

## eFaculty Competencies: An eTQM Case Study of Selection and Utilization

### 1. Introduction

This case study is based on the critical nature of eFaculty competencies – critical to the process of faculty selection and certification in the online and/or blended education environment, critical for ongoing faculty training and development, critical for modeling and managing good eLearning. Indeed, eFaculty competencies are a critical component in Total Quality Management (TQM) in the education and training industry, both public and private sector.

eTQM College is an institution of higher education using a blended approach, offering courses both onsite and online. Faculty need to be able to “teach” in both environments, and this requires

1. basic skills associated with teaching, assessment and management of learning, in addition to other faculty roles such as research; and
2. special skills and knowledge associated with Information and Communication Technologies (ICT).

In higher education, faculty often come from specialty or content areas and may have little or no teacher training or faculty experience. Even for those experienced instructors, using ICT fundamentally changes the role of faculty from instructor to facilitator of learning, and a relatively limited number of faculty in higher education have experience and competencies to facilitate learning in the online environment. Competent faculty is one of the many elements of quality eLearning, but a critical and a challenging one.

How are colleges, like eTQM College, to find and retain quality eFaculty? How do we effectively and efficiently undertake initial screening of applicants, provide basic orientation to teaching, fundamental training in eLearning and Continuing Professional Development (CPD)? Can quality certification provide us with “due diligence” on behalf of our clients and learning customers? How do we enable eFaculty to be dedicated lifelong learners? It is vital that we do these things in order to both offer quality eLearning and model TQM for eLearning.

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Therefore, it is hypothesized that the answer to this challenge lies at the intersection of:

- Competence-based training and learning outcomes
- Skills and competence standards for online and blended “teaching”
- ePortfolio tools for showcasing competencies and managing lifelong learning
- ICT and digital skills for the modern workplace
- eLearning for acquisition of both skills and knowledge
- Total Quality Management of eLearning

This paper describes a case study in the implementation of a competence-based ePortfolio approach to eFaculty training and certification at eTQM College, including a discussion of the relevant terminology, the rationale behind the project, an environmental scan for best practices and competence profiles, and implementation strategies.

## 2. Terminology

At the outset, it is necessary to operationally define key terms that are being used. For clarity, the following definitions are used for purposes of this paper and for eTQM College in the context of the eLearning Unit.

*Competency* means:

- A complex combination of knowledge, attitudes, skills, and values displayed in the context of task performance (Smith, 2005). Competencies define not only what a person must know and do, but also how a person does it.
- Key characteristics of a competence are (1) the unique features of the context in which is applied, (2) the individual's degree of acquired ability, from none to excellence, and (3) standards, including the required competencies for a particular context and the required degree of ability.

ICT – *Information and Communications Technologies* – is a term for:

- The tools for the electronic processing of information and communications (OECD, 1998)
- a diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information (UNESCO, 2002)

*eLearning* means:

- In a pure sense, learning via a computer and the internet; in an expanded sense, the tools and techniques used to provide teaching and learning in an electronic environment.
- Key characteristics of eLearning are (1) learner purpose / context (formal, informal or non-formal education and training) and (2) system elements (learning objectives and outcomes, processes for teaching and learning, and hardware and software tools).

eFaculty are:

- content area specialists contracted by higher education institutions to facilitate learning for students in the online and blended education and training environment; and
- only different from eTrainers, eTeachers and other eEducators in the sense that there are unique faculty roles and responsibilities in addition to the teaching function.

Quality means:

- The degree to which something – a product or service – is both effective and efficient from both the producer's and the user's point of view.

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ePortfolio is:

- At its simplest, an electronic portfolio of “learning” – achievements and capabilities.
- Academically defined as “a collection of authentic and diverse evidence, drawn from a larger archive representing what a person or organization has learned over time on which the person or organization has reflected, and designed for presentation to one or more audiences for a particular rhetorical purpose” (National Learning Infrastructure Initiative, 2003); hence both a digital archive and a purpose-driven presentation; and both a product and a process
- A term used to encompass (1) tools, products and systems that can be used by (2) individuals, educators, employers and entire nations for the purposes of (3) describing, assessing, recognizing and using knowledge and skills acquired through all forms of learning (4) with evidence that is digitally created, stored and managed through (5) practices that meet quality standards to assure transportability, usability, and security.

### 3. Rationale

This project addresses the following objectives of the eLearning Unit of eTQM College:

- To assure the quality of eLearning offered the College
- To provide initial and ongoing training for eFaculty at the College
- To explore and implement learning innovations
- To provide eLearning leadership and services in the Middle East and North Africa

This does not imply that these objectives are fully met simply through this project.

#### 3.1. eLearning Quality and Quality Assurance

Quality is a key concept for eTQM College from two perspectives. First, we provide direct instruction in the principles of Total Quality Management and must be seen to model TQM in provision of services to learning clients. Second, we must provide the highest possible quality of eLearning, from Reusable Learning Objects (RLO) to entire programs. The College has a number of Quality Assurance (QA) mechanisms in place and the eLearning Unit will be implementing a rigorous QA specific to eLearning.

Among the quality standards for eLearning<sup>1</sup> is the requirement to engage instructors / teachers / professors with:

1. recognized qualifications in the subject area;
2. teaching experience at the relevant level (e.g., secondary or higher education);
3. relevant work experience and/or current knowledge in the field; and
4. appropriate skills to teach online.

The College must endeavor to recruit and select faculty that meet these quality requirements, and, at a minimum, provide orientation to the specific use of ICT at the College. In addition, some new faculty may need training in the fundamentals of teaching and assessment of learning. The management of faculty is made more complex by the preponderance of part-time adjunct faculty who may be located literally anywhere in the world.

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<sup>1</sup> Open eQuality Learning Standards available online at [www.eife-l.org/publications/quality/oeqls/intro](http://www.eife-l.org/publications/quality/oeqls/intro)

### **3.2. eFaculty certification and CPD**

As stated earlier, not all content area experts have experience as teachers and few have experience as online educators. Additionally, eLearning tools and approaches change very rapidly as innovations emerge. Therefore, it is necessary to provide CPD to faculty to address skills gaps and improve service to learning clients. The College, through Centre for eLearning Excellence (CeLEEx) is developing an eFaculty certification process incorporating training in the basics of eLearning and instructional design. In future, all eFaculty should have the eFaculty certificate, ideally before they begin to work at the College. That certificate should reflect a deliberate choice of competencies for online teaching in the cultural, educational and technological context of the Arab World.

### **3.3. Learning innovations**

At one time eLearning was an innovation, and to many, it still is. However, as it evolves, it incorporates ideas and approaches from research in, for example, ICT, learning, assessment of learning, lifelong learning. Among the innovations under study at eTQM is the ePortfolio – a tool for

- assessing student learning through self-assessment, peer and instructor assessment;
- demonstrating or showcasing competencies of learners, i.e., students, faculty, and training clients;
- quality assurance in both individual learning and eLearning products;
- communications and community building.

On one hand, a standards-based ePortfolio is a digital tool for eFaculty to demonstrate acquired competencies and target required competencies, first for basic teaching and second to facilitate online learning. The QA process inherent in the ePortfolio process is to:

1. reflect on learning experiences – both formal and informal – to identify the skills and knowledge acquired
2. assess oneself against a stated set of standards; e.g., required competencies for online teaching;
3. provide the digital evidence to support claims of competence; and
4. generate a showcase of acquired skills and a gap analysis for targeted CPD.

On the other hand, competencies become the stated learning objectives of eFaculty training. This project directly relates, then, to the study of ePortfolio implementation at eTQM College (Appendix A).

### **3.4. eLearning leadership and services**

Finally, this project is intended to demonstrate a credible, professional and integrated approach to eFaculty recruitment and selection, orientation and training, certification and professional development. This is not just for eTQM College, but for the Middle East and North African (MENA) region where eLearning is relatively new and extremely important as a means of increasing access to education, improving quality of life for large undereducated populations, and contributing to regional economic development. Developing a system and a service for assuring the quality of eFaculty stands alone and simultaneously contributes, with projected systems and services for assuring the quality of instructional design and other key elements of eLearning, to an overall system and a service for eLearning Quality Assurance for MENA, promoted through the Middle East Council for eLearning Quality (MECeLQ). The rationale for this project, then, is the achievement of the goals of the eLearning Unit.

### **3.5. Starting point**

At eTQM College, two documents guide this case study. In the first, The Faculty Handbook, generally speaking,<sup>2</sup> faculty are expected to:

- Attend all unit, department and college meetings, commencements and convocations.
- Serve on unit, department and College committees and councils.
- Assist in carrying out the programs of the unit they are associated to.
- Cooperate fully with College academic administrative in promoting all the interests of the e-TQM College.
- Contribute to curriculum design, development and review.
- Participate in the design and development of online courses.
- Be involved in teaching/ tutoring courses appropriate to their expertise.
- Participate in research activities.
- Be involved in community services within and outside the College.
- Maintain the highest standards of conduct.
- Participate in learner academic advising.

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<sup>2</sup> eTQM College Faculty Handbook, page 43.

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More specifically, in the course, Basics of Instruction Online developed by eTQM College, the specific roles of eFaculty are listed as:

1. facilitator for content, learning and process
2. advisor/counselor
3. assessor (formative and summative)
4. technologist
5. resource provider
6. manager/administrator
7. designer
8. co-learner
9. researcher

This project is intended to (1) isolate the specific online function from the general faculty roles and, at the same time, (2) enhance all of the specific eFaculty roles at eTQM College.



#### **4. Environmental scan – competencies and best practices**

The first step in this project was to scan the online environment for established sets of competencies for faculty working with learners online. The following search terms and synonyms were used.

- electronic (e) learning - online, virtual, distance, distributed, flexible, blended
- learning - teaching, instructing, training
- faculty - teacher, instructor, professor, trainer
- the context the College: higher education, university, college, post-secondary education and training
- competencies - skills, skill standards, standards

The search resulted in some recent research in the field, a number of sets of competencies, and a number of approaches to QA for faculty in general, adjunct faculty and eFaculty in particular. It is important to note that every effort was made to be inclusive and thorough; however, we make no claim to be fully inclusive of all that exists about eFaculty competencies.

The second step was an environmental scan of the development of 'competence lists' for teaching and/or hiring online faculty/mentors/coaches/instructors/teachers in Canada - specifically skills and knowledge (from entry level to advanced) required to be an effective elearning facilitator. Representatives from elearning institutions/initiatives in Canada were asked if they had developed specific guidelines/lists in this area. In BC this included the University of British Columbia, Simon Fraser University, Thompson Rivers University, Royal Roads University, Knowplace and BC Campus. Other institutions with elearning programs across Canada were also contacted: the University of Calgary, the University of Western Ontario, the University of Toronto, Acadia University, St. Francis Xavier University, Cape Breton/Memorial University, the University of New Brunswick and Mount St. Vincent University. The result was that none of the respondents had developed specific guidelines.

In conclusion, eTQM College is not the first to realize that, in addition to the general roles of faculty, there are specific roles, and associated competencies, for faculty teaching online, i.e., for eFaculty (Lee and Hirumi, 2004; Luck and McQuiggan, 2006; Smith, 2005). We are not the first to implement the use of ePortfolios for focusing faculty development and demonstrating competence (Barker, 2003, 2005,2006; Barrett, ; many schools of education require that student teachers create teaching portfolios, and many universities require faculty to produce achievement portfolios for advancement. We are not the first to believe that eFaculty, especially part-time or adjunct faculty, should be well-trained and certified for quality assurance purposes (Collom, Dallas, Jong and Obexer, 2002; Adams and Dority, 2005; Sixl-Daniell, Williams and Wong, 2006).

However, we may be the first to combine these three issues into one project. In doing so, we are building on the best practices in each area.

#### **4.1. Best practices in eFaculty development**

From our scan and review of the resultant literature, we have identified some of the best practices in eFaculty training and professional development for application at eTQM College. In this, we were assisted by those who studied the issue of eFaculty competencies before us.

In 2004, Lee and Hirumi conducted an extensive literature review to analyze essential skills and knowledge for teaching online. They concluded that there were six essential skills and sixteen outputs for performing these skills. Perhaps more important are the “factors that may affect the essential skills of successful online distance educators in higher education” –

1. The supporting system of the institution, i.e., the better the supporting system, the less essential skills those online educators need.
2. Delivery methods of the online courses, i.e., essential skills differ for completely online versus blended courses.
3. Learning outcomes of online instruction, i.e., courses with higher thinking skills will be different from those with fundamental operation skills.
4. Instructional approach and epistemological beliefs, i.e., different approaches and beliefs affect the skills required.

From this we conclude that an eFaculty member (1) comes to the online environment with pre-conceived beliefs and approaches, and (2) is not the only component in the quality of online learning.

As well, Lee and Hirumi (2004) addressed the ways in which to determine the suitability of eFaculty. First, they examined self-assessment tools and guidelines for using them.<sup>3</sup>

Secondly, they examined alternative ways to determine suitability by:

1. professional teacher organizations, e.g., National Board for Professional Teaching Standards, which results in a “relatively credible” assessment coming from an independent source but which takes considerable time and effort and may not be practicable for larger organizations;
2. assessment centres, using employment assessment materials rather than teacher materials, with the same strengths and weaknesses as professional organizations;

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<sup>3</sup> Lee and Hirumi (2004), p. 537, accessed online, August 2007 at [http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?\\_nfpb=true&&ERICExtSearch\\_SearchValue\\_0=ED485021&ERICExtSearch\\_SearchType\\_0=eric\\_accno&accno=ED485021](http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nfpb=true&&ERICExtSearch_SearchValue_0=ED485021&ERICExtSearch_SearchType_0=eric_accno&accno=ED485021)

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3. checklists, best practices and benchmarks from credible organizations which may provide useful guidelines for general assessment purposes;
4. a good mentor in the same field.

From this we conclude that eFaculty may arrive with relevant professional certification; however, in the absence of that, and for comparability, we will utilize the checklist, best practices and benchmarks, not only as guidelines, but as the basis for standards.

From a different perspective, Luck and McQuiggan (2006) researched the question of what aspects of online teaching did faculty feel they needed assistance with. Faculty asked, in order of importance, for training and/or assistance with:

- regarding course design and development:
  - choosing appropriate technologies to enhance their online course
  - converting course materials for online use
  - creating video clips
  - determining ways to assess student progress in an online course
  - adapting traditional lecture material to an online environment
  - creating audio clips
  - designing and developing attractive Websites
- regarding course delivery:
  - facilitating online discussion forums
  - building and enhancing professor/student relationships in the online classroom
  - facilitation Web conferencing sessions
  - increasing interactions in an online course
  - managing their online teaching workload
- regarding administrative issues
  - making their online courses available to students at other campus locations.

From this we conclude that there is a mix of skills gaps identified by eFaculty themselves.

### **4.2. General competencies for faculty**

The online environmental scan revealed sets of general Faculty competencies, within which there were teaching and technology-specific competencies, presented here in no particular order.

*Instructor Competencies*<sup>4</sup> (2003)

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<sup>4</sup> IBSTPE (2003), accessed online, August 2007, at [http://www.ibstpi.org/Competencies/instructor\\_competencies.htm](http://www.ibstpi.org/Competencies/instructor_competencies.htm)

- produced by the International Board of Standards for Training, Performance and Instruction (IBSTPI) in North America;
- intended for professional instructors and trainers;
- comprised of 17 competencies in five categories – professional foundations, planning and preparation, instructional methods and strategies, assessment and evaluation, management.

Skills Checklist: Criteria related to Teaching, Research, and Service to the University Community and Professional Discipline, Leadership and Administration <sup>5</sup> (undated), produced by UNSW in Australia as a part of a skills checklist for all staff at the university, and intended for continuing professional development purposes, with four **self-assessment competency levels** to choose from: (1) like using and am good at; (2) like using but need to develop; (3) dislike using but am good at; and (4) dislike using and have little or no skill. These may be a useful way for eFaculty to conduct self-assessment in the ePortfolio environment.

#### **4.3. Technical competencies for faculty**

Our environmental scan revealed two types of competencies associated with technologies, i.e.,

1. standards for teachers using technology in general, and
2. basic technology skills for teachers.

ISTE National Education Technology Standards (NETS) and Performance Indicators for Teachers (2000)

- produced by the International Society for Technology in Education in North America;
- intended for classroom teachers, but with applicability in other teaching environments;
- focused on using technology appropriately in teaching and in all areas of professional practice;
- comprised of six standards with associated performance indicators (Appendix B) in the areas of technology operations and concepts; planning and designing learning environments and experiences; teaching, learning and curriculum; assessment and evaluation; productivity and professional practice; and social, ethical, legal and human issues.

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<sup>5</sup> Accessed online, August 2007, at [www.hr.unsw.edu.au/osds/pdfdocs/skills%20checklist.pdf](http://www.hr.unsw.edu.au/osds/pdfdocs/skills%20checklist.pdf)

According to Turner (2005), all educators should have the following 20 basic technology skills:<sup>6</sup>

1. Word Processing Skills
2. Spreadsheets Skills
3. Database Skills
4. Electronic Presentation Skills
5. Web Navigation Skills
6. Web Site Design Skills
7. E-Mail Management Skills
8. Digital Cameras
9. Computer Network Knowledge Applicable to your School System
10. File Management & Windows Explorer Skills
11. Downloading Software From the Web (Knowledge including eBooks)
12. Installing Computer Software onto a Computer System
13. WebCT or Blackboard Teaching Skills
14. Videoconferencing skills
15. Computer-Related Storage Devices (Knowledge: disks, CDs, USB drives, zip disks, DVDs, etc.)
16. Scanner Knowledge
17. Knowledge of PDAs
18. Deep Web Knowledge
19. Educational Copyright Knowledge
20. Computer Security Knowledge

These are competencies for which it is relatively easy to create evidence of competence.

#### **4.4. Skills and competencies for eFaculty**

The online environmental scan revealed several “sets” of eFaculty-related competencies, presented here in no particular order.

*Standards for Quality Online Teaching*<sup>7</sup> (August 2006)

- produced in the United States of America (USA) by the Educational Technology Cooperative of the Southern Regional Education Board (SREB) in Atlanta;
- intended for teachers in primary and secondary education but with applicability to higher education;
- focused on traditional school-based students;
- comprised of 11 standards with indicators in three categories – Academic Preparation; Content Knowledge, Skills and Temperament for Instructional Technology; and Online Teaching and Learning Methodology, Management, Knowledge, Skills and Delivery

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<sup>6</sup> Accessed online, August 2007, at <http://thejournal.com/the/printarticle/?id=17325>

<sup>7</sup> SREB (2006), accessed online, August 2007, at <http://www.sreb.org/programs/EdTech/pubs/PDF/StandardsQualityOnlineTeaching.asp>

*e-Learning Competencies*<sup>8</sup> (2001)

- produced in the USA by the American Society for Training and Development (ASTD) for the training industry;
- intended for Human Resource Development (HRD) professionals who plan for, select, produce and undertake eTraining;
- focused on adult and workplace training and Continuing Professional Development (CPD);
- comprised of 31 competencies in four categories – General Competencies, Management Competencies, Distribution Method Competencies; and Presentation Method Competencies

*The Teacher/Trainer eLearning Competency Framework Skillscheck*<sup>9</sup> (2006)

- produced in the European Union by the European Institute for eLearning (EIfEL);
- intended for teachers, trainers, mentors who are not considered to be professional educators but who are involved in helping others to learn on an occasional or part-time basis;
- focused on learners in non-formal environments such as the workplace;
- comprised of 47 competencies with related sub-competencies in six key areas – Preparing the Learning Event, Running a Learning Event, Supporting Learners, Assessing Learner Progress, Promoting Accessibility for Learners, and Evaluating Learning Programs

Essential skills of a successful online distance educator in higher education,<sup>10</sup>

- resulting from a review and synthesis of the literature in the field by Lee and Hirumi (2004);
- comprised of six essential skills (interaction, management, organization / instructional design, technology, content knowledge, teamwork skills) and sixteen outputs for performing those skills (Appendix C).

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<sup>8</sup> ASTD (2001), accessed online, August 2007, at <http://www.learningcircuits.org/2001/mar2001/competencies.html>

<sup>9</sup> EIfEL (2006), accessed online, August 2007, at <http://www.eifel.org/publications/competencies/ttskillscheck/view>

<sup>10</sup> Lee and Hirumi (2004), accessed online, August 2007 at [http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?\\_nfpb=true&\\_ERICExtSearch\\_SearchValue\\_0=ED485021&ERICExtSearch\\_SearchType\\_0=eric\\_accno&accno=ED485021](http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nfpb=true&_ERICExtSearch_SearchValue_0=ED485021&ERICExtSearch_SearchType_0=eric_accno&accno=ED485021)

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Competencies for online teaching, resulting from a review and synthesis of the literature in the field by Spector and de la Teja (2001):

- focused on the moderating function of online teaching
- comprised of seven competencies divided between the synchronous and asynchronous activities of the online moderator

Core competencies for the distance education professional, produced by Dooley and Lindner (2001):

- intended for adult educators in the agricultural industry;
- comprised of six core competencies (adult learning theory, technological knowledge, instructional design, communication skills, graphic design, and administrative issues) with associated “competency-based behavioural anchors” (Appendix D) which **serve as guide in the creation of digital evidence.**

*Fifty-One Competencies for Online Instruction* (Smith, 2005);

- compiled for Western International University, based on the benchmarks for excellence recommended by the Institute for Higher Education Policy in the US, and drawn from only 5 or 6 sources;
- intended for online instructors as a checklist;
- comprised of 51 competencies presented in no particular order but noting **whether the competency would be of primary importance before, during and/or after the course.**

Adapt (Academic Development and Professional Training) framework for teaching online:

- developed at Griffiths University in Australia in 2002
- focused on university faculty;
- intended to assist with selection, recruitment and CPD for faculty;
- comprised of four areas (content items and creation; communication and collaboration; assessment; and administration) and self-assessed as being in one of three development levels: **surviving, consolidating and enhancing practice, and exploring and experimenting.**

Competencies for Online Instructors (Shank, 2005):

- compiled for Learning Peaks, in recognition of the fact that instructors’ role in learner retention and achievement;
- intended for online instructors at all levels of education;

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- comprised of five competency areas (administrative, design, facilitation, evaluation and technical) with associated indicators (Appendix E).

At U21 Global (Sixl-Danielle, Wong and Williams; 2005), all adjunct faculty are required to complete an online training program covering online teaching in general and online skills in particular, including how to:

- teach and communicate effectively online
- navigate the U21G Learning Management System
- work effectively in a multicultural learning environment
- establish teams and team threaded discussions
- use the problem-based learning methodology effectively
- participate with other adjuncts and with full time faculty members in an online community of practices addressing issues related to online teaching.

The training program leads to certification required by and recognized by U21 Global, a consortium of 21 leading universities worldwide.

The Online Teacher: Summary of Skills and Attributes (2001),<sup>11</sup>

- produced for the Department of Education and Training in New South Wales Australia by Kemshall-Bell as a result of research with online teachers;
- comprised of key skills in 5 competency areas (relating to the learner in an online environment; managing the online learning environment; communicating effectively online; using online learning tools; and using effective online teaching methods) with associated skills and indicators.

Two sets of competence standards that are alluded to but which are not available online are (1) those used by U21Global in the certification of faculty for that university consortium and (2) those developed by IBSTPI which are sold in book format.

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<sup>11</sup> Available online <http://cyberteacher.onestop.net/final%20report.pdf>



## 5. eFaculty competencies for eTQM College

Rather than arbitrarily choose one set of eFaculty competencies and/or develop a new one, the process followed was to generate and utilize a set of selection criteria. On the basis of those criteria, then, a set of eFaculty competencies was identified as suitable for potential application at eTQM College.

### 5.1. Selection criteria

The process of implementing a set of eFaculty competencies could be to either (1) adopt an existing set or (2) adapt one or more sets. To make a choice, the following criteria were taken into account.

1. Higher education context – the competencies do not have to be specific to HE but must be applicable to HE.
2. Cultural context – the competencies must take into account the values and attributes of the Arab world, and the use of English in the MENA region.
3. Educational context – the competencies must account for the historical development and current status of education and training in the Arab World.
4. Technological context – the competencies must take into account current and emerging ICT tools and innovations while recognizing the limitations associated with the goal of universal access.
5. Credibility – the competencies must have been developed in a transparent and professional fashion, with the authors identified.
6. Currency – the competencies must be recent, reflecting innovations and emerging best practices.
7. Completeness – including all elements of the eFaculty function – outputs, processes and practices, inputs and a feedback loop (systems-based).
8. Customer-focus (TQM) – developed and presented with a focus on the learner, the learning customer or client.
9. Expediency – easily accessible, immediately-applicable, and copyright free.

### 5.2. Selected competence standards

On the basis of these criteria, one existing set of standards with competencies and indicators appears to be suitable for use at eTQM College. **Standards for Quality Online Teaching** have been produced by the Southern Regional Education Board (SREB), Educational Technology Cooperative, in Atlanta, Georgia in 2006. According to SREB, “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 complete set of standards is found in Appendix F.

### **5.3. Proposed eFaculty competencies for eTQM College**

The following proposed eFaculty competencies are commended for adoption at eTQM College having been adapted from the SREB standards by (1) substituting “an eFaculty member” for “the teacher”, (2) substituting “learner” for “student”, and (3) using a numbering scheme to facilitate discussion. The competencies are presented here for discussion, potential modification and affirmation by the faculty and administration at eTQM College in 2007. Readers are asked to (1) apply the selection criteria and (2) consider what should be added, removed or modified.

#### **1. Academic Preparation:**

1.1. **Standard:** An eFaculty member has necessary and appropriate professional certification.

**Indicators:** An eFaculty member:

- 1.1.1. has academic credentials in the field in which he or she is teaching;
- 1.1.2. provides evidence that he or she has credentials in the field of study to be taught;
- 1.1.3. knows the content of the subject to be taught and understands how to teach the content to learners;
- 1.1.4. facilitates the construction of knowledge through an understanding of how learners learn in specific subject areas; and
- 1.1.5. continues to update academic knowledge and skills.

## 2. Content Knowledge, Skills and Temperament for Instructional Technology

**2.1. Standard:** An eFaculty member has the prerequisite technology skills to teach online.

**Indicators:** An eFaculty member:

- 2.1.1. demonstrates the ability to effectively use word-processing, spreadsheet and presentation software;
- 2.1.2. demonstrates effective use of Internet browsers, e-mail applications and appropriate online etiquette;
- 2.1.3. demonstrates the ability to modify and add content and assessment, using an online Learning Management System (LMS);
- 2.1.4. incorporates multimedia and visual resources into an online module;
- 2.1.5. utilizes synchronous and asynchronous tools (e.g., discussion boards, chat tools, electronic whiteboards) effectively;
- 2.1.6. troubleshoots typical software and hardware problems;
- 2.1.7. demonstrates the ability to effectively use and incorporate subject-specific and developmentally appropriate software in an online learning module; and
- 2.1.8. demonstrates growth in technology knowledge and skills in order to stay current with emerging technologies.

## 3. Online Teaching and Learning Methodology, Management, Knowledge, Skills and Delivery

**3.1. Standard:** An eFaculty member plans, designs and incorporates strategies to encourage active learning, interaction, participation and collaboration in the online environment.

**Indicators:** An eFaculty member:

- 3.1.1. demonstrates effective strategies and techniques that actively engage learners in the learning process (e.g., team problem-solving, in-class writing, analysis, synthesis and evaluation instead of passive lectures);
- 3.1.2. facilitates and monitors appropriate interaction among learners;
- 3.1.3. builds and maintains a community of learners by creating a relationship of trust, demonstrating effective facilitation skills, establishing consistent and reliable expectations, and supporting and encouraging independence and creativity;
- 3.1.4. promotes learning through group interaction;
- 3.1.5. leads online instruction groups that are goal-oriented, focused, project-based and inquiry-oriented;
- 3.1.6. demonstrates knowledge and responds appropriately to the cultural background and learning needs of non-native English speakers;

- 3.1.7. differentiates instruction based on learners' learning styles and needs and assists learners in assimilating information to gain understanding and knowledge; and
  - 3.1.8. demonstrates growth in teaching strategies in order to benefit from current research and practice.
- 3.2. **Standard:** An eFaculty member provides online leadership in a manner that promotes learner success through regular feedback, prompt response and clear expectations.

**Indicators:** An eFaculty member:

- 3.2.1. consistently models effective communication skills and maintains records of applicable communications with learners;
  - 3.2.2. encourages interaction and cooperation among learners, encourages active learning, provides prompt feedback, communicates high expectations, and respects diverse talents and learning styles;
  - 3.2.3. persists, in a consistent and reasonable manner, until learners are successful;
  - 3.2.4. establishes and maintains ongoing and frequent teacher-learner interaction, learner-learner interaction and teacher-parent interaction;
  - 3.2.5. provides an online syllabus that details the terms of class interaction for both teacher and learners, defines clear expectations for both teacher and learners, defines the grading criteria, establishes inappropriate behavior criteria for both teacher and learners, and explains the course organization to learners;
  - 3.2.6. provides a syllabus with objectives, concepts and learning outcomes in a clearly written, concise format;
  - 3.2.7. uses learner data to inform instruction, guides and monitors learners' management of their time, monitors learner progress with available tools and develops an intervention plan for unsuccessful learners;
  - 3.2.8. provides timely, constructive feedback to learners about assignments and questions; and
  - 3.2.9. gives learners clear expectations about teacher response time.
- 3.3. **Standard:** An eFaculty member models, guides and encourages legal, ethical, safe and healthy behavior related to technology use.

**Indicators:** An eFaculty member:

- 3.3.1. facilitates learner investigations of the legal and ethical issues related to technology and society;
- 3.3.2. establishes standards for learner behavior that are designed to ensure academic integrity and appropriate uses of the Internet and written communication;
- 3.3.3. identifies the risks of academic dishonesty for learners;
- 3.3.4. demonstrates an awareness of how the use of technology may impact learner testing performance;

- 3.3.5. uses course content that complies with intellectual property rights policies and fair use standards;
  - 3.3.6. provides learners with an understanding of the importance of Acceptable Use Policies (AUP);
  - 3.3.7. demonstrates knowledge of resources and techniques for dealing with issues arising from inappropriate use of electronically accessed data or information; and
  - 3.3.8. informs learners of their right to privacy and the conditions under which their names or online submissions may be shared with others.
- 3.4. **Standard:** An eFaculty member has experienced online learning from the perspective of a learner.

**Indicators:** An eFaculty member:

- 3.4.1. applies experiences as an online learner to develop and implement successful strategies for online teaching;
  - 3.4.2. demonstrates the ability to anticipate challenges and problems in the online classroom; and
  - 3.4.3. demonstrates an understanding of the perspective of the online learner through appropriate responsiveness and a supportive attitude toward learners.
- 3.5. **Standard:** An eFaculty member understands and is responsive to learners with special needs in the online classroom.

**Indicators:** An eFaculty member:

- 3.5.1. understands that learners have varied talents and skills and uses appropriate strategies designed to include all learners;
  - 3.5.2. provides activities, modified as necessary, that are relevant to the needs of all learners;
  - 3.5.3. adapts and adjusts instruction to create multiple paths to learning objectives;
  - 3.5.4. encourages collaboration and interaction among all learners;
  - 3.5.5. exhibits the ability to assess learner knowledge and instruction in a variety of ways; and
  - 3.5.6. provides learner-centered lessons and activities that are based on concepts of active learning and that are connected to real-world applications.
- 3.6. **Standard:** An eFaculty member demonstrates competencies in creating and implementing assessments in online learning environments in ways that assure validity and reliability of instruments and procedures.

**Indicators:** An eFaculty member:

- 3.6.1. creates or selects fair, adequate and appropriate assessment instruments to measure online learning that reflect sufficient content validity (i.e., that adequately cover the content they are designed to measure), reliability and consistency over time; and

3.6.2. implements online assessment measures and materials in ways that ensure instrument validity and reliability.

3.7. **Standard:** An eFaculty member develops and delivers assessments, projects and assignments that meet standards-based learning goals and assesses learning progress by measuring learner achievement of learning goals.

**Indicators:** An eFaculty member:

3.7.1. continually reviews all materials and Web resources for their alignment with course objectives and state and local standards and for their appropriateness;

3.7.2. creates assignments, projects and assessments that are aligned with learners' different visual, auditory and hands-on ways of learning;

3.7.3. includes authentic assessment (i.e., the opportunity to demonstrate understanding of acquired knowledge and skills as opposed to testing isolated skills or retained facts) as part of the evaluation process;

3.7.4. provides continuous evaluation of learners to include pre- and post-testing and learner input throughout the course; and

3.7.5. demonstrates an understanding of the relationships between and among the assignments, assessments and standards-based learning goals.

3.8. **Standard:** An eFaculty member demonstrates competencies in using data and findings from assessments and other data sources to modify instructional methods and content and to guide learner learning.

**Indicators:** An eFaculty member:

3.8.1. assesses each learner's background and content knowledge and uses these data to plan instruction;

3.8.2. reviews learner responses to test items to identify issues related to test validity or instructional effectiveness;

3.8.3. uses observational data (e.g., tracking data in electronic courses, Web logs, e-mail) to monitor course progress and effectiveness; and

3.8.4. creates opportunities for self-reflection or assessment of teaching effectiveness within the online environment (e.g., classroom assessment techniques, teacher evaluations, teacher peer reviews).

3.9. **Standard:** An eFaculty member demonstrates frequent and effective strategies that enable both teacher and learners to complete self- and pre-assessments.

**Indicators:** An eFaculty member:

3.9.1. employs ways to assess learner readiness for course content and method of delivery;

3.9.2. employs ways for learners to effectively evaluate and assess their own readiness for course content and method of delivery;

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- 3.9.3. understands that learner success (e.g., grade, level of participation, mastery of content, completion percentage) is an important measure of teaching and course success; and
- 3.9.4. provides opportunities for learner self-assessment within courses.

These standards and indicators may or may not imply a full set of eFaculty competencies.

## 6. Implementation strategy

The rationale behind this project is that the identification of relevant and important eFaculty competencies has utility in:

- Recruiting and selecting faculty to teach in the online or blended environment;
- Assisting eFaculty to showcase their strengths and accomplishments;
- Identifying eFaculty strengths and conduct skills gap analysis for efficient training and CPD;
- Forming the intended learning outcomes for eFaculty training courses;
- Setting standards for eFaculty certification.

Therefore, the eFaculty competencies identified through this project will be used, as per the ePortfolio implementation strategy in Appendix A, to:

1. guide the development of intended learning outcomes for the existing and emerging eFaculty training courses;
2. assess the quality of eLearning directed at eFaculty CPD, i.e., the degree to which eFaculty can reasonably be expected to acquire the required competencies;
3. populate the ePortfolio tool as the competence standards eFaculty will be assessed against in the training and certification process.

What remains, then, is to:

- work with faculty and administration at eTQM College to affirm the eFaculty competencies;
- establish indicators of competence from “none”, through “developing”, to “expert”;
- develop and pilot the self-assessment ePortfolio tool;
- establish what would constitute digital evidence, and make it possible to create appropriate digital evidence.

When this process is complete, eTQM College and the faculty themselves will be able to showcase competencies for eTeaching to meet established international eLearning quality standards.

Finally, in the process of training and certifying eFaculty for the College and for external clients through CeLEx, these competencies may form the basis for either our own certificate and/or form part of the criteria in identifying and selecting appropriate partners for a shared certificate, i.e., we can seek to find partners that share our view of eFaculty competencies.



## 7. References

- Adams, M. and Dority, K. (2005). Part-time Faculty: Building a Quality Team. Occasional paper of the Distance Education and Training Council. Accessed online, August 2007, at [www.detc.org/downloads/No24%20-%20Part-Time%20Faculty%20-%20Adams.pdf](http://www.detc.org/downloads/No24%20-%20Part-Time%20Faculty%20-%20Adams.pdf)
- Abdulla, Ahmad G. (2004). Distance Learning Students' Perceptions of the Online Instructor Roles and Competencies. Florida State University PhD dissertation. Available at: <http://etd.lib.fsu.edu/theses/available/etd-04082004-124906/>
- Barker, K. (2003). The ePortfolio and Human Capital Accounting. A FuturEd White Paper available at <http://www.futured.com/library.htm> .
- Barker, K. (2005). ePortfolio for the Assessment of Learning. A FuturEd White Paper available at <http://www.futured.com/library.htm>.
- Barker, K. (2006). ePortfolio: A Tool for Quality Assurance. A FuturEd White Paper available at <http://www.futured.com/library.htm> .
- Barrett, H. (2007). Teacher (and Student Teacher) ePortfolios. Available online at <http://electronicportfolios.com/teachers/index.html>
- Bennett, S., Priest, A.-M., & Macpherson, C. (1999). Learning about online learning: An approach to staff development for university teachers. Australian Journal of Educational Technology, 15(3), 207-221. Available at: <http://www.ascilite.org.au/ajet/ajet15/bennett.html>
- Berge, Z.L. (1995). The Role of the Online Instructor/Facilitator. Available at [http://www.emoderators.com/moderators/teach\\_online.html](http://www.emoderators.com/moderators/teach_online.html)
- Collom, G., Dallas, A., Jong, R. & Obexer, R. (2002). Six months in a leaky boat: Framing the knowledge and skills needed to teach well online. Proceedings ASCILITE 2002, December 8-11. Auckland, New Zealand; accessed online August 2007 at <http://www.ascilite.org.au/conferences/auckland02/proceedings/papers/181.pdf>
- Darabi, A. A., Sikorski, C. G., & Harvey, R. B. (2006). Validated competencies for distance teaching. Distance Education, 27(1), 105-122.
- Dooley, Kim E. & Lindner, James R. (2001). Competencies for the Distance Education Professional: A Self-Assessment Model to Document Learning. Texas A&M University. Available at: <http://aaae.okstate.edu/proceedings/2001/dooley.pdf>
- Goodyear, P., Salmon, G., Spector, J. M., Steeples, C. & Tickner, S. (2001). Competence for Online Teaching: A Special Report. Educational Technology Research and Development Journal 49 (1) 65-72.
- Grant MacEwan College. Instructor Competencies in a Distance Education Context. Available at: [http://stats.macewan.ca/learn/staff/lit\\_comp.cfm](http://stats.macewan.ca/learn/staff/lit_comp.cfm)
- Herrington, J. & Oliver, R. (2001). Online learning: Professional development for the changing role of the lecturer. Paper presented at the Moving Online Conference II (September 2-4, 2001). School of Social and Workplace Development, Southern Cross University, New South Wales

- International Society for Technology in Education (2000). Educational Technology Standards and Performance Indicators for All Teachers. Available at:  
[http://cnets.iste.org/teachers/t\\_stands.html](http://cnets.iste.org/teachers/t_stands.html)
- Kemshal-Bell, Guy. (2001). The Online Teacher. New South Wales Department of Education and Training. Available at: <http://cyberteacher.onestop.net/final%20report.pdf>
- Kenny, J., Quealy, J., & Young, J. (2002). RMIT ICT DLS competency framework - A basis for effective staff development. UltiBASE. Available at:  
<http://ultibase.rmit.edu.au/Articles/nov02/kenny1.htm>
- Lee, I. (2002). Delphi Study on Competency Model of Online Instructor. In G. Richards (Ed.), Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2002 (pp. 1778-1779). Chesapeake, VA: AACE.
- Lee, J.-L. and Hirumi, A. (2003). Analysis of Essential Skills and Knowledge for Teaching Online. Paper presented at the Association for Educational Communications and Technology, Chicago, Ill., 2004. Available at:  
[http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content\\_storage\\_01/0000019b/80/1b/a6/fa.pdf](http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1b/a6/fa.pdf)
- Louisiana Community & Technical College System (2005). Competencies for e-Learning Faculty. Available at: [www.lctcs.state.la.us/assets/policies/3.010.pdf](http://www.lctcs.state.la.us/assets/policies/3.010.pdf)
- Luck, A. & McQuiggan, C. A. (2006). Discovering what faculty REALLY need to know about teaching online. Paper presented at the Distance Learning Conference, Madison, WI. Available at:  
[http://www.uwex.edu/disted/conference/Resource\\_library/proceedings/06\\_4160.pdf](http://www.uwex.edu/disted/conference/Resource_library/proceedings/06_4160.pdf)
- Padavano, Denise & Gould, Marie (2004). Best Practices for Faculty Who Teach Online, DEOSNEWS 13 (9). Available at:  
[http://www.ed.psu.edu/acsde/deos/deosnews/deosnews13\\_9.pdf](http://www.ed.psu.edu/acsde/deos/deosnews/deosnews13_9.pdf)
- Puzziferro-Schnitzer, M. (2005). Managing virtual adjunct faculty: applying the seven principles of good practice. Online Journal of Distance Learning Administration , VIII(II). Available online: <http://www.westga.edu/%7Edistance/ojdl/summer82/schnitzer82.htm>
- Quilter, S. & Weber, R. (2004). Quality assurance for online teaching in higher education: considering and identifying best practice for e-Learning. International Journal on E-Learning , 3(2), 64-73.
- Reid, Doug (2002). International Conference on Computers in Education (ICCE'02). A Classification Schema of Online Tutor Competencies. Edith Cowan University
- Schoenfeld-Tacher, R., & Persichitte, K. (2000). Differential skills and competencies required of faculty teaching distance education courses. International Journal of Educational Technology 2 (1).
- Shank, P. (2004) Competencies for Online Instructors. Available at:  
<http://www.learningpeaks.com/instrcomp.pdf>
- Sixl-Daniell, K., Williams, J.B., and Wong, A. (2006). A Quality Assurance Framework for Recruiting, Training (and Retraining) Virtual Adjunct Faculty. Accessed online, August 2007, at <http://www.ascilite.org.au/conferences/perth04/procs/pdf/sixl-daniell.pdf>

Draft for discussion

- Smith, T.C. (2005) Fifty-One Competencies for Online Instruction. Axia College, Western International University. Available online at <http://www.thejeo.com/Ted%20Smith%20Final.pdf>
- Southern University Online and the Center for Effective E-Teaching and E-Learning. Online Instructor Competencies. Available at: [http://suamconline.net/ContentManual/OnlineManual/OnlineCourseTutorial/page\\_03.htm](http://suamconline.net/ContentManual/OnlineManual/OnlineCourseTutorial/page_03.htm)
- Spector, M.J. & De la Teja, I. (2001). Competencies for online teaching. ERIC Digest , December, 3-4. Available at: <http://www.ericdigests.org/2002-2/teaching.htm>
- Thach, E. C. & K. L. Murphy. (1995). Competencies for Distance Education Professionals. Educational Technology Research and Development Journal 43 (1) 57- 79.
- Tobin, T. J. (2004). Best practices for administrative evaluation of online faculty. Online Journal of Distance Learning Administration , VII(II). Available online: <http://www.westga.edu/%7Edistance/ojdl/summer72/tobin72.html>
- Turner, L. (2005). 20 Basic Technology Skills Every Educator Should Have. Accessed online, August 2007, <http://thejournal.com/the/printarticle/?id=17325>
- Williams, P. (2000). Defining Distance Education Roles and Competencies for Higher Education Institutions: A Computer-Mediated Delphi Study. Texas A & M University.
- Wilson, G. & Stacey, E. (2003) Online interaction impacts on learning: Teaching the teachers to teach online. In G. Crisp, D. Thiele, I. Scholten, S. Barker and J. Baron (Eds), Interact, Integrate, Impact. Proceedings 20th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education, pp541-551. Adelaide, 7-10 December: ASCILITE. Available at: <http://www.ascilite.org.au/conferences/adelaide03/docs/pdf/541.pdf>
- Varvel, Virgil, Online Instructor Competencies, Pointers and Clickers, Vol. 7 (6) 2006. Available at: [http://www.ion.uillinois.edu/resources/pointersclickers/2006\\_11/CompPointer.pdf](http://www.ion.uillinois.edu/resources/pointersclickers/2006_11/CompPointer.pdf)

**Appendix A:  
ePortfolio Strategy for eTQM College**

Prepared by Dr. Kathryn Chang Barker  
March 14, 2007

**e-Portfolio:** a digital tool used by both individuals and organizations to demonstrate competencies – acquired learning – with supporting digital evidence. Development and use of an e-Portfolio involves:

- Tools to create both a digital archive and a purpose driven presentation;
- Multi-purpose tools within a Virtual Learning Environments
- Both processes (learning) and product;
- Meeting international quality standards.

There are basically three types of e-Portfolios, with many subsets:

1. **standards-based e-Portfolios**
2. **demonstration e-Portfolios**
3. **social networking e-Portfolios**

Ideally, we should find a tool or e-Portfolio service that allows for all three. All the following uses of e-Portfolio are inter-related in some fashion. It is my professional opinion that the e-Portfolio is, in fact, e-Learning at it's finest.

## **1. Three uses of Standards-based e-Portfolios**

### **1.1. Standards-based for assessment of learning**

At eTQM, we would use a standards-based e-Portfolio for assessment of learning (academic and continuing education courses) for students, faculty as learners, and other learning clients. The associated strategy involves:

- describing all learning objects, modules, courses and programs in terms of intended learning outcomes, i.e., competencies that are observable and demonstrable;
- developing e-Portfolio standards frameworks and marking rubrics for each and all courses, i.e., embedding the intended learning outcomes as learning requirements or standards in the e-Portfolio tool, with associated marking rubrics;
- providing a personal e-Portfolio – an online, digital repository – to all students which belongs to them and can form the basis of a lifelong learning portfolio;
- training learners (and faculty as learners) to demonstrate their competencies by attaching digital artifacts (papers, hyperlinks to projects, video and audio demonstrations) for each and all learning standards;
- training instructors (and learners, for self-assessment) to assess the digital evidence against the learning standards using marking rubrics;
- assisting incoming students to create e-Portfolios of acquired competencies for, if desired, advanced placement and/or continuing professional development;
- ensuring that students (and faculty as trainees) transfer the course competencies to their personal e-Portfolios.

In summary, the associated purposes are:

- increasing use of learning technologies
- appropriate and reflective learning processes
- authentic and self-assessment of learning
- learning and practicing of important ICT skills
- adding to one's personal e-Portfolio of acquired competencies

This is a form of quality assurance for teaching and learning at eTQM. The learning acquired by students from each learning object, module, course and/or program should be migrated to the individual's personal e-Portfolio of acquired competences. This can then be used by them for skills gap analysis. The cumulative learning of all students in a course can be used to assess the quality of the module or course; and the cumulative quality of the courses can be used to demonstrate, in part, the quality of the College.

This same e-Portfolio approach can be used to assess incoming students for advanced placement/standing. Prior learning credit can be awarded to students who can demonstrate, via an e-Portfolio, the competencies they have acquired from previous study or work experience.

### **1.2. Standards-based e-Portfolio for QA of e-Learning at eTQM**

In a second and related way, the standards-based e-Portfolio can be used for quality assurance for learning objects, courses, programs and services. Quality standards form the requirements side of the e-Portfolio; digital evidence is provided by products and services under review to demonstrate the degree to which they meet each and all relevant standards. The associated strategy involves:

1. developing comprehensive, consensus-based quality standards for each and all e-Learning products and services developed and/or purchased by eTQM;
2. populating an e-Portfolio tool with the standards, as requirements;
3. using the e-Portfolio tool as a design rubric for new products and services;
4. using the e-Portfolio tool as an evaluation tool for potential purchases (to be completed by vendors);
5. using the e-Portfolio tool as a quality assessment tool for existing e-Learning products and services;
6. using the e-Portfolio tool for marketing eTQM e-Learning products and services;
7. continuously monitoring usage, measuring impact and making improvements.

This use of the e-Portfolio provides simple, transparent, transparent and total quality management for eTQM e-Learning products and services.

This same process will be used in the selection of:

- papers for presentation at the annual forum
- submissions for publication in the e-Journal

In addition, this process will subsequently be used by the Centre of Excellence in, e.g.,

- demonstrating and managing Centre products and services
- assessing e-Learning products and services for the quality mark
- assessing e-Learning products and services for the quality award

Ultimately, the standards-based e-Portfolio will be used by the e-Learning Unit to manage and demonstrate KPIs in an iterative and transparent fashion.

### **1.3. Standards-based e-Portfolio for Human Capital Management**

In a third manner, associated with personal rather than organizational e-Portfolios, the standards-based e-Portfolio can be used by employers for human capital management. Instead of intended learning outcomes, employers will develop intended or required competencies with associated skill levels. The potential employees (e.g., College graduates) can demonstrate what they know and can do, with digital evidence. Thus, at eTQM, all students should graduate with their personal e-Portfolio of acquired competences, to be used for employment, career development and lifelong learning.

As well, all faculty and staff should also have an e-Portfolio to manage continuing professional development. As a long-term goal, the HCM approach could be adopted by eTQM, and we would be a total e-Portfolio / e-Learning college.

The standards-based ePortfolio is the most common, and many tools are available. An important related issue is to provide secure, private, ongoing ePortfolio storage – i.e., digital storage space.

## **2. Demonstration e-Portfolio**

Demonstration portfolios are commonly used, e.g., by artists and others who market products and services. Digitizing the portfolio makes it into an e-Portfolio of goods on offer, with associated samples, examples and quality criteria.

At eTQM, the e-Learning Unit would use a use such an e-Portfolio tool to:

- Manage and share e-Learning research and resources;
- Manage and promote eTQM e-Learning competencies;
- Research management and reporting;

Similarly, the e-Learning Centre of Excellence would use the Demonstration e-Portfolio to manage and promote:

- e-Learning Continuing Education (LLL) services;
- client continuing professional development;
- project management and reporting;
- the e-Learning e-Journal and e-Newsletters;

Indeed, a very viable business for the Centre of Excellence in e-Learning will be training and ePortfolio development services.

The associated strategy involves:

1. Selecting and installing an e-Portfolio tool that includes both a digital archive function and a purpose-driven presentation function;
2. Creating a digital archive (database) of e-Learning research and resources, e.g., case studies, best practices, events
3. Creating a digital archive of e-TQM e-Learning competencies, i.e., e-Faculty, courses and services
4. Creating a digital archive of
5. Generating purpose-driven presentations for newsletters, clients, and special events;
6. Continuous updating and active, assigned participation by College personnel;
7. Monitoring usage, measuring impact and making improvements.

In addition to artist e-Portfolios, other examples of demonstration e-Portfolio are personal home pages, digital storytelling and scrap booking, and lifelong learning e-Portfolios.

## **3. Social networking e-Portfolio**

Communicating is the basis of social networking; communicating to develop partnerships, collaborate on research, seek advice from colleagues, initiate teams and groups, and develop virtual communities. The social networking e-Portfolio performs these functions digitally. At eTQM, the e-Learning Unit would use such an e-Portfolio tool to:

- Form the framework for an e-Learning portal;
- Develop an e-Faculty community at eTQM;
- Manage such boards as the e-Learning Advisory Board and editorial boards;
- Building organizations such as the Middle East e-Learning Quality Association (hypothetical name)
- Organize forums and special events;

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The associated strategy involves:

1. Selecting and installing a social-networking e-Portfolio tool that meets College security and privacy requirements;
2. Populating the tool with opportunities to communicate – student to student, student to faculty, faculty to faculty, admin to students and faculty, board members with the College and each other, potential students and clients to the college and the Centre of e-Learning Excellence;
3. Monitoring the usage, measuring impact and making improvements

Examples of social networking software include MySpace, ELGG, and blogging tools.

#### **4. Implementing the e-Portfolio Strategy**

##### **4.1. Implementation for Impact**

Overall, this proposed e-Portfolio strategy should be framed and undertaken as a research project to measure impact on, e.g.,

- Student and faculty learning – both subject matter expertise and ICT skills
- Virtual community building and College reach
- Quality assurance of products and services
- e-Learning Unit Management effectiveness and efficiency
- Return on Investment
- And others to be discussed/determined.

##### **4.2. Required Resources**

First and foremost, we need to select an ePortfolio tool or service that meets our three purposes, if possible.

Secondly, we need expertise to:

- Install and continuously trouble-shoot an ePortfolio tool, and to provide ongoing technical support
- Train and mentor students and faculty with both assessment e-Portfolios and lifelong learning e-Portfolios
- Provide e-Portfolio training workshops to outside clients
- Actively develop and manage the e-Portal – creating archives, presentations and communities

Finally, we need adequate digital storage that is secure and enduring. This can become a fee for service later on.

**Appendix B:**  
**National Educational Technology Standards and Performance Indicators for Teachers**  
(ISTE, 2000)

*All classroom teachers should be prepared to meet the following standards and performance indicators*

**I. TECHNOLOGY OPERATIONS AND CONCEPTS**

*Teachers demonstrate a sound understanding of technology operations and concepts. Teachers:*

- A. demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in the ISTE *National Educational Technology Standards for Students*).
- B. demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

**II. PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES**

*Teachers plan and design effective learning environments and experiences supported by technology. Teachers:*

- A. design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- B. apply current research on teaching and learning with technology when planning learning environments and experiences.
- C. identify and locate technology resources and evaluate them for accuracy and suitability.
- D. plan for the management of technology resources within the context of learning activities.
- E. plan strategies to manage student learning in a technology-enhanced environment.

**III. TEACHING, LEARNING, AND THE CURRICULUM**

*Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers:*

- A. facilitate technology-enhanced experiences that address content standards and student technology standards.
- B. use technology to support learner-centered strategies that address the diverse needs of students.
- C. apply technology to develop students' higher order skills and creativity.
- D. manage student learning activities in a technology-enhanced environment.

**IV. ASSESSMENT AND EVALUATION**

*Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies. Teachers:*

- A. apply technology in assessing student learning of subject matter using a variety of assessment techniques.
- B. use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.
- C. apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.

**V. PRODUCTIVITY AND PROFESSIONAL PRACTICE**

*Teachers use technology to enhance their productivity and professional practice. Teachers:*

- A. use technology resources to engage in ongoing professional development and lifelong learning.
- B. continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
- C. apply technology to increase productivity.
- D. use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

**VI. SOCIAL, ETHICAL, LEGAL, AND HUMAN ISSUES**

*Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK–12 schools and apply that understanding in practice. Teachers:*

- A. model and teach legal and ethical practice related to technology use.
- B. apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
- C. identify and use technology resources that affirm diversity.
- D. promote safe and healthy use of technology resources.
- E. facilitate equitable access to technology resources for all students.



**Appendix C:**  
**Six Essential Skills of a Successful Online Distance Educator**  
**in Higher Education in order of Importance**  
(Lee and Hirumi, 2004)

1. Interaction
  - 1.1. guide and maintain interactive discussion
  - 1.2. provide timely feedback
  - 1.3. encourage peer learning
  - 1.4. advise and counsel students
2. Management
  - 2.1. monitor and evaluate student performance
  - 2.2. facilitate presentation
  - 2.3. introduce support services to students
3. Organization / instructional design
  - 3.1. provide clear learning outcomes, objectives, and expectations
  - 3.2. organize materials and activities clearly and well
  - 3.3. identify students' learning styles/needs
  - 3.4. conduct instructional design effort
  - 3.5. present materials and activities
  - 3.6. provide a variety of learning activities
4. Technology
  - 4.1. utilize technology in a competent manner
5. Content management
  - 5.1. master in content area
6. Teamwork skills
  - 6.1. collaborate with technical/support skills`

**Appendix D:**  
**Core Competency Level Competency-Based Behavioral Anchors**  
(Dooley and Lindner, 2001)

Adult Learning Theory

- Show someone how to do a literature review on student-centered learning
- Present a short workshop on the theory of andragogy
- Develop and deliver a student-centered training program that incorporates adult learner characteristics and student learning styles

Technological Knowledge

- Show someone how to log onto a computer and search the Internet
- Show someone how to access and use Web course tools
- Show someone how to design and execute a Web-delivered course using Web course tools

Instructional Design

- Use an ice-breaker or opening to gain attention
- Prepare a lesson plan
- Write measurable instructional objectives for a curricula that provides for student-centered learning

Communication Skills

- Facilitate a videoconference
- Create virtual teams for discussion threads
- Design appropriate synchronous and asynchronous communications methods for delivering course materials at a distance

Graphic Design

- Rely on technical experts to develop multimedia
- Show someone how to develop a PowerPoint presentation with graphics
- Show someone how to use animation, video streaming, and text to effectively deliver content

Administrative Issues

- Rely on technical experts for scheduling and copyright clearance
- Identify and use available support services to plan and organize a course
- Determine fiscal, human, and technical needs to plan and implement a curricula entirely at a distance

**Appendix E:  
Competencies for Online Instructors**  
(Shank, 2005)

1. Administrative

The primary goal is to assure smooth course operations and reduce instructor and learner overload.

- Provides an unambiguous roadmap through the instruction.
- Provides clear objectives, expectations, and policies.
- Posts course materials (syllabus, assignments, discussion topics, etc.) in advance so learners can plan.
- Conveys changes and updates.
- Assures that all learners are 'on board' at the beginning of a course.
- Returns learner calls/emails quickly to allow learners to progress.
- Refers problems to appropriate sources and follows up to assure resolution.

2. Design

The primary goal is to assure adequate learning outcomes and satisfaction.

- Plans activities that allow learners to attach personal meaning to content.
- Provides opportunities for hands-on practice and application.
- Balances design to help learners manage load.
- Helps learners assess their learning and attain personal learning goals.
- Incorporates social aspects to improve satisfaction, provide a realistic environment, present multiple viewpoints, and overcome anonymity.
- Assures materials are easy to use.

3. Facilitation

The primary goal is to provide social benefits and enhance learning.

- Sets or facilitates setting of communication rules and group decision-making norms.
- Provides compelling opportunities for online discussion, negotiation, debate.
- Moderates discussion, contributes advanced content knowledge and insights, models desired methods of communication.
- Fosters sharing of knowledge, questions, and expertise.
- Contributes outside resources (online, print-based, others) and encourages learners to do as well.
- Responds to discussion postings adequately without 'taking over.'
- Provides acknowledgment of learner contributions.
- Moderates disagreements and group problems.

4. Evaluation

The primary goal is to assure that learners know how they will be evaluated and help learners meet course objectives.

- Provides learners with clear grading criteria. Uses rubrics, grading criteria, or examples to help learners recognize expectations.
- Assists learners who are having problems completing the assignments.
- Allows learners to track assignment completion and impact on final grade.
- Quickly acknowledges receipt of assignments.
- Provides feedback and help with remediation, as needed.
- Contacts learners who have not completed assignments and helps them plan to complete assignments.

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## 5. Technical

The primary goal is to assure overcome barriers due to technical components.

- Becomes proficient with all technical systems used in the course.
- Helps learners troubleshoot technical systems.
- Refers problems to appropriate sources and follows up to assure resolution.

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**Appendix F:  
Standards for Quality Online Teaching  
(SREB, 2006)**

**1. Academic Preparation:**

**Standard:** The teacher meets the professional teaching standards established by a state licensing agency or the teacher has academic credentials in the field in which he or she is teaching.

- Indicators:** The teacher:
- meets the state's professional teaching standards or has academic credentials in the field in which he or she is teaching;
  - provides evidence that he or she has credentials in the field of study to be taught;
  - knows the content of the subject to be taught and understands how to teach the content to students;
  - facilitates the construction of knowledge through an understanding of how students learn in specific subject areas; and
  - continues to update academic knowledge and skills.

**2. Content Knowledge, Skills and Temperament for Instructional Technology**

**Standard:** The teacher has the prerequisite technology skills to teach online.

- Indicators:** The teacher:
- demonstrates the ability to effectively use word-processing, spreadsheet and presentation software;
  - demonstrates effective use of Internet browsers, e-mail applications and appropriate online etiquette;
  - demonstrates the ability to modify and add content and assessment, using an online Learning Management System (LMS);
  - incorporates multimedia and visual resources into an online module;
  - utilizes synchronous and asynchronous tools (e.g., discussion boards, chat tools, electronic whiteboards) effectively;
  - troubleshoots typical software and hardware problems;
  - demonstrates the ability to effectively use and incorporate subject-specific and developmentally appropriate software in an online learning module; and
  - demonstrates growth in technology knowledge and skills in order to stay current with emerging technologies.

**3. Online Teaching and Learning Methodology, Management, Knowledge, Skills and Delivery**

**Standard:** The teacher plans, designs and incorporates strategies to encourage active learning, interaction, participation and collaboration in the online environment.

- Indicators:** The teacher:
- demonstrates effective strategies and techniques that actively engage students in the learning process (e.g., team problem-solving, in-class writing, analysis, synthesis and evaluation instead of passive lectures);
  - facilitates and monitors appropriate interaction among students;
  - builds and maintains a community of learners by creating a relationship of trust, demonstrating effective facilitation skills, establishing consistent and reliable expectations, and supporting and encouraging independence and creativity;

## Draft for discussion

- promotes learning through group interaction;
- leads online instruction groups that are goal-oriented, focused, project-based and inquiry-oriented;
- demonstrates knowledge and responds appropriately to the cultural background and learning needs of non-native English speakers;
- differentiates instruction based on students' learning styles and needs and assists students in assimilating information to gain understanding and knowledge; and
- demonstrates growth in teaching strategies in order to benefit from current research and practice.

**Standard:** The teacher provides online leadership in a manner that promotes student success through regular feedback, prompt response and clear expectations.

- Indicators:** The teacher:
- consistently models effective communication skills and maintains records of applicable communications with students;
  - encourages interaction and cooperation among students, encourages active learning, provides prompt feedback, communicates high expectations, and respects diverse talents and learning styles;
  - persists, in a consistent and reasonable manner, until students are successful;
  - establishes and maintains ongoing and frequent teacher-student interaction, student-student interaction and teacher-parent interaction;
  - provides an online syllabus that details the terms of class interaction for both teacher and students, defines clear expectations for both teacher and students, defines the grading criteria, establishes inappropriate behavior criteria for both teacher and students, and explains the course organization to students;
  - provides a syllabus with objectives, concepts and learning outcomes in a clearly written, concise format;
  - uses student data to inform instruction, guides and monitors students' management of their time, monitors learner progress with available tools and develops an intervention plan for unsuccessful learners;
  - provides timely, constructive feedback to students about assignments and questions; and
  - gives students clear expectations about teacher response time.

**Standard:** The teacher models, guides and encourages legal, ethical, safe and healthy behavior related to technology use.

- Indicators:** The teacher:
- facilitates student investigations of the legal and ethical issues related to technology and society;
  - establishes standards for student behavior that are designed to ensure academic integrity and appropriate uses of the Internet and written communication;
  - identifies the risks of academic dishonesty for students;
  - demonstrates an awareness of how the use of technology may impact student testing performance;
  - uses course content that complies with intellectual property rights policies and fair use standards;
  - provides students with an understanding of the importance of Acceptable Use Policies (AUP);
  - demonstrates knowledge of resources and techniques for dealing with issues arising from inappropriate use of electronically accessed data or information; and
  - informs students of their right to privacy and the conditions under which their names or online submissions may be shared with others.

**Standard:** The teacher has experienced online learning from the perspective of a student.

**Indicators:** The teacher:

- applies experiences as an online student to develop and implement successful strategies for online teaching;
- demonstrates the ability to anticipate challenges and problems in the online classroom; and
- demonstrates an understanding of the perspective of the online student through appropriate responsiveness and a supportive attitude toward students.

**Standard:** The teacher understands and is responsive to students with special needs in the online classroom.

**Indicators:** The teacher:

- understands that students have varied talents and skills and uses appropriate strategies designed to include all students;
- provides activities, modified as necessary, that are relevant to the needs of all students;
- adapts and adjusts instruction to create multiple paths to learning objectives;
- encourages collaboration and interaction among all students;
- exhibits the ability to assess student knowledge and instruction in a variety of ways; and
- provides student-centered lessons and activities that are based on concepts of active learning and that are connected to real-world applications.

**Standard:** The teacher demonstrates competencies in creating and implementing assessments in online learning environments in ways that assure validity and reliability of instruments and procedures.

**Indicators:** The teacher:

- creates or selects fair, adequate and appropriate assessment instruments to measure online learning that reflect sufficient content validity (i.e., that adequately cover the content they are designed to measure), reliability and consistency over time; and
- implements online assessment measures and materials in ways that ensure instrument validity and reliability.

**Standard:** The teacher develops and delivers assessments, projects and assignments that meet standards-based learning goals and assesses learning progress by measuring student achievement of learning goals.

**Indicators:** The teacher:

- continually reviews all materials and Web resources for their alignment with course objectives and state and local standards and for their appropriateness;
- creates assignments, projects and assessments that are aligned with students' different visual, auditory and hands-on ways of learning;
- includes authentic assessment (i.e., the opportunity to demonstrate understanding of acquired knowledge and skills as opposed to testing isolated skills or retained facts) as part of the evaluation process;
- provides continuous evaluation of students to include pre- and post-testing and student input throughout the course; and
- demonstrates an understanding of the relationships between and among the assignments, assessments and standards-based learning goals.

**Standard:** The teacher demonstrates competencies in using data and findings from assessments and other data sources to modify instructional methods and content and to guide student learning.

**Indicators:** The teacher:

- assesses each student's background and content knowledge and uses these data to plan instruction;
- reviews student responses to test items to identify issues related to test validity or instructional effectiveness;
- uses observational data (e.g., tracking data in electronic courses, Web logs, e-mail) to monitor course progress and effectiveness; and
- creates opportunities for self-reflection or assessment of teaching effectiveness within the online environment (e.g., classroom assessment techniques, teacher evaluations, teacher peer reviews).

**Standard:** The teacher demonstrates frequent and effective strategies that enable both teacher and students to complete self- and pre-assessments.

**Indicators:** The teacher:

- employs ways to assess student readiness for course content and method of delivery;
- employs ways for students to effectively evaluate and assess their own readiness for course content and method of delivery;
- understands that student success (e.g., grade, level of participation, mastery of content, completion percentage) is an important measure of teaching and course success; and
- provides opportunities for student self-assessment within courses.