I. An Operational Definition of “Competency”

Jurgen Hilke (jhilke@frederick.edu)  
September 2012

“Competency” is a multi-dimensional concept that has been defined in a variety of ways depending on the primary domain of use: Business, Computers, or Higher Education. In the following are four sample definitions that show the spread of different aspects.

(1) “observable behaviors or skill sets” (Spector & de la Teja, 2001),
(2) “dimensions of knowledge, skills, and abilities, such as personal attributes” (Boyatzis, 1982).
(3) "a knowledge, skill, or attitude that enables one to effectively perform the activities of a given occupation or function to the standards expected in employment” IBSTPI(p. 31).
(4) “appropriate prior knowledge, skills, attitudes, and abilities in a given context that adjust and develop with time and needs in order to effectively and efficiently accomplish a task and that are measured against a minimum standard”. (Illinois Faculty Summer Institute 2006)

For the purpose of this presentation, we will choose formulation (4) from the Illinois Faculty Institute.

“Appropriate prior knowledge, skills, attitudes, and abilities in a given context that adjust and develop with time and needs in order to effectively and efficiently accomplish a task and that are measured against a minimum standard”.

II. Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>IHEP</td>
<td>Institute for Higher Education Policy.</td>
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<tr>
<td>IBSTPI</td>
<td>International Board of Standards for Training, Performance and Instruction</td>
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<td>IAF</td>
<td>International Association of Facilitators</td>
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<td>ISTE</td>
<td>International Society for Technology in Education</td>
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<td>ISBE</td>
<td>Illinois State Board of Education</td>
</tr>
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<td>ION</td>
<td>Illinois Online Network</td>
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<tr>
<td>NACOL</td>
<td>North American Council for Online Learning</td>
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<td>NCATE</td>
<td>National Council for Accreditation of Teacher Education</td>
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<tr>
<td>NETC</td>
<td>Naval Education Training Command (here DE Program)</td>
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<td>NETS</td>
<td>National Educational Technology Standards</td>
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<td>SME</td>
<td>Subject Matter Experts</td>
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<tr>
<td>SREB</td>
<td>Southern Regional Education Board</td>
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### III. Competency Standards for Teaching Online

Jurgen Hilke (jhilke@frederick.edu)  
September 2012

<XXXXX> includes references to the Annotated Review of Rubrics and Standards

<table>
<thead>
<tr>
<th>Areas of Competency</th>
<th>Competency Standards</th>
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<tbody>
<tr>
<td><strong>A. Teaching Online</strong></td>
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</table>
| I. The instructor understands the institutional context in which s/he teaches. | 1. The instructor is aware of Student Disciplinary and/or Classroom Behavior Policies in his/her institution.  
<ION I.C.5> |
| | 2. The instructor is aware of Academic Integrity policies and procedures in his/her institution.  
<ION I.C.4> |
| | 3. The instructor is aware of rules relevant to academic reporting and student privacy.  
<ION I.C.1>, <NACOL (SREB) E.8> |
| | 4. The instructor knows copyright requirements for all course materials and student work.  
<ION I.B.2>, <NACOL (SREB) E.5, E.6> |
| | 5. The instructor is aware of regulations regarding students with disabilities and recognizes the importance of ADA compliance for his/her online course.  
<ION I.C.2>, <NACOL (SREB) G.7> |
| | 6. The instructor is aware of his or her institution’s faculty evaluation policies and practices.  
<ION I.E>, <ION I.E> |
| II. The instructor is knowledgeable about the technologies used in the online classroom | 1. The instructor has an understanding of commonly used Web browsing software and computer programs (e.g. Word Processing) required in online education.  
<ION III.B.1>, <NACOL (SREB) B.1, B.2> |
| | 2. The instructor is proficient in the chosen course management system (CMS).  
<ION III.B.3>, <NACOL (SREB) M.1> |
| | 3. The instructor has proficiency managing a given computer operating system to maintain security updates, anti-virus software, and other software updates as necessary.  
<ION III.B.6> |
| | 4. The instructor knows how to identify technologies (such as simulations, multimedia, etc.) designed to reach course objectives and to promote skills relevant to the field of study.  
<ION IV.D.1> |
| | 5. The instructor has an understanding of the course technologies sufficient to help students with basic technical issues and to refer to additional support resources.  
<ION III.C.1>, <NACOL (SREB) B.4> |
| | 6. The instructor knows resources to review and evaluates the instructional effectiveness of the given course technologies from an instructor, student, and management perspective.  
<ION IV.D.1>, <NACOL (SREB) M.3> |
| | 7. The instructor is aware of the need for equitable and effective access to course technology resources for all students with diverse abilities, backgrounds, and cultures.  
<ION V.H.4.b>, <NACOL (SREB) C.5> |
| III. The instructor understands the instructional design | 1. The instructor is able to judge the credibility, clarity, validity, reliability, accuracy, currency, and quality of course resources in a given online course.  
<ION IV.B.3.b>, <NACOL (SREB) A.3> |
| | 2. The instructor is proficient in selecting online course materials and resources that lead to a successful learning process.  
<ION IV.C.1> |
<table>
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<tr>
<th>Requirements of an Online Course</th>
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<tbody>
<tr>
<td>The instructor knows how to communicate his/her expertise in the field to the students amplifying preselected course materials and resources.</td>
<td>&lt;ION V.B&gt;</td>
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<tr>
<td>The instructor is aware of established quality assurance standards for the design of online courses.</td>
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### IV.
The instructor understands the pedagogical components of the online teaching and learning process

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<tr>
<td>1</td>
<td>The instructor understands the importance of motivation in guiding students to become active learners. &lt;ION V.D.1&gt;, &lt;NACOL (SREB) C.1&gt;</td>
</tr>
<tr>
<td>2</td>
<td>The instructor understands the importance of modeling time-management patterns and commitment to the course. &lt;ION II.D.&gt;, &lt;NACOL (SREB) E&gt;</td>
</tr>
<tr>
<td>3</td>
<td>The instructor understands the importance of monitoring and fostering student engagement to guide students towards successful completion of the course. &lt;ION V.J&gt;</td>
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<tr>
<td>4</td>
<td>The instructor has a basic knowledge in learning theory and understands how student’s social, cultural, and religious disposition influence learning. &lt;ION V.A.1; A.4; A.5&gt;</td>
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### V.
The instructor is knowledgeable about various methods of measuring the success of the teaching learning process in the online classroom.

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<td>1</td>
<td>The instructor understands how to select, construct, and utilize assessment strategies to assist and measure student learning in the online environment. &lt;ION VI.C&gt;</td>
</tr>
<tr>
<td>2</td>
<td>The instructor understands the importance of providing timely and constructive feedback for student work &lt;ION VI.F&gt;, &lt;NACOL (SREB) D.8, D.9&gt;</td>
</tr>
<tr>
<td>3</td>
<td>The instructor understands the importance of actively engaging students in self-assessment and involving them in monitoring their own learning. &lt;ION VI.1&gt;, &lt;NACOL (SREB) K.4; K.2&gt;</td>
</tr>
<tr>
<td>4</td>
<td>The instructor knows how to curb academic dishonesty in the online environment through proper pedagogy and assessment techniques. &lt;ION VI.H.2&gt;</td>
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<td>5</td>
<td>The instructor understands the importance of clearly linking assessments to learning outcomes and course activities. &lt;NACOL (SREB) I.3; M 4&gt;</td>
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<tr>
<td>6</td>
<td>The instructor understands the importance of using assessment results, course evaluations, and student feedback to assess the effectiveness of the teaching/learning process in the online course.</td>
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### VI.
The instructor establishes a social presence and communicates effectively through writing and/or audio/video.

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<td>1</td>
<td>The instructor understands the impact that cultural, cognitive, and emotional factors as well as physical disabilities can have on communication processes in the online classroom. &lt;ION V.7.C.6&gt;</td>
</tr>
<tr>
<td>2</td>
<td>The instructor understands the importance of modeling and guiding communication patterns in the online classroom in terms of language, methods and consistency. &lt;ION V. E.6&gt;, &lt;ION VII.A.1&gt;, &lt;NACOL (SREB) D.1&gt;</td>
</tr>
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<td>3</td>
<td>The instructor has the ability to foster effective instructor-student and student-student communication in the online classroom. &lt;ION V. E.11&gt;</td>
</tr>
<tr>
<td>4</td>
<td>The instructor has the ability to manage conflict resulting from behavior problems or miscommunication in the online classroom. &lt;ION VII.D&gt;</td>
</tr>
<tr>
<td>5</td>
<td>The instructor understands the importance of maintaining a presence in the online classroom through affective as well as effective</td>
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<tr>
<td>6</td>
<td>The instructor has the ability to use Internet-based communication applications effectively. &lt;NACOL (SREB) B.2&gt;</td>
</tr>
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</table>

**B. Faculty Hiring**

<table>
<thead>
<tr>
<th>VII</th>
<th>The instructor meets the academic and/or professional standards in his/her chosen field of teaching.</th>
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<tbody>
<tr>
<td>1</td>
<td>The instructor has achieved the required academic and/or professional credentials in his/her chosen field of teaching. &lt;NACOL (SREB) A.1&gt;</td>
</tr>
<tr>
<td>2</td>
<td>The instructor is dedicated to education and has a commitment to quality teaching, including the use of learning technology. &lt;ION II.B&gt;</td>
</tr>
<tr>
<td>3</td>
<td>The instructor is able to facilitate the construction of knowledge through an understanding of how students learn in specific subject areas. &lt;NACOL (SREB) A48&gt;</td>
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<tr>
<td>4</td>
<td>The instructor is aware of resources and opportunities for professional development in his/her institution and the subject area to be taught. &lt;NACOL (SREB) A.5&gt; &lt;ION I.F&gt;</td>
</tr>
</tbody>
</table>
IV. Annotated Review of Competency Rubrics

Jurgen Hilke (jhilke@frederick.edu) September 2012

There are a number of competency standards and competency rubrics to be found in the relevant literature. We have selected and annotated twelve of them here to represent differences in approach, amount of detail and institutional provenance.

(1) T. C. Smith, Axia College, Western International University
The Journal of Educators Online, Volume 2, Number 2, July 2005
“Fifty-one Competencies for Online Instruction”
Abstract: “The effectiveness of distance learning must be measured in results—quality learning. Learner-centered 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).

(2) A. Aubteen Darabi*, Eric G. Sikorski and Robert B. Harvey
Florida State University, USA
Distance Education, Vol. 27, No. 1, May 2006, pp. 10.5-122
“Validated Competencies for Distance Teaching”
Access: http://www.informaworld.com/smpp/content~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 time 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.)
Abstract: 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 delineate 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>


(4) 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”.)

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

(5) Shannon Young, shannony@umich.edu
Project IDEAL Support Center, University of Michigan, September 20, 2006

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 higher education and business literature on distance education competencies and were tailored to reflect the unique skills and dispositions needed by teachers of ABE, ASE, and ESOL learners. The competencies reflect the input and expertise of over fifty distance education 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.”

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

(7) Cengiz Hakan AYDIN
Anadolu University School of Communication Sciences, Eskisehir-TURKEY
“Turkish Mentors’ Perception of Roles, Competencies and Resources for Online Teaching”
Turkish Online Journal of Distance Education-TOJDE July 2005 ISSN 1302-6488 Volume: 6 Number: 3 Article: 5
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.”)

(8) SREB Standards for Quality Online Teaching, August 2006
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”).

(9) Tigers Project: Assessing Online Facilitation (2006)  
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.

(10) 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.

(11) Matrix on Virtual Teaching: A competency-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. Understanding 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.)

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 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>
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