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Background

This report is a summary of findings of a research-focused review of the literature centered around instructor and online teaching competencies. The research builds upon a previous study by Jurgen Hilke and others that was completed in 2012. In this study, Hilke and colleagues categorized multiple instructor and online teaching competencies that were identified in the literature at that time. These included:

- Institutional context
- Technologies
- Instructional design
- Pedagogy
- Assessment
- Social presence
- Discipline expertise

Additionally, Hilke identified myriad competency rubrics and standards, and this report builds upon and supports that work.

The following pages contain a general analytical summary of the new research, an annotated bibliography of the rubrics and standards, and a bibliography of the articles that relate to instructor and online teaching competencies spanning from 1995 to 2015.

Online instructor and teaching competencies: Literature review for Quality Matters
Summary of Research

Queries were targeted at a database of journals, conference proceedings, and other publications from a wide array of disciplines. Keywords included "online instructor competency", "online teaching and competencies", "e-learning and instructor competency", "online teaching and quality", "online instructor competency", online teaching and competencies", "e-learning and instructor competency", "online teaching and quality", "web based teaching and quality", "online teaching and quality", "online teaching effectiveness", "e-learning and teaching quality", "teaching quality and distance education", and "teaching competency/competencies and distance education."

Published articles on the above that are related to this study originated from a wide range of journals, a few conference proceedings and other publications. The following is a list of publications (if more than one article in publication has been dedicated to online teaching competency the number of articles is noted in parenthesizes) including Academy of Management Learning and Education, Active Learning in Higher Education, Advance Principles of Effective eLearning, American Journal of Distance Education, The Australasian Society for Computers in Learning in Tertiary Education, Assessment in Education, Australasian Journal of Educational Technology (2), Australian Journal of Teacher Education, British Journal of Educational Technology (6), Campus Wide Information Systems (4), College Teaching, Community College Journal of Research and Practice, Computers & Education (3), Contemporary Educational Technology, Contemporary Issues in Technology and Teacher Education, Creative Education, Distance Education (8), Education and Information Technologies (2), Education and Training, Educational Media International, Educational Technology & Society, Educational Technology Research and Development (3), EDUCAUSE Quarterly, E-Journal of Instructional Science and ©2016 MarylandOnline

Online instructor and teaching competencies: Literature review for Quality Matters Technology, eLearning Papers, European Journal of Teacher Education (2), Family and Consumer Sciences Research Journal, Hanaover Research Council, Higher Education, Informatics in Education, Information Technology Journal, Innovate (2), Innovation, Innovative Higher Education (3), Instructional Science (2), Interactive Learning Environments, International Association for K-12 Online Learning, International Journal of Computer Applications, International Journal of Engineering and Technology, International Journal of Instructional Media, International Journal of Instructional Technology and Distance Learning (2), International Journal of Learning, International Journal of Medical Informatics, International Review of Research in Open and Distance Learning, Internet and Higher Education (7), JALN, Journal of Adult Education, Journal of Asynchronous Learning Networks (7), Journal of Computer-Mediated Communication, Journal of Computing in Higher Education, Journal of Digital Learning in Teacher Education, Journal of Educational Technology & Society, Journal of Faculty Development, Journal of Information Systems Education, Journal of Information Technology Education, Journal of Library & Information Services in Distance Education, Journal of Management Education, Journal of Nursing Education, Journal of Online Learning and Teaching, Journal of Professional Nursing (2), Journal of Research in Innovative Teaching, Journal of Systemics, Journal of Technology and Teacher Education (2), Journal of the Idaho Academy of Science, Journal of the Learning Sciences, Language Teaching, Learning, Learning, Media and Technology, Malaysian Online Journal of Instructional Technology (MOIT), Medical Teacher, MERLOT Journal of Online Learning and Teaching (2), Most, New Directions in Adult Education and Human Resource Development, Nurse Education in Practice, Nurse Education Today, Nurse Educator (2), Online (2), Online Journal of Distance Learning Administration, Online Teaching and Learning, Performance Improvement, Procedia – Social

Online instructor and teaching competencies: Literature review for Quality Matters and Behavioral Sciences (7), Proceedings asci lite Melbourne 2008, Proceedings of Society for Information Technology & Teacher Education International Conference 2008, Proceedings of the 9th Annual Teaching learning Forum, Quarterly Review of Distance Education (6), ReCALL (2), Review of Educational Research, Southern Regional Education Board, Studies in Higher Education, Teachers College Record, Teaching and Teacher Education (2), TEACHING Exceptional Children, Teaching of Psychology, Technology for Education (T4E) 2010 International Conference, TechTrends (3), The International Review of Research in Open and Distance Learning, The Internet and Higher Education (4), The Journal of Continuing Education in Nursing (2), The Journal of Educators Online, The Journal of Faculty Development (2), The Language Learning Journal, The Turkish Online Journal of Distance Education (3), Third International Conference on eLearning for Knowledge-Based Society, World Wide Web, YC Young Children.

Almost 120 different journals that have published articles related to instructor and online teaching competencies. Several initial observations can be made from the above list:

- Distance education (online education) is ubiquitous in today's higher educational
 landscape and scholars interested in online teacher competencies are focusing on
 publishing their research in journals that may not necessarily be traditional distance
 education journals.
- Because of the ubiquitous nature of distance/online education., the research that is being conducted and published is also becoming widespread across a multi-disciplinary field of educators.
- This writer hypothesizes that educators that are researching and publishing their work may not be fully cognizant of, or interested in the broader academic field of distance

- Online instructor and teaching competencies: Literature review for Quality Matters education research. Likely, their academic disciplinary focus may be on those journals and publications that are directly related to their academic disciplines. A suggestion is that scholars who have established a foundation in distance education research should continue to create an awareness of traditional distance education journals across disciplines so that their colleagues can build upon past research and not attempt to "reinvent the wheel" or duplicate efforts unnecessarily.
 - Distance and online learning and technology focused journals (e.g. Distance Education, British Journal of Educational Technology, Educational Technology Research and Development, International Journal of Instructional Technology, International Review of Research in Open and Distance Learning, Journal of Asynchronous Learning Networks, MERLOT Journal of Online Learning and Teaching, Online, Quarterly Review of Distance Education, The Internet and Higher Education) contained the most articles related to teacher competencies. Further analysis of the results is needed to determine percentages of articles in these types of journals vs. journals from the remaining academic disciplines. Additionally, an analysis of the origins from specific academic disciplines would be of interest (e.g. healthcare, K-12).

An initial tally of articles over the years resulted in over 190 new articles in journals and conference proceedings identified since Hilke and colleagues' report. The table below provides the number of new articles and a breakdown of publication dates. The new column represents the results from this 2016 report, and the Hilke column represents the results from that particular study.

As the reader will notice, a fairly significant number of new articles were discovered that range over the course of years that Hilke and colleagues reported. Possible reasons for this may ©2016 MarylandOnline

Online instructor and teaching competencies: Literature review for Quality Matters be that a) journals previously queried have now made older articles available online, b) a wider range of journals was queried, or c) additional key search terms were used.

No missing competency areas were identified that should be added to Hilke's original list. A more granular analysis might provide new insights and opportunities to refine or build upon that original work.

Number of publications per year

Year	New	Hilke
2015	7	0
2014	16	0
2013	15	0
2012	15	0
2011	17	5
2010	18	4
2009	23	4
2008	13	2
2007	10	3
2006	21	3
2005	8	4
2004	7	10
2003	4	15
2002	4	11
2001	3	19
2000	3	17
1999	2	9
1998	1	4
1997	0	2
1996	7	2
1995	1	3
1994	0	0
1993	1	0
1990	0	3
1982	0	1
1979	0	1
1964	0	1
1962	0	1
nd		1
totals	196	125

Table 1

Online instructor and teaching competencies: Literature review for Quality Matters

Competency Standards for Teaching Online

Annotated Review of Competency Rubrics and Standards (Hilke 2011 section)

There are a number of competency standards and competency rubrics to be found in the relevant literature. We have selected and annotated them here to represent differences in approach, amount of detail and institutional provenance. This section has been slightly edited from Hilke's original list in some areas in order to update the APA style of the source.

Smith, T. C. (2005). Fifty-One Competencies for Online Instruction. *The Journal of Educators Online*, 2, 1–18. Retrieved from http://web.kennisnet2.nl/attachments/session=cloud_mmbase+1690923/Ted_Smith_Final.

Abstract: "The effectiveness of distance learning must be measured in results—quality learning. Learner-center programs and competent instructors are two oft-cited keys to success in higher education. Teaching online requires specific skill sets (competencies). This paper identifies and describes 51 competencies needed by online instructors and outlines an instructor-training program that satisfies 3 of the 24 benchmarks for excellence recommended by the Institute for Higher Education Policy".

(There is no definition of 'competency', the 51 items are plucked from relevant literature. and listed in alphabetical order. Not grouped by instructor roles or general areas, but the categorization applicability to 'before', 'during' and 'after' course delivery is useful).

Darabi, A. A., Sikorski, E. G., & Harvey, R. B. (2006). Validated Competencies for Distance Teaching. *Distance Education*, 27(1), 105–122. http://doi.org/10.1080/01587910600654809

Access: http://www.informaworld.com/smpp/content-a747655809

Abstract: "The International Board of Standards for Training, Performance and Instruction (IBSTPI) provides a methodology for drafting and validating teaching competencies. This study

applied the IBSTPI methodology to identify and validate distance education (DE) instructor competencies. The research team's review of DE literature in the past 10 years resulted in a list of 20 competencies. The list was reviewed by 18 distance learning professionals as subject matter experts (SMEs). The SMEs' feedback and comments along with the performance statements developed for the competencies were analyzed which resulted in 54 task statements describing the instructional activities of a DE instructor. These tasks were then rated by 148 instructors in terms of importance, frequency of performance, and the perception of relative rime spent on each task. The task analysis resulted in a list of 17 most frequently performed tasks that we linked back to the corresponding original competencies. Analysis of these data pointed out the significant characteristics of teaching from a distance including interaction with learners and technological and logistical requirements. This article presents the methodology and findings of this study and discusses their implications for recruitment, selection, and training of DE instructors".

(The validation method involving expert practitioners from both military and non-military institutions seems helpful in that it allows for the ranking of competencies by tasks measured by importance, frequency of performance, and time spent. Rubric is not linked to instructor roles.)

Varvel, V. E. (2007). Master Online Teacher Competencies. *Online Journal of Distance Learning Administration*, 10, 1–47. Retrieved from http://www.westga.edu/~distance/ojdla/spring101/varvel101.htm

Online education continues to flourish across the globe. As we pass from the early adopter phase into acceptance by the masses, the number of instructors taking part in online education grows. Although qualified in their field, many instructors have no education in the methods of instruction or facilitation. Those that have such training often do not have any additional training or experience specifically in the field of distance or online education. But what should such training consist of, and what additional faculties of an individual help one to be a proficient online educator? Furthermore, once a listing of such skills or competencies has been developed, how can or should they be assessed and when should such an assessment occur? This paper discusses the process of constructing a competency document for online instructors. In addition, issues and axioms that developed as an online instructor competency list, geared to the needs of a particular program, was generated. Implications for assessment of program and individuals are discussed. The competencies that were delineated are then discussed followed by the rationales for their choice and categorization.

(Very thorough. The rubric identifies 7 instructor roles, each grouped into subdivisions of competencies. Core competencies are assigned to the concept of a "competent" instructor", additional competencies are assigned upwardly affiliated with a category and instructor role.)

Abbreviated as <ION>

Penn State University: Competencies for Online Instructors

Access: http://ets.tlt.psu.edu/learningdesign/onlinecontent/instructors

Abstract: "Many factors influence the outcomes of instruction. The instructor's role in the success of instruction, including learner retention and achievement, is clearly documented. In online learning, this role is even more critical, as the instructor has to help learners overcome potential barriers caused by technology, time, and the way interactions with learners and with the instructor occur. The following online instructor competencies come from instructional theory and research, as well as many years of combined (mine and others') experience as an online learner, instructor, and instructional designer.

The actions are divided into five competency areas: administrative, design, facilitation, evaluation, technical.

There is some overlap between them. The individual actions are general and apply mainly to asynchronous instruction. Some contexts may require additional or different actions. Credible content knowledge and obtaining help as needed to complete these actions are assumed to be present and are not addressed here."

(The five competency areas provide a grid for 30 competencies that articulate measurable instructor actions such as "Provides opportunities for hands-on practice and application".)

Shannon Young, shannony@umich.edu

Project IDEAL Support Center, University of Michigan, September 20, 2006

Access: http://www.adultedonline.org/DistTchCompetenciesFinal.pdf

Abstract: This "is the list of 49 distance teaching competencies that underlie *AdultEd Online's Distance Teaching Self-Assessment*. The competencies are based on a review of highereducation and business literature on distance education competencies and were tailored toreflect the unique skills and dispositions needed by teachers of ABE, ASE, and ESOLlearners. The competencies reflect the input and expertise of over fifty distanceeducation teachers and consultants".

(The 49 competencies are grouped in eight areas: Recruitment, Intake and Orientation, Communication, Personal Dispositions, Student Support, Instruction, Curriculum, and optionally Course Development. The competencies articulate mostly measurable instructor activities such as "Can develop supplemental learning materials for learners who need more help than a curriculum provides".)

International Association for K-12 Online Learning (originally published by North American Council for Online Learning (NACOL) in 2008)

Access:

 $\frac{http://www.inacol.org/research/nationalstandards/NACOL\%20Standards\%20Quality\%20Online\%20Teaching.pdf$

Abstract: *National Standards for Quality Online Teaching* is designed to provide states, districts, online programs, and other organizations with a set of quality guidelines for online teaching and instructional design. The initiative began with a thorough literature review of existing online teaching quality standards, a cross-reference of standards, followed by a research survey to NACOL members and experts to ensure the efficacy of the standards adopted.

(NACOL has endorsed and incorporated the SREB" Standards for Quality Online Teaching and Online Teaching Evaluation for State Virtual School. NACOL also incorporated NEA Guide to Teaching Online Courses, Fifty-one Competencies for Online Instruction, the Ohio Department of Education's Ohio Standards for the Teaching Profession, and the Electronic Classroom of Tomorrow's Teacher Evaluation Rubric.)

Abbreviated as <NACOL(SREB)>

AYDIN, C. H. (2005). Turkish Mentors' Perception of Roles, Competencies and Resources for Online Teaching. *The Turkish Online Journal of Distance Education*, *6*(3), 58–80. Retrieved from

http://psu.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMw3V25TsQwELWWrWgQpzglVzQQlNt2QQELCBoaFiSqKD6yLIgEZdmGiq9A4vf4EsaxcyxQISrKWFGceF7miF_eIBT4B67zxSdAlJQyU65HWSxdXwDQQuZFMswgBaCE13-PGTpU7-0bRepfGH5aPmiZIq3OU5STms3ANNndclgqBZLCdrse1Jkz1Mz2d0XzRb9Satg

Access: http://tojde.anadolu.edu.tr/tojde19/articles/caydin.htm

Abstract: "Due to qualified instructor shortage and some other administrative issues such as intellectual property, Anadolu University uses mentors rather than instructors in its completely online degree program, the Information Management Program (IMP). It is an associate degree (two-year long) program that requires the use of online technologies in instruction processes. This program is also the first online undergraduate level degree program in Turkey. It aims to help students (1) gain the necessary skills to use required business software effectively and efficiently, (2) acquire the concepts and experience of Information Management in business, (3) attain the collaborative working experience and institutional communication through the Internet environment, and (4) acquire the necessary experience for the enterprise and management of the Internet environment.

There are 55 mentors, entitled "Academic Advisor", employed primarily for providing the pedagogical support in IMP. The main duties of these mentors include, providing guidance to students when they are working on their assignments, answering their questions regarding assignments and topics, and assessing assignments".

("The main goal of this study is to examine the Turkish online mentors' perception of roles, competencies and resources for successful online teaching. In other words, the study aims to identify roles, competencies and resources for online teaching in Turkey by asking mentors what they think of the roles they should perform, competencies and resources they should possess, in order to teach online successfully.")

SREB Standards for Quality Online Teaching, August 2006

Access:

http://www.sreb.org/programs/EdTech/pubs/PDF/06T02_Standards_Online_Teaching.pdf

Abstract: "The standards for quality online teaching in this report were developed by knowledgeable, experienced resource persons from K-12 and postsecondary education, drawn from national and regional organizations, SREB state departments of education, and colleges and universities. Through extensive collaboration and sharing with SREB staff over many months, their work culminated in specific standards that SREB states can use to define and implement quality online teaching. Through broad acceptance of these standards, SREB states will be able to provide more students with the courses they need, regardless of where students and teachers reside.

These standards have been supported by practice over time, as well as substantiated by research. In fact, research at both the K-12 and postsecondary levels is creating a growing body of evidence that quality online teaching is not only as good as traditional teaching — in many ways it can be superior."

(The competencies are grouped into three areas: a. Academic Preparation, b. Content Knowledge, Skills and Temperament for Instructional Technology, c. Online Teaching and Learning Methodology, Management, Knowledge, Skills and Delivery. The rubric shows 11 standards and 62 Indicators that articulate instructor activities such as "troubleshoots typical software and hardware problems").

Tigers Project: Assessing Online Facilitation (2006)

Access: http://www.humboldt.edu/~aof/index.html

Abstract: The instrument was developed by a team of seven instructional designers and online educators from Humboldt University and five other colleges and universities. It can be used to guide a current course's facilitation as well as a review tool for a recent course facilitation. The instrument is organized around four principal instructor roles *Pedagogical*: Guiding student learning with a focus on concepts, principles, and skills. *Social*: Creating a welcoming online community in which learning is promoted. *Managerial*: Handling organizational, procedural,

and administrative tasks. *Technical:* Assisting participants to become comfortable with the technologies used to deliver the course.

A total of 84 instructor activities are assigned to the four instructor roles in a "before", "during", and "after" the semester division. The instrument can be used in connection with a Facilitation Activity Record as an optional companion document.

The facilitator can use this document to help organize and document activities performed as a facilitator for a particular course offering.

AEA Iowa Area Education Agencies (2012)

Access: http://iowaonlinelearning.wikispaces.com/Teaching+Standards

Abstract: The work of AEA was commissioned by AEA Chief Administrators as the AEA Online Council in 2007 with the goals of establishing quality online education. Part of the work was development of the Iowa Online Teaching Standards. The Iowa Online Teaching Standards used the NACOL, SREB and Varvel competencies as resources in the development of the instrument. Iowa Online Teaching Standards include eight areas of competence, which include: 1. Demonstrates ability to enhance academic performance and support the agency's student achievement goals; 2. Demonstrates competence in content knowledge (including technological knowledge) appropriate to the instructional position; 3. Demonstrates competence in planning, designing, and incorporating instructional strategies; 4 Understands and uses instructional pedagogy that is appropriate for the online environment and meets the multiple learning needs of students; 5. Creates and implements a variety of assessment that meet course learning goals and provide data to improve student progress and course instruction;6. Incorporates social aspects into the teaching and learning process, creating a community of learners; 7. Engages in professional growth; 8. Adheres t, models, and guides ethical behavior, including technological use.

Matrix on Virtual Teaching: A comptetency-based model for faculty development

Access: http://conference.merlot.org/2008/Friday/grant_mr_1045Friday.ppt

Abstract: This model is developed by Mary Rose Grant, Ph.D. and was presented at the MERLOT Conference in 2008. The model combines course design and instructor competencies and is based on Grant's research which looked at faculty competencies and course design and teaching practice. Instructor competencies include 1. Undertanding online format; 2. Knowing online pedagogy; 3. Knowing instructional design; Understanding online format includes knowing time and effort required, understanding the medium (CMS), believing in the outcome, and discovering teaching and social presence. Knowing online pedagogy includes connectivity

(student to student, student to content, student to instructor), and interactivity (learning community, groups, feedback, peer review, journals). (*The instructor competencies are less defined in this model compared to other earlier models presented in this document.*)

Ragan, L. and Bigatel, P.M., From Research to Practice: Towards the Development of an Integrated and Comprehensive Faculty Development Program (2012); Journal of Asynchronous Learning Networks, Vol.16, Issue 5, Oct. 2012, pp 73-86

Access: (http://sloanconsortium.org/node/377986).

Abstract: "This article describes the design and development of a professional development program based upon research on the competencies necessary for online teaching success conducted at Penn State University in 2009-10. The article highlights how the results of this research are being aligned with various professional development courses comprising the certificate program for online faculty Penn State's World Campus". In three categories (Pedagogical, Administrative, and Technological Competencies) the research the research identifies 27 competencies for online teaching.

(The 27 teaching competencies are statements of behavior, attitude, belief or skill. The usefulness of assigning particular competencies to one of the three categories is not always clear.)

Abbreviated as <PSU12>

2016 Competency Rubrics and Standards Additions

Frydenberg, J. (2002). Quality standards in eLearning: A matrix of analysis. In *International Review of Research in Open and Distance Learning* (Vol. 3, pp. 68–85).

Abstract: "Most institutions of postsecondary and higher education are creating or adopting quality statements, standards, and criteria regarding their niche of the "e-Learning enterprise." In doing so, they have a tendency to reinvent the wheel. This article summarizes current published quality standards in the US, and analyzes and organizes them into a nine-cell matrix. It concludes with discussion of emerging issues with respect to the nine standards-areas."

The article covers Institutional Commitment, Technology, Student Services, Instructional Design and Course development, Instruction and Instructors, Delivery, Finances, Regulatory and Legal Compliance, and Program Evaluation. While it does not go into depth, the section on Instruction and Instructors may be helpful and other sections touch on instructor competencies (e.g. communication, legal knowledge).

Northcote, M., Seddon, J., & Brown, P. (2011). Benchmark yourself: Self-reflecting about online teaching. *ASCILITE 2011 - The Australasian Society for Computers in Learning in Tertiary Education*, 904–908.

Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education - "Changing demands, changing directions", ASCILITE 2011; Hobart, TAS; Australia; 4 December 2011 through 7 December 2011; Code 94320

Retrieved from http://www.scopus.com/inward/record.url?eid=2-s2.0-84870794668&partnerID=40&md5=eee37c0d03453171c53463c4fdc210b2

Abstract: "Teachers need effective online teaching and course development skills to engage higher education students in meaningful, socially contextual, challenging and engaging learning experiences. To develop these skills, academic teaching staff typically attend professional learning activities, such as workshops to investigate online learning and strategies, engage in one-to-one consultations with online learning experts, and analyse practical exemplars. Online teacher/designers are often perplexed by the transitional conundrums between the modes of oncampus and online teaching, and grapple with how to endow online learning contexts with the same qualities of good oncampus learning contexts. Many online teachers and designers of online courses are self-taught whereas others rely on institutionally-provided courses, workshops and seminars to extend their online teaching skills. This paper reports on a utilisation-focused evaluation methodology (Patton, 1997) that was adopted to develop a self-reflection rubric tool to guide academic teaching staff in the evaluation of their own online teaching and course development skills. © 2011 Maria Northcote, Jack Seddon, Philip Brown."

This work contains a rubric tool that "can be used to self-reflect on and self-evaluate one's online teaching and course development skills." It covers pedagogical knowledge, content knowledge, and technological knowledge and each area contains "descriptive statements ... developed to identify knowledge and skills associated with effective online teaching and course design"(p. 906).

Rubrics Outside of Journals

Many universities and colleges maintain rubrics for online courses and teaching, and the majority of them solely address characteristics of course design. The following rubrics contain at least some elements that can be considered to be in the category of instructor competency standards. These are not directly retrieved from journals but are included for reference.

Chico State University: http://www.csuchico.edu/eoi/documents/rubricpdf

Rubric for Online Instruction Rationale

"California State University, Chico's first strategic priority is to create and enhance high quality learning environments. Academic technologies, especially online or web-enhanced courses, have a significant role in the creation of those learning environments. The University's Strategic Priorities challenge faculty and staff to use academic technologies to create and enhance high quality learning environments in a demonstrable manner. What should a quality online course look like? Chico's Rubric for Online Instruction offers a framework for addressing this question. Use of this rubric represents a developmental process for online course design and delivery, and provides a means for an instructor to self-assess course(s) based on University expectations. Furthermore, the rubric provides a means for supporting and recognizing a faculty member's effort in developing expertise in online instruction as part of our commitment to high quality learning environmnts. The Rubric for Online Instruction can be used in three ways. 1. As a course "self-evaluation" tool - advising instructors how to revise an existing course to the Rubric for Online Instruction. 2. As a way to design a new course for the online environment, following the rubric as a road map. 3. As a means for getting recognition for exemplary online instruction -going through a nomination/recognition process on campus. Faculty can receive recognition to go in their RTP file."

Category 6 addresses "Faculty Use of Student Feedback" which relates to instructor competency measured as "baseline", "effective", or "exemplary". The remainder of the rubric addresses course design features.

OLC quality framework

http://onlinelearningconsortium.org/about/quality-framework-five-pillars/ -

"In 1997, Frank Mayadas, President of the Online Learning Consortium (renamed OLC), affirmed that any learner who engages in online education should have, at a minimum, an education that represents the quality of the provider's overall institutional quality. Any institution, he maintained, demonstrates its quality in five inter-related areas – learning effectiveness, access, scale (capacity enrollment achieved through cost-effectiveness and institutional commitment), faculty satisfaction, and student satisfaction.

These five have become OLC's Five Pillars of Quality Online Education, the building blocks which provide the support for successful online learning. The intent of the quality framework,

which is always a work in progress, is to help institutions identify goals and measure progress towards them."

Basic info on a pillared framework (learning, faculty, students, scale, access) for quality online courses but in addition, the Student satisfaction pillar addresses "appropriate, constructive, and substantive interaction with faculty" and notes that "Effective professors help students achieve learning outcomes that match course and learner objectives by using current information and communications technologies to support active, individualized, engaged, and constructive learning."

Online Course Development Guidelines and Rubric (Michigan Community College Association Virtual Learning Collaborative).

Guidelines and a rubric intended to assist institutions with developing online courses of quality. http://www.mccvlc.org/~staff/content.cfm?ID=108

While most of this rubric has direct relation to course design elements, the final section entitled "Course Development and Support" addresses "appropriate training and technical support" as part of the rubric. Criteria are ranked from Beginning, Developing, Accomplished, and Exemplary, with the scoring based upon no access to training to "informal" to "formal" including and up to "some formal Online Teaching Certification program." Another note in this section addresses Faculty access to technology, and this could be considered a technology area. In Hilke's rubric, "access" is not addressed – only knowledge of technologies that are used in the course. This is a bullet point that could be considered for addition to Hilke's rubric under the technology section.

Evaluation of Online Course based on Principles of Online Design, Florida Gulf Coast University.

http://www.fgcu.edu/onlinedesign/ -

Checklist doc located at: http://www.fgcu.edu/onlinedesign/Checklist.doc

This checklist mainly addresses course design, however, the Course Management section addresses what the instructor needs to address such as time, communication, and setting student expectations/responsibilities. "Student emails are answered in a timely manner" is an element that appears in Hilke's Teaching Competency Rubric under the category of Assessment.

Faculty Focus Special Report: http://www.facultyfocus.com/free-reports/principles-of-effective-online-teaching-best-practices-in-distance-education/

"This special report explains the "rules of the road" for online teaching and learning and features a series of columns that first appeared in the Distance Education Report's "Between the Clicks,"

a popular column by Dr. Lawrence C. Ragan, Director of Instructional Design and Development for Penn State's World Campus."

This twenty-six page report includes the following main "online instructor best practices and expectations":

Show up and Teach
Practice Proactive Course Management Strategies
Establish Patterns of Course Activities
Plan for the Unplanned
Response Requested and Expected
Think Before You Write
Help Maintain Forward Progress
Safe and Secure
Quality Counts
(Double) Click a Mile on My Connection

The material contained in this report pertains to various areas that are found in Hilke's Teaching Competencies Rubric.

Teaching Competencies Rubric

Another goal of this study was to identify a sampling of research evidence which supports the competency areas identified by Hilken. Hilke's Teaching Competencies Rubric breaks each competency down into subsections and can be found at the end of this report. The following list of articles have been identified as pertaining to either the broader competency or to the subsections that Hilke identified. The competencies are identified by the Header text and the general description and subsections are in bold below, followed by the respective literature.

Institutional Context

The instructor understands the institutional context in which s/he teaches.

Student disciplinary policy

Varvel, V. E. (2007). Master Online Teacher Competencies. *Online Journal of Distance Learning Administration*, 10, 1–47. Retrieved from http://www.westga.edu/~distance/ojdla/spring101/varvel101.htm

Academic Integrity

Tracy, B., Baltunis, S., & Swiderski, C. (2011). National standards for quality online teaching. *International Association for K-12 Online Learning*, (October), 18. Retrieved from http://www.inacol.org/research/nationalstandards/iNACOL_TeachingStandardsv2.pdf

Student privacy

Varvel, V. E. (2007). Master Online Teacher Competencies. *Online Journal of Distance Learning Administration*, 10, 1–47. Retrieved from http://www.westga.edu/~distance/ojdla/spring101/varvel101.htm

Student Disabilities

- Frydenberg, J. (2002). Quality standards in eLearning: A matrix of analysis. In *International Review of Research in Open and Distance Learning* (Vol. 3, pp. 68–85).
- Greer, D., Rowland, A. L., & Smith, S. J. (2014). Critical Considerations for Teaching Students With Disabilities in Online Environments. *TEACHING Exceptional Children*, 46(5), 79–91. http://doi.org/10.1177/0040059914528105

- Online instructor and teaching competencies: Literature review for Quality Matters
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Evaluation Policies

Varvel, V. E. (2007). Master Online Teacher Competencies. *Online Journal of Distance Learning Administration*, *10*, 1–47. Retrieved from http://www.westga.edu/~distance/ojdla/spring101/varvel101.htm

Technologies

Technology Knowledge

The Instructor is knowledgeable about the technologies used in the online classroom.

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Students and Effective Access

- Arinto, P. B. (2013). A framework for developing competencies in open and distance learning. *The International Review of Research in Open and Distance Learning*, *14*(1), 167–185.
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Instructional Design

Instructor Understands the Instructional Design requirements of a course

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Pedagogy

The instructor understands the pedagogical components of the online teaching and learning process

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Assessment

The instructor is knowledgeable about various methods of measuring the success of the teaching and learning process in the online classroom.

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- Tracy, B., Baltunis, S., & Swiderski, C. (2011). National standards for quality online teaching. *International Association for K-12 Online Learning*, (October), 18. Retrieved from http://www.inacol.org/research/nationalstandards/iNACOL_TeachingStandardsv2.pdf
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- Winter, J. (2010). Educative assessment for/of teacher competency. *Assessment in Education*, 17(1), 112. Retrieved from http://proquest.umi.com/pqdweb?did=1979837691&Fmt=7&clientId=11263&RQT=309&VName=PQD

Social Presence

The instructor establishes a social presence and communicates effectively through writing and/or audio/video

- Bair, D. E., & Bair, M. A. (2011). Paradoxes of online teaching. *International Journal for the Scholarship of Teaching and Learning*, *5*(2), 1–15. Retrieved from http://www.georgiasouthern.edu/ijsoltl\nWhile much attention is paid to students? experiences in online courses, there is sparse information regarding the experiences of faculty who teach online. Two university instructors address this gap in the literatu
- Baran, E., & Correia, A.-P. (2014). A professional development framework for online teaching. *TechTrends*, *58*(5), 95–101. http://doi.org/10.1007/s11528-014-0791-0
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- Douglas-Faraci, D. (2010). A correlational study of six professional development domains in elearning teacher professional development. *Journal of Online Learning and Teaching*, 6(4), 754–766. Retrieved from http://jolt.merlot.org/vol6no4/douglas-faraci_1210.pdf
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Online instructor and teaching competencies: Literature review for Quality Matters

Overview, for further research, and study limitations

While this study has identified a large number of journal articles related to instructor and online teaching competencies, there is a need for further analysis. The study has also identified numerous articles that lend support to Hilke's Teaching Competency Rubric. Additionally, an initial meta-analysis of journals has provided some insight into the origins of the newly identified literature. Additional teaching competency related rubrics have also been identified.

Additional analysis would be useful to understand more details on the finer points of the topics that are covered in the articles. Systematic coding of all of the articles (including Hilke and colleagues' original list) will provide granular insights that would be useful to researchers who wish to pursue research in this area. A plan to populate a database with the research findings is underway and when this work is taken on, it would be an ideal time to carry out the coding.

Additional analysis would also provide an opportunity for a closer review of the articles that have been identified in order to be certain that each article does specifically and appropriately address the main topic of instructor and online teaching competencies. This additional scrutiny would also provide an opportunity to identify the types of studies (e.g. methodology, frameworks) that are presented in this report.

While this author has not identified any competency areas to add to Hilke's original list, additional and more granular analysis of articles may provide new insights and opportunities to refine or build upon that original work.

Another interesting phase for future study would be to study and better understand the primary references that the authors of these articles have identified. During this study, this author has been cognizant of the fact that this study is mainly focused on *online teaching*, while he and other researchers familiar with distance education history and foundations understand that decades of research in the field has addressed many of the topics that online educators and researchers currently find to be relevant.

2016 Identified References

The following is a list of articles identified in this 2016 report. These are in addition to those articles found in the Hilke and colleagues' report. Hilke and colleagues' references are found at the end of this document.

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