure quality in their course designs. Furthermore, a few interviewees indicated that they, other faculty members, or the departments in general were moving towards adopting a set of standards. It was consistent among all instructional designers that they placed value on having a policy to use to check over their work.

When asked to describe their ideal course design with access to unlimited resources, there were two characteristics that were often mentioned; the first was more time to be spent with the main stakeholders (course designers, instructors, and students) and the second was investment in technology. For example, Instructional Designer One mentioned in detail the benefits of spending more time with other course designers. These benefits included the fact that she would better understand the course objectives and the instructors’ need to thus produce a higher quality course. Similarly, Instructional

Designer Six mentioned that she would encourage faculty to spend time with each other and to spend the resources to get to learn more about their audience. The instructional designers mentioned a few different technologies as investment options. For example, Instructional Designer Four mentioned video assimilation and virtual exercises. Although all instructional designers mentioned general examples, most stated that, given unlimited resources, they would take a case-by-case approach on what they would change on each project. One instructional designer even mentioned that unlimited resources would have little effect on quality.

The instructional designers' response to what are the most emphasized quality parameters fell under three broad categories. The responses can either be categorized as making a comment on the beginning of the course design cycle, the execution of the course, or the final assessment. For instance, while Instructional Designers Six and Eight both mentioned learning objectives (i.e., beginning of the course) as the most important, Instructional Designers Three and Seven stated collaboration and technology, respectively (i.e., execution), and Instructional Designer One revealed learning assessment as the most important. Overall, all the designers emphasized that if they had time, they would pay attention to all parameters; however, in their practice/daily work they take different approaches with different emphasis.

The last question asked during the interview asked whether the instructional designers preferred to have a university policy for quality of online learning.

Do you prefer/like to have a university (an institutional) policy/set of guidelines for quality of online learning?

The response to this question was universal; all of the instructional designers preferred having such a policy. However, they feared that if the university were to put a set of standards in place, it would be too rigid and inhibiting. Where the responses differed was as to why the standards could be restraining. Instructional Designers One and Three mentioned that each course, class, and instructor has its own unique culture and thus a rigid set of standard would not accommodate all courses. For example, Instructional Designer One said "I think guidelines are good but as long as they are not completely

enforced [*sic*] because at the end of the day it goes down to the faculty member and how that faculty member wants to approach that course...the guidelines should be easily modified and adapted by each individual for their own context”. On the other hand, Instructional Designer Two mentioned that she needs to have her own style and a rigid set of standards would deprive her of that liberty and thus lower quality of the online course. Similarly, Instructional Designer Four thought that a policy is a good idea; however, she believed that quality would be hard to measure and thus policy would be hard to put in place. Instructional Designer Five answered, “Yes, I like policy. Those can drive us to higher. They offer us structure that allows us to do better. And follow; otherwise some of these things can easily fall off. If our institutions tells [*sic*] us that every course should have blah, the instructional designers are responsible for that. I think it is kind of..., it is midways to track that. I see that as not looking over the shoulder but a help mechanism that would allow me and force me to do better.... my vote is definitely for a set of guidelines that are meaningful to those involved.” Instructional Designer Eight emphasized, “I don’t think it hurts to have guidelines at a university level but in terms of sticking to the guidelines, I am not quite sure how that part would play out.... In regards to having a policy/standard, it is a good idea for sure, but if with discrete elements and rigid it is not”.

Conclusion

The instructional designers in this research agreed that having a guideline or a policy was important, which is supported by other professionals in the field (Barker, 2001; Beck, 1997; Herrington, Herrington, Oliver, Stoney, & Willis, 2001). At the same time they all mentioned that a rigid and fixed guideline might not be welcome and practical in an institution. They argued that the field of instructional design is changing as technology is evolving; therefore, the standards and guidelines developed today for a quality online course might be irrelevant tomorrow. As a result, a flexible descriptive quality framework for instructional design seemed to be what instructional designers needed in their online course development, which is supported by other educators (Lewis & Baker, 2011; Yeung, 2002).

The next chapter describes the online quality framework that I have developed as a result of my literature review, research, and findings to assist designers to develop a quality online course.

Chapter Four: Quality Guidelines/Framework

Although the aforementioned studies and literature discussed in previous chapters have emphasized the key elements of quality courses as well as tasks involved in different phases of the course development process, there has not been an online resource to bring together and link all these. The qualitative research results demonstrate that instructional designers do not want a rigid template to surrender their design to; however, they require research-informed descriptive guidelines to assist them through different phases of the course development process. Instructional designers demand is for a set of guidelines that evolves with the field of instructional design.

The online resource that I have developed, http://wiki.ubc.ca/Design_Quality_OnlineCourse, consists of five sections. Each section covers one of the five phases of the course development cycle: planning, design, production, implementation, and evaluation. Each phase starts with an overview, a descriptive image, and a list of tasks suggested to be performed by an instructional designer within that phase. All the phases are based on the literature review completed throughout my study and are accompanied by supporting documents that improve quality of an online course, such as Course Planning or Course Schedule documents presented in Planning Phase.

The resource is flexible in the sense that it is accessible online, has no copyright attached to it, is under creative commons, can be modified and adapted based on context, and is changing along with technology and education. I will update the different sections of this resource as a part of my work, and those who adapt it should also be able to customize and update it regularly. This chapter explains the development of the resource and its components in detail. First, I will address the decision-making process that I undertook for the selection of the platform. Then, I will discuss the instructional design model used for this resource and finally examine in detail each phase of the quality course development process.

Selection of Platform: Why Wiki?

To select the right platform for this online resource, I went through Bates' ACTIONS model's (2000) guiding questions and tried to answer the following questions:

1. Is the platform easy to use?
2. What is the cost to use this technology?
3. Is it easy to update/maintain and sustain?
4. How does it affect the learning?
5. Will it be easy and fast to transfer and transform the content?

Between blogs and Wiki, I selected a Wiki platform because of its accessibility (open source and free), ease of use, interactive content, and its transferability to another medium. Wiki content can easily be transferred to a website, a Learning Management System, or a course. It is also possible to transfer the content to a booklet and print it. The feature of having one input and producing different types of output was one of the more useful features of this tool that made me determined to select it.

Course Development Phases/Instructional Design Model: Inspired by the Analysis, Design, Develop, Implement, Evaluation (ADDIE) Model

The majority of instructional design models are somehow inspired by ADDIE. In Appendix A, I discussed different instructional design models in detail and demonstrated their similarities to the ADDIE model. There are five phases in the design model that I have used for this resource: planning, development/design, production, implementation, and evaluation (PDPIE). This design model is quite close to the hybrid design model proposed by Passerini and Gragner (2000), which also has five phases — analysis, design, development, evaluation, and delivery. While the design is not the same as the ADDIE model, the PDPIE design shares many qualities with it. The first phase of the PDPIE model calls for conducting a needs analysis, which covers learners' characteristics, context, and instructional goals. In the second phase, the main content and the assessment

and instructional strategies are determined and developed. In the production phase, the content is finalized and developed online. The implementation phase covers facilitators' training, delivery, learners' support, and resources; it is actually the phase in which the course is taught. Finally, the last phase, similar to that of ADDIE, covers evaluation in both the formative and summative formats. The phases, shown in Figure 7, are presented and discussed in detail below. In each phase below, basic steps are illustrated and key/promising elements and required documents for a quality course are shared.

Course Development Cycle



Figure 7. Course development cycle (PDPIE)

Phase 1: Planning

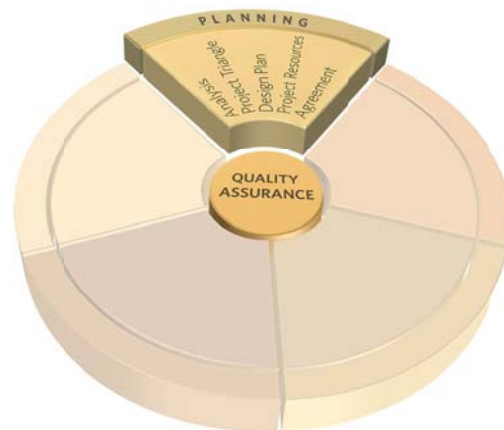


Figure 8. Planning phase

Planning is an iterative process. The major tasks in planning include assess needs, define project scope, determine resources, create a project schedule, and determine budget. This phase includes conducting a needs analysis, which covers analysis of learners' characteristics, context, as well as instructional problems and instructional goals. The importance of needs analysis for the design of syllabus and course design is supported by many educators in the field (Gomez Garcia, 2007; Garcia Pilar & Mayo, 2000; Palacios Martinez, 1992; Hutchinson & Walters, 1987). During this phase (and in a team-based approach), the course author/instructor is encouraged to work with a project manager/instructional designer to outline key objectives, teaching methodologies, planning details, schedules, and goals, much of which will be collected via the course planning document that is presented at http://wiki.ubc.ca/Sandbox:Course_Planning (Appendix K). Once the course planning document is complete, it is always good to have a peer/colleague review it. I presented and discussed this phase and its key elements and steps for the course development at the European Foundation for Quality in e-Learning (EFQUEL) conference (Appendix L). The feedback received from participants supported the need for such a resource and made me more determined to be focused on the course development phases and instructional designers' perspectives.

The first phase, shown in Figure 8, is discussed in greater detail below.

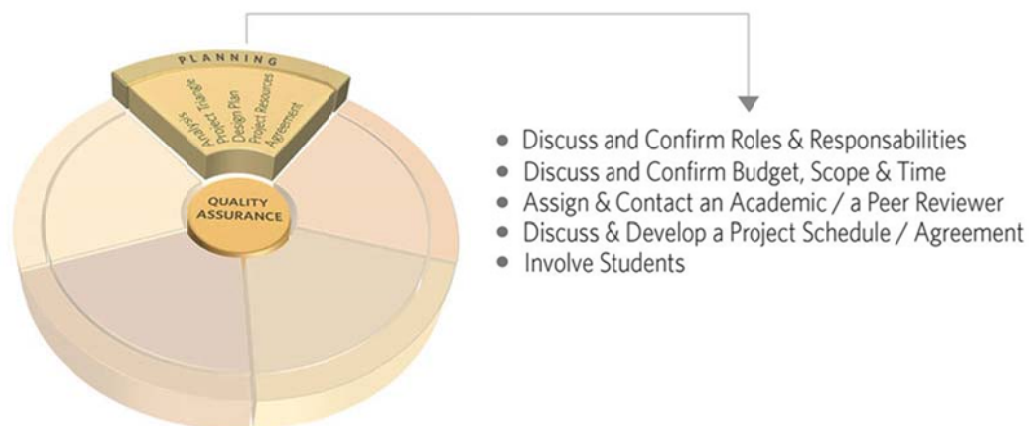


Figure 9. Planning phase and key elements for quality

The following section outlines the steps that an instructional designer is recommended to follow in phase one; these are also shown in Figure 9.

1. **Initial Meeting:** Organize a meeting with the course author (a faculty member or a subject matter expert) to establish a pedagogical approach, a rough schedule, and the learning outcomes, to further analyze the multimedia requirements, and to identify and to develop a strategy for copyrighted materials. If you are working with different team members from different units, invite them all to the meeting to discuss individuals' roles and responsibilities.
2. **Preparation for the Initial Meeting:** Prior to the meeting, prepare a project schedule, a document where different tasks, their milestones, and the project's resources are identified. If possible, send the document to the course author for review prior to the meeting. Go through the project schedule with the course author during the meeting and try to develop an agreement around roles, responsibilities, and timelines during the first few meetings.
3. **Discussion of Course Delivery Platforms:** Ensure that the course author is familiar with the course delivery platform whether it is an in-house Learning Management System (LMS) or an open source such as Wiki. Organize an orientation or training session to reinforce this point.

4. Showcasing: Show different examples of courses in the same delivery platform.
5. Ensure Accessibility: Go over the importance of accessibility in the development of the course and discuss the basic requirements (i.e., alternative texts (ALTs) for images and transcripts/captions for videos).
6. Ensure Quality Check: Discuss the quality assurance steps and go over your quality check process (different quality guidelines are listed at the Delicious account <http://delicious.com/afsanehsh>).
7. Provide Essential Documents: Send the course planning document along with the meeting notes and samples to the course author.
8. Identify and Confirm the Academic or Peer Reviewer: Contact the department head for an academic reviewer (if possible). The academic reviewer is a person assigned by the department or main stakeholders to review the content of the course once written to confirm its curriculum alignment with other courses in a faculty as well as to avoid redundancy of content within the program. If you do not have access to an academic reviewer assigned to your course, ask one of your colleagues in the same field and department to review your course to ensure that your course aligns with the program's/department's goals.
9. Discuss the Requirements with the Reviewer: Contact the academic reviewer and discuss the project timelines and requirements for the review process. Discuss and finalize the payment process. It is recommended to have the payment in two steps; one after the review of the course planning document and the second one after the review of the all the course content. Otherwise, negotiate whatever works best for the project.
10. Finalize the Course Planning Document: Review, provide feedback, and finalize the course planning document with the course author within the timeline set on the project schedule.

11. First Review: Send the course planning document along with the sample unit to the academic reviewer.
12. Incorporate Feedback: Share the academic reviewer's feedback with the instructor and incorporate the necessary changes.
13. Prototyping: Develop the sample lesson online at this stage to demonstrate to the instructor how the lessons would look online. If the structure of the course is complicated, a prototype helps to identify the sections that need to change earlier in the course development process or the parts that might not work online. For example, an instructor might want to link each activity to a blog and a discussion; however, after the prototype, he or she might decide to try only a blog considering student workload for one lesson. Test and modify the online sample lesson as required.

Supporting Quality Assurance Documentation

1. [Course Design Planning Document](#)
2. [Project/Course Schedule](#)
3. [How to Write Measurable Learning Outcomes](#)
4. [A list of guidelines for quality in online learning](#)

Phase 2: Design and Development

This phase refers to the planning and structuring of a course to achieve specific instructional goals. It include the following activities:

- Identifying and developing appropriate goals
- Choosing content that is consistent with the goals
- Selecting strategies and activities to achieve the goals
- Assessing participant learning in relation to the goals

The design and development phase (see Figure 10) is characterized by the author creating and writing the course content. At this stage, it is recommended that the course author look at one quality assurance guideline as a reference while developing the content. This might be a guideline that is developed in house or one is that is developed externally. [A Guide to Quality in Online Learning](#), from Academic Partnership (2013), is a valuable resource that lists many of these guidelines. The objectives, scope, a sample lesson, and other sections from the course planning document can also be helpful at this stage.

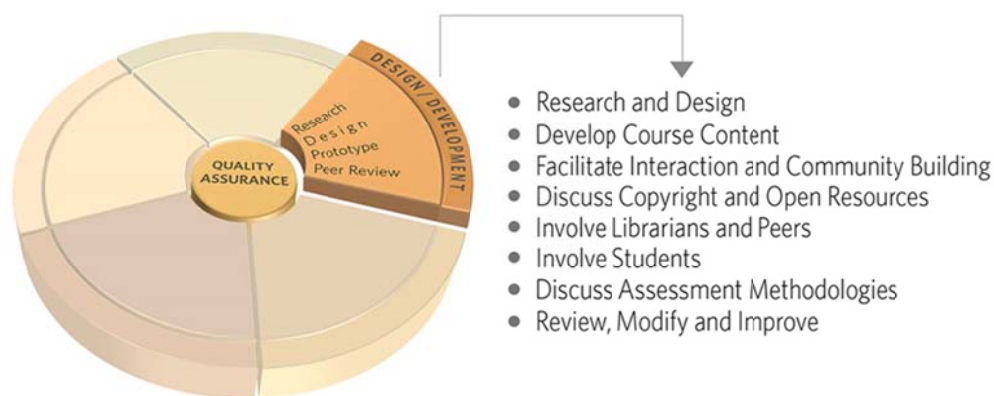


Figure 10. Design and development phase

The course author can follow the sample lesson from the course planning document as she or he works through the remainder of the course development. This phase may demand more time as the content for the course is being further developed. The instructional designer may provide the course author with tips on instructional design and consult on learning activities and course assessment strategies. The content is developed for particular learners; therefore, it is important to involve learners in course content development early in the process to make the content more relevant and engaging.

Steps that an instructional designer is recommended to go through in this phase are listed below.

1. The project manager/instructional designer will work with the course author throughout the design process and provide timely feedback on the content, structure, and assessment of the course. Various team members may offer their

- expertise at this time; the instructional designers need to create a communication channel for this and organize regular team meetings. For example, the course author may want to consult with a librarian while he or she sorts through the content choices. She/he might want to see a few existing online courses in the same field or explore different assessment strategies for his or her particular subject. She/he might want to try a new tool or approach in the course.
2. At this stage, the course author has the opportunity to be creative and incorporate his or her personal teaching methodologies and learning principles into the course content. He or she will create the lessons and content for each module as well as the assessment activities. During this phase, it is recommended to create two to three different versions of the final exam and to discuss whether or not the exam will be invigilated or online. It is recommended to have two different formats for an exam in order to accommodate students with cognitive disabilities. For example, if the instructor uses only multiple-choice questions, it may be recommended to also include a written examination portion to accommodate a student who is less successful on multiple-choice exams because of a cognitive disability. If the exam will be invigilated, the course author/instructor will be put into contact with the appropriate department. If the exam will be conducted online, the exams will be sent to the project manager/instructional designer as a part of the content so that the team can set up the exam in the Course Management System or respective platform through which they deliver exams. At this point, the course instructor will let the project manager know of any relevant reading material and other resources in order to prepare the material for sale and distribution to students. It is important to involve a librarian at this stage, to discuss which textbooks and articles are available online and are more accessible for students. Involving a librarian earlier in the development process might save time for stakeholders involved in addition to money for learners. A librarian in consultation with the course author might be able to offer articles and textbooks that are available free online through the organization's library or might be in the public domain, which save learners money. This approach also may save time for the copyright clearance staff.

3. **Assessment Strategies:** After deciding on the appropriate examination technique, it is important that the team members discuss and explore different assessment methodologies, including formative and summative assessments. Team members must ensure that the types of assessments selected measure the stated learning outcomes. In other words, there are links between the outcomes, the activities, and the assessments within the course. The instructional designer needs to ensure that learners have multiple opportunities to measure their own learning progress and that the course grading policy is stated clearly.

4. The course author and the project manager will identify any materials that require copyright clearance, such as images, videos, or readings, and work with other team members in the library and the Copyright Office to get copyright clearance. It is important to discuss the option of using public domain materials, to talk about the delivery platform, and to decide whether the course will be open to the public or private in a course management service (accessible only by students registered in the course). Here are two websites for free or easy-to-use copyright licenses instructional materials where the course author might be able to find useful materials such as images, videos, or articles that do not need copyright permission or the copyright permission is easy to obtain:
 - Creative Commons (<http://creativecommons.org>)
 - Flickr (flickr.com)

5. **Ensuring Accessibility:** The instructional designer will also work with the course author to ensure that the course is accessible to all students. For example, transcripts may be needed for videos or for animations to accommodate students with disabilities. The following resources were developed to increase the awareness of instructional designers regarding accessibility.
 - [Accessibility mini session](http://wiki.ubc.ca/Sandbox:CTLTAcessibility) ([http://wiki.ubc.ca/Sandbox: CTLTAcessibility](http://wiki.ubc.ca/Sandbox:CTLTAcessibility))
 - [Accessibility Checklist](http://wiki.ubc.ca/AccessibilityChecklist) (<http://wiki.ubc.ca/AccessibilityChecklist>)

6. **Second Review:** Once the course author has written the course content, activities, and assignments the project manager/instructional designer will request a second academic review (typically from the same person). The academic reviewer as well as the instructional designer will provide final feedback, and this feedback will be considered before the materials are finalized and sent on for production.

Supporting Quality Assurance Documentation

1. [Accessibility Checklist](#)
2. [A Guide to Quality in Online Learning](#)
3. [The chapter on formative and summative assessment in “Creating Learning Materials for Open and Distance Learning: A handbook for Authors and Instructional Designers”, published by Commonwealth of Learning](#)
4. [Planning and Writing Self-assessment, published by Commonwealth of Learning](#)

Phase Three: Production

During this phase the content/course will be developed fully online. The final course content will be handed over to the instructional designer, and she/he will work with the production team, including course programmer, media producer, and graphic designer to prepare the course for the online learning environment. When developing course materials online, breaking them into small, manageable units or modules increases students’ awareness of the conceptual structure of each unit and also allows for greater flexibility in pacing their learning (Johnson & Aragon, 2003). Quality online courses are well organized and easy to navigate. Figure 11 demonstrates the production phase and the key tasks that need to be completed at this phase.



Figure 11. Production phase and key elements for quality

Steps that an instructional designer is recommended to go through in this phase are listed below.

1. The instructional designer will collect all the course content from the course author. She/he works with the production team to design the layout of the course and ensure all of the content is uploaded into an online course shell as planned. In some organizations, a built file (in Word) is used to help the course author develop the content in a way that the production team can follow easily. In these “built files” there are instructions on where the headings and the levels of headings go, where images and their alternative texts will be placed; as well, text font and formats will be presented almost the same way that they appear online.
2. While the course is in production, the course author/instructor will continue to consult on final versions of course materials. The course author will also have a chance to review the full course online when everything is complete and produced for the learning environment. All the items listed in Figure 8 need to be emphasized and focused on.
3. The production team will follow the World Wide Web Consortium (W3C) standards to ensure all the online components of the course are accessible and the course design accommodates the use of assistive technologies. For example, the programmer needs to add the alternative text (ALT) for all the images that are

provided by the course author and the instructional designer. She/he needs to make the navigation consistent and use web-safe colours in the course. The accessibility checklist is available at <http://wiki.ubc.ca/AccessibilityChecklist>.

4. The instructional designer will work with the production team and the instructor to ensure that selected media and tools support the course learning outcomes and the learners' interaction. It is important that all three interactions are present in an online course: learner–learner, learner–instructor, and learner–content.
5. **Technical Usability:** Team members discuss and pay attention to technical usability issues such as server reliability, download times, appropriateness of plug-ins, and accurate codes such as HTML codes.
6. Prior to the course start, it is recommended that online instructors have access to training sessions or an online orientation for teaching online. These sessions will help the course instructor teach the course more efficiently and smoothly by offering online teaching tips as well as information on various online course tools. It is essential for instructors and learners to get familiar and comfortable with the platform through which the course will be delivered (whether it is Moodle, Desiger2Learn, Blackboard, or any other content management system (CMS)). In many of the organizations, there are ongoing technology training sessions available. For example, at the University of British Columbia, the upcoming Connect (Blackboard-courses delivery platform) training sessions and other workshops offered through the Centre for Teaching, Learning and Technology are listed at <http://www.events.ctlt.ubc.ca/>.

If your organization does not offer training sessions, prepare a training document. You can search to see if there are any existing videos on the required technologies on YouTube to share with your team members or use Camtasia (<http://www.techsmith.com/camtasia.html>) or other tools to create screen casts.

7. **Selection of Technologies:** Discuss as a team and use a model such as Bates (2000) ACTIONS for selection of your technologies.

Supporting Quality Assurance Documentation

Below are online resources created for learners and instructors by the University of British Columbia. These resources provide learners and instructors with tips and information on how to use the tools and features in the current platform that the university is using to offer its online courses. You might find these resources useful in creating your own resources.

1. [Instructor Resources](http://elearning.ubc.ca/connect/instructor-resources/) (http://elearning.ubc.ca/connect/instructor-resources/)
2. [Student Resources](http://elearning.ubc.ca/connect/student-resources/) (http://elearning.ubc.ca/connect/student-resources/)
3. [Online Learners: How to Do Well in An Online Course](http://learningcommons.ubc.ca/resource-guides/online-learners/0) (http://learningcommons.ubc.ca/resource-guides/online-learners/0)
4. [Checklist of Checkpoints for Web Content Accessibility Guidelines](#)

Phase Four: Implementation

The implementation phase comprises the course offering and teaching process (see Figure 12). At this stage, all the course components have been thoroughly reviewed, and the course is ready to be launched for the first time. If the course author is teaching the course, there are a few notes listed in the process below that need to be taken into account prior to the course commencement. If the course author is not teaching the course, she/he may be asked to meet with the course instructor and instructional designer as the course is handed over to help prepare the instructor. Instructors and other members of the online course development team should strive to create learning environments that exploit the features inherent in the Web, in order to promote active learning that resides in the control of the student and that can effectively lead to the development of critical thinking skills (Caplan, 2004).

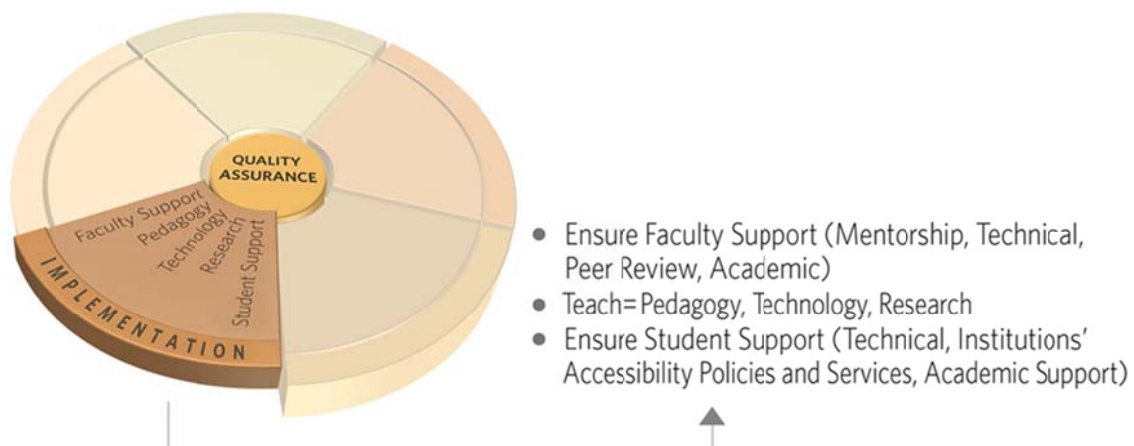


Figure 12. Implementation phase and key elements for quality

Steps that an instructional designer is recommended to go through in this phase are listed below.

1. Welcome Letter: The instructional designer needs to ensure that a welcome letter/email is sent to students registered in the course before the course starts to begin building the learning community and to introduce himself/herself. This letter will also provide students with information regarding ordering textbooks, standards with regards to contacting their instructor, login information for the course website, and other resources.
2. At this point, all the payments for the development of the course should be made to the team members involved. The project manager/instructional designer is normally the person who is in charge of the budget.
3. Final Exam: The instructional designer needs to ensure that the final exam arrangements are set and confirmed with the team at the appropriate unit. If the exams are online, they should be created and reviewed prior to the course start date.
4. Mentorship: Throughout the course delivery process, the project manager/instructional designer should be available to mentor and guide the

- instructor, ensure that the course is running smoothly, and assist with any technical or course-related issues.
5. The course instructor and project manager/instructional designer will track corrections and changes that should be discussed for the future offerings as well as make minor changes in collaboration with the course web programmer as needed.
 6. The instructional designer should encourage the instructor's frequent presence in the first few weeks of the course; this will create and facilitate the online learning community.
 7. The instructional designer should encourage and emphasize the importance of learner support in a timely manner.

Supporting Quality Assurance Documentation

Teaching should be focused and inspired by pedagogy, research, and technology.

The following links are resources developed by the online teaching community for those new to online teaching. All of these resources can be used as is and are in development based on feedback received:

1. [Introduction to Online Teaching](http://wiki.ubc.ca/Documentation:Introduction_to_Online_Teaching/Learning_Module)
(http://wiki.ubc.ca/Documentation:Introduction_to_Online_Teaching/Learning_Module)
2. [Creating the Online Learning Environment](http://wiki.ubc.ca/Documentation:Creating_the_Online_Learning_Environment/Learning_Module)
(http://wiki.ubc.ca/Documentation:Creating_the_Online_Learning_Environment/Learning_Module)
3. [Developing Social Space](http://wiki.ubc.ca/Documentation:Developing_Social_Space/Learning_Module)
(http://wiki.ubc.ca/Documentation:Developing_Social_Space/Learning_Module)

4. [Supporting Critical Thinking Online](http://wiki.ubc.ca/Documentation:Supporting_Critical_Thinking_Online/Learning_Module)
(http://wiki.ubc.ca/Documentation:Supporting_Critical_Thinking_Online/Learning_Module)
5. [Teaching Challenges: Online](http://wiki.ubc.ca/Documentation:Teaching_Challenges:_Online/Learning_Modules)
(http://wiki.ubc.ca/Documentation:Teaching_Challenges:_Online/Learning_Modules)
6. [Developing Cohesion Between Goals and Assessment](http://wiki.ubc.ca/Documentation:Building_Cohesion_Between_Goals_and_Assessment/Learning_Module)
(http://wiki.ubc.ca/Documentation:Building_Cohesion_Between_Goals_and_Assessment/Learning_Module)

Phase Five: Evaluation

The evaluation phase generally takes place once the first offering of the course has successfully come to an end. At times, this phase may take place while the course is still in progress; this depends on the urgency of the issues and demands from students and the instructor. To prepare the course for its second offering, the course development team will meet again to evaluate the course based on the first offering. The student evaluations, peer feedback, instructor's notes and reflection, and course instructor and the team feedback assist in assessing the course more efficiently.

The U.S. Department of Education (2006) recommends the following techniques for the evaluation of an online program: interviewing faculty on uses of the course evaluation data for teacher improvement, analyzing the effect of course evaluation on student performance, periodical review of courses, comparison of outcomes between online and face-to-face programs, and documentation of program improvement.

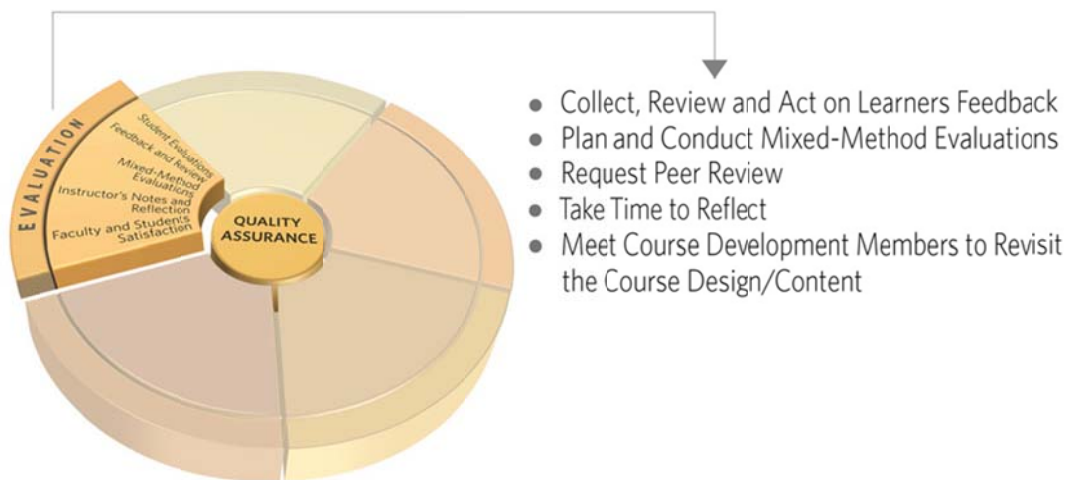


Figure 13. Evaluation phase and key elements for quality

Figure 13 demonstrates the Evaluation Phase and the key tasks that need to be completed during this phase. Steps that an instructional designer is recommended to go through in this phase are listed below.

1. Debriefing Meeting: After the first offering of a course, the project manager/instructional designer may ask to meet with the course author/instructor to debrief how the course went. At this meeting, the team will debrief learner evaluations and instructor concerns and make note of any items that may need modification. It is recommended to make notes of any issues brought up by students as well as peers (if peer review has been in place). Instructor's reflection is also helpful in the evaluation process.
2. The team will review the overall course content including assignments and discuss any student feedback that is available. The instructor will discuss his/her concerns regarding how to develop new strategies and designs that eliminate issues highlighted by students throughout the course.
3. Content, technical, or delivery issues must be resolved before the next run of the course. For example, if a majority of students had expressed concerns about one of the assignments and its delivery, the assignment and its design must be revisited, which may lead to a redesign of the assignment.

4. All revisions to be done for the next offering will be discussed and noted; the revision schedule may depend on the available budget and resources. It is recommended that the original course author be the person to make the revisions to the course.

For evaluation, consider different assessment strategies including, but not limited to, reflecting on your class (it is recommended to do this from the beginning of the course), documenting students' academic achievements in the course, keeping record of student retention, monitoring faculty and students satisfaction throughout the course, collecting student feedback on the course a few times throughout the course, maintaining the cost effectiveness of the program, measuring students' competence using nationwide standard assessments as a comparison, comparing students' performance with the course/program outcomes, and having a peer or an academic reviewer to provide you feedback.

Supporting Quality Assurance Documentation

The online course evaluation links below offer a range of rubrics and guidelines to assist with the development of effective practices for evaluating online courses.

1. Self Review of Online Teaching (<http://www.online.pitt.edu/faculty/documents/SelfReviewGuide.pdf>)
2. A Tool for Faculty Peer Review of Online Teaching – The Sloan Consortium (http://sloanconsortium.org/effective_practices/tool-faculty-peer-review-online-teaching)
3. Rubric for Online Instruction (ROI) – Chico State University (<http://www.csuchico.edu/roi/>)
4. Faculty Peer Review of Online Teaching – Penn State University (<http://facdev.e-education.psu.edu/evaluate-revise/peerreviewonline>)
5. A Peer Review Guide for Hybrid Courses at Penn State (https://www.e-education.psu.edu/files/files/PeerReview_HybridCourses_PSU_Guide_31July2012_form.pdf)

6. Gathering Feedback from Students – Vanderbilt University (<http://cft.vanderbilt.edu/guides-sub-pages/student-feedback/#inclass>)
7. Midterm Feedback Evaluation – Carleton University (<http://carleton.ca/edc/services/midterm-feedback-evaluation/>)
8. Teaching Evaluation – NYU Stern (<http://www.stern.nyu.edu/portal-partners/center-innovation-teaching-learning/resources/teaching-evaluation/index.htm>)
9. Conducting a Midterm Evaluation – University of California, Berkeley (<https://gsi.berkeley.edu/teachingguide/improve/midterm-eval.html>)

For the purpose of this study, only the tasks of instructional designers are discussed in detail; however, the online resource can be expanded to include other members' roles. In addition to the online Wiki resource, I have developed two checklists that can be used by course authors or instructional designers for the following purposes:

1. An online course quality checklist (presented below), which lists all the key elements in seven sections of an online course, including course overview, course goals, assessment, course materials, learner engagement, course technology and learner support. This checklist is based on literature review and earlier rubrics such as Commonwealth of Learning and Quality Matters.

Online Course Quality Checklist

Criteria	✓	How to improve
Section I: Course Overview & Introduction		
Instructions on how to get started and where to find various course components are clear and easy to find.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The purpose of the course is clearly stated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The structure of the course is clearly explained.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
A link is provided to the official current course outline.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Assessment information is easy to find.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Communication/activity tools (forums, wiki, blogs, etc.) are easy to find.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Purposes and etiquette expectations for online discussions, chat, email, and other forms of communication are clearly stated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Prerequisite knowledge and required competencies are clearly stated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Minimum technical skills expected of the student are clearly stated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
A clear course schedule with topics, assignments, and due dates is posted.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
A link to course and/or institutional policies with which the student is expected to comply is provided or policies are clearly stated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The introduction includes a section detailing how learners will be assessed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Instructor response and assignment turnaround times are clearly stated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The self-introduction by the instructor is available online.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Students are asked to introduce themselves to the class.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Section 2: Course Goals and Learning Outcomes		
The course learning outcomes are measureable.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The course learning outcomes are described in terms of what the student will be able to do upon completion and are written from the student's perspective.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The module/unit learning outcomes are clearly stated and are consistent with	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

the course-level outcomes.		
Instructions to student on how to meet the learning outcomes are clearly stated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Learning outcomes are appropriately distributed among modules/units.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Learning outcomes are at levels appropriate for the course.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Criteria		How to improve
Section 3: Assessment		
Learning activities and assessments are consistent with the learning outcomes.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The course grading policy is stated clearly.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Rubrics (specific and descriptive criteria) are provided for the evaluation of students' work, assignments, and participation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Learner assessment is sequenced, varied, and conducted on an ongoing basis throughout the course (formative and summative).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
A structure exists to provide students with feedback throughout the course.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The assessment strategies/tools selected are appropriate to the student work being assessed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Self-assessment activities with feedback are incorporated in the course.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Clear instructions are provided on how to submit assignments.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Students have multiple opportunities to measure their own learning progress.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Section 4: Course Materials		
Course content is sequenced and structured in a way that enables students to achieve stated learning outcomes.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Learning activities are clearly integrated with specific instructional materials and linked to learning outcomes.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Course materials are presented in a consistent and logical structure and layout,	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

suitable to the delivery mode.		
All course materials are current and easy to understand.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The distinction between required and optional materials is clearly explained.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
All materials and resources used in the course are appropriately cited.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The course design facilitates readability and minimizes distractions.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The course contains equivalent alternatives to auditory and visual content for accessibility purposes.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Criteria		How to improve
Section 5: Learner Engagement		
The learning activities promote the achievement of the stated learning outcomes.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Learning activities foster levels and types of interaction (instructor–student, content–student, student–student) that are appropriate to the course learning outcomes.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Learners are actively engaged in meaningful and relevant learning activities throughout the course.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The instructor’s plan for classroom response time and feedback is clearly stated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The requirements for student interaction and progression through the course are clearly articulated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Section 6: Course Technology		
The tools support the learning outcomes and enhance the learning process.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The course technologies are current.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Instructions on how to access technologies and resources at a distance are sufficient and easy to understand.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The tools used in the course are available to students, and there are instructions on how to get any additional required tools (e.g., free plugins).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
If synchronous activities are included, they are archived for students to review	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

(e.g., Elluminate Live! sessions, podcasts).		
Navigation of the course is logical, consistent, and efficient.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The course uses accessible technologies.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The course design accommodates the use of assistive technologies.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Section 7: Learner Support		
The course instructions make it clear how students can access technical support.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The course instructions make it clear how the institution's or the program's academic support systems can be accessed (e.g., library services, peer tutoring).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The course instructions make it clear how the institution's student support services can be accessed (e.g., peer support services, counselling).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The course instructions articulate or link to the institutions' accessibility services.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
The course provides guidelines or links to resources on how to succeed as a student in online or blended environments.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

2. An instructional designer (ID) checklist for online course development; which lists all the necessary tasks that an ID needs to complete through different phases of an online course development cycle.

Instructional Designer Checklist for Online Course Development (Team-based Approach)

Criteria	✓
PLANNING PHASE	
Course Design Planning document is completed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Team members' roles and responsibilities are discussed and confirmed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Course budget is discussed and confirmed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Course timelines and delivery date are confirmed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Academic/peer reviewer is identified, confirmed, and informed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
A strategy for copyrighted materials is identified.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
An assessment strategy for the entire course is discussed and planned.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Multimedia requirements are discussed and estimated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
A Project Schedule (also called Project Charter or Agreement) is developed and signed by the key team members.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
A sample lesson plan/module is completed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
The delivery platform (i.e., Moodle, Blackboard, Wordpress) and existing supported tools and technologies are identified and discussed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
The final Course Design Planning document is sent to the academic reviewer for review and feedback.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Learners are involved in planning stage.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
COMMENTS:	
DESIGN AND DEVELOPMENT PHASE	
Academic/peer reviewer's feedback on the Course Design Planning document is shared with the instructor and necessary changes are incorporated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Course content is written or adapted from existing materials. Open Educational Resources are introduced.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Course goals and learning objectives are stated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

Criteria	✓
Graphic/media needs are discussed with the team for development.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
An assessment strategy for the entire course is developed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Opportunities for self-assessment in the learning process are provided.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
A didactic discourse is maintained throughout the course.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Different examples of activities are used throughout the course.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Instructional materials are copyright-cleared or are in public domain.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Course content and technologies are in accordance with W3C standards (Accessibility Checklist)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
All the course content is written, finalized, and sent to the academic/peer reviewer.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Tools/educational technologies are assessed and selected (Assessing Technology).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
COMMENTS:	
PRODUCTION PHASE	
Academic/peer reviewer's comments on the entire course content have been received and shared with the instructor and necessary changes have been incorporated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Instructions have been added to the content for the production team (i.e., web programmer) and all the files including content, images, and media have been sent to the production team.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Course content is uploaded into the delivery platform online.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Videos, multimedia, images, and tools are added and embedded into the course.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
The online course is in compliance with W3C standards and tools are accessible.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
The course instructor has been trained in the online delivery platform.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Quizzes, assignments, assessment, and discussions have been created.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Course syllabus and course links are current and active.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
All the copyright permissions have been obtained.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Course textbooks and materials have been ordered or are available online.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

Criteria	✓
The course author/instructor has reviewed the course online to ensure all the course content and activities are in place and the course is ready for new offering/delivery.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
COMMENTS:	
IMPLEMENTATION PHASE	
Course instructor is introduced to online teaching .	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
A welcome letter/email is sent to students registered in the course with information on how to order their textbooks, how to login into the course, and how to contact their instructors.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
All the payments for the course development have been made to the team members involved (i.e., course author, academic reviewer, media producer, ...)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Final exam arrangements are set and confirmed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Students with disabilities have been accommodated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Course instructor has been informed of frequent presence in the first few weeks of the course.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Students have been provided with learner supports and resources' links.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Course instructor and instructional designer have made a list of issues throughout the course for course evaluation and modification purposes.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Course instructor has required students' feedback throughout the course.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Learners have completed a course evaluation at the end of the course.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
COMMENTS:	
EVALUATION PHASE	
The course instructor has met with the instructional designer and other course development members to debrief how the course went.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Students' feedback and course evaluation forms have been reviewed and outstanding issues have been noted.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
The course instructor and the instructional designer have created a list of new strategies and changes based on their reflection as well as feedback received.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
All the revisions to be done for the next offering have been discussed with the course production team and noted, and	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

Criteria	✓
available budget and resources have been considered.	
Online course evaluation rubrics or checklists have been developed and used for the course/program.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Faculty peer review of online teaching has been discussed and implemented (Penn State University – Faculty Peer Review)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
COMMENTS:	

Adding a section on MOOC development and quality assurance in MOOCs will also add to the value of this resource. The section on MOOCs will be added to the resource in the near future. The online resource is a work in progress and will be modified and updated based on feedback received and outstanding changes in online course design. The next chapter concludes this study and discusses how the results of this study including the online quality framework have been used by other educators involved in the field.

Chapter Five: Conclusion

To develop an online course, the work of an instructional designer is undoubtedly heavily dependent on technology. Hence, as technology changes, different aspects within the field of instructional design also require modification. Existing literature provides compelling analysis and argument regarding the importance of quality in online learning as well as providing different guidelines for measuring and monitoring quality of online courses (Chao, Saj, & Tessier, 2006; Eaton, Reynolds, Mason, & Cardell, 2008; McGorry, 2003; Wang, 2006). Existing literature also examines how different stakeholders, such as students, instructors, and administrators, have various perspectives and criteria for determining quality in online learning (Ehlers, 2004; Jung, 2011; Koslowski, 2006; Shaban & Qureshi, 2013). Nevertheless, instructional designers often fail to adapt a systematic way to assess quality in their work for different reasons, such as tight deadlines or lack of policy concerning quality within the organization. Instructional designers have a key role in the development of quality online courses; however, their voices and perspectives are not often incorporated in the existing frameworks for creating quality online courses. As I have discussed in my findings and papers, the lack of focus on instructional designers can be influenced by the fact that many do not recognize the position of instructional designers as a real profession. Many instructors adopt the role of instructional designers because of a lack of a professional team dedicated to the course development process or a lack of resources. In many organizations, instructional designers are considered as technical people. Thus, their expertise is not fully utilized within their institutions. In these cases, the instructional designers need to work on projects with tight deadlines, and often they do not have sufficient time to reflect on their design. While the team approach for course development is recommended and supported by the existing literature (Ellis & Phelps, 2000; Hixon, 2008; McDonald & Postle, 1999), it has its own challenges. In these cases, instructional designers play the role of a gatekeeper or a bridge to connect instructors and pedagogy with production team and technology. This can be a challenging task if someone in the team does not cooperate. It can also be challenging if team members use different terminology for the same tasks or fail to achieve an agreement on their main priorities.

At the beginning of my research my objective was to respond to the high demand for guidelines that address the quality of online courses. As I further engaged with my research it became more evident that others had attempted to resolve the same challenge but their research results were valuable for a period of time and needed to be modified as the standards of education changed and technology evolved. I came to the conclusion that it is necessary to have a resource for instructional designers that can continuously be modified to remain relevant. There is a clear need for a modifiable resource that can be adjusted to meet the needs of institutions yet one that follows established guidelines and standards.

The resource that I have developed is based on a team approach; however, the resource has been developed in a way that even instructors/course developers who do not have the resources to work in a team can also use it to improve quality in their work. In this resource, team members' roles are discussed and instructional designer's tasks are explained in detail to avoid confusion of responsibilities. In each phase of the course development process, different guidelines are developed and shared. I have also created a Delicious account, which completes this resource by listing links to quality frameworks and guidelines. The terms and steps are explained in detail to avoid misinterpretation. Supporting documents for each phase of the course development cycle that I have developed and gathered include templates, samples, and guided questions that help designers to do their jobs more efficiently within the timeline given. The aim for the development of such a resource was to get all stakeholders involved in course development closer to a quality course and make the quality assurance process an ongoing improvement process. The online resource and checklist has been shared with the participants in this research and presented in an instructional design community of practice. Owing to the timing of this thesis, I will not be able to get and share their experiences at this time; however, the feedback received so far is positive. Since the Wiki is open to the public, others involved in training and online content development have already started modifying and using the resource as well as the checklists; they have found them useful. Below is a good example of how the University of New South Wales in Australia is modifying and using these resources:

“Online Course Quality Checklist

The Quality Checklist for Online Learning developed by Afsaneh Sharif as part of her doctoral studies is an incredible resource that I plan to use at UNSW Australia. While numerous organization and educational institutions have developed quality assurance checklists for online learning, Afsaneh’s particular checklist adds incredible value to the education sector by not only compiling the essential criteria from the other checklists but also being informed by her own research study enhancing the credibility of the checklist items. While the checklist was developed for assuring the quality of online courses, in particular, with a few minor modifications that Afsaneh was willing to do for us, it is ideal for assessing blended learning course design as well. UNSW Australia has a strong focus on blended learning and hence, the modified checklist is valuable for our academic staff to use to evaluate their own course design and identify areas of improvement. I plan to use the checklist in a post-graduate course, Educational Design in Higher Education, that I will teach this year. My students will review their existing course design for their face-to-face or blended courses using Afsaneh’s modified Quality Assurance Checklist for Online Learning to identify the areas in their course they should redesign to better meet the criteria on the checklist. In addition, the checklist will be provided as an optional resource in the upcoming massive open and online course (MOOC), Learning to Teach Online, where participants will redesign a component of their existing course for online learning and can use the checklist to identify the component in their course that requires improvement or to use after they redesign their course to ensure it meets the required criteria. Afsaneh’s Quality Assurance Checklist for Online Learning and it’s modified version for blended learning will be a very valuable asset for UNSW Australia.

Designing for a Quality Online Course: Online Learning: Course Development Cycle

The Online Learning: Course Development Cycle developed by Afsaneh Sharif as part of her doctoral studies is a valuable resource for the education sector, particularly due to the current interest and expansion of massive open and online courses (MOOCs). UNSW Australia is traditionally a single-mode face-to-face

on-campus university with limited online courses. However, recently becoming involved in the design and delivery of MOOCs, UNSW Australia like many other higher education institutions has begun to develop project management and course design process for the design of MOOCs. Afsaneh's resource, although perhaps not intended for MOOCs specifically, is useful for informing the process and approach that UNSW Australia plans to use in the development and design of future MOOCs. In addition, the process can be adapted to be useful for the design of blended learning courses and programs, which is one of the strategic directions of the university and many academic staff will need the step-by-step guidance and resources available from the Online Learning: Course Development Cycle to begin redesign of face-to-face courses to blended mode.”

Dr. Negin Mirriahi, Academic Developer/Lecturer,
Learning & Teaching Unit UNSW Australia

Earlier in my research, I realized that no matter how fast I developed my work, I could not keep up with the speed of change in technology. As I continued my research, it became evident that the pace of this change was not specific to just a particular period and that this trend would continue. As a result, I deduced that having an open source tool would address this issue and increase the accessibility of my research and avoid time-consuming copyright matters.

While this resource is effective in solving the main issues addressed above, there are certain limitations. Key elements considered quality measures might not remain in place in the future. Also, no other personal factors except the cultural background of designers were examined and discussed in relation to the quality of a design. Involvement of learners at different levels through focus groups and interviews in addition to a survey is recommended. One goal for the development of this resource is to get instructional designers one step closer to a quality design; a second goal is to provide a resource that can be modified and improved as the field and technology changes. It is also my hope that descriptive procedures in this resource reduce the challenges that instructional designers face every day.

References

- Academic Partnership. (2013). *A guide to quality in online learning*. Retrieved September 2013 from <http://www.contactnorth.ca/sites/default/files/tips-tools/A%20Guide%20to%20Quality%20in%20Online%20Learning.pdf>
- Ashcraft, M., McMahon, J., Lesh, S., & Tabrizi, M. (2003). *Peer review for online learning*. Retrieved 2012 from <http://pages.towson.edu/mcmahon/peerreview/On-linerubric.pdf>
- Barker, K. (2001). *Quality guidelines for online education and training*. Retrieved September 2012 from <http://futures.com/form/pdf/english.pdf>
- Bates, A. W. (2000). *Managing technological change: Strategies for college and university leaders*. San Francisco: Jossey-Bass Inc.
- Bates, A. W. (2005). *Technology, e-learning and distance education* (2nd ed.). New York: Routledge Falmer Studies in Distance Education.
- Bates, T. (2012) *Book review: Quality assurance in distance education and e-learning*. Retrieved January 2013 from <http://www.tonybates.ca/2012/02/08/book-review-quality-assurance-in-distance-education-and-e-learning/>
- Beck, S. (1997). *Evaluation criteria: The good, the bad, & the ugly: or, why it's a good idea to evaluate web sources*. Institute for Technology-Assisted Learning, New Mexico State University. Retrieved June 2012 from <http://lib.nmsu.edu/instruction/eval.html>
- Blood-Siegfried, J. E., Short, N. M., Rapp, C. G., Hill, E., Talbert, S., Skinner, J., Campbell, A., & Goodwin, L. (2008). A rubric for improving the quality of online courses. *International Journal of Nursing Education Scholarship*. 5(1), Article 34.
- Bloom B. S. (1956). *Taxonomy of educational objectives, Handbook I: The cognitive domain*. New York: David McKay Co Inc.
- Boeije, H. (2010). *Analysis in qualitative research*. Chippenham, CPI Antony Rowe.
- Bourne, J., & Moore, J. C. (2004). *Elements of quality online education*. The Sloan Consortium, volume 5. Retrieved December 21, 2011, from sloanconsortium.org/publications/books/vol5summary.pdf
- Bryman, A. (2012). *Social research method*. Oxford: Oxford University Press.
- Brymen, A., & Bell, E. (2007). *Business research methods*, Oxford: Oxford University Press.
- Caplan, D. (2004). *The development of online courses*. Athabasca University. Retrieved June 2013 from http://cde.athabascau.ca/online_book/ch7.html
- Chao, T., Saj, T., & Tessier, F. (2006). Establishing a quality review for online courses. *Educause Quarterly*, 29(3), 32–39.

- Chen, A., Mashhadi, A., Ang, D., & Harkrider, N. (1999). Cultural issues in the design of technology-enhanced learning systems. *British Journal of Education Technology*, 30(3), 217–230.
- Chickering A. W., & Gamson, A. F. (1987). *Seven principles for good practice in undergraduate education*. Racine, WI: The Johnston Foundation, Inc.
- Cohen, L., Lawrence, M., & Morrison, K. (2007). *Research methods in education* (6th ed.). London: Routledge.
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education*. London: Routledge.
- Committee for Online Instruction (2003). *What does a high quality online course look like?* Retrieved 2012 from <http://www.csuchico.edu/tlp/resources/rubric/rubric.pdf>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks: Sage Publications, Inc.
- Culatta, R. (2011). *ASSURE. Instructional design*. Retrieved June 18, 2012, from <http://www.instructionaldesign.org/models/assure.html>
- Daniel, J. S. (1996). *Mega-universities and knowledge media: Technology strategies for higher education*. Kogan Page.
- Dick, W. (1996). The Dick and Carey model: will it survive the decade? *Educational Technology Research and Development*, 44(3), 55–63.
- Downes, S. (2012). *E-Learning generations*. Retrieved November 2012 from <http://halfanhour.blogspot.ca/2012/02/e-learning-generations.html>
- Easterby-Smith, M., Thorpe, R. & Jackson, P. R. 2008. *Management research*. London: Sage Publications.
- Eaton, A. K., Reynolds, A. P., Mason, R., & Cardell, R. (2008). Assuring quality. *British Dental Journal*, 205(3), 145–150.
- Ehlers, U.-D. (2004). Quality in e-learning from a learner's perspective. *European Journal of Open and Distance and E-Learning. I*. Retrieved November 2012 from http://www.eurodl.org/materials/contrib/2004/Online_Master_COPs.html
- Ellis, A., & Phelps, R. (2000). Staff development for online delivery: A collaborative, team based action learning model. *Australian Journal of Educational Technology*, 16(1), 26–44.
- Frydenberg, J. (2002). Quality standards in e-learning: A matrix of analysis. *International Review of Research in Open and Distance Learning*, 3(2), 1–15.
- Fulford, C.P., & Zhang, S. (1993). Perceptions of interaction: The critical predictor in distance education. *The American Journal of Distance Education*, 7(3), 8–12.

- Garrison, D. R., & Anderson, T. (2003). *E-learning in the 21st century: A framework for research and practice*. London: Routledge Falmer.
- Gay, L. R., & Airasian, P. (2003). *Educational research: Competencies for analysis and applications* (7th ed.). New Jersey: Pearson Education.
- Gibbons, A. S. (2003). What and how do designers design? A theory of design structure. *TechTrends*, 47(5), 22–25.
- Gibby, S., Quiros, O., Demps, E., & Liu, M. (2002). Challenges of being an instructional designer for new media development: A view from the practitioners. *Journal of Educational Multimedia and Hypermedia*, 11(3), 195–219.
- Gomez Garcia, L. (2007). *The importance of needs analysis in syllabus and course design. The CMC-E project: a case in point*. Retrieved August 2012 from <http://www.spertus.es/Publications/Lidia/valladolid.pdf>
- Grant, J. (2013). *Exploring the realm of culture within instructional design*. Retrieved November 2013 from http://spectrum.library.concordia.ca/977257/1/Grant_MA_S2013.pdf
- Herrington, A., Herrington, J., Oliver, R., Stoney, S., & Willis, J. (2001). *Quality guidelines for online courses: The development of an instrument to audit online units*. Retrieved September 2013 from <http://www.ascilite.org.au/conferences/melbourne01/pdf/papers/herringtona.pdf>
- Hixon, E. (2008). Team-based online course development: A case study of collaboration models. *Journal of Distance Learning Administration*, 11(4).
- Hutchinson, T., & Waters, A. (Eds.) (1987). Need analysis. *English for specific purposes*. Cambridge: Cambridge University Press, pp. 53–64.
- Illinois Online Network. (2010). *Quality online course initiative rubric*. Retrieved June 2012 from <http://www.ion.uillinois.edu/initiatives/qoci/rubric.asp>
- Institute for Higher Education Policy. (1998). *Assuring quality in distance learning: A preliminary review*. Council for Higher Education Accreditation, Washington, DC. Retrieved April 2013 from <http://www.ihep.org/assets/files/publications/a-f/AssuringQualityDistanceLearning.pdf>
- Johnson, S. D., & Aragon, S. R. (2003). An instructional strategy framework for online learning environments. *New Directions for Adult and Continuing Education*, 2003(100), 31–43.
- Jung, I. (2011). The dimensions of e-learning quality: From the learner's perspective. *Educational Technology Research and Development*, 59(4), 445–464.
- Jung, I., & Latchem, C. (2012). *Quality assurance and accreditation in distance education and e-learning*. Routledge.

- Kop, R., Fournier, H., & Mak, J. (2011). A pedagogy of abundance or a pedagogy to support human beings? Participant support on massive open online courses. *The International Review of Research in Open and Distance Learning*, 12(7), 74–93.
- Koslowski, F. A., III. (2006). Quality and assessment in context: a brief review. *Quality Assurance in Education*, 14(3), 277–288.
- Lao, T., & Gonzales, C. (2005). Understanding online learning through a qualitative description of professors and students' experiences. *Journal of Technology and Teacher Education*, 133, 459–474.
- Larson, B. M., & Lockee, B. B. (2009). Preparing instructional designers for different career environments: A case study. *Educational Technology Research and Development*, 57(1), 1–24.
- Lebow, D. (1993). Constructivist values for instructional systems design: Five principles toward a new mindset. *Educational Technology, Research and Development*, 41(3), 4–16.
- Lee, J., & Dziuban, C. (2002). Using quality assurance strategies for online programs. *Educational Technology Review*, 10(2), 69–78.
- Lewis, K. O., & Baker, R. C. (2011). Current practices and needs assessment of instructors in an online masters degree in education for healthcare professionals: A first step to the development of quality standards. *Journal of Interactive Online Learning*, 10(1). Retrieved June 2013 from <http://www.ncolr.org/jiol/issues/pdf/10.1.4.pdf>
- Liu, X., Liu, S., Lee, S., & Magjuka, R. J. (2010). Cultural differences in online learning: International student perceptions. *Educational Technology & Society*, 13(3), 177–188.
- Lockee, B., Moore, M., & Burton, J. (2002). Measuring success: evaluation strategies for distance education. *Educause Quarterly*, 2002(1), 20–26. Retrieved June 2012 from <http://www.educause.edu/ir/library/pdf/eqm0213.pdf>
- Lockhart, M., & Lacy, K. (2002). An assessment model and methods for evaluating distance education programs. *Perspectives*, 6(4), 98–104. doi: 10.1080/136031002320634998.
- Mack, N., Woodsong, C., MacQueen, K. M., Guest, G. & Namey, E. (2005). *Qualitative research methods: A data collector's field guide*. Family Health International. Retrieved March 2013 from [www.fhi360.org/sites/default/files/media/documents/Qualitative Research Methods - A Data Collector's Field Guide.pdf](http://www.fhi360.org/sites/default/files/media/documents/Qualitative%20Research%20Methods%20-%20A%20Data%20Collector's%20Field%20Guide.pdf)
- McDonald, J., & Postle, G. (1999). *Teaching online: Challenge to a reinterpretation of traditional instructional models*. Retrieved November 2012 from <http://ausweb.scu.edu.au/aw99/papers/mcdonald/paper.htm>
- McGorry, S. Y. (2003). Measuring quality in online programs. *The Internet and Higher Education*, 6(2), 159–177.

- McKenzie, B., Mims, N., & Bennett, E. (2003). *Successful online assessment, interaction and evaluation techniques*. Society for Information Technology and Teacher Education International Conference, 2003(1), 426–431.
- Northrup, P. T. (2002). Online learners' preferences for interaction. *Quarterly Review of Distance Education*, 32, 219–226.
- Palacios Martinez, I. (1992). *An analysis and appraisal of the English language teaching situation in Spain from the perspectives of teachers and learners*. Ph.D. dissertation. Universidad de Santiago de Compostela. pp. 133–150.
- Parrish, P., & Linder-VanBerschot, J. (2010). Cultural dimensions of learning: Addressing the challenges of multicultural instruction. *The International Review Of Research In Open And Distance Learning*, 11(2), 1–19. Retrieved 2013 from <http://www.irrodl.org/index.php/irrodl/article/view/809/1497>
- Partnerships for Training. (2003). Quality standards for learner-centered online instruction.
- Passerini, K., & Granger, M. J. (2000) A development model for distance learning using the Internet. *Computers & Education*, 34(1), 1–15.
- Patton, M. Q. 1980. *Qualitative evaluation methods*. Beverly Hills, CA: Sage.
- Picciano, A. G. (2001). *Distance learning: Making connections across virtual space and time*. Upper Saddle River, NJ: Prentice-Hall.
- Pilar, M., & Mayo, G. (2000). *English for specific purposes: Discourse analysis and course design*. Bilbao: Servicio Editorial. Universidad del Pais Vasco/Euskal Herriko Unibertsitatea. pp. 37–39.
- Punch, K. F. 2005. *Introduction to social research: quantitative and qualitative approaches*, London: SAGE.
- Quality Matters. (2011). *Quality matters rubric standards 2011–2013 edition with assigned point values*. MarylandOnline. Retrieved 2012 from <http://www.adlc.ca/public/download/documents/6131>
- Rapley, T. J. (2001). The art(fulness) of open-ended interviewing: Some considerations on analysing interviews. *Qualitative Research*, 1(3), 303–323. doi: 10.1177/146879410100100303.
- Roblyer, M. D., & Ekhaml, L. (2000). How interactive are YOUR distance courses? A rubric for assessing interaction in distance learning. *Online Journal of Distance Learning Administration*, 3(2). Retrieved September 2012 from <http://www.westga.edu/~distance/roblyer32.html>
- Roblyer, M. D., & Wiencke, W. R. (2003). Design and use of a rubric to assess and encourage interactive qualities in distance courses. *American Journal of Distance Education*, 17(2), 77–98.

- Reiser, R. A. (2012). What field did you say you were in? Defining and naming our field. In R. A. Reiser & J. V. Dempsey (Eds.), *Trends and issues in instructional design and technology* (3rd ed.). Boston, MA: Pearson Education.
- Reiser, R.A., & Dempsey, J.V. (2007). *Trends and issues in instructional design* (2nd ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Richey, R. C., Fields, D. C., & Foxon, M. (2001). *Instructional design competencies: The standards* (3rd ed.). Syracuse, NY: ERIC Clearinghouse.
- Schwier, R., Campbell, K., & Kenny, R. (2004). Instructional designers' observations about identity, communities of practice and change agency. *Australian Journal of Education Technology*, 20(1), 69–100.
- Schwier, R., Hill, J., Wager, W., & Spector, J. M. (2006). Where have we been and where are we going? Limiting and liberating forces in IDT. In M. Orey, J. McLendon, & R. Branch (Eds.), *Educational Media and Technology Yearbook*. Westport, CT: Libraries Unlimited. pp. 75–96.
- Shaban, N., & Qureshi, M. (2013). Quality in open and distance learning institutes. *Asian Journal of Business and Management*. 1(5).
- Shrock, S. (1995). A brief history of instructional development. In A. Gary (Ed.), *Instructional technology: past, present, and future*. Englewood: Libraries Unlimited.
- Siemens, George (2002). Instructional design in elearning. *learnspace everything elearning*. Retrieved June 2013 from <http://www.elearnspace.org/Articles/InstructionalDesign.htm>
- Swan, K., Bishop, T., Wisher, R., & Trollip, S. (2003). *Benchmarks and milestones for measuring quality*. Paper presented at the 30th Annual Conference on Distance Teaching & Learning, Madison, Wisconsin. Retrieved October 2013 from http://www.uwex.edu/disted/conference/Resource_library/handouts/Forum1.pdf
- Swan, K., Shea, P., Fredericksen, E., Pickett, A., Pelz, W., & Maher, G. (2000). Building knowledge building communities: Consistency, contact and communication in the virtual classroom. *Journal of Education Computing Research*, 234, 359–383.
- Twigg, C.A. (2003). Improving learning and reducing costs: New models for online learning. *EDUCAUSE Review*, 38(5), 29–38.
- U.S. Department of Education (2006). *Evidence of quality in distance education programs drawn from interviews with the accreditation community*. Retrieved September 2013 from <http://msjconline.com/Accreditation-Evidence-of-Quality-in-DE-Programs.pdf>
- Wang, Q. (2006). Quality assurance – best practices for assessing online programs. *International Journal on E-Learning*, 5(2), 265–274.
- Wiesenberg, F. & Stacey, E. (2005). Reflections on teaching and learning online. *Distance Education*, 26(3), 385–404.

Williams, D. D, South, J. B., Yanchar, S. C., Wilson, B. G., & Allen, S. (2011). How do instructional designers evaluate? *Educational Technology Research and Development*, 59(6), 885–907.

Wright, C. R. (2004). *Criteria for evaluating the quality of online courses*. Retrieved 2012 from <http://elearning.typepad.com/thelearnedman/ID/evaluatingcourses.pdf>

Yang, Y. (2012). Roles of administrators in ensuring the quality of online programs. In R. Paolucci (Ed.). *Quality assurance of online and distance learning*. The Interlearning Company, LLC 2012. pp. 1–8.

Yeung, D. (2002). Toward an effective quality assurance model of web-based learning: The perspective of academic staff. *Online Journal of Distance Learning Administration*, 5(2). Retrieved June 2013 from <http://www.westga.edu/~distance/ojdla/summer52/yeung52.pdf>

Young, A., & Norgard, C. (2006). Assessing the quality of online courses from the students' perspective. *Internet and Higher Education*, 9, 107–115. Retrieved May 2013 from http://www.water-msc.org/en/knowledge_base/assessment_of_online_courses.pdf

Yusop, D. F., & Correia, A. (2012). The civic-minded instructional designers framework: An alternative approach to contemporary instructional designers' education in higher education. *British Journal of Educational Technology*, 43(2), 180–190.

Appendix A: Hearing From Instructional Designers: Our Identity and Actual Practice

Universities and Knowledge Society Journal (under review)

Hearing from Instructional Designers: Our Identity and Actual Practice

Afsaneh Sharif^{1,*}, Sunah Cho², Mercè Gisbert Cervera

Centre for Teaching, Learning and Technology, University of British Columbia,
Vancouver, Canada {afsaneh.sharif@ubc.ca}

Centre for Teaching, Learning and Technology, University of British Columbia,
Vancouver, Canada {sunha.cho@ubc.ca}

Universitat Rovira i Virgili, Tarragona, Spain {merce.gisbert@urv.cat}

Abstract

The purpose of this paper is to discuss instructional designers' current status through a brief discussion of the history of instructional design, comparison of instructional design models, and a presentation of a perspective on how instructional designers cope with their current identity and profession while seeking professional development. In this paper we identified four reasons that explain why the effort of professional development is less than ideal for instructional designers: 1) lack of priority given to professional development at an organization level, 2) budget and funding, 3) individual workload, and 4) departments' visions and priorities. In order to address and overcome these factors, we recommend an instructional designer community of practice within institutions. As the landscape of education is constantly transforming, the designers' field cannot stay static. To respond to all the changes, instructional designers not only need to strive for continuous learning but also to adopt a more collaborative practice, where they can share and exchange ideas and best practices.

Key words: instructional design, professional development, instructional improvement, instructional innovation.

Introduction

The 21st century poses a challenge to educators — including instructional designers — as learners' attitudes toward learning and technology evolve at a very fast pace. There are many examples in the literature which discuss who instructional designers are, what they do as professionals, what kind of instructional design model they use, and what kind of challenges they regularly face (Cox & Osguthorpe, 2003; Gibbons, 2003; Gibby et. al. 2002; Rowland, 1992; Schwier, Hill, Wager, & Spector, 2006). The purpose of this paper is to discuss instructional designers' current status through a brief discussion of the

history of instructional design, comparison of instructional design models, and a presentation of a perspective on how instructional designers cope with their current identity and profession while seeking professional development. This paper aims to provide a perspective from designers for designers.

While there have been many discussions on how instructional designers need to be trained for the field, there is limited literature on what they need to be trained on and how they need to continue their professional development. Cheong, Wettasinghe, and Murphy (2006) broadly discuss the shift of education systems and assert that designers should not remain stagnant in their thinking and need to continue learning on a regular basis. Professional development for instructional designers is also clearly stated and emphasized as a competency for designers by the International Board of Standards for Training, Performance, and Instruction, which states “Apply research and theory to the discipline of instructional design and update and improve knowledge, skills, and attitudes pertaining to instructional design process and related field” (International Board of Standards for Training, Performance, and Instruction, 2012). The following sections will focus on instructional designers, the models and challenges along with possible solutions.

Who is an Instructional Designer?

Richey, Fields, and Foxon (2001) specify four roles for the instructional designer: analyst, evaluator, e-learning specialist, and project manager. Throughout time, the position has been compared to different professions, such as film director (Gibby et al., 2002) and architects and structural engineers (Gibbons, 2003), in a sense, to use the best available tools and technologies in different layers and phases of instructional design in order to attract and engage more clients. In recent years instructional designers have been referred to as an “agent of social change” and “civic-minded professionals” (Schwier et al., 2006; Yusop & Correia, 2012). The profession takes on different titles in different parts of the world or even within the same institution.

Definition and History of Instructional Design

The term “instructional design” has been interpreted various ways based on grounded theories or for practical reasons. The various terms and definitions are overarched by the common theme of teaching and learning, but these un-unified concepts sometimes confuse instructional designers and hinder fostering an understanding and interpreting of the crucial issues and foundations related to instructional design. Furthermore, the constantly shifting landscape of education demands design that can grow and change with its context. Therefore, key elements of instructional design can be overlooked or even ignored by groups owing to a lack of knowledge or context (Levy, 2003).

Different terms have been used to represent the field of instructional design. Shrock (1995) used “instructional development” as a broader context for her description of the history of the field. To Shrock, instructional development is a self-correcting systems approach that seeks to apply scientifically derived principles to the planning, design, creation, implementation, and evaluation of effective and efficient instruction. This umbrella definition encompasses a wide range of concepts open to interpretation in different ways in different instructional design models. Instructional design includes all the processes involved in optimizing learning and performance (Reiser, 2001a). The following descriptions incorporate the overall history of instructional development and learning theories.

Although instructional design has roots in the study of educational psychology, the relevance of instructional design was established during and after World War II with the huge success of the incorporation of training films in the United States Army Air Force. (Reiser, 2001b) Skinner (1954) introduced behaviorist principles of learning in his publication, *The Science of Learning and the Art of Teaching*. The key element of his theory lies in the reinforcement of desired learner responses. His instructional design emphasized formulating behavioral objectives, breaking instructional content into small units, and rewarding correct responses early and often. Another famous instructional theorist was Bloom. In 1956 he led a committee that introduced a taxonomy of educational objectives (Bloom, 1956). According to Clark (1999), the taxonomy provided

instructors with a means to decide how to impart instructional content to learners most effectively. However, during these times a standardized design process had yet to be devised.

Gagné (1965) elaborated the analysis of learning objectives and the relationship between different classes of learning objectives and appropriate instructional designs. Due to the influx of instructional application of microcomputers, the utilization of instructional development by agencies outside of the educational sector, such as military training, business, industry, and even consumer products (educational video games) grew in the 1980's. Merrill, Li, and Jones (1991) claimed that it was necessary to develop new models of instructional design to accommodate the interactive capabilities of the new computer.

In the 1990's, with the influence of the technology movement, constructivist approaches encouraged learners to construct their understanding and meaning of reality and experiences. Dick (1996) and Lebow (1993) tried to see how constructivist principles could enhance instructional design practice. Also, the use of the Internet for distance learning brought instructional designers to consider how online courses could be carefully designed within the new environment.

The advent of new media in the 21st century has brought about technological innovations coupled with new ways of approaching learning and instruction. Owing to the divergent and complex nature of the instructional design process and practice, the field of instructional design seems to be growing more general or, conversely, more specific. The different roles that instructional designers play under the name of the instructional design field depend on institutional, organizational strategic plans and instructional designers' personal levels of expertise. Looking at what is happening in the field of instructional design today raises many questions. Merrill (1996) distinguished the new paradigm of instructional theories from the old paradigm by emphasizing user–designer concept. Reigeluth (1999, p. 5) stated “an instructional design theory ... offers explicit guidance on how to help people learn and develop.” However, it is important to note that there are many permutations in the practice of instructional design and development.

All of the above-mentioned literature clearly demonstrate the evolution of the field and support the need for designers to be flexible and creative to respond to the demands of this continually changing profession. In the next section, we will discuss different instructional design models and will briefly compare them with the analysis, design, development, implementation, and evaluation (ADDIE) model.

Instructional Design Models

Instructional design models provide guidelines or frameworks that help organize structures of procedures in designing and developing instructional activities. There are numerous instructional design models (e.g., Dick and Carey, Kemp, ASSURE, and Rapid Prototyping), which are all somehow variations of the traditional ADDIE model (Culatta, 2011).

The aim of this paper is not to determine which model is better but rather to find links among all these models through an instructional designer's lens.

Why the ADDIE model? This is not a foreign concept or question for those in the field of instructional design. While there is still some confusion on the focus of the field, ADDIE seems to be the most recognized model or colloquial term for instructional development among instructional design and technology (IDT) professionals (Bichelmeyer, 2005). Molenda argues that ADDIE might not even be a model but rather a label covering instructional development processes in a systematic approach (Molenda, 2003). Each of the phase outcomes of ADDIE leads into the subsequent stage. In the analysis phase, target learners, learners' existing knowledge, learning environment, and instructional problems and objectives will be identified. In the design phase, which is systematic and specific, learning objectives, assignments, lessons, and media will be developed and selected. In the development phase, the content will be developed and proper technologies will be used. In the implementation phase, instructor(s) and learners will be trained in learning environments and other technologies used in the course. The evaluation phase repeats throughout the process in formative forms, and at the end of the development process the evaluation will be summative in the form of learners' feedback.

The Dick and Carey design model details a comprehensive and detailed process of instructional system design (ISD) that starts by identifying instructional goals and ends with a summative evaluation (Lee & Lee, 1996). In this model, the instructional development process happens within nine phases. The sequential steps in this design (Dick, Carey, & Carey, 2001) are as follows: (1) assess needs to identify goal(s), (2) conduct instructional analysis and analyze learners and context, (3) write performance activities, (4) develop assessment instruments, (5) develop instructional strategy, (6) develop and select instructional materials, (7) design and conduct formative evaluations, (8) revise instruction, and (9) design and conduct summative evaluation. The analysis phase in ADDIE is similar to the first two phases of this model. The write performance objectives phase in Dick and Carey's model is similar to the development stage in ADDIE, while the evaluation step in both models covers the same thing. This model is also a systematic model.

The Kemp design is similar to Dick and Carey in that it consists of nine steps, starting with identifying instructional problems and ending with an evaluation process. The model strongly emphasizes learners' characteristics as well as resources to support instruction and learning activities (Morrison, Ross, & Kemp, 2010). The nine elements of the model listed in Morrison, Ross, and Kemp (2004) are (1) identify instructional problems, (2) identify learners characteristic, (3) analyze tasks, (4) design instructional objectives, (5) design content sequencing, (6) design instructional strategies, (7) design the message, (8) develop instruction, and (9) develop evaluation instruments.

The Rapid Prototyping model is inspired by software development (Grant, 2010). The model is used to develop instructional materials in a design–evaluation cycle that continues throughout the life of the project. The model cycle is not as detailed as ADDIE; however, its continual design–evaluation cycle has sometimes been cited as a way to improve the generic ADDIE model (Learning-Theories.com, 2012). The Rapid Prototyping model consists of three steps: (1) prototype, (2) review, and (3) refine. This model reduces costs and time by using a working model early in a project to reduce revisions later. The designer using this model gathers information through needs analysis

and setting goals, then constructs and uses a prototype, and finally refines and maintains the design (Camm, 2012).

ASSURE is another ISD model, ASSURE is an acronym taken from the tasks associated with the model and consists of (A) analyze learners, (S) state standards and objectives, (S) select strategies, technology, media, and material, (U) utilize technology, media, and materials, (R) require learner participation, and (E) evaluate and revise (Academy of Teaching Excellence, 2002; Culatta, 2011). Similar to ADDIE, this model starts with analyzing learners and ends with evaluation and revisions.

Within the Center for Teaching, Learning and Technology context at the University of British Columbia, there are five main design and development processes: planning, development, production, implementation, and evaluation (PDPIE). This design model is quite close to the hybrid design model proposed by Passerini and Granger (2000), which also has five phases — analysis, design, development, evaluation, and delivery. While the design is not the same as that of ADDIE, the PDPIE design is in a similar vein to that of the ADDIE model. The first phase of the PDPIE model calls for conducting a needs analysis, which covers learners' characteristics and instructional goals. In the second phase the main content and the assessment and instructional strategies are determined and developed. In the production phase the content is finalized and developed online. The implementation phase covers facilitators training, delivery, learners' support, and resources. Finally, the last phase, similar to that of ADDIE, covers evaluation in both the formative and summative formats.

The comparison between ADDIE and other models is shown in Table 1.

Table 1. Comparison of ADDIE model with other instructional design models

THE INSTRUCTIONAL DESIGN MODELS' STEPS	ADDIE MODEL PHASES					
		Analysis	Design	Develop	Implement	Evaluation
	Dick and Carey	Needs assessment to identify goals, instructional analysis, analyze learners and context	Develop instructional strategy, develop and select instructional materials, design formative evaluation, revise instruction	Write performance activities, develop assessment instruments, develop instructional strategy, revise instruction	Develop and select instructional materials,	Conduct formative evaluation, design/ conduct summative evaluation
	Kemp	Analysis of instructional problems, learner characteristics and task	Develop and design instructional strategies, design content sequencing, and design the message, design of evaluation instruments	Development of instructions	Instructional delivery & implementation , support services	Formative, confirmative and summative evaluation
	Rapid Prototyping	Information gathering	Setting objectives, construct prototype, refine	Construct prototype	Use prototype	Review
	ASSURE	Analyze learners	State standards and objectives, select strategies, technology, media, and materials	Utilize technology, media & materials	Require learner participation	Evaluate and revise
PDPIE	Planning	Development	Production	Implementation	Evaluation	

Instructional Designers' Challenges

A. Identity and the Nature of our Actual Practice

Method

In May 2011, we conducted a brief survey at an event called Just Instructional Design in Vancouver, British Columbia, Canada. The event takes place each year in British Columbia with 60 participants. It is open to all professionals from public schools or private companies who are either instructional designers or are involved in the instructional design process.

The survey provided an overview of the professionals who consider themselves involved in instructional design and the general public's perceptions of the role of an instructional designer. Thirty-five participants completed the instructional designer's survey.

To identify professionals who are involved in instructional design under different titles, one question asked was "Many jobs are not strictly 'instructional designer' in nature but may be part of the work you do. What is your current position?" Figure 1 gives the distribution of answers to this question.

Results

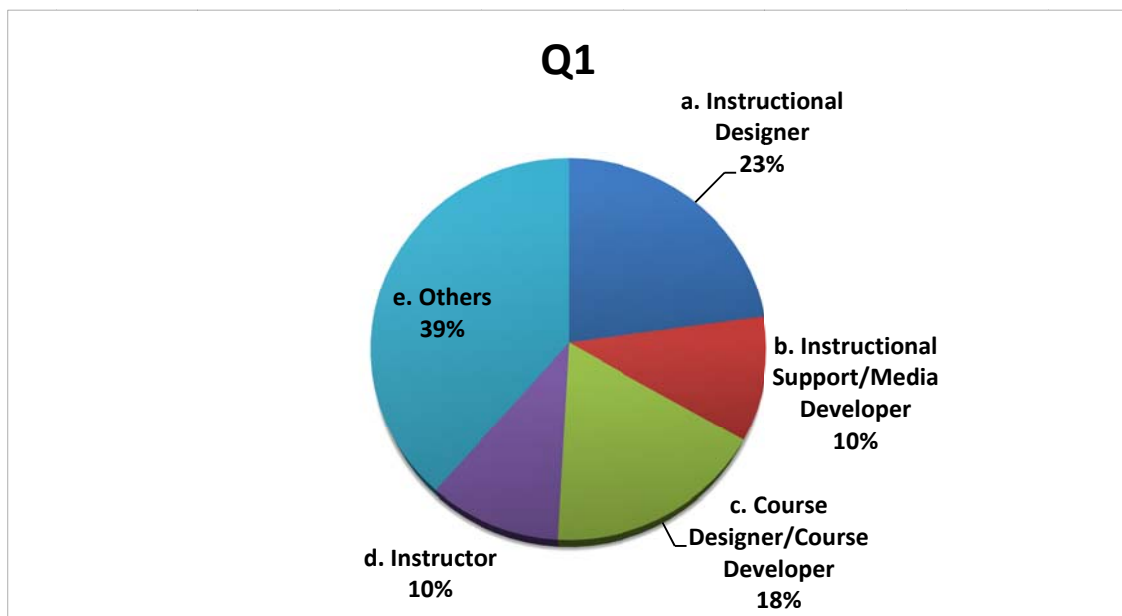


Figure 1: Participants' current positions

Among all the participants, only 23% of instructional designers surveyed self-identified as being primarily instructional designers, as shown in Figure 1. Most considered themselves course designers/developers, instructional support/media developers, instructors, and other roles first and foremost. While we had many participants under titles/positions other than instructional designer, most of the positions carried similar responsibilities to instructional designers but under different titles. These titles include learning designer, project manager, educational consultant, instructional development consultant, education program designer, educational analyst, manager (facilitation and process design), educational technology manager, "meta designer", faculty learning

management systems training coordinator, administrator, curriculum developer, facilitator, program manager, learning consultant, and educational technology specialist. The nebulous perceptions of instructional design are found not only among instructional designers themselves but also in the general public. To understand the ambiguity of the position among people, another question asked was “In most cases, when you introduce yourself as an instructional designer, what exactly people do think of you?” See Figure 2 for the answers to this question.

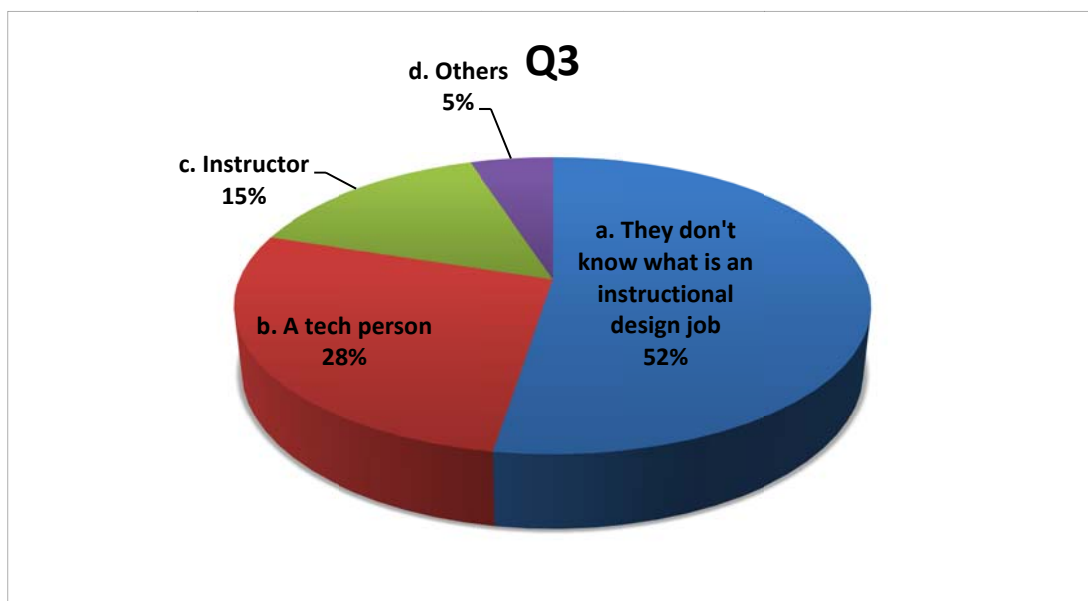


Figure 2: What people think of instructional designers

According to the survey 52% of instructional designers surveyed responded that most people they introduce themselves to are not aware of what instructional design entails. Once they introduce themselves as an instructional designer, most claimed that people think of them as a “tech” person or an instructor, as shown in Figure 2.

According to Reiser (2001a), instructional design was not recognized as its own field until the 1960’s, and its relative novelty leaves many instructional designers shrouded in obscurity. As a result, the role of an instructional designer is vague. The poorly informed perceptions of instructional designers could pose challenges to their identities; in some cases the unclear roles may negatively impact the status of instructional designers in the workplace. A significant amount of literature in the field of instructional design has

raised and discussed the questions and concerns about “who we are” and “what we do as professionals” (Cox & Osguthorpe, 2003; Gibbons, 2003; Gibby, et al., 2002; Rowland, 1992; Schwier et al., 2006). The results of our survey confirm that these questions are still un-answered and that the role of an instructional designer is still not well defined.

While instructional designers are still struggling with their identity and job titles, examining the nature of our actual practice has become another interesting question to explore in our field. Recent researchers have taken different approaches to respond to this question; some focus on “how instructional designers practice” (Cox & Osguthorpe, 2003; Gibbons, 2003; Rowland, 1992) and others focus on “why they practice” (Schwier et al., 2006).

Identifying different titles such as instructional designers, technology coordinators, educational technology specialist, curriculum consultant, training managers, educational researchers, university professors, advisors, and consultants, Schwier et al. (2006) demonstrate that instructional designers’ primary concern should not be their identity. They emphasize that instructional designers have multiple identities, multiple roles, and are involved in a multitude of activities. They warn instructional designers to “avoid the ‘ticky tacky’ nature of rigidly imposed standard solutions and approaches, as Malvina Reynolds reminds us” (Schwier et al., 2006, p. 15).

In their research, which clearly focuses on why instructional designers practice rather than how they practice, Schwier et al. (2006) interviewed 25 instructional designers, mostly from Canada, and found that instructional designers may be acting as agents of social change more than they realize. They explain the confusion about why people come to instructional designers only as an afterthought as being because the understanding of instructional designers “grand purpose” (p. 4) is not shared and instructional designers see themselves as just key participants rather than leaders.

Inouye, Merrill, and Swan (2005) invite the discipline and its profession to consider “help” (p. 14) as a new alternative for the central concern of IDT. They further explain that having help at the center of our profession affects what we are and what we do and know as professionals.

In a recent publication, Yusop and Correia (2012) gave instructional design and its nature a new perspective by introducing instructional designers as civic-minded professionals. They contended that instructional designers contribute to positive social change through their design work and by engaging in social relationships and communications with clients who require their services.

In the preceding paragraphs, the authors have explored and answered the identity and nature of their practice questions by offering a synthesis of the variety of relevant literature in existence.

B. Training for the Job vs. the Real-World Situation

There seems to be a consensus among professionals in this field that there is a discrepancy between the way instructional design is taught and is practiced in real-world situations. A significant amount of recent instructional design literature indicates differences in competency requirements as well as positions in various sectors and workplaces with respect to the organizational culture (Cox & Osguthorpe, 2003; Larson & Lockee, 2009). Larson and Lockee (2009, p. 16) give an example that skills such as gap analysis and cost–benefit analysis are not seen commonly in job advertisements for higher education positions.

To respond to these differences, many IDT professionals and faculty have emphasized the inclusion of real-world, relevant, and authentic experience in different workplace environments in their programs and training. Flexibility, workplace cultural preparation, internship, and assistantships were considered as other techniques and strategies to be offered in these programs to get instructional designers ready for real-world situations (Larson & Lockee, 2009, p. 16).

While instructional designers have been concerned with catching up with technology, they seem to have forgotten about the main purpose of their profession. Yusop and Correia (2012) stress how recent publications support the idea that most current training prepares designers to be technically competent, which undermines their transformative power to initiate social change. They explain that recent approaches are also model-centric (Gibbons, 2003) and so fail to address the broader scope of instructional design

knowledge. They stress designers should be trained to be active contributors in improving public life or the civic aspect of their profession. Therefore, they propose applying civic professionalism in IDT training to prepare instructional designers to be socially aware and technically competent in performing their job. They introduce a new conceptual framework to the field called the civic-minded instructional design framework by adapting Kaufman's organizational elements model to explain three levels of organizational planning. Within this framework, they explain that a professional civic-minded instructional designer functions at three different context levels: micro, macro, and mega. They also identify four major characteristics of a civic-minded instructional designer, building on Hatcher's categorization of characteristics of a civic-minded professional (Yusop & Correia, 2012, p. 186). These major components are belief, knowledge, skills, and dispositions. They conclude that lack of focus on educating designers to be active contributors in improving public life is evident, and they call upon educators and academics to include and emphasize the civic aspect of the IDT profession in their training.

The literature discussed above has stressed the social and civic-related skills of this profession, which needs to improve every day as society evolves and clients' demands change daily. Many educators in the field have emphasized how instructional designers should develop themselves professionally so they can confidently respond to design challenges. Cheong et al. (2006), for example, encourage life-long learning habits for instructional designers. While the importance of ongoing professional development for designers is evident, there are different views and discussions on the topic. In reality, professional development does not occur regularly. Cheong et al. (2006) identify two reasons that explain why the effort of professional development is less than ideal for instructional designers. One is the lack of priority given to professional development at an organization level, and the other is budget and funding. We argue that two additional factors also affect the professional development of designers: individual workload as well as departments' visions and priorities. In order to address and further analyze these factors, we, along with other instructional designers at the University of British Columbia, have developed a community of practice. The community members meet every 6 weeks to we approach a design challenge as a team, share best practices, discuss recent

instructional design literatures, explore new technologies and tools, and to invite guest speakers. This community and system of collaboration allows for enhancement of our professional development.

Discussion and Conclusions

Instructional design is a dynamic and fluid field. Its relative infancy as a recognized and distinct area of study and application makes it even amorphous at times. This paper explored the challenges that stem from this status. The ongoing shifts and evolution of the field force instructional designers to constantly adapt and evolve with it. This is a challenge in itself, but more importantly, it breeds further issues of identity-related uncertainties, inconsistent industry standards, and maintenance of mastery in one's field. These topics should be addressed in both a short-term and a long-term manner to optimize the instructional designers' role. Short term, the main requirement is mainly to act immediately on the rapid growth and development of the field; long term, progress must be continually maintained in an ever-changing role.

One of the biggest themes discussed here was "lack of consistency". That is, a lack of consistency in the expectations and identity of instructional designers makes it extremely difficult to attain consistency in industry standards. This, of course, breeds uncertainty as to how training can be standardized; as a result, many instructional designers may feel confused as to how they can best perform their role in the workplace. In order for instructional design to truly secure legitimacy as a field, meaningful standards are recommended to be made universal.

However, standardizing training and encouraging professional development are no simple tasks. How can designers be sufficiently trained to adapt to a non-static landscape while maintaining the depth of knowledge and expertise to make valuable contributions in practice? Professional development needs continuous collaboration to be as dynamic as the domain of instructional design with emphasis on constant analysis and refinement. Professional development might need to prepare designers not for a single role but a multitude of roles. Preparing instructional designers for their work should be aligned with the nature of their work, which is innovative and never stagnant.

References

- Academy of Teaching Excellence, Metropolitan State College of Denver, C. (2002). *Course construction: ASSURE. ASSURE model*. Retrieved December 12, 2012, from <http://www.mscd.edu/~act2/courseconstruct/assure.html>
- Bichelmeyer, B. A. (2005). The ADDIE “model” — A metaphor for the lack of clarity in the field of IDT. *IDT Record*. Retrieved March 25, 2012, from www.unco.edu/cetl/sir/clt/documents/IDTf_Bic.pdf
- Bloom B. S. (1956). *Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain*. New York: David McKay Co Inc.
- Camm, B. (2012). *Instructional Design and Rapid Prototyping: Rising from the Ashes of ADDIE*. *Social Learning Blog*. Retrieved September 17, 2012, from <http://www.dashe.com/blog/elearning/instructional-design-and-rapid-prototyping-rising-from-the-ashes-of-addie>
- Cheong, E., Wettasinghe, M. C., & Murphy, J. (2006). Professional development of instructional designers: A proposed framework based on a Singapore study. *International Journal on E-Learning*, 5(2), 197–219.
- Clark, D. (1999). *Bloom's taxonomy of learning domains*. Retrieved September 10, 2012, from <http://www.nwlink.com/~donclark/hrd/bloom.html>
- Cox, S., & Osguthorpe, R. T. (2003) How do instructional design professionals spend their time? *TechTrends*, 47(3), 45–47.
- Culatta, R. (2011). ASSURE. *Instructional design*. Retrieved June 18, 2012 from <http://www.instructionaldesign.org/models/assure.html>
- Dick, W. (1996). The Dick and Carey model: will it survive the decade? *Educational Technology Research and Development*, 44(3), 55–63.
- Dick, W., Carey, L., & Carey, J. (2001). *The systematic design of instruction* (5th ed.). New York: Addison-Wesley, Longman.
- Gagné, R. M. (1965). *The conditions of learning and theory of instruction* (1st ed.). New York, NY: Holt, Rinehart & Winston.
- Gibbons, A. S. (2003). What and how do designers design? A theory of design structure. *TechTrends*. 47(5), 22–25.
- Gibby, S., Quiros, O., Demps, E., & Liu, M. (2002). Challenges of being an instructional designer for new media development: A view from the practitioners. *Journal of Educational Multimedia and Hypermedia*, 11(3), 195–219.

Grant, M. M. (2010). *Comparing instructional design models*. Retrieved November 22, 2012, from <http://www.slideshare.net/msquareg/comparing-instructional-design-models>

Inouye, D. K., Merrill, P. F., & Swan, R. H. (2005). Help: toward a new ethics-centered paradigm for instructional design and technology. *IDT Record*. Retrieved October 18, 2012, from http://www.indiana.edu/~idt/articles/documents/Inouye_print_version.pdf

International Board of Standards for Training, Performance and Instruction (2012). *Instructional designer competencies*. Retrieved November 2012 from http://www.ibstpi.org/wp-content/uploads/2012_ibstpi_Instructional_Design_Competencies.pdf

Larson, B. M., & Lockee, B. B. (2009). Preparing instructional designers for different career environments: A case study. *Educational Technology Research and Development*, 57(1), 1–24.

Learning-Theories.com (2012). *ADDIE model*. Learning-Theories.com knowledge base and webliography. Retrieved April 26, 2012, from <http://www.learning-theories.com/addie-model.html>

Lebow, D. (1993). Constructivist values for instructional systems design: Five principles toward a new mindset. *Educational Technology, Research and Development*, 41(3), 4–16.

Lee, H. S., & Lee, S. Y. (1996). *Dick and Carey model*. Retrieved September 18, 2012, from http://www.umich.edu/~ed626/Dick_Carey/dc.html

Levy, S. (2003). *Six factors to consider when planning online distance education programs in higher education*. Retrieved August 17, 2012, from <http://www.westga.edu/~distance/ojdla/spring61/levy61.htm>

Merrill, D. (1996). What new paradigm of ISD? *Educational Technology*, 36(6), 57–58.

Merrill, M. D., Li, Z., & Jones, M. K. (1991). Second generation instructional design (ID2). *Educational Technology*, 30(2), 7–14. Retrieved August 18, 2012, from <http://mdavidmerrill.com/Papers/ID1&ID2.PDF>

Molenda, M. (2003). In search of the elusive ADDIE model. *Performance Improvement* – 42(5), 34–36.

Morrison, G. R., Ross, S. M., & Kemp, J. E. (2010). *Designing effective instruction* (6th ed.). Retrieved October 23, 2012, from <http://books.google.ca/books?hl=en&lr=&id=yglbaCIN3KMC&oi=fnd&pg=PR7&dq=Kemp+design+model+i&ots=7RwgO2EPPr&sig=zBt7T6fo2mHZmW-qAykn9INFUhU#v=onepage&q&f=false>

Passerini, K., & Granger, M. J. (2000) A development model for distance learning using the Internet. *Computers & Education*. 34(1), 1–15.

- Reigeluth, C. (1999). *Instructional-design theories and models: a new paradigm of instructional theory*. Lawrence Erlbaum Associates.
- Reiser, R. A. (2001a). A history of instructional design and technology. In R.A. Reiser and J.V. Dempsey (Eds.), *Trends and Issues in Instructional Design and Technology*. Englewood Cliffs: Prentice Hall College Division.
- Reiser, R. A. (2001b). A history of instructional design and technology: Part II: A history of instructional design. *Educational Technology, Research and Development*, 49(2), 57–67.
- Richey, R. C., Fields, D. C., & Foxon, M. (2001). *Instructional design competencies: The standards* (3rd ed.). Syracuse, NY: ERIC Clearinghouse.
- Rowland, G. (1992). What do instructional designers actually do? An initial investigation of expert practice. *Performance Improvement Quarterly*, 5(2), 65–86.
- Schwieb, R., Hill, J., Wager, W., & Spector, J. M. (2006). Where have we been and where are we going? Limiting and liberating forces in IDT. In M. Orey, J. McLendon, & R. Branch (Eds.), *Educational Media and Technology Yearbook*. Westport, CT: Libraries Unlimited. pp. 75–96.
- Shrock, S. (1995). A brief history of instructional development. In A. Gary (Ed.), *Instructional Technology: Past, Present, and Future*. Englewood: Libraries Unlimited.
- Skinner, B.F. (1954). The science of learning and the art of teaching. *Harvard Educational Review*, 24, 86–97.
- Yusop, D. F., & Correia, A. (2012). The civic-minded instructional designers framework: An alternative approach to contemporary instructional designers' education in higher education. *British Journal of Educational Technology*, 43(2), 180–190.

Appendix B: Quality Assurance in E-Learning Programs

in

Teaching and Learning in Digital Worlds. Strategies and Issues in Higher Education

Abstract

A quality assurance program provides not only a mechanism for establishing training and competency guidelines within an e-learning program but also a method for continuously monitoring current practices in order to correct shortcomings. As e-learning is driven by change in technology and learners' behaviors towards new methods of learning, quality assurance benchmarks for e-learning programs need to be updated constantly.

Introduction

The rapidly evolving nature of the technologies used for e-learning makes the quality assurance (QA) process dynamic and challenging for these programs. Useful technologies used today are likely to be replaced or significantly modified in a very short period of time, as new technologies are constantly being introduced in ways that redefine educational opportunities. If universities are to be responsive to this constant change and potential opportunities, there needs to be flexibility and openness to change. Institutions need an environment in which the processes used to design, deploy, and maintain e-learning programs are robust and effective rather than dependent on the skills of particular individuals (Marshall, 2010). This chapter will discuss the definition of e-learning as well as its current and future standings. Furthermore, to assist and support quality assurance, it will explore practices/examples and quality assurance guidelines for e-learning programs.

E-Learning: Current Standing and Future Development

Defining E-Learning

Different universities and organizations can have a variety of definitions for e-learning. In a broad sense, the term refers to the use of technologies for the purpose of assisting students in achieving their learning outcomes. Latchem (2012) describes e-learning as a learning that involves the use, wholly or in part, of the Internet, an intranet, or an extranet for course or service delivery, interaction, facilitation, assessment, and evaluation. He further explains that advantages of e-learning are its flexibility, convenience, and ability to provide fast and inexpensive access to high-quality content and materials from anywhere in the world. The origin of the term e-learning is not certain because educators around the world define it differently. The majority of educators seem to define it as access to learning experiences via the use of some technology (Moore et al., 2011). Some prefer to separate the variance by describing e-learning as wholly online learning, and others refer to the context and technology medium with which it is used.

This chapter defines e-learning as a giant umbrella that covers distance education, mobile learning, blended learning, flexible learning, learner-centered learning, open educational resources, and massive open online courses (MOOCs). It can occur in or out of the classroom, can be self-paced or cohort, and can be asynchronous or synchronous learning. E-learning is suited to distance learning and flexible learning, but it can be used in face-to-face classroom situations, in which case it is generally referred to as blended learning.

E-Learning Generations

There are several milestones in the history of e-learning. When discussing the history of e-learning, some educators refer back to 1840 when Pitman taught shorthand writing to his students via correspondence and others refer back to Pressey's invention of the "Automatic Teacher" in 1924 (eLearning Industry, 2012). The 1960s marked the introduction of Programmed Logic for Automated Teaching Operations (PLATO) when the University of Illinois' scientists created a classroom system based on linked computer terminals. Implementation of computer-assisted training and courses occurred in the 1970s when people had to use computers within a school or place of employment, and

online courses began emerging in the 1980s. Learners started to have the option of earning their degrees without having their instructors present in the 1990s, and private universities such as the University of Phoenix began offering full academic degree programs online within the same decade. Currently, the revolution of e-learning is emerging as connectivist theory is taken into consideration more and offering MOOCs is becoming popular (Lepi, 2012).

Downes (2012) describes a series of “generations” of technologies and approaches that have characterized the development of e-learning over the years. He states that the first three generations of e-learning represent a focus on documents. He further explains that through the first three generations, shown in Fig. 1, a familiar process of innovation occurs: first is the development and piloting of the technology, then the commercialization of the technology, and finally the amalgamation of the commercial market as large players eliminate weaker competitors.

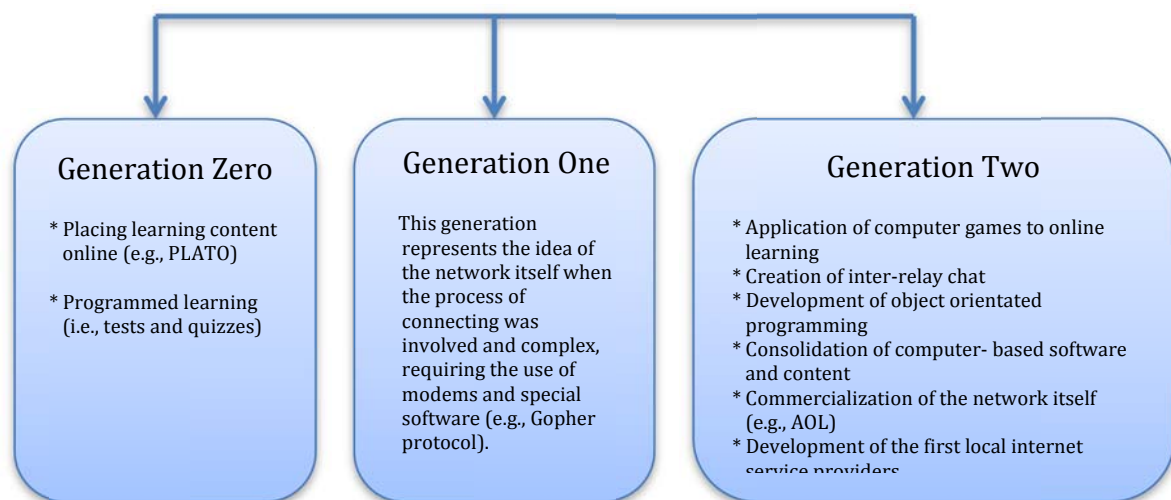


Figure 1: The first three generations of e-learning represent a focus on documents

Downes (2012) further explains that the second three generations of e-learning represent a focus on data: the content management system (CMS) is content thought of as data, web 2.0 is the network thought of as data, and the MOOC is the environment thought of as data” (see Fig. 2).

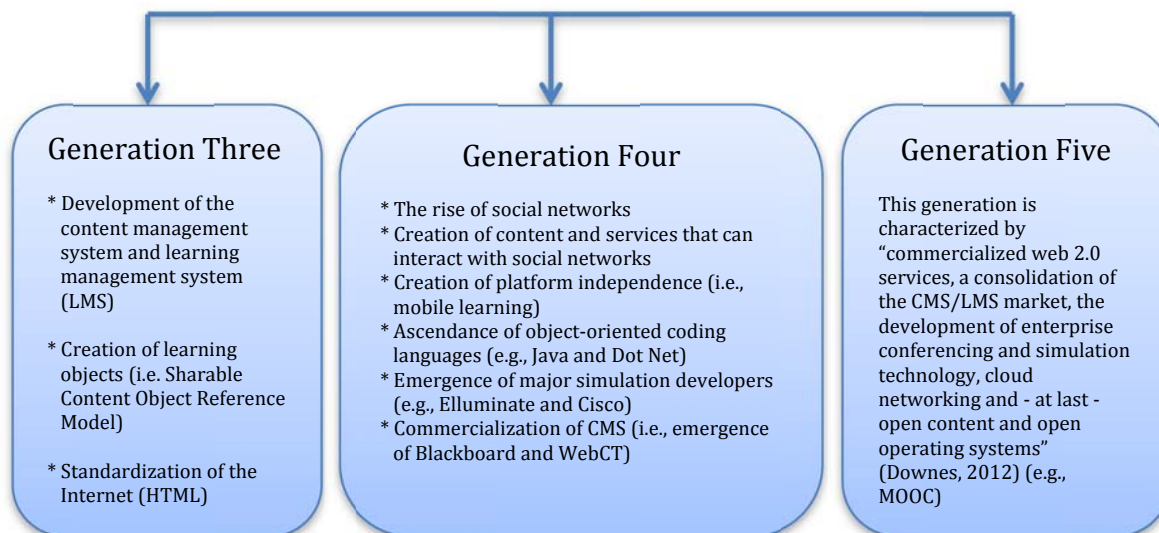


Figure 2: The second three generations of e-learning represent a focus on data.

Downes (2012) predicts that the next three generations of learning technology will be based on the idea of flow, which is when your content and your data become – too massive to store, and too detailed to comprehend. He describes that the first of these things that flow will be the outputs of learning analytics: “they will be the distillation of the massive amounts of data, presented to us from various viewpoints and perspectives, always changing, always adapting, always fluid.”

Universities around the world may offer their courses in e-learning programs differently. Some universities are still in generation zero and some are attempting to adapt to the recent evolution, while others may not know how they will progress. Gibbs (1994) describes the activities of those creating software in the late 1980s and early 1990s as having “no formal process, no measurements of what they do and no way of knowing when they are on the wrong track or off the track altogether.” This criticism could easily be made of e-learning activities such as MOOCs undertaken in many educational institutions today (Marshall, 2010), which also aligns with John Hennessy’s (President of Stanford University) comparison of MOOCs to tsunamis that have the potential to destroy or create the areas they hit (Fairey, 2012).

Educators and universities are challenged to commit to quality in e-learning as new teaching and learning paradigms are emerging, new technologies are introduced, and more students are leaning towards e-learning programs. The next section will explore quality assurance and its practices with e-learning programs.

Quality Assurance

Defining Quality

Quality is a relative concept that can be viewed differently by various stakeholders. In the case of quality of e-learning, universities and e-learning institutions may be concerned about cost-effectiveness, learner satisfaction, completion/graduation rates, and management. Instructors may be interested in the teaching aspects of online learning and intuitive course management and more concerned with the quality of learning processes and outcomes (Jung, 2011). Students may be preoccupied with different factors such as costs, flexibility, responsive teachers, accessibility, and interactions in their learning and online assessments (Ehlers, 2004; Jung, 2011).

Wang (2006) asserts that educational quality assurance is a matter of accountability and of national interest. Governments should mandate it, accreditation agencies require it, the general public expects it, and faculty members need it to support their teaching (McKenzie, Mims, & Bennett, 2003). Learners, as the main clients of educational services along with their parents or employers, also demand quality assurance, as e-learning is becoming a more consumer-driven market (Carnevale, 2000). Jung (2011) states, “the quality of e-learning is not something that can be delivered to the learner but is something that is co-developed by the learner and the provider during the teaching and learning processes” (p. 445).

Bates (2010) lists the best guarantees of quality in e-learning as

1. “well-qualified subject experts also well trained in both teaching methods and the use of technology for teaching,
2. highly qualified and professional learning technology support staff,

3. adequate resources, including appropriate instructor/student ratios
4. appropriate methods of working (teamwork, project management)
5. systematic evaluation leading to continuous improvement.”

The quality assurance for an e-learning program provides not only a mechanism to proactively establish and modify training and competency guidelines but also a method for continuous monitoring of current practices to correct deficiencies.

Benchmarks and Guidelines Supporting Quality Assurance

With more students moving towards e-learning programs, universities and educators are becoming more cautious and concerned about the quality of their offerings as well as the quality of learners' experiences. In response to these concerns, educators and a number of accreditation agencies (such as Sloan-C Quality Framework, and The Best Practices developed by C-RAC92000) have developed sets of guidelines, standards, and benchmarks in an effort to support and assist quality of e-learning (Barker, 2002; Bourne & Moore, 2004; Quality Matters, 2011; Wang, 2006). Although these organizations vary in their benchmarks regarding quality standards for e-learning programs, the following elements are evenly stressed in their guidelines: strong institutional commitment, adequate curriculum and instruction, peer review, effectiveness, faculty-to-student ratios, attrition rates, student support, sufficient faculty support, instructional materials, technology appropriateness, accessibility, and consistent learning outcome assessment (Chao, Saj, & Tessier, 2006; Quality Matters, 2011; Wang, 2006).

Benchmarks for e-learning quality assurance aim to encapsulate the best practices, experiences, and objectives involved in teaching and learning. Therefore, they need to be continually updated as the learning and teaching paradigms shift in this ever-changing environment. The following section presents some best practices and quality assessment design for e-learning programs around the following elements: administrative leadership and support, ongoing program concerns and support, web course development, student concerns and support, and faculty concerns and support.

Quality Assurance in Practice for E-learning Programs

Administrative Leadership and Support

Yang (2012) asserts that to ensure quality e-learning programs, administrators must be planners, motivators, promoters, and supporters. She further explains that in order for administrators to take major steps toward achieving quality e-learning programs for students, they need to understand clearly what their roles are and the impact their contribution has on the quality of e-learning programs.

At the University of Central Florida (UCF), the budget reflects the importance of distance learning programs; the university funds the technical infrastructure, faculty development, learner support, and research and development in distance learning. There are dedicated servers for e-learning programs and online courses, and the technical infrastructure is made up of wired and wireless network connections to every building. The university offers a technical and infrastructure design that provides administrative leadership, structures faculty development, and assesses course delivery service (Cavanaugh, 2002). To offer and maintain high-quality e-learning programs within a university, e-learning and its components need to be included as part of the core business.

Ongoing Program Concerns and Support

The decision to develop an e-learning program involves discussion, planning, and evaluation at different levels, including administrative and departmental. Administrators of the department and the university should support the program in order to offer and maintain a high-quality e-learning program. E-learning programs' planning and development should be based on established standards and guidelines from accrediting associations as well as national and local professional organizations. Developers should review similar existing e-learning programs and courses as well as involve faculty and students in the development of the programs. Ongoing evaluation of individual courses as they relate to the overall program is needed to maintain curriculum continuity. Alignment of outcomes among the courses as well as the overall program outcomes needs to be supported and evaluated. Program design, requirements, and evaluation should be based on comments from outside reviewers, student input and evaluations, current online

research, existing similar programs, and professional literature. Program promotion, program study, program flexibility, student enrollment, and currency of the program are among ongoing concerns that should be examined closely and acted upon constantly (Lee & Dziuban, 2002).

The most common method used for assessing quality in e-learning programs is questionnaire-based research, although not everyone follows the same approach. A combination of mid-course questionnaire, end-of course surveys, end-of course focus group meetings, and students' feedback and interviews together with monitoring of student performance and drop-out rates should be instituted (Eaton, Reynolds, Mason, & Cardell, 2008).

Course Development

Chao et al (2010), building on previous literature, believe collaborative course development is the best approach to designing quality online courses. A good example of this collaborative course development is seen at the Centre for Teaching, Learning and Technology (CTLT) at the University of British Columbia (UBC). CTLT is a central service department that provides a broad range of services to the university in leadership, innovation, and the application and integration of learning technologies. Within CTLT, the organizational model for online course development and e-learning programs is a project-team-based structure consisting of instructional designers/project managers, web programmers, graphic designers, librarians, and multi-media producers. During course development, the team is joined by a faculty-appointed subject matter expert referred to as the "Course Author". The role of the Instructional Designer (ID) is diverse and multi-faceted, ranging from project team facilitation to understanding teaching epistemologies, budgeting, scheduling, and the selection of learning technologies. Within this context, the ID works with the course author to set learning outcomes, selects appropriate technologies that enable learning, implements interactive activities such as discussion forums, wikis, and blogs, ensures appropriate copyright use, and develops course evaluation processes (McCracken et al., 2011).

In the development process, the ID works with the course author to conduct a comprehensive course analysis relative to the program, focusing on course prerequisites, program sequencing, assessment strategies, and instructional methodologies. The content is designed to encourage critical thinking, be relevant and meaningful, support independent learning, and accommodate the cultural differences among students as well as the special needs of some students. Online course development is coherent, clear, and consistent and follows the World Wide Web Consortium standards for accessibility purposes. For complex programs, the team pilots a course to be reviewed by a focus group before opening it to students. Eaton et al. (2008) stress that the distance learning material and e-learning courses should be independently assessed (pre-piloted) before distribution to learners. After the first offering of the course and after receiving students' evaluations of the course, the course development team meets to reevaluate the course for the next offering.

Student Concerns and Support

To make informed choices, learners planning to register in an e-learning program should have clear information about the program aims, outcomes, structure, support, criteria for admission, and assessment regulations as well as method of evaluation (Eaton et al., 2008). They also need to be informed of financial aids and awards available within the program. Access to an online course through a guest account can be an effective tool to give learners an idea of how a course is set in the program.

UCF is a good example of how an institution can support students registered in an e-learning program. After admission to an e-learning program, students at UCF are given an email account and have access to the Internet, online course orientation, library online and tutorial, necessary software and technologies, technical support, online resource directory, and WebCT orientations (Lee & Dziuban, 2002). Access to an academic advisory committee, online program planning, graduation checklist, plagiarism regulations and resources, online netiquette and policy, and exam information are considered to be key resources for students registered in e-learning programs. After completion of the program, access to the alumni community and courses or their outlines is recommended.

Faculty Concerns and Support

Cavanaugh (2002) explains the best practices for faculty support at UCF. Instructors have access to a faculty development course, training, and workshops, such as Summer Institute, where faculties from across campus meet to create innovative teaching approaches including e-learning instructions and strategies. The instructors receive a laptop computer and are given release time and extra pay for course development. They are assisted in all phases of course design and delivery by trained “Tech Rangers”. At UBC, as a support to instructors involved in the design, development, implementation, and evaluation of e-learning courses and programs, the university has provided faculty development, educational support, and production support through CTLT and different departments. Resources to assist these processes and how to use different technologies for e-learning programs have been developed and made available online.

Access to an online orientation through which the instructors are able to work with materials and tools in the same manner as their students is one of the strategies used at UBC. Different focus groups and communities of practice across disciplines enable faculty to discuss strategies for coping with the additional workloads, write cross-discipline grants, peer review, discuss/determine academic credit and recognition for online course delivery, and develop assessment and evaluation procedures.

Conclusion

E-learning is incredibly dynamic and constantly driven by changes in learners’ demands/behaviors and technology. Marshall (2010) asserts that the challenge facing universities engaging in e-learning is not so much about innovation as it is about implementation and the need to rapidly evolve to sustain change at the pace technology is evolving and affecting our lives, including our education. Institutions need to be ready to reinvent themselves and make purposeful and directed changes in response to new technologies and pedagogies in order to offer high-quality e-learning programs. Benchmarks for e-learning quality assurance aim to encapsulate the best practices, experiences, and objectives involved in teaching and learning; therefore, they need to be

continually updated as learning and teaching paradigms shift in this ever-changing environment.

References

Barker, K. (2002). Candian Recommended E-Learning Guidelines. Retrieved January 20, 2012, from www.futured.com/pdf/CanREGs%20Eng.pdf.

Bates, T. (2010). In search of quality in e-learning. Online Learning and Distance Education Resources. Retrieved November 2012 from <http://www.tonybates.ca/2010/06/22/in-search-of-quality-in-e-learning/>.

Bourne, J. and Moore, J. C. (Eds.) (2004). Elements of Quality Online Education: Into the Mainstream. The Sloan Consortium, Volume 5. Retrieved December 21, 2011, from sloanconsortium.org/publications/books/vol5summary.pdf.

Carnevale, D. (2000). Shopping for an online course? Kick the tires and check the mileage. The Chronicle of Higher Education, February 2.

Cavanaugh, C. (2002). Distance education quality: Success factors for resources, practices and results. In R. Discenza, C. Howard, & K. Schenk (Eds.), *The Design & Management of Effective Distance Learning Programs* (pp. 171–189). Hershey, PA: Idea Group Publishing.

Chao, T., Saj, T., & Hamilton, D. (2010). Using Collaborative Course Development to Achieve Online Course Quality Standards. *International Review of Research in Open and Distance Learning*. 11(3).

Chao, T., Saj, T., & Tessier, F. (2006). Establishing a quality review for online courses. *Educause Quarterly*, 29(3), 32–39.

Downes, S. (2012). E-Learning Generations. Retrieved November 2012 from <http://halfanhour.blogspot.ca/2012/02/e-learning-generations.html>.

Eaton, A. K., Reynolds, A. P., Mason, R., & Cardell, R. (2008). Assuring quality. *British Dental Journal*. 205(3), 145–150.

Ehlers, U.-D. (2004). Quality in e-learning from a learner's perspective. *European Journal of Open and Distance Learning*. I. Retrieved November 2012 from http://www.eurodl.org/materials/contrib/2004/Online_Master_COPs.html.

eLearning Industry (2012). The History of eLearning Infographic 2012. Retrieved January 2013 from <http://elearningindustry.com/history-of-elearning-infographic-education-2012>.

Fairey, A. (2012). Online education a 'tsunami' of change. Retrieved November 2012 from <http://www.thecord.ca/?p=11713>.

- Gibbs, W. (1994). Software's chronic crisis. *Scientific American*, 271(3): 86–95.
- Jung, I. (2011). The dimensions of e-learning quality: from the learner's perspective. *Educational Technology Research and Development*, 59, 445–464.
- Latchem, C. (2012) Quality Assurance Toolkit for Open and Distance Non-formal Education. Commonwealth of Learning. Retrieved December 2012 from www.col.org/PublicationDocuments/QA%20NFE_150.pdf.
- Lee, J., & Dziuban, C. (2002). Using quality assurance strategies for online programs. *Educational Technology Review*, 10(2), 69–78.
- Lepi, K. (2012). The history of online education. *Edudemic*. Retrieved November 2012 from <http://edudemic.com/2012/10/the-history-of-online-education/>.
- Marshall, S. (2010). A quality framework for continuous improvement of e-learning: The e-learning maturity model. *Journal of Distance Education*, 24(1), 143–166.
- McCracken, J., Cho, S., Sharif, A., Wilson, B., Miller, J., Crowley, C., & Scalzo, D. (2011). Articulating assessment design practice for online courses and programs: cases in assessment strategy design and development. *Proceedings of the International Conference on e-Learning*. pp. 226–235.
- McKenzie, B., Mims, N., & Bennett, E. (2003). Successful online assessment, interaction and evaluation techniques. *Society for Information Technology and Teacher Education International Conference*. 2003(1), 426–431.
- Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). E-Learning, online learning, and distance learning environments: Are they the same? *Internet and Higher Education*, 14(2), 129–135.
- Quality Matters (2011). *Quality Matters Rubric Standards 2011–2013 edition*. Marylandonline. Retrieved November 22, 2011, from www.qmprogram.org/files/QM_Standards_2011-2013.pdf.
- Wang, Q. (2006). Quality Assurance – Best Practices for Assessing Online Programs. *International Journal on E-Learning*, 5(2), 265–274.
- Yang, Y. (2012). Roles of administrators in ensuring the quality of online Programs. In Paolucci, R. (Ed.) *Quality Assurance of Online and Distance Learning*. The Interlearning Company, LLC 2012. pp. 1–8.

Appendix C: Quality of Online Learning: Adding MOOC into the Mix?

**(Published in the Proceedings of EdMedia 2013: World Conference on Educational
Multimedia, Hypermedia, and Telecommunications)**

Afsaneh Sharif

**Centre for Teaching, Learning and Technology, University of British Columbia,
Vancouver, Canada**

Hosein Moeini

Faculty of Education (Alumni), University of British Columbia, Vancouver, Canada

and

Merce Gisbert

Universitat Rovira i Virgili, Tarragona, Spain.

Abstract

Online learning is a broad term that can describe a learning environment supported via information and communication technology. Online learning has become a diverse and dynamic world in which educators and learners bring new methods or strategies for learning almost every day. Recent literatures demonstrate that students prefer online learning to face-to-face learning due to its flexibility and convenience (Young & Norgard, 2006; Northrup, 2002; Swan et al. 2000). By carefully investigating the new path that our learners are choosing, we educators use more tools and different strategies to make the learning journey a quality one. In this paper, by focusing on online learning's current standing and future development, we will briefly investigate quality of online learning from an instructional designer's perspective. We will also argue that investigating learners' perspectives on the quality of online learning is essential since doing so allows instructional designers to use better strategies and tools when designing online courses.

Quality in Online Learning

Quality is a relative concept that can be viewed differently by various stakeholders. In the case of quality of online learning, governments may be more focused on socio-economic benefits such as public accountability, whereas universities and e-learning institutions may be more concerned about cost-effectiveness, learner satisfaction, completion/graduation rates, and management. Furthermore, instructors may be interested in the teaching aspects of online learning and more concerned with the quality of learning process and outcomes (Jung, 2011). On the other hand, students may be preoccupied with different factors such as costs, flexibility, responsive teachers, access to resources, interactions in their learning and online assessment (Ehlers, 2004; Jung, 2011).

Educators and universities are challenged to commit to quality in online learning, as new teaching and learning paradigms are emerging and more students are leaning towards taking courses online. In response, educators have developed guidelines, standards, and frameworks for assuring the quality of online learning (Barker, 2002; Bourne & Moore 2004; Quality Matters, 2011). These guidelines contain similar criteria, which include strong institutional commitment, adequate curriculum and instruction, peer review, effectiveness, faculty-to-student ratios, attrition rates, student support, sufficient faculty support, instructional materials, technology appropriateness, accessibility, and consistent learning outcome assessment (Chao, Saj, & Tessier., 2006; Quality Matters, 2011; Wang, 2006). Instructional designers play a key role in assessing these standards and implementing them in their design.

In June 2012, we conducted a study to gain an understanding of which elements are considered key for quality design by instructional designers and how important the instructional designers consider each element in their course development. The participants were 33 instructional designers from different universities and organizations within British Columbia, Canada. For the purpose of the study, the survey contained a rubric based on the Quality Matters model (2011-2013 edition) which covers key areas of course quality under eight categories: course overview and introduction, learning objectives, assessment and measurement, instructional materials, learner interaction and

engagement, course technology, learner support and accessibility (Quality Matters, 2011). The participants were asked to rate each point in the rubric under two categories: 1) importance, how critical designers find each point, and 2) focus, how much the designers actually pay attention and focus on these elements when they design a course.

The results of our study highlight areas instructional designers focus on and find most important, as well as demonstrate the difference between instructional designers and learners' perspectives. As per our findings, all designers focus and find the following two areas very important in their design: 1) grading policy in the assessment area and 2) course overview and introduction. The results also illustrate that while the focus of designers are mostly in the course overview, and assessment, they find learner interaction and engagement as well as course technology very important in their design. Another interesting result indicated that designers are less focused (and sometimes never focused) on learner support and accessibility. Access to required technologies/tools, variety/currency of instructional materials, and time expectation for feedback were among the least critical points through designers' lens; more than 20% of participants did not find these points critical in their design. Interestingly, while learner support, and accessibility were not the highlights of designers' focus in our survey, different studies show learners emphasize these two factors when talking about the quality of online learning (Cashion & Palmieri, 2002; Ehlers, 2004; Jung, 2011).

These differences urge instructional designers to pay more attention to learners' perspectives in quality of online learning. Jung (2011) asserts "the quality of e-learning is not something that can be delivered to the learner but is something that is co-developed by the learner and the provider during the teaching and learning processes" (p. 445). Jung, through the results of the explanatory factor analysis arising from a survey of 299 learners, revealed seven dimensions in evaluating the online learning quality from learners' perspective: interaction, staff support, institutional quality assurance mechanism, institutional credibility, information and publicity, learner support, and learning tasks. Interaction is considered as an important dimension, which is also emphasized by Ehlers (2004). Learner support is also identified as another important dimension in Jung's study, which is also supported by Ehlers (2004). Ehlers emphasizes that needs-based learner

services are essential for a quality e-learning system. Jung believes that learners' views on quality need to be understood and incorporated with those of the provider's in defining the quality of online learning and also emphasizes that it is unfortunate that most of the time this is not the case (2011).

The above findings show that there can be important differences between designers and learners' views of online learning quality. For instructional designers to be able to develop a quality course, they need to continuously investigate the context/status of online learning as well as learners' perspectives on the quality of online learning along with other factors. In the next section, we will discuss the current standing of online learning and its future development.

Online Learning: Current Standing and Future Development

The origin of the term online learning is not certain due to the fact that educators around the world define it differently. Some prefer to separate the variance by describing online learning as "wholly" online learning and others refer to the context and technology medium with which it is used. Many view online learning as a more recent version of distance learning that improves access to educational opportunities for learners described as both "nontraditional and disenfranchised" (Moore et al., 2011). The majority of educators seem to define it as access to learning experiences via the use of some technology (Moore et al., 2011).

Present day online learning has evolved rapidly through a short period of time. There are several milestones in the history of online learning. The 1960s marked the introduction of Programmed Logic for Automated Teaching Operations (PLATO) when the University of Illinois' scientists created a classroom system based on linked computer terminals. Implementation of computer assisted training and courses occurred in 1970s when people had to use the computers within a school or place of employment and online courses began emerging in 1980s. Learners started to have the option of earning their degrees without having their instructors present in 1990s and private universities such as University of Phoenix started offering full academic degree programs online within the same decade. The revolution of online learning is emerging as connectivist theory is more

exercised and offering massive open online course (MOOC) is becoming popular (Lepi, 2012). Social web and connectivist theory bring new perspectives to online learning. These new perspectives allow learners to have more control over their own learning by giving them a public voice as well as connecting them to a vast number of resources and peers. Thus, instructors are now able to rely on learners as another source of knowledge production.

MOOC is the recent development in the area of online learning carrying three key characteristics: 1) low cost or no cost, 2) open access and 3) large-scale participation. MOOCs normally do not offer credits; however, some providers have started offering certificates. The term MOOC was coined by Dave Cornier at the University of Prince Edward Island and Bryan Alexander of the National Institute for Technology in Liberal Education in 2008 referring to an open online course, Connectivism and Connective Knowledge, which was designed and led by George Siemens and Stephen Downs. MOOCs originated from within the open educational resources and in a short period of time MOOC-type projects such as Coursera, Udacity, and edX have emerged around the world. MOOC hit the spotlight when Sebastian Thrun from Stanford University offered a free Artificial Intelligence course attracting 160,000 learners from 190 nations in 2011.

There are different perspectives around the MOOC phenomena, both positives and negatives. Some view MOOC as a “gathering of learning participants or people willing to jointly exchange information and collaboratively enhance their knowledge” in which distributed learners and instructors connect over a common topic (Alexandria, 2011). Also, some describe it as a space for experimentation that the on-campus experience may benefit from (Byerly, 2012). Siemens (2008) explains that learning happens through communities of practice, and personal networks within MOOC and Martin (2012) believes instructors can now use their “precious classroom time” for meaningful conversations. It is envisaged that four major types of activities within MOOCs enhance learning: aggregation, relation, creation, and sharing (Kop, 2011).

On the other hand, there are educators and researchers that look at MOOC more critically and declare that MOOC “doesn’t create a learning community, it creates a crowd.” They

believe that in MOOC, advancement of a learning relationship beyond an “informal, intermittent connection” is not possible due to the fact that the crowd lacks loyalty, initiative and interest (Guthrie, 2012). Guthrie (2012) emphasizes that “the MOOC model is fine for the informal student or academic dabbler, but it is not the same as attaining an education”. Vardi (2012) believes that the buzz about MOOC is not about “technology’s intrinsic educational value, but due to the seductive possibilities of lower costs” and he fears that “financial pressures will dominate educational consideration” and wishes for a wand to make MOOC disappear. The President of Stanford University, John Hennessy, describes MOOCs cleverly as a tsunami and explains that this is a correct metaphor, as tsunamis have the potential to destroy or create the areas they hit (Fairey, 2012). Given the aforementioned information, we can see that MOOC is a salient change in the nature of learning that also has great implications on the role of learners and instructors.

What is the Next Step?

MOOC is the new face of online learning for our learners in which they gain knowledge on how to learn, manage their time, find resources, find new tools, try new tools, and take their learning to the next step. The key for survival in MOOC is to connect and reconnect. As Kop (2011) explains, “a connectivist learner has to be fairly autonomous to be able to learn independently, away from educational institutions, and to be engaged in aggregating, relating, creating, and sharing activities.” While learners’ roles have changed in MOOC with more responsibilities around support and peer evaluation, new roles are also emerging for educators, such as those of curator, supporter of “repurposing” and “remixing” of information, moderator, provider of technical support, as well as “sharer” of resources (Kop, Fournier, & Mak, 2011).

These changes, evolution of learners and instructors’ roles as well as continuously changing online learning environments/context, urge designers to pay more attention to these factors when working on a quality course. As discussed earlier, interaction and learner support are identified as important factors for learners in a good-quality course; therefore, if a course is open to 30 learners or 30000, we need to consider these two factors more carefully when designing our courses. Creating an environment with

scaffolding nurturing, offering a new pedagogy for learner support through created network, harnessing enrollment power for resource creation and sharing are among those that can improve the current online learning experience, particularly MOOC. For now, we need to emphasize the importance of responsibilities, collaboration, and peer evaluation in large classes by educating our learners in these concepts as well as building our online environments on these foundations.

Conclusion

Defining quality and designing a quality online environment can be challenging due to continuously changing and emerging technologies within this environment. While instructional designers refer to different guidelines and use many standards and frameworks to improve the quality of online learning, they need to be alert that these guidelines require modification and updates as the context and nature of online learning as well as learners and instructors' expectation/perspectives change within this environment. There can be important differences between designers and learners' views of online learning quality, thus, further studies on learners' views in various contexts to define, develop and improve future quality assurance frameworks are recommended. It is perhaps too soon to imagine and discuss the possible effects of MOOC on online learning and higher education whether positives or negatives; however, we need to be ready to respond to it whenever this tsunami hits our shore.

Bibliography

Barker, K. (2002). Candian Recommended E-Learning Guidelines. Retrieved November, 2012 from www.futured.com/pdf/CanREGs%20Eng.pdf.

Bourne, J., & Moore, J.C. (2004) Elements of quality online education. The Sloan Consortium, volume 5. Retrieved December 21, 2011 from sloanconsortium.org/publications/books/vol5summary.pdf

Byerly, A. (2012). Before you jump on the bandwagon... *The Chronicle of Higher Education*, Retrieved February 2013 from <http://chronicle.com/article/Before-You-Jump-on-the/134090/>

Cashion, J., & Palmieri, P. (2002). The Secret is the Teacher: The Learners' View of Online Learning. Leabrook, Australia: National Center for Vocational Education Research.

- Chao, T., Saj, T., & Tessier, F. (2006). Establishing a quality review for online courses. *Educause Quarterly*, 29(3), 32–39.
- Ehlers, U.-D. (2004). Quality in e-learning from a learner's perspective. *European Journal of Open and Distance Learning*. I. Retrieved November 2012 from http://www.eurodl.org/materials/contrib/2004/Online_Master_COPs.html
- Fairey, A. (2012). Online education a 'tsunami' of Change. Retrieved November 2012 from <http://www.thecord.ca/?p=11713>.
- Guthrie, D. (2012). Jump off the Coursera bandwagon (massive open online courses). *The Chronicle of Higher Education*, Retrieved February 2013 from <http://chronicle.com/article/Jump-Off-the-Coursera/136307>
- Jung, I. (2011). The dimensions of e-learning quality: From the learner's perspective. *Educational Technology Research and Development*, 59(4), 445–464.
- Kop, R. (2011). The challenges to connectivist learning on open online networks: Learning experiences during a massive open online course. *The International Review of Research in Open and Distance Learning*. 12(3), 19–38.
- Kop, R., Fournier, H., & Mak, J. S. F. (2011). A pedagogy of abundance or a pedagogy to support human beings? Participant support on massive open online courses. *The International Review of Research in Open and Distance Learning*. 12(7), 74–93.
- Lepi, K. (2012). The history of online education. *Edudemic*. Retrieved November 2012 from <http://edudemic.com/2012/10/the-history-of-online-education/>.
- Martin, F. G. (2012). Education: Will massive open online courses change how we teach? *Communications of the ACM*. 55(8), 26.
- Northrup, P. T. (2002). Online learners' preferences for interaction. *Quarterly Review of Distance Education*, 32, 219–226.
- Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). E-Learning, online learning, and distance learning environments: Are they the same? *Internet and Higher Education*, 14(2), 129–135.
- Quality Matters (2001). Quality Matters Rubric Standards 2011–2013 edition. Marylandonline. Retrieved November 2012 from www.qmprogram.org/files/QM_Standards_2011-2013.pdf.
- Siemens, G. (2008). Learning and knowing in networks: Changing roles for educators and designers. *ITFORUM for Discussion*. Retrieved December 2012 from it.coe.uga.edu/itforum/Paper105/Siemens.pdf.
- Swan, K., Shea, P., Fredericksen, E., Pickett, A., Pelz, W., & Maher, G. (2000). Building knowledge building communities: Consistency, contact and communication in the virtual classroom. *Journal of Educational Computing Research*, 23(4), 359–383.
- Vardi, M. Y. (2012). Will MOOCs destroy academia? *Communications of the ACM*. 55(11), 5.

Wang, Q. (2006). Quality assurance—Best practices for assessing online programs. *International Journal on E-Learning*, 5, 265–274.

Young, A., & Norgard, C. (2006). Assessing the quality of online courses from the students' perspective. *Internet and Higher Education*. 9, 107–115.

Appendix D: Quality Assurance in e-Learning Environments

(Published in Proceedings of EDUTECH 2012, Spain)

**Afsaneh Sharif, Centre for Teaching, Learning and Technology. University British
Columbia, Vancouver, Canada**

A considerable amount of literature expresses educators and researchers' concerns about the quality of online learning. In response, a variety of scholars, educators, organizations, and accrediting agencies have developed guidelines, standards, rubrics, and frameworks for assuring the quality of online learning (Barker, 2002; Bourne and Moore 2004; Blood-Siegfried et al., 2008; Quality Matters, 2011). All these guidelines and publications include similar criteria for online education, which include strong institutional commitment, adequate curriculum and instruction, peer review, effectiveness, faculty-to-student ratios, attrition rates, student support, sufficient faculty support, instructional design, technology appropriateness, accessibility, and consistent learning outcome assessment (Chao, Saj, & Tessier, 2006; Corry, 2008; Little, 2009; Wang, 2006). These publications support the idea of using of standards and a peer review process throughout the course development process to ensure the quality of online courses. However, they do not explain in detail how educators and online programs should develop and maintain programs for quality assurance (QA).

To define quality in higher education, Harvey and Green's five discrete ways of thinking about quality are frequently cited: excellence, consistency, fitness for purpose, value for money, and transformation. Quality assurance in higher education is mostly judged in terms of fitness for purpose or value for money; however, it may involve all of the above (Jung and Latchem, 2012). In their recent book, Jung and Latchem have offered a competency-based quality management system for distance and online education where the quality of online learning depends not only on the providers but also on the capabilities of the learners and their participation in the learning and creation of knowledge (p. 240).

There are different factors that affect quality assurance in online learning. As technology evolves, the online learning shifts too, and with that methods for assuring quality in online learning are changing. The traditional approaches such as pre-publication expert peer review are routinely bypassed as individuals share their work directly with wide audiences through social media. Leacock and Nesbit (2007) believe that with any emerging social practice, standards, conventions, and new traditions are developed. These authors assert that heuristic approaches to quality assurance will shape a salient part of these new traditions. This is aligned with Jung and Latchem's claim (p. 243) that the knowledge and skills that provide the basis for gaining and sustaining quality in e-learning today will be different from tomorrow.

Stakeholders' values and needs are also important and shape the criteria for judging development processes, instructional design, content, and products (Williams et al. 2011). The quality assurance can be seen through different lenses and is affected by different views, such as those of administrators, designers, instructors, students, and program leaders.

Wiesenberg and Stacey (2005) stress the importance of providing three interrelated support systems for institutions seeking to deliver quality online learning: quality teaching support, quality learning support, and quality administrative support (p. 397). In addition to an integrated institutional support systems for faculty and students, the authors also stress the necessity of the orientation of instructors to the new roles and responsibilities that online teaching requires as well as continuous professional development regarding new technology and online teaching strategies.

Johnson and Aragon (2003) invite instructional designers to look for creative approaches in their design to support quality of teaching and learning in online environments. The authors offer a few principles for powerful online learning. These principles include addressing individual differences, avoiding information overload, motivating students, creating a real-life context, encouraging social interaction, providing hands-on activities, and encouraging student reflection (p. 34).

Ali (2003) directs designers' attention toward certain elements prior to the implementation of online courses. He stresses appropriateness of internet, quality control (having guidelines for determining quality learning), course content, instructional styles, students' skills and motivation, time management, communication, and access (p. 44). Corry (2008) briefly discusses the importance of course design, course content, course instructor, and support as the key elements to consider for quality in online education.

Chao et al. (2010), similar to many educators in the course design field, advocate a collaborative course development model for quality online learning where courses are designed under the guidance of an instructional designer and an academic lead to ensure alignment with the university-wide quality standards (if any) and program outcomes. Many institutions have developed their own quality standards, and many use external resources. These authors support the use of guidelines flexibly as a "guide," not as a template.

Bates (2012) has created a list of online quality standards for e-learning where educators can go to compare different quality standards for online learning. In his recent book review, *Quality assurance in distance education and e-learning*, Bates highlights and summarizes Jung and Latchem's concluding chapter, which covers a number of important quality assurance issues to conclude this section of quality assurance for e-learning: "focus on outcomes as the leading measure of quality, take a systemic approach to quality assurance, see QA as a process of continuous improvement, move the institution from external controls to an internal culture of quality, poor quality has very high costs so investment in quality is worthwhile" (Bates, 2012).

Bibliography

Ali, A. (2003). Instructional design and online instruction. Practices and perception. *TechTrends*, 47(5), 42–45.

Barker, K. (2002). *Canadian Recommended E-Learning Guidelines*. Retrieved November 2012 from www.futured.com/pdf/CanREGs%20Eng.pdf.

Bates, T. (2012) Book review: *Quality assurance in distance education and e-learning*. Retrieved January 2013 from <http://www.tonybates.ca/2012/02/08/book-review-quality-assurance-in-distance-education-and-e-learning/>

Blood-Siegfried, J. E; Short, N. M; Rapp, C. G.; Hill, E.; Talbert, S., Skinner, J.; Campbell, A.; & Goodwin, L. (2008). A rubric for improving the quality of online courses. *International Journal of Nursing Education Scholarship*, 5(1), 1–13.

Bourne, J., & Moore, J. C. (2004) *Elements of Quality Online Education*. The Sloan Consortium, volume 5. Retrieved December 21, 2011 from sloanconsortium.org/publications/books/vol5summary.pdf

Chao, T., Saj, T., & Tessier, F. (2006). Establishing a quality review for online courses. *Educause Quarterly*, 29(3), 32–39.

Chao, T., Saj, T., & Hamilton, D. (2010). Using collaborative course development to achieve online course quality standards. *International Review of Research in Open and Distance Learning*, 11(3).

Corry, M. (2008). Quality in distance learning. *Distance Learning*, 5(1), 88–91.

Johnson, S. D., & Aragon, S. R. (2003). An instructional strategy framework for online learning environments. *New Directions for Adult and Continuing Education*, 2003(100), 31–43.

Jung, I., & Latchem, C. (2012). *Quality Assurance and Accreditation in Distance Education and e-Learning*. Routledge.

Leacock, T. L., & Nesbit, J. C. (2007). A framework for evaluating the quality of multimedia learning resources. *Educational Technology & Society*, 10(2), 44–59.

Little, B. B. (2009). Quality assurance for online nursing courses. *Journal of Nursing Education*, 48(7), 381–387.

Quality Matters (2011). *Quality Matters Rubric Standards 2011–2013 edition*. Marylandonline. Retrieved November, 2012 from www.qmprogram.org/files/QM_Standards_2011-2013.pdf.

Wang, Q. (2006). Quality assurance—Best practices for assessing online programs. *International Journal on E-Learning*, 5, 265–274.

Wiesenberg, F. & Stacey, E. (2005). Reflections on teaching and learning online. *Distance Education*, 26(3), 385–404.

Williams, D. D, South, J. B., Yanchar, S. C., Wilson, B. G., & Allen, S. (2011). How do instructional designers evaluate? *Educational Technology Research and Development*. 59(6), 885–907.

Appendix E: Quality of Online Programs: Cultural Differences' Impact on Instructional Designers' Practice and Perspectives

International Journal of Instruction (under review)

Afsaneh Sharif

Centre for Teaching, Learning and Technology, University of British Columbia, Canada

604-822-8411, Afsaneh.sharif@ubc.ca

Dr. Merce Gisbert

Department of Pedagogy Universitat Rovira i Virgili , Spain

34-639788473, merce.gisbert@urv.cat

Abstract

The purpose of this study was to investigate the effect of cultural differences on instructional designers' perspectives of quality in online environments. Using a questionnaire developed based on the Quality Matters rubric in Canada and Spain, we found designers in Canada focus more on Learner Support strategies than designers in Spain. However, it is not clear whether this slight difference is because of cultural differences or other factors such as budget, resources, training, and institutions' commitment. Despite differences in their context and responsibilities, instructional designers in both countries consider the same points important and pay attention to them in their practices in order to develop good quality online courses. These points are institutional commitment, faculty support, student support, technology, course structure/instructional design, and assessment/evaluation and accessibility. Future research is required to improve the generalization of the existing study's results while identifying other factors, such as budget and technology literacy, that influence instructional designers' approach in developing high-quality online learning materials.

Key Words: online learning, quality, instructional design, cultural differences, instructional designer

Introduction

Action research provides researchers with the opportunity to engage in professional development enabling them to reflect on their practices and determine whether they are living up to their values. Exercising this approach, we closely examined the elements and factors that contribute to a quality online course while practicing as instructional designers. It is obvious that the rapid evolution of technology has impacted online learning significantly, which has led to constant changes in our profession and

responsibilities. Many guidelines and benchmarks have been developed for quality of online learning programs; Sir John Daniel, along with other experts from different institutions, has recently listed many of these in a guide, which is licensed under the Creative Commons (Daniel, 2013). The emphasis of guidelines may differ; however, the common aspects of quality for online programs can be easily identified as institutional commitment, faculty support, student support, technology, course structure/instructional design, and assessment/evaluation.

Through a survey based on the Quality Matters rubric and conducted in 2012 for instructional designers in British Columbia (BC) in Canada, it was found that all designers have similar perspectives on quality of online courses. They focus on the same elements, such as assessment and course overview, and find the same elements critical in their design. To investigate whether culture has an impact on instructional designers' perspectives for designing a quality online course, we used the same survey in a Spanish context

Brief Literature Review: Culture and its Impact in Instructional Design

Culture is a broad term, and different stakeholders involved in the learning process may define it differently. Many contemporary definitions of culture explain culture as a system of knowledge (Spencer-Qatey, 2012; Gudykunst & Kim, 2003), and others define it as problem solving in a sense that culture affects people's behavior and people can find guidance in their culture on how to handle and solve problems (Lustig & Koester, 2012; Spencer-Oatey, 2008, 2012). Although choosing one definition without excluding other components or factors related to culture which others might consider important/relevant is problematic, for the purpose of this study we are choosing the 1870 definition of culture of Tyler, a British anthropologist (Spencer-Qatey, 2012, p. 2): Culture "is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society".

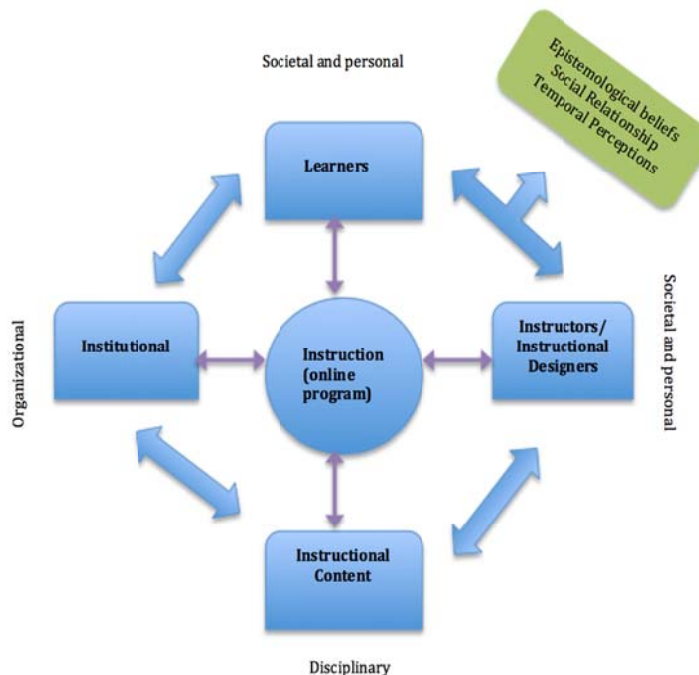
When the definitions above are considered, and in response to understanding culture in the context of instructional design, it is important to note that “culture in education goes beyond the idea of training and effective practices of teaching and learning” (Grant, 2013). It includes the very presence of who we are, what we know, and how we learn. When we teach, we are teaching culture, including its manifestos of knowledge, skills, and attitudes. This way, we can come to understand education as being a process that is fundamentally sociocultural in nature (Thomas, 2003).

While there is significant existing literature on learner diversity/culture in instructional design and cultural issues in education, there are a limited number of texts focusing on the impact of culture on educators and how they design and teach. Obviously, when we design, we are not separated from our culture; our backgrounds, beliefs, values, and teaching and learning experiences are reflected in our design. Recent literature determined that instructional design does not exist outside of a consideration of culture; culture is an important value for educators to hold because they are in the position of social agents having significant influence on their learners (Grant, 2013; Schwier, Campbell & Kenny, 2004). Kinuthia (2009) claims culture influences instruction at several levels, including institutional, instructional content, instructors, and learners.

Due to the constant evolution of online learning and internationalization and accessibility of online learning (i.e., Massive Open Online courses), consideration of cultural and social difference among students and between providers and learners has become a greater issue for the success of the online program. Figure 1 demonstrates how our instruction is affected by the culture surrounding it at different levels. Grant (2013, p. 30) explains how Collis (1999) outlined the ways cultural variables interact and influence each other on four levels: societal, personal, organizational, and disciplinary. He continues with the premise that the combinations of social and cultural factors are closely related to those of learning processes and promoting knowledge acquisition for students, as shown in Figure 1, and also to the development of courses and materials in delivering culturally sensitive instruction. Figure 1 also demonstrates the Cultural Dimension of Learning Framework proposed by Parrish & Linder-VanBerschot (2010), which is a set

of cultural parameters regarding epistemological beliefs, social relationships, and temporal perceptions that are most likely to impact instructional situations.

Figure 1: Impact of culture on instruction and instructional designer's work



When designing courses, instructional designers make both implicit and explicit decisions. As per Hando and Ahern (2012), explicit design decisions are those we learn to make consciously, such as creating learning objectives. Implicit design decisions are mostly based on personal assumptions and preferences, such as type and frequency of interactions that should take place in a course. Cultural background may show its impact in implicit designs more than explicit. For example, in many Asian and Middle Eastern countries, designers may lean toward note taking in class rather than discussions and constructivist approach, since these concepts are not well introduced in their education systems and cultures. The instructor is still seen as the source of knowledge and should not be questioned. In North America, designers may be hesitant to use/introduce group activities, since students are not comfortable working in groups and there are always some complaints from students saying “He/she didn’t contribute to the project”. Designers in North America might also want to involve learners in

knowledge/resource/content building, whereas designers from other parts such as Iran and China might want to provide all the content ready for learners because they consider that students pay to learn and should get all the resources and information necessary. Our culture and culture of our target learners affect our design approaches and decisions; however, our core values, skills, and common sense might stay intact when it comes to design.

In this study, we will explore whether cultural differences affect instructional designers' perspectives on key elements of a quality course. These key elements are presented within eight categories and include course overview and introduction, learning objectives, assessment, instructional materials, learner interaction, course technology, learner support, and accessibility. By examining how culture and cultural differences interact with the design process and impact instructional designers' work/perspective, we try to improve our understanding of the socio-cultural issues in instructional design foundations and so get closer to key elements for a quality online program.

Research Question

1. How are key elements of a quality online course identified in a guideline, in this case Quality Matters, seen and pursued by instructional designers in different contexts and countries?

Instrument

The instrument developed for this study is a rubric based on the Quality Matters rubric standards 2011–2013 edition. The rubric covers key areas of course quality under eight categories. Two columns were added to the rubric to gather information from instructional designers regarding their course development practices. The instrument was first distributed among six instructional designers, three in Canada and three in Spain, as a focus group and was modified based on their feedback. The two columns were labeled based on the required data, and the rubric was finalized to be distributed among more participants. The participants were asked to rate each point in the rubric under two

categories, importance and focus. The “focus” column is to find out how much the designers actually pay attention and focus on these elements when they design a course. The “importance” column is to gather information on how important designers find each point in the rubric in their course development process. The same instrument was used for both groups. For the instructional designers in British Columbia (BC), Canada, the instrument was distributed in a workshop event. For participants in Spain, the instrument was distributed through emails and personal contacts.

Figure 2: A snapshot of the instrument

Course Quality Page 1		Focus					Importance					
This rubric is based on the Quality Matters rubric standards 2011-2013 edition. The results will be used in a doctoral study research on course quality for online course development from an Instructional Designer's perspective. Below, key areas of course quality is divided into 8 sections. Please rate each point using a scale 1 to 5 (5 means Always the focus and 1 means Never the focus when designing that specific area in your design). In column 2, rate each point based on its Importance in your design using a scale 1 to 5 (5 means Critical, 4 Very Important... and 1 means Unimportant).		5: Always	4: Often	3: Sometimes	2: Seldom	1: Never	5: Critical	4: Very Imp.	3: Important	2: Somewhat Imp.	1: Unimportant	NA
Course Overview and Introduction	• Instructions make clear how to get started and where to find various course components.											
	• Students are introduced to the purpose and structure of the course.											
	• Etiquette expectations (sometimes called "netiquette") for online discussions, email, and other... forms of communication are stated clearly.											
	• Course and/or institutional policies with which the student is expected to comply should be clearly stated, or a link to current policies is provided.											
	• Prerequisite knowledge in the discipline and/or any required competencies should be clearly stated.											
	• Minimum technical skills expected of the student are clearly stated.											
	• The self-introduction by the instructor is appropriate and available online.											
Learning Objectives (competencies)	• Students are asked to introduce themselves to the class.											
	• The course learning objectives describe outcomes that are measurable.											
	• The module/unit learning objectives describe outcomes that are measurable and consistent with the course-level objectives.											
	• All learning objectives are stated clearly and written from the students' perspective.											

Context

Canadian Context

In this study, participants were selected based on their work experience with instructional design. The study instrument was distributed in the Just Instructional Design (Just ID) event in June 2012. The Just ID event takes place in British Columbia, Canada, each year and welcomes all instructional designers in public schools as well as educators involved in instructional design process from private companies in British Columbia. Most of the participants are from post-secondary schools. The event is informal and is aimed to be a session for instructional designers to exchange ideas, share best practices, discuss design challenges, and network. In the Canadian context, in the majority of public schools, the profession of the instructional designer exists under different titles, such as learning

designer, education technology specialist, and curriculum consultant, to support instructors and faculty to improve their learning environments or teaching practices. There were 33 participants in this study of which more than 80% were instructional designers from public post-secondary schools.

Spanish Context

In Spain the survey was distributed by emails to the research group and instructors who do not work under the title of “Instructional Designer” yet consider themselves instructional designers working on and teaching their courses. The participants are from four different universities in Spain: Universitat Rovira i Virgili (URV), Universidad de Murcia, Universidad de les Illes Balears, and Universidad d’Alacant. In the Spanish context, there is no official position of Instructional Designer; however, considering tasks and responsibilities that instructional designer are involved in, all teachers who have collaborated in the study do the same tasks as instructional designers in addition to their teaching and research. There were 19 participants from Spain in this study, and the distinguishing feature of these participants is that they are experts in educational technology. Therefore, their design and development of projects and courses, combining pedagogy, research, and technology, have been very rich.

Results and Discussions

One area of success in the study is that it served to increase the coverage of the areas of quality of online programs and the important role of instructional designers and their perspectives in the development of high-quality online courses. In addition, it expanded the literature base in this area of study, which has only recently begun to receive attention. Hypothesis testing for each of the eight categories was used to compare Spanish with Canadian designers. The hypothesis testing used in this study was the following (typically called the null hypothesis and denoted by H_0): H_0 is that the mean (average) value of the responses of each group are the same (i.e., the category is not dependent on a certain community).

As per the results, only for the “learner support” category, when comparing Spanish versus Canadian designers, we can conclude that there is enough evidence from the data to suggest that the two groups are different (the probability, α , that we have made an error in drawing this conclusion is 0.0457, which is below and very close to 0.05, i.e., 5%). Canadian (BC) designers focus more on the learner support category than Spanish designers.

For all the other categories, there is insufficient evidence to indicate a difference in the mean value of the responses for the two groups at the $\alpha = 0.05$ level of significance. In general, there are no differences among designers in both countries regarding their perspectives on importance of key elements of a quality course; the only difference, which is slight, is in the focus of designers on the learner support category. The chart below shows this slight difference of Spanish designers’ focus on the learner support category.

Figure 3: Focus: Comparison of BC and Spanish designers. Average rating is given on a scale of 1 to 5, where 5 means “Always the focus” and 1 means “Never the focus” of designers for each key area of course quality listed on the *x* axis.



Table 1 demonstrates the results of hypothesis testing.

Table 1: Hypothesis testing

Category	n	MEAN									
		Course Overview & Introduction	Learning Objectives	Assessment & Measurement	Instructional materials	Learner Interaction & Engagement	Course Technology	Learner Support	Accessibility		
Focus	BC Designers	4.21	4.21	4.26	3.94	4.07	4.08	3.73	3.31		
	Spanish Designers	3.95	4.27	4.07	4.04	4.27	4.12	3.24	3.15		
Importance	BC Designers	4.06	4.33	4.32	4.09	4.27	4.33	4.12	3.92		
	Spanish Designers	3.81	4.27	4.39	4.17	4.32	4.32	3.59	3.78		
STANDARD DEVIATION											
Focus	BC Designers	0.99	0.95	0.93	0.99	0.92	0.98	1.17	1.16		
	Spanish Designers	1.00	0.79	1.01	1.05	0.74	0.85	1.06	1.08		
Importance	BC Designers	0.96	0.81	0.87	0.88	0.78	0.80	0.92	0.92		
	Spanish Designers	1.01	0.72	0.73	0.84	0.68	0.72	0.89	0.83		
Two-sample z-test: Spanish Designer vs. BC Designer											
Importance		0.89	0.27	-0.29	-0.31	-0.22	0.05	2.07	0.59		
Focus		0.90	-0.27	0.65	-0.36	-0.85	-0.12	1.53	0.52		
Two-sample t-test: Spanish Designer vs. BC Designer											
Importance	2.01	0.90	0.27	-0.28	-0.30	-0.21	0.05	2.05	0.58		
	0.05	0.37	0.79	0.78	0.76	0.83	0.96	0.05	0.57		
Focus		0.90	-0.26	0.67	-0.36	-0.80	-0.12	1.49	0.51		
		0.37	0.79	0.51	0.72	0.43	0.91	0.14	0.61		

Research Limitations/Implications

One limitation of the study is that while it is designed to highlight the key elements for quality of online programs and to identify the impact of cultural differences in implication of those elements, the instructional design field is quite large and the instructional designer positions so varied and different within the same culture let alone a different culture that it is impossible to explore all relevant topics. Another limitation is that designers are embedded within a bounded cultural context that affects both explicit and implicit design decisions. However, in design decisions it is hard to distinguish which decisions are directly affected by the designer's culture and to what extent. Also, in some cases it is hard to distinguish explicit design decisions from implicit ones. Feedback from this study can serve as a resource for decision making about existing and additional quality assurance rubrics and frameworks and the role of context/culture in a quality online program.

Conclusion

Designers make conscious and unconscious decisions based on their native culture, but it is not clear whether their culture, their learning environments, or their levels of technology literacy cause the differences in design decisions. In this study, it was found that designers in both Spain and Canada generally considered the same key elements of the guideline important and critical for a good quality course. There was a slight difference among designers on how they focus on the learner support in their work. Nevertheless, it is not clear whether the difference in the learner support category in Spain is caused by the culture, training, technology, support, or other factors.

Socio-cultural concepts are broad, and it is recognized that a single study is not enough to effectively cover all relevant issues. Further research is therefore important. Researchers can, for instance, conduct the same study in other countries and investigate whether the results are similar. Additionally, one particularly important possibility for research is further examination of the cultural aspects present within instructional design and practiced by instructional designers and to determine the impacts of these cultural aspects

on the designers' work. The goal would be to help instructional designers create quality online courses/instruction that can help cross-cultural learners learn in ways that coincide with their culture, values, beliefs, and styles of learning. The courses designed with this approach would embrace the differences among learners and be enriched by the background diversity of the designer. The authors suggest that future research is required to improve the generalization of the existing study's results while identifying other factors, such as budget and technology literacy, that influence instructional designers' approach in developing high-quality online learning materials.

References

- Collis, B. (1999). Designing for differences: Cultural issues in the design of WWW-based course-support sites. *British Journal of Educational Technology*, 30(3), 201–217.
- Daniel, Sir John (2013). *A Guide To Quality in Online Learning*. Retrieved July 2013 from <http://www.contactnorth.ca/tips-tools/guide-quality-online-learning>.
- Grant, J. (2013). *Exploring the Realm of Culture Within Instructional Design*. Thesis in the Department of Education at Concordia University. Montreal, Quebec, Canada.
- Gudykunst, W. B., & Kim, Y. Y. (2003). *Communicating with Strangers. An Approach to Intercultural Communication*. Boston: McGraw Hill.
- Hando, A., & Ahern, T. (2012). Hofstede's model of cultural dimensions: A tool for understanding how background culture affects instructional designers. In *Proceedings of Society for Information Technology & Teacher Education International Conference 2012*, No. 1, pp. 1162–1170.
- Kinuthia, W. (2009). Reflecting on embedding socio-cultural issues into instructional design. *Multicultural Education & Technology Journal*, 3(4), 266–278.
- Lustig, M. W., & Koester, J. (2012). *Intercultural Competence: Interpersonal Communication across Cultures*. NY, USA: HarperCollins.
- Parrish, P., & Linder-VanBerschot, J. A (2010). Cultural dimensions of learning: Addressing the challenges of multicultural instruction. *International Review of Research in Open and Distance Learning*, 10(2), 1–19. Retrieved February 2013 from <http://www.irrodl.org/index.Php/irrodl/article/view/809/1497>.
- Schwier, R. A., Campbell, K., & Kenny, R. (2004). Instructional designer's observations about identity, communities of practice and change agency. *Australasian Journal of Educational Technology*, 20(1), 69–100.

Spencer-Oatey, H. (2008) Culturally speaking. culture, *Communication and Politeness heory*, 2nd edition. London: Continuum

Spencer-Oatey, H. (2012) What is culture? A compilation of quotations. *GlobalPAD Core Concepts*. Retrieved December 2012 from http://www2.warwick.ac.uk/fac/soc/al/globalpad/openhouse/interculturalskills/global_pad_-_what_is_culture.pdf

Thomas, M. K. (2003). Designer's dilemmas: The tripartite responsibility of the instructional designer. *TechTrends*, 47(6), 34–39 (Retrieved May 2013 from https://stjohns.digication.com/michael_k_thomas/Research_and_Conceptual_Articles).

Appendix F: Questionnaire — Quality Matters Survey

This rubric is based on the Quality Matters rubric standards 2011–2013 edition. The results will be used in a doctoral study research on course quality for online course development from an Instructional Designer’s perspective. Below, key areas of course quality are divided into 8 sections. Please rate each point using a scale 1 to 5 (5 means Always the focus and 1 means Never the focus when designing that specific area in your design). In column 2, rate each point based on its Importance in your design using a scale 1 to 5 (5 means Critical, 4 Very Important... and 1 means Unimportant).		5: Always	4: Often	3: Sometimes	2: Seldom	1: Never	NA	5: Critical	4: Very Imp.	3: Important	2: Somewhat Imp	1: Unimportant	NA
Course Overview and Introduction	<ul style="list-style-type: none"> • Instructions make clear how to get started and where to find various course components. • Students are introduced to the purpose and structure of the course. • Etiquette expectations (sometimes called “netiquette”) for online discussions, email, and other forms of communication are stated clearly. • Course and/or institutional policies with which the student is expected to comply should be clearly stated, or a link to current policies is provided. • Prerequisite knowledge in the discipline and/or any required competencies should be clearly stated. • Minimum technical skills expected of the student are clearly stated. • The self-introduction by the instructor is appropriate and available online. • Students are asked to introduce themselves to the class. 												
Learning Objectives (competencies)	<ul style="list-style-type: none"> • The course learning objectives describe outcomes that are measurable. • The module/unit learning objectives describe outcomes that are measurable and consistent with the course-level objectives. • All learning objectives are stated clearly and written from the students’ perspective. • Instructions to students on how to meet the learning objectives are adequate and stated clearly. • The learning objectives are appropriately designed for the level of the course. 												

Assessment and Measurement	<ul style="list-style-type: none"> • The types of assessments selected measure the stated learning objectives and are consistent with course activities and resources. • Specific and descriptive criteria are provided for the evaluation of students' work and participation and are tied to the course grading policy. • The assessment instruments selected are sequenced, varied, and appropriate to the student work being assessed. • Students have multiple opportunities to measure their own learning progress. • The course grading policy is stated clearly. 													
Instructional Materials	<ul style="list-style-type: none"> • The instructional materials contribute to the achievement of the stated course and module/unit learning objectives. • The purpose of instructional materials and how the materials are to be used for learning activities are clearly explained. • All resources and materials used in the course are appropriately cited. • The instructional materials are current. • The instructional materials present a variety of perspectives on the course content. • The distinction between required and optional materials is clearly explained. 													
Learner Interaction and Engagement	<ul style="list-style-type: none"> • The learning activities promote the achievement of the stated learning objectives. • Learning activities provide opportunities for interaction that support active learning. • The instructor's plan for classroom response time and feedback on assignments is clearly stated. • The requirements for student interaction are clearly articulated. 													
Course Technology	<ul style="list-style-type: none"> • The tools and media support the course learning objectives. • Course tools and media support student engagement and guide the student to become an active learner. • Navigation throughout the online components of the course is logical, consistent, and efficient. 													

Appendix G: Quality of Online Learning through Instructional Designer's Lens

**Proceedings of the International Perspectives on Technology-Enhanced Learning
Conference, Vancouver, Canada, July 2013**

<http://ocs.educ.ubc.ca/index.php/IPTEL/IPTEL2013/>

Afsaneh Sharif

**Centre for Teaching, Learning and Technology, University of British Columbia,
Canada**

Hosein Moeini

Faculty of Education (Alumni), University of British Columbia, Canada

Abstract: As we witness a greater inclination towards online learning, concerns about the quality of online learning and the practice of key professionals in course development are on the rise amongst educators. Defining quality and designing a quality online course can be challenging due to the continuously changing and emerging technologies within the online environments. The evolution of learners' and instructors' roles as well as continuously changing online learning environments/context urge designers to pay more attention to these factors while working on a quality course. While instructional designers refer to different guidelines and use many standards and frameworks to improve the quality of online learning, they need to be alert to the fact that these guidelines require modification and updates as the context and nature of online learning as well as learners' and instructors' expectations and perspectives change within this environment. Recent literatures indicate knowledge and skills that provide the existing basis for gaining and sustaining quality in online courses today will be different in the near future.

This study examines quality of online learning through instructional designers' perspectives since they play a critical role in meeting the learners' expectation of high quality online programs. The aim of this paper is to explore the quality of online learning

through a survey in which instructional designers were asked to rate the key areas of quality course development using a modified version of the Quality Matters rubric. The questionnaire was distributed in Just Instructional Design (Just ID) event in June 2012. The participants were selected purposefully based on their work experience within the field of instructional design. Most of the participants were from post-secondary institutions within British Columbia. The results of our study highlight areas instructional designers focus on and find most important as well as demonstrate the difference between the perspectives of instructional designers and learners. Although there has been a shift to learner centered online environments in the recent years, the results of the study indicate that important criteria such as learner support and accessibility have not been emphasized enough by the instructional designers. In light of the findings it seems that more research is required to improve the generalization of the existing study's results while identifying the numerous factors that influence instructional designers' approach in developing high quality online learning materials.

Introduction

Increasing demands for online learning, constant change in delivery formats, and the competitive market require educators to focus on the quality of online learning as well as the practice of those professionals involved in online course development. Instructional designers are among the key professionals involved in online course development and must constantly gain new skills and knowledge to respond to these demands and changes. In this paper, we look at the quality of online learning through an instructional designer's lens. From this perspective, we will examine the role of an instructional designer in an online course development process, and how instructional designers consider and evaluate quality in each step of this process.

Quality in Online Learning

As online learning grows in both popularity and controversy, measurable criteria to assess quality in online learning need to be determined. Due to the application of online learning in our time, there has been a convergence in distance education and on-campus instruction that extends the scope of online learning to encompass higher education too.

The growth of online education, development of new approaches for its delivery, its convergence with on-campus learning, and its global impacts have created considerable discussions in quality of online learning all around the world (Lee, 2010).

In spite of various e-learning quality assurance standards, different approaches have also emerged emphasizing practical aspects towards implementing those standards. In a recent study Bates (2012a) suggests nine steps in implementation of quality in online learning. These steps are considered as: i) decide how you want to teach online; ii) decide what kind of online course are needed; iii) work in a team; iv) build on existing resources; v) master the technology; vi) set appropriate learning goals for online learning; vii) create a strong online course structure / schedule; viii) communicate, communicate, communicate; and finally ix) innovate and evaluate.

On the other hand, Hosie, Schibeci and Backhouse (2005) studies on a context bound approach indicate the pedagogical quality of online learning materials in higher education. In fact in their approach, the quality of the instructional design remains an important consideration in evaluating online learning. They proposed a framework developed in Edith Cowan University that assesses the quality of online learning within three main areas: pedagogies, resources and delivery strategies. In this framework, pedagogies attributes are compromised of authentic tasks, opportunities for collaboration, learner centered environments, engagement, and meaningful assessment. The category of resources emphasizes attributes such as accessibility; currency; richness; purposeful use of the media; and inclusivity. Meanwhile, reliable and robust interface; clear goals / directions / learning plans; communication; appropriate bandwidth demands; equity / accessibility; and appropriate corporate style are described as the main attributes in delivery strategies (Hosie et al. 2005).

In general, since knowledge is still increasing continuously in short periods of time, it seems that an instructional designing perspective plays an important and critical role in determining quality of online learning and evaluation of related courseware in web-based learning environments.

Role of Instructional Designers in Quality of Online Learning

A considerable amount of literature in the field of online education has expressed concerns about the quality of online education and instructional strategies employed. In response, a variety of researchers, educators, organizations, accrediting agencies have developed guidelines, standards, benchmarks, rubrics and frameworks for assuring the quality of online learning (Quality Matters, 2011; Barker, 2002; Bourne and Moore 2004). All these guidelines and publications include similar criteria for online education and include strong institutional commitment, adequate curriculum and instruction, effectiveness, faculty-to-student ratios, attrition rates, student satisfaction and support, sufficient faculty support, instructional design, web design, technology, accessibility, consistent learning outcome assessment and institutional resources (Corry, 2008; Little, 2009; Wang, 2006).

Previous literatures have discussed and reviewed who instructional designers are, what they do as professionals, how designers spend their time, how they generally make decisions, and expert- novice differences; however, limited discussions have been around how we evaluate our daily work and quality of our design (Williams et al. 2011). With evolution of technology, our jobs and responsibilities change as well. Thomas (Thomas, M. K. 2003) asserts that instructional designers' job is more than effectiveness of their design; it is to create good design, good theory and do good. He explains that as instructional designers we need to move beyond the effectiveness of our design work and start with more innovative and critical approaches to design courses and instructions that will serve as a more "altruistic" agenda (p.34). He emphasizes that it is our responsibility to not only create good products but develop sound theories and do work with the notion to make the world a better place. (p. 37)

Williams et al. (2011) recently has taken a naturalistic-qualitative form of inquiry approach to find out how designers view and use evaluation for improvement, formally and informally, in their everyday design and context. Their analysis suggests instructional designers are learners who are trying to help other learners while working in complex and rapidly changing circumstances. They assert quality design from this view "must be

contextually sensitive and calls for continual evaluation of how one is responding to those changing circumstances” (p. 901). These authors suggest the integration of internal “development evaluation” into all aspects of instructional design would also be valuable and aid designers to improve their work through all the analysis, design, development, implementation, evaluation (ADDIE) stages. This view of seeing quality assurance as a process of continuous improvement is supported by many recent literature such as Bates (2012b) and Jung and Latchem (2012).

While all the above literatures emphasize on the quality of online education and the role of instructional designer as a key element in quality assurance process, it is not clear how designers do quality check in their daily work.

Method

Study Design

This study conducted exploratory research on the creation of a set of guidelines and design standards for quality of online course development. The main goal of the study is to gain an understanding of what elements are considered as key for quality design by instructional designers and how important the instructional designers consider each element in their course development purposes.

Study Setting and Population

In this study, participants were selected purposefully based on their work experience with instructional design. The study instrument was distributed in Just Instructional Design (Just ID) event in June 2012. The Just ID event takes place in British Columbia, Canada each year and, welcomes all instructional designers in public schools as well as educators involved in instructional design process from private companies. Most of the participants are from Post-Secondary schools. The event is informal and is aimed to be a session for instructional designers to exchange ideas, share best practices, discuss design challenges and network.

Study Instrument Completion

The instrument developed for this study is a rubric based on the Quality Matters rubric standards 2011-2013 edition. The rubric covers key areas of course quality under eight categories. Two columns were added to the rubric to gather information from instructional designers regarding their course development practices. For validation, the instrument was first distributed among the research group in Universitat Riveria i Virgili. Upon receipt of comments, and feedbacks, the updated instrument then was shared among a focus group, all instructional designers, from the University of British Columbia. The instrument was modified based on the feedback received. The two columns were labelled based on the required data and the rubric was finalized to be distributed among more participants.

Around 52 participants at the ID event were invited to participate in the study voluntarily and the results of the study would be shared with those interested in the study. The participants were asked to rate each point in the rubric under two categories, Importance and Focus. The Importance column is to gather information on how important designers find each point in the rubric in their course development process and the Focus is to find out how much the designers actually pay attention and focus on these elements when they design a course. Under Focus, 5 means Always the focus and 1 means Never the focus when designing that specific category/stage in course development process. Under Importance, participants were asked to rate each point based on its Importance in their design using a scale 1 to 5, 5 means Critical, 4 Very Important and 1 means Unimportant. There were 52 people registered at the Just ID event this year from which 37 completed the rubric. Out of thirty seven, 4 weren't fully completed and the back page was left blank. The total completed rubric was 33.

Data Analysis

At this stage, we used coding to separate each point under the eight key areas of course quality and then collected the results for each point. For example, under the Course Overview and Introduction area, the first point was labelled A and the last item was H based on the alphabetic order. First, we collected data for each point based on the "Focus"

of the participants. As per collected data, we found “Instructions make clear how to get started and where to find various course components” is the point where that majority of designers always focus when developing a course. Twenty eight participants out of thirty-three selected “Always’ under the Focus for this point on their design.

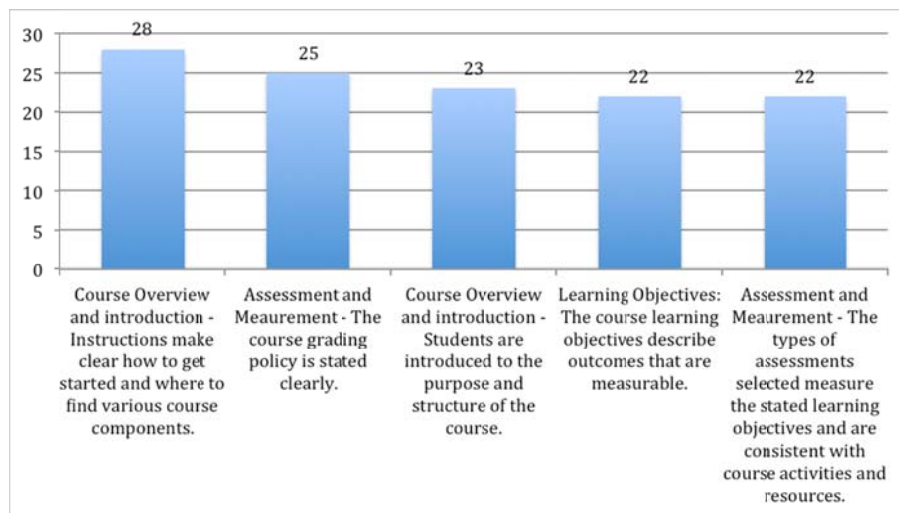


Figure 1- Focus: The points that are always the focus in design

We repeated the same coding and approach for the “Importance” part of the survey where we collected data for each point under the key areas. Again, point A under the Course Overview and Introduction was most voted for being critical under the Importance of the participants’ design. Twenty six out of thirty three found this point critical in their course development.

In the next step, we tried to narrow down our results and then sorted and compared selected data. In our comparison, we selected the top 5 in each column. We then compared our results with the Quality Matter’s rubric points for more findings.

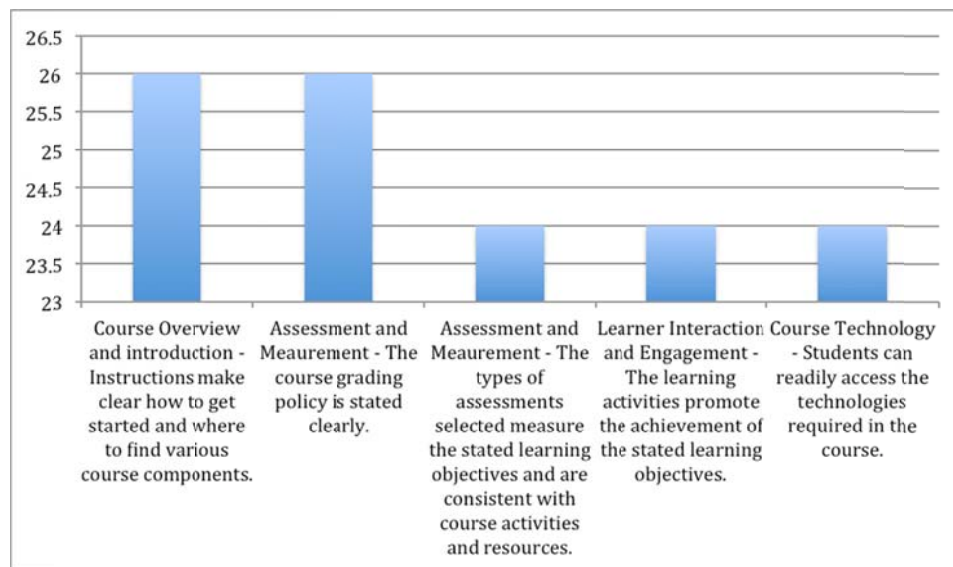


Figure 2 - Importance: Critical Points in Design

Results

Through a constant comparison among the codes, we discovered that the top two points that majority of designers always focus on and find critical in their designs are the same; all designers pay close attention to the course introduction and grading policy in their practice. These two points are listed below:

Course overview and introduction: Instructions make clear how to get started and where to find various course components.

Assessment and measurement: The course grading policy is stated clearly.

Based on the results of the survey, while the focus of instructional designers are mostly in the course overview, assessment and learning objectives areas, they find learner interaction and engagement as well as course technology very important in their design. The data also shows that instructional designers are less focused (and sometimes never focused) on learner support and accessibility. Variety and currency of instructional materials, state of expected time for assignments and feedback as well as access to required technologies used in the courses were among the least critical points through designers' lens. More than 20% of participants didn't find these points critical in their design.

In comparison of data collected and Quality Matters rubric points, we found the top two areas somehow neglected by instructional designers, both from focus and importance perspectives, are learner support and accessibility. While accessibility is one of the international standards for online development, such as World Wide Web standards, it seems that isn't taken seriously by many designers in their practice. Another area that is recognized and valued in Quality Matters rubric is learner support, which doesn't seem to get the appropriate focus and importance in course development process and instructional designers practice.

Conclusion

With the emerging of the new teaching and learning paradigms, universities are challenged to commit to quality in their online programs and monitor their performance continuously.

This study examined quality of online learning through instructional designers' perspectives since instructional designers play a critical role to meet the learners' expectation of high quality online programs. Although there has been a shift to learner centered online environment in the recent years, but ironically, the results of the study indicate that important dimensions such as learner support and accessibility have been neglected. In fact, different monitoring studies on comprehensive evaluation of cyber universities (Korean Ministry of Education, Science and Technology, 2007) confirm the lack of sufficient learner support as a serious problem in their learning process. Similarly, according to Leem and Lim (2007) there is an overall lack of support for learners involved in online learning. In their study they found that only 40% of the conventional universities surveyed offering e-learning courses or online programs, provided sufficient support to the learners. Lack of systematic or goal oriented support programs for online learners and its importance in students' learning process were also emphasized by Jung (2011). In that study, he concluded that universities and higher education institutes providing e-learning must establish a strong personalized and interactive learner support system if they are to provide a quality learning environment for their learners.

Meanwhile, possible explanations for ignorance of accessibility in this study may be considered as bureaucratic barriers, increased development costs and false assumption that with the new emerging technologies online content and materials are immediately accessible. In light of the findings the authors suggest that future research is required to improve the generalization of the results of the existing study while identifying the numerous factors that influence instructional designers' approach in developing high quality online learning materials.

References

- Barker, K. (2002). Candian Recommended E-Learning Guidelines. Retrieved January 20, 2012, from www.futured.com/pdf/CanREGs%20Eng.pdf
- Bates, T. (2012a). Nine steps to quality online learning: introduction. Retrieved July 15, 2012, from <http://www.tonybates.ca/2012/05/02/nine-steps-to-quality-online-learning-introduction/>
- Bates, T. (2012b) Book review: Quality assurance in distance education and e-learning. <http://www.tonybates.ca/2012/02/08/book-review-quality-assurance-in-distance-education-and-e-learning/>
- Bourne, J., & Moore, J. C. (2004) Elements of Quality Online Education. The Sloan Consortium, volume 5. Retrieved December 21, 2011, from sloanconsortium.org/publications/books/vol5summary.pdf
- Corbin, J., & Strauss, A. (2008). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. Third Edition. Sage Publications, Inc. pp. 148-150.
- Corry, M. (2008). Quality in Distance Learning. *Distance Learning*. Volume 5. Issue 1, pp. 88–91.
- Hosie, P., Schibeci, R., & Backhaus, A. (2005). A framework and checklists for evaluating online learning in higher education. *Assessment & Evaluation in Higher Education*. Vol. 30, No. 5, pp. 539–553.
- Jung, I. (2011). The dimensions of e-learning quality: from the learner's perspective. *Educational Technology Research and Development*. 59: 445–464.
- Jung, I., & Latchem, C. (2012). Quality Assurance and Accreditation in Distance Education and e-Learning. Routledge.
- MEST. (2007). A Report on Comprehensive Evaluation of Cyber Universities in 2007. Seoul: Korean Ministry of Education, Science and Technology.
- Lee, J. W. (2010). Online support service quality, online learning acceptance, and student satisfaction. *Internet and Higher Education*, Vol. 13, 277–283.

Leem, J. H., & Lim, C. (2007). The current status of e-learning and strategies to enhance educational competitiveness in Korean higher education. *The International Review of Research in Open and Distance Learning*, 8(1). Retrieved November 12, 2012, from <http://www.irrodl.org/index.php/irrodl/article/view/380/763>.

Little, B. B. (2009). Quality assurance for online nursing courses. *Journal of Nursing Education*. Volume 48, Issue 7, pp. 381–387.

MEST. (2007). A report on comprehensive evaluation of cyber universities in 2007. Seoul: Korean Ministry of Education, Science and Technology.

Quality Matters (2001). Quality Matters Rubric Standards 2011–2013 edition. Marylandonline. Retrieved November 22, 2011, from www.qmprogram.org/files/QM_Standards_2011-2013.pdf.

Thomas, M. K. (2003). Designers' dilemmas: The tripartite responsibility of the instructional designer. *TechTrends*. Volume 47, No. 6, pp. 34–39.

Wang, Q. (2006). Quality assurance—Best practices for assessing online programs. *International Journal on E-Learning*, 5, 265–274.

Williams, D. D., South, J. B., Yanchar, S. C., Wilson, B. G., & Allen, S. (2011). How do instructional designers evaluate? A qualitative study of evaluation in practice. *Educational Technology Research and Development*. Volume 59, No. 6. pp. 885–907.

Appendix H: Students' Questionnaire

This rubric is based on the Quality Matters rubric standards 2011-2013 edition. The results will be used in a doctoral study research on course quality for online course development. Below, key areas of course quality are divided into 8 sections. Please rate each point from your perspective (as an online student) using a scale 1 to 5 (5 means you consider it Critical for your learning, 4 Very Important... and 1 means Unimportant).		5: Critical	4: Very Imp.	3: Important	2: Somewhat important	1: Unimportant	NA
Course Overview and Introduction	• Instructions to be clear on how to get started and where to find various course components.						
	• You are introduced to the purpose and structure of the course.						
	• Etiquette expectations (sometimes called "netiquette") for online discussions, email, and other forms of communication are stated clearly.						
	• Course and/or institutional policies with which you are expected to comply should be clearly stated, or a link to current policies is provided.						
	• Prerequisite knowledge in the discipline and/or any required competencies should be clearly stated.						
	• Minimum technical skills expected of you are clearly stated.						
	• The self-introduction by the instructor is appropriate and available online.						
Learning Objectives (competencies)	• You are asked to introduce yourself to the class at the beginning of the course.						
	• The course learning objectives describe outcomes that are measurable.						
	• The module/unit learning objectives describe outcomes that are measurable and consistent with the course-level objectives.						
	• All learning objectives are stated clearly and written from the student's perspective.						
	• Instructions to you on how to meet the learning objectives are adequate and stated clearly.						
• The learning objectives are appropriately designed for the level of the course.							

Assessment and Measurement	• The types of assessments selected measure the stated learning objectives and are consistent with course activities and resources.								
	• Specific and descriptive criteria are provided for the evaluation of students' work and participation and are tied to the course grading policy.								
	• The assessment instruments selected are sequenced, varied, and appropriate to your work being assessed.								
	• You have multiple opportunities in the course to measure your own learning progress.								
	• The course grading policy is stated clearly.								
Instructional Materials	• The instructional materials contribute to the achievement of the stated course and module/unit learning objectives.								
	• The purpose of instructional materials (such as readings) and how the materials are to be used for learning activities are clearly explained.								
	• All resources and materials used in the course are appropriately cited.								
	• The instructional materials are current.								
	• The instructional materials present a variety of perspectives on the course content.								
• The distinction between required and optional materials is clearly explained.									
Learner Interaction and Engagement	• The learning activities promote the achievement of the stated learning objectives.								
	• Learning activities provide opportunities for interaction that support active learning.								
	• The instructor's plan for classroom response time and feedback on assignments is clearly stated.								
	• The requirements for student interaction are clearly articulated.								

Course Technology	• The tools and media support the course learning objectives.								
	• Course tools and media support student engagement and guide the student to become an active learner.								
	• Navigation throughout the online components of the course is logical, consistent, and efficient.								
	• Students can readily access the technologies required in the course.								
	• The course technologies are current.								
Learner Support	• The course instructions articulate or link to a clear description of the technical support offered and how to access it.								
	• Course instructions articulate or link to the institution's accessibility policies and services (for students with disability).								
	• Course instructions articulate or link to an explanation of how the institution's academic support services and resources can help you succeed in the course and how you can access the services.								
	• Course instructions articulate or link to an explanation of how the institution's student support services can help you succeed and how you can access the services.								
Accessibility	• The course employs accessible technologies and provides guidance on how to obtain accommodation.								
	• The course contains equivalent alternatives to auditory and visual content (for students with disability)								
	• The course design facilitates readability and minimizes distractions.								
	• The course design accommodates the use of assistive technologies (for students with disability)								

Note: Please write here any other points that you find important for a good quality online course from a student perspective, which is not included above.

Appendix I: Interview Consent Form

The Researcher

Thank you for agreeing to participate in this study. This form details the purpose of this study, a description of the involvement required and your rights as a participant.

The Research

The purpose of this study is to gain insight into instructional designers who are working on online and blended course development. The focus will be on how they assure a good quality course. The study's findings will add to the scarce literature describing quality assurance for online course development.

The Process

Your participation in the study will involve an interview with an estimated length of one hour and collection of demographic survey data. This interview will be digitally taped and transcribed, unless requested otherwise by the participant. There may be additional follow up/clarification through email, or in person, unless otherwise requested by participant. Privacy will be ensured through confidentiality. Participation is voluntary and the interviewee has the right to terminate the interview at any time.

Insights gathered from you and other participants will be used in writing a qualitative research thesis, which will be read by my academic supervisors, graduate committee and made available through the Universitat Rovira I Virgili. The research may also be submitted for publication. Though direct quotes from you may be used in the paper, your name and institution name will be kept anonymous.

Please contact me, Afsaneh Sharif, with any questions or concerns.

Email: afsaneh.sharif@ubc.ca

Phone: 604-822-8411

Risk

This study poses little to no risk to its participants. I will do my best to ensure that confidentiality is maintained by not citing your actual name within the paper. You may choose to leave the study at any time, and may also request that any data collected from you not be used in the study.

By signing below I acknowledge that I have read and understand the above information. I am aware that I can discontinue my participation in the study at any time.

Signature _____

Date _____

Appendix J: Interview Questions

1. How long have you been working as an instructional designer?
2. What is your educational background?
3. What is your work experience/background overall?
4. What instructional design model do you use in your daily work when designing courses?
5. How do you check/assure quality in your design? Do you follow any standards or rubrics to ensure quality in your course development?
6. Do you have a policy or a set of standards to follow in your department to ensure a good quality online course?
7. If you were given unlimited resources, what would your online course look like? What would be your ideal interaction among students/instructor(s)/content?
8. In your ideal design/model, what are the most emphasized quality parameters/areas (course overview and introduction, learning objectives, assessment and measurement, instructional materials, learner interaction and engagement, course technology, learner support and accessibility)?
9. Do you prefer/like to have a university (an institutional) standard/policy for quality of online learning?

Appendix K: Course Planning

This document should be completed by the course author/instructor:

COURSE TITLE:

COURSE CREDITS AND DURATION:

COURSE MODALITY (ONLINE, BLENDED,...):

COURSE DESCRIPTION:

PREPARE BY:

DATE:

1. STUDENT DESCRIPTION

In this section, explain who are the target students and for whom the course is designed.

2. COURSE OBJECTIVES/OUTCOMES

List your course outcomes/objectives here (a short paragraph or a bullet form/list).

EXAMPLE:

BY THE END OF THIS COURSE, STUDENTS WILL BE ABLE TO:

- IDENTIFY...
- SELECT...

You can find more information on [HOW TO WRITE MEASURABLE LEARNING OUTCOMES](http://wiki.ubc.ca/Sandbox:How_to_Write_OUTCOMES) at http://wiki.ubc.ca/Sandbox:How_to_Write

3. COURSE STRUCTURE

How is your course structured and organized? How are you planning to break down the course content? What are your course “building blocks”? Is it Units, Chapters, Modules, etc.

Please choose one of the following:

Unit→Module→Topics

Unit→Lessons→Topics

Module→Topics

Others

If others, please specify the structure of your course below:

Please provide the numbers and titles of your course “building blocks”. For example if your course is divided into modules and topics provide the following information:

- Numbers and titles of the modules
- Numbers and titles of topics in each module

Example:

Module 1: Introduction to Culture

Topic 1: What do we mean by Culture?

Topic 2: Implicit and Explicit Culture

Topic 3: Role of Culture in Our Daily Life

4. COURSE MATERIALS AND COMPONENTS

Note: When selecting instructional materials, consider how they contribute to the achievement of the stated course learning outcomes. Make sure they are current and cover a variety of perspectives on the course content.

What are the required readings for the course? Text books (author, edition, year, ISBN...)

What are the supplementary readings for the course?

Audio/Video component:

Number of videos/audios?

Duration of videos/audios?

Are these videos in the public domain?

Do we need to clear the copyright for these videos/audios?

Do we need to shoot new video clips? If yes, how many? Where? When?

What Web 2/Internet/email/discussions/communication tools are you planning to use in the course?

Other multimedia and materials?

For any copyright materials, provide the copyright holder contact information. You need to obtain copyright permission yourself or through your university services or by contacting the copyright holder directly. You also need to check with your university for Fair Dealing policies if you plan to use any materials under that policy. To find similar articles, images, or videos, check public domain resources such as:

1. Creative Commons: <http://creativecommons.org>
2. Wikipedia: http://en.wikipedia.org/wiki/Main_Page
3. Flickr: <http://www.flickr.com>

Note: Please ensure that you allot a section to Course Overview in which you provide learners with instructions on how to get started and where to find various course components. This section should cover topics such as netiquette, learner support, technical support, minimum technical skills, institutional policies and resources, prerequisite knowledge in the discipline, class introduction and bio postings, accommodation of students with disabilities, as well as instructor's bio and expectations of the course.

5. ASSESSMENT AND ASSIGNMENT

Make a list of the number and type of the assignments here. Add the instructions for preparation of graded assignments as well as instructions for use of self-test, quizzes, and study questions here. Provide instructions/information on how student are going to be evaluated. Provide the grading system for the course as well as a rubric for each assignment/assessment.

Note: Ensure assignments and activities provide opportunities for interaction that support active learning and promote the achievement of the stated learning outcomes. Students should have multiple opportunities to measure their own learning process.

Resources on Assignments:

Assessing Learning in Online Courses

http://itle.okstate.edu/fd/online_teaching/assessment.html

Assessment in Online Courses: Practical Examples

educause.edu/ir/library/powerpoint/EDU03150.pps

Developing Engaging Online Assessment Strategies (Tony Bates)

<http://www.tonybates.ca/2011/02/24/developing-engaging-online-assessment-strategies/>

Online Assessment Strategies: A Primer http://jolt.merlot.org/vol6no1/sewell_0310.pdf

Principled Assessment Strategy Design for Online Courses and Programs

<http://www.ejel.org/front/search/index.html>

6. INSTRUCTOR'S ROLE

Provide information on the instructor's role, contact information, ways of communication, and office hours in this section. This will allow students to know when to expect to hear from their instructors.

Instructor's Roles Example:

- Facilitator, who assists, directs, and stimulates the learning during the course.
- Stimulator, particularly in respect to discussion groups in the Forum. The instructor will pay equal attention to each discussion group and, if necessary, will pose questions and present alternative views that will stimulate discussion. He/she will also be challenging the conclusions that the discussion groups have reached.
- Monitor, who can oversee the discussion groups in the Forum, ensuring that the exchanges remain focused on the module objectives. The instructor will also act to mediate when difficult situations arise during discussions within a group.
- Specialist, who can provide answers on points of knowledge or course related questions.

- Evaluator, who will grade the assignments, the final examination, and students' participation in the discussions.

7. HOW TO PROCEED THROUGH THE COURSE

In this section provide information on how students should work through the course: where they need to start, how to complete their activities, and what is expected from them.

8. SAMPLE OF LESSON/TOPIC AND ASSIGNMENT

In this section develop one of your building blocks of the course; a lesson with its activities and assignments. It is recommended to develop this lesson as a prototype online that can be modified/used as a template for the rest of the course content/lessons.

Note: When developing the “course planning document” and a sample lesson, think about how you might use some elements of the online course in your face-to-face or blended classroom.

At the end of your course planning check the following guideline and rubric to ensure you have covered the key elements for a quality online course.

A Guide to Quality in Online Learning: <http://www.contactnorth.ca/tips-tools/guide-quality-online-learning>

Quality Matters Rubric: www.qmprogram.org/files/QM_Standards_2011-2013.pdf

Appendix L: What Should a Quality Online Course Look Like? The First Step in Design — Course Planning

**Presented at EFQUEL Innovation Forum, Barcelona, Spain, September 2013,
<http://eif.efquel.org/programme/quality-approaches-and-methods-presentations/>**

Afsaneh Sharif: Centre for Teaching, Learning and Technology, University of British Columbia, Vancouver, Canada

Dr. Merce Gisbert: Department of Pedagogy, Universitat Rovira i Virgili, Tarragona, Spain

Abstract:

E-learning has become a diverse and dynamic world in which learners and educators continuously bring new methods, perspectives, or strategies for learning. Constant change in delivery formats, increasing demands for e-learning programs, and a competitive market compel educators to focus on the quality of online courses. In this presentation, we investigate the quality of an online course through its first phase of the design — the planning stage. From this perspective, we will examine the details and requirements that need further discussion and revision in this phase. We will then share with participants the course planning document developed with the aim to improve the course development process toward a quality online course.

The growth of e-learning, its convergence with on-campus and blended learning, new approaches for its delivery, and its global impacts on education have created considerable discussion concerning the quality of e-learning all around the world. Most countries and higher education institutions have their own systems of quality control and quality assurance in place. Many have developed different guidelines, rubrics, and resources/strategies for this purpose. In Europe, quality assurance of higher education is one of the key development areas in the effort to construct a European Higher Education Area. The European Foundation for Quality in eLearning (EFQUEL), for example, is a European membership organisation that was established in 2005 and funded by the

European Commission. Its main mission is to enhance the quality of e-learning in Europe by providing services and support for all stakeholders.

Defining quality and designing a quality online course can be challenging because of the continuously emerging and changing technologies within the online environments. While educators refer to different guidelines and use different frameworks/standards to improve the quality of e-learning, they need to pay attention to the fact that these guidelines need updates and modification, as the context and nature of e-learning is evolving. They need to modify/add to their toolbox to be able to respond to constant change of learners' and instructors' expectations and perspectives within e-learning environments.

In this presentation, we are going to focus on the first phase, planning, of an online course development process. This phase starts once an online course development is approved/budgeted. It includes conducting a needs analysis, which covers analysis of learners' characteristics, context, as well as instructional problems and instructional goals. During this phase, the course author/instructor is encouraged to work with a project manager/instructional designer to outline key objectives, teaching methodologies, planning details, schedules, and goals, much of which will be collected via the course planning document that is presented here. Once the course planning document is complete, we suggest that it be sent to a department appointed academic reviewer to ensure the alignment of the course content with the program/department's learning goals. Failure to plan is planning to fail; in other words the more time you spend on planning, the closer you come to a quality online course. In this presentation, we will share with you an example of a course planning document that can be a good start/guideline for development of a quality online course.