International Journal for Education Media and Technology
2008, Vol.2, No. 1, pp. 15-26

Quality in Distance Education: A Macro-analysis of Recent Trends and Issues

Terumi Miyazoe

International Christian University, Japan

This paper discusses the issues regarding quality in distance education. The aim of this paper includes locating the issues of quality in distance education in the wider context of education in general. It first examines its own interpretations of quality in distance education and tries to propose a framework for how we can conceptualize quality. Secondly, it examines some of the major approaches towards quality in distance education that currently form the consensus as fields of study in distance education. The paper highlights some of the particularities involved in quality issues and suggests areas for improvement in future research and practice regarding quality in the field.

Keywords: quality, distance education, credit bank, cost, accessibility

QUALITY ISSUES IN DISTANCE EDUCATION

The field of distance education does not yet have a consensus or "rigid standardization" on how to talk about quality issues (Sherry, 2003, p.436). Towards the research question about *quality* in distance education, some focus on cost issues (Bates, 2005) whereas others examine learner outcomes (Russell, 1999). This rather chaotic state in research direction may partly derive from the fact that people understand *quality* in different ways; that is, any research and practice that is directed towards improvement (= goodness) could be included in quality issues. However, in this paper the view is taken that the research areas can be more clearly delineated by ensuring that quality has as its core the problem of *axiology,* or the study of value. The following section, relying on the work by Sherry (2003) and Mayer (2002) who give a useful overview of the issues of quality in distance education, attempts to clarify what is meant by the term *quality* in this paper and how we can take a more systematic approach towards the issues of quality in distance education.

What is quality?

A dictionary definition of "quality" (OALD, 2005) is a useful place to begin. Quality is:

> the standard of something when it is compared to other things like it; how good or bad something is/a high standard/thing that is part of a person's character, especially something good/a feature of something, especially one that makes it different from something else (abbreviation "sth" is expanded to "something").

Though simple, this definition seems to succinctly express the essential components necessary to phrase the issue of quality in this paper's discussions; that is, that the concept of quality includes 1) standards, 2) comparison, 3) goodness, and 4) uniqueness. Therefore, we perceive the quality of an object (whether concrete, abstract, or both) by applying some sort of standard: we perceive quality by its having superiority over other things by comparison (goodness), or we perceive quality by its having an ultimate value (uniqueness), although it must be said that uniqueness and goodness are not always completely exclusive. If our emphasis is more on the comparative aspects of quality, we may establish "betterness" and "uniqueness" as subdivisions of "goodness." As will be examined later, the notion of *betterness* and

uniqueness could be the keys to elucidate the issue of quality in our research.

A framework

Drawing together the elements previously discussed, Table 1 below provides an overview of the conceptualization of the issues of quality in distance education so far. To this, the often referred-to distinction between micro-/macro- levels of analysis (Smith & Ragan, 2005) is also used to classify different approaches: that is, macro-level evaluations refer to research approaches that are more concerned with the convertibility of educational value between traditional and distance education whereas micro-level evaluations relate to considering the inner structures of a program/course regarding quality learning in distance education.

Table 1. *Conceptualization of Quality Issues in Distance Education*

Levels	Research schemes	Research questions
Macro- ↓ Micro-	Quality assurance Credit banks	How can we assure quality of distance education as we have with traditional education? ↓ How can we realize quality learning in distance education that is different from traditional education? ↓ How can we assure quality in education regardless of whether it is traditional or online?
	People's perceptions	
	Cost and accessibility Learner outcomes	

More precisely, at the macro-level, the themes of quality assurance and credit banks are directly related to how people evaluate and consider the quality of distance education, whereas at the micro-level, the themes of cost and accessibility, and learner outcomes are more related to how people try to improve or control the quality. People's perceptions towards distance education can be obtained from both levels. Unfortunately, at this stage of development, while some are ready to provide ample research data to discuss the validity of the opposing positions, many are still at an early stage and have yet to decide how to test their hypotheses. Even so, this paper will include some of these early-stage approaches because they are likely to develop into future trends.

Finally, empirically, it is observed that the main trend regarding quality issues in distance education seems to have recently been shifting emphasis from, "How can we assure quality in distance education as we have with traditional education?" to, "How can we realize quality learning in distance education that is different from traditional education?" and further to, "How can we assure quality in education regardless of whether it is traditional or online?": the reason for this will be explained in the arguments of learning outcomes and people's perceptions in this paper.

QUALITY MEASUREMENTS IN DISTANCE EDUCATION

Quality assurance

In this paper, *quality assurance* is defined as "planned activities carried out with the intent and purpose of maintaining and improving the quality of learning rather than simply evaluating activities" (Jung 2005b, p.5). Therefore, following this definition, the concept of quality assurance is more about the standardization of formative efforts to maintain and improve quality in distance education for present and future practice.

Accreditation is another concept which often appears paired with the issue of quality assurance, and it is difficult to draw a clear line between the concept of evaluation (Hamalainen et al., 2001) and assessment. In this paper, to avoid confusion, accreditation will be understood as a judgmental evaluation or "the yes-no verdict" (Hamalainen et al., 2001, p.8), that is a pass-or-fail decision, whether a program is *up to* a certain standard, whereas quality assurance is more directed to the *process* of reaching that goal. As Hamalainen et al. (2001) admit, the process could consist of many formative evaluations (or assessments) including course-level analysis. When a program is declared to have cleared a standard, it is regarded as *quality assured*. In this sense a prior "no verdict" could be upgraded to a "yes verdict" at a later time if the necessary efforts are made; accreditation is a device to foster *improvement* whereas establishing the validity period of the approval (for example, 10 years in case of American Academy for Liberal Education or AALE, 2006) contributes to the *maintenance* of the assured quality level.

Jung (2005b) executed a comprehensive overview of the quality assurance frameworks in different continents in distance education. The key points are 1) if distance education has been accorded *separate* criteria of quality assurance or 2) if the same criteria have been applied to both traditional education and distance education. As of 2005, the former case makes up the majority and only India (Distance Education Council or DEC) and Turkey are reported to be in the second category (Jung, 2005b). At the national level, for example, the Quality Assurance Agency (QAA) in the UK and the Council for Higher Education Accreditation (CHEA) in the US are examples of bodies that work specifically on quality issues in education in each country. The UK also has the Open & Distance Learning Quality Council (ODLQC) that serves as the quality assurance center of the distance courses offered by non-accredited institutes (British Council, n.d.).

In the case of Japan, the National Institute of Academic Degrees and University Evaluation (NIAD-UE), the Japan University Accreditation Association (JUAA) and the Japan Institution for Higher Education Evaluation (JIHEE) take these roles: the detailed results of the evaluation of the institutes that are annually awarded accreditation are open to the public (JUAA, 2007b). With INQAAHE (below), the "Tokyo declaration" (JUAA, 2007c) was made to state its "intention of making positive contributions in the international community through networking with other higher education quality assurance bodies in the Asia Pacific region," that is the Asia-Pacific Quality Network (APQN) in 2002. This policy applies to all institutes, including distance universities, in higher education in Japan.

When limited to distance education institutes, the establishment of a new distance education institute or program must meet the Distance University Establishment Standards, and must be re-accredited every seven years after its initial establishment (JUAA, 2007a). Furthermore, the guidelines for the "maintenance, improvement, and development of the educational standards of correspondence universities" were set by the University Correspondence Education (UCE, Japan, 2005). Although they are currently at an early stage (being only four pages in length) they can be seen as a sign that distance education in Japan is becoming more concerned about quality issues in distance education.

Globally, though there are currently no specific unified quality assurance systems for distance education, some efforts have been made, including "Guidelines for Quality Provision in Cross-border Higher Education" (2005) jointly proposed by the OECD and the International Quality Assurance, Accreditation and the Recognition of Qualifications at UNESCO, and the International Network for Quality Assurance Agencies in Higher Education (INQAAHE). In Japan, the guidelines by the OECD and UNESCO are available to the public on the official website of the Ministry of Education with Japanese translation (MEXT, n.d.a): this is significant because it symbolizes that the Ministry accepts and is diffusing the guidelines as part of its national policy in education.

Jung (2005c) reports on a comprehensive survey on the quality assurance systems of eleven open and distance mega-universities (that have enrollments of more than 1,000,000) in 2004. Internal self-assessment and external examinations are used for self-improvement: efforts to maintain quality in distance institutes include internal staff development, examination of course development procedures, revision of learner assessments, and more, though the methods for quality assurance vary from institute to

institute. The two key areas observed for quality assurance were "course materials production" and "student support services," both of which allow the learners have direct involvement with their learning processes at a distance. Though quality assurance is said to be "in the early stages of development" (p.80), it is fair to say that "a quality culture has been emerging, if not fully integrated, in the mega universities investigated" (p.90).

The research report "Quality on the Line" jointly executed by the National Education Association (NEA) and Blackboard Inc., published by the Institute for Higher Education Policy (IHEP, 2000) presents 24 benchmarks for quality learning specifically focusing on online distance education. Its production process can be described as discrete because they were derived by testing an initial 45 benchmarks at six online distance learning institutes in higher education (in the US), resulting in the elimination of 13 and the addition of 3 items: they include the benchmarks of institutional support, course development, teaching/learning, course structure, student support, faculty support, and evaluation and assessment. Relying on this and other sources, Frydenberg (2002) articulated a matrix for standardizing quality of e-learning in distance education, though its scope is limited primarily to the US.

A relative weakness of quality assurance systems thus far is that though they have succeeded in providing descriptive standards or benchmarks to be followed in distance education and online learning, their efforts are largely dependent on the awareness of and the self-improvement efforts of each institute and they do not seem to include any serious sanction in the case of violation. Also, as Frydenberg (2002) notes, it would be necessary to incorporate "Consumer Reports" that come strictly from the learner's perspective in a more real sense. Furthermore, given the recent rapid merging of traditional and distance learning, it may be that we need a higher-level framework that encompasses all learning modes. We should give serious consideration as to whether separate or unified standards are more preferable; that is, we may gain more from standards that cover all modes of traditional, distance, online, and the blending of all patterns, at the global level.

Credit banks

Though this point is rarely mentioned as a quality issue, it is felt that the idea of *credit banks* will become increasingly more important because the systematic interpretation of equivalency in educational value across different educational institutes is directly involved.

In the Japanese context, it is the National Institute for Academic Degrees and University Evaluation (NIAD-UE) that is said to currently fulfill the role of a credit bank; under their scheme, there are two kinds of degree awarding processes (NIAD-UE, n.d.a):

1. Bachelor's degrees to learners who have completed study at a junior college, college of technology or a special training college.
2. Degrees (Bachelor's, Master's and Doctoral) to those who have completed a course of study at a NIAD-UE approved educational institution other than a university.

A clear weakness of the degree awarding system of NIAD-UE is its currently covering only the relatively narrow disciplines of science, engineering, and medicine at this moment for master's and doctoral degrees, although for bachelor's degrees, the much wider discipline of the humanities is covered. By 2004, the Institute had issued 14,039 degrees from bachelor's to doctoral since its establishment in 1991 (NIAD-UE, n.d.a), with continuing year on year increases (NIAD-UE, n.d.b). For the future, it is hoped that the Institute will become able to award all the kinds of degrees obtainable from all the accredited educational institutes within the country.

In the assessment process at NIAD-UE, credits obtained from campus-based and distance institutes are accorded equal value. This is understandable because the credit value obtained from campus-based and distance institutes are treated interchangeably under the current Japanese School Law, though there are some differences in graduation requirements between the two; specifically, under the University Establishment Standards of 2006, up-to 60 credits can be taken via media learning for campus-based institutes (Article 32 in e-Gov., 2006b) whereas all the 124 credits required for graduation can in theory

be taken via media learning for distance universities (Article 6 in e-Gov., 2006a). As for the master's programs, in the case of campus-based professional programs such as Law and Teaching, all the 30 credits required for graduation can now be taken via media learning as of 2007 (Article 9 in e-Gov., 2007) whereas all the 30 credits can be taken via media learning for distance universities (Article 3 in MEXT, n.d.b); here, we see *convergence* of campus-based and distance programs at the tertiary level of education, that is, a learner can obtain a master's degree via 100% "media learning" in either university type in Japan.

On the global stage, in its English version website, the Institute states its mission to be:

> In Japan academic degrees have been awarded to those who have completed the curriculum of universities and graduate schools subject to the School Education Law…However, recently, motivation for life-long learning activities is rising and individual learning paths are becoming more and more diversified. Therefore a new educational system is needed one which provides various educational opportunities assesses the learning results and then awards degrees through credit accumulation based on diverse learning experiences (NIAD-UE, n.d.c).

A telephone interview with a representative of NIAD-UE found that though they have started investigating the possibility of a "credit accumulation" system, their degree awarding applications have not perceived an urgent need to enlarge the system to cope with internationally obtained credits, or those obtained from domestic accredited universities other than those currently approved at master's and doctoral levels yet; however, this did not exclude the possibility that they will do so in the future (2007.4.23).

Even so, it is likely that learners will increasingly seek to be awarded a degree or degrees by accumulating credits from *more than one institute or from more than one country* regardless of whether they receive campus-based or distance learning. This phenomenon already occurs, for example, when a learner with a degree obtained from an accredited distance institute in one country moves to another country to pursue studies where the initial degree is a prerequisite to begin the next degree: this procedure has been supported by the international transcript assessment services in each country such as the International Qualifications Assessment Service (IQAS) in Canada (Alberta Government, 2000) and the transcript service in the US American Association of Collegiate Registrars and Admission Offices (AACRAO, 2007). In this sense, what the world now needs urgently is an *international credit bank* where any educational experience in any accredited institute in any country could be accumulated as credits and be converted into the *educational currency* of each country.

On the other hand, there are risks involved with such a step. Firstly, if we submit the transcript assessment standards to outside measurement systems (such as by American assessment agencies), the process will naturally include the application of a standard by one country to other countries; such a process could not be separated from the political and economic power relations among countries. In other words, there is a danger that the value systems of country/countries of power become the measurement applied to other countries, which could reproduce the hierarchical relations among the countries at the educational level. Secondly, as school systems of each country differ largely from country to country (for example, the term master's degree is defined by a minimum of one year of full-time study in Europe whereas the same degree is defined by two years full-time study in North America, but the former operates highly selective entry whereas the latter enrolls a much wider level of students), it is necessary to re-examine how we could measure and assure the equivalency of educational value on the global scale, including credits obtained by distance and online learning.

People's perceptions

As we saw above, people's beliefs can be said to be directly associated with the notion of quality and therefore, this section may actually be the most relevant in addressing the question of quality in distance education in this paper.

From the historical perspective it is undeniable that distance education has been regarded as a lesser kind of learning system, as symbolized by the books "Learning at the Back Door" (Wedemeyer, 1981) and

more recently "Digital Diploma Mills" (Nobel, 2001). Furthermore, the existence of papers such as those by Jones et al. (2002) that survey the positions of faculty members towards distance education suggest, ironically, the existence of negative evaluations of distance learning among faculty members *involved* in distance and online learning.

Conversely, the rise of the "distributed learning" style of educational concept where face-to-face and online components are arranged on a continuum of instructional design (Matheos & Archer, 2004; Saltzberg & Polyson, 1995) are making the traditional superior/inferior image to distance and face-to-face learning anachronistic. The series of research surveys executed by Sloan-C in 2003 and 2006, with the latter covering all the active degree granting institutions in higher education in the US (a total of 4,491 institutions, 2006, p.16), found that 62 % of chief academic officers *believe* online learning is *equal or superio*r to face-to-face learning.

Turning to Japan, though it would be ideal if surveys similar to those done by Sloan-C were conducted, the latest survey provided by NIME (2007) about the implementation of e-learning in higher education in Japan and covering all the 1,276 higher educational institutes (valid sample 70.7%) is still able to give us some insight as to how people regard e-learning. The survey reports that 10.7% of those institutions offer some sort of *stand-alone e-learning course* where students are not required to attend face-to-face meetings (p.32) and that *internet-based distance course* delivery has increased from 6.8% to 16.5% over the five years from 2002 to 2006 though distance courses delivery of other media such as print, video, and broadcasting remained almost flat (p.43). Though whether distance universities were included in this survey is unclear (if they were, interpretations may have to change slightly), the acceptance of e-learning components is clearly spreading rapidly with one tenth of the institutes, about 130 institutes, offer some sort of course solely online.

Globally, the number of distance online programs is growing, particularly in the US (Universities Com, 2007): and they include the recent opening of doctoral programs by traditionally recognized universities such as University of Calgary (Canada, 2006), Macquarie University (Australia, 2007), and others (WorldWideLearn.com, 2007; CVU-UVC, 2004) which will surely increase positive opinion towards distance learning. Therefore, though there is no doubt that it will take some time before people's perceptions towards the learning quality of distance learning has completely changed from the traditional view, it is fair to say, at the level of people's perceptions, that the trend is towards more acceptance of distance learning, especially in technology-oriented countries and among younger generations who are familiar with digital-based learning environments.

Cost and accessibility

Though the association of quality-cost-accessibility may sound slightly strange, research using the three elements as variables is common in the field. The "external triangle of education" posited by Daniel (2003), who also coined the term "mega-university," helps clarify their relationship. According to him, the triangle is formed by three vectors, a vector of access, a vector of cost, and the vector of quality.

He observes that the three vectors are intricately linked because, historically, quality education has been exclusive due to its high cost. Here, it is important to emphasize that the idea of accessibility in his argument is linked to the human right to education, and extending education to more people, which is the vision of many of the open and distance learning institutes around the world. By relying on technology, many accessibility problems are now being solved; however, the question is, as he notes, "Can mega-universities achieve [quality] without sacrificing wide access and low cost?"

In answer to this, the UKOU (United Kingdom Open University), to which Sir Daniel has been the vice-chancellor, is reported to rank fifth in the "quality of teaching" among universities in the UK. Also, to improve quality, he proposes the need to distinguish between "independent" vs. "interactive" activities; independent activities are similar to self-study here whereas interactive activities include communication among participants. In this scheme, he notes that new technology has now found means to provide both types of activities, therefore to maintain quality in distance education.

Jung (2005a) develops the cost issue from a unique perspective called *opportunity cost*, that is, "the benefit foregone when one alternative is chosen over another" (Matkin, 1997, p.287), for distance learners by analyzing online teacher training programs; that is, not only that online program fees are slightly more economical than traditional ones, but also that distance education indirectly saves the time and money of the learner as he/she can continue to do other things at the same time. This sort of analysis should draw greater attention because distance education could provide a unique quality to stakeholders, though one that is not directly visible.

There are a few concerns regarding the premises of Daniel's arguments; that is, 1) technology usage, 2) enrollment size, and 3) quality feature.

As to the first point, there is a position in the field that views technology as maintaining quality learning in distance education, as Twigg (2003, p.38 in Bates, 2005, p.153) summarizes:

> …Currently in higher education…we individualize faculty practice…and standardize the learning experience…Instead, we need to do the opposite: individualize student learning and standardize faculty practice…What higher education needs is greater consistency in academic practice that builds on accumulated knowledge about improving quality and reducing costs.

On the other hand, there is an opposing view that "...information technology has not proven to be a cost-reducer on the educational side of operations" (Bichelmeyer & Molenda, 2006, p.13), which is sometime also called the *productivity paradox* in that "the sharp drop in productivity roughly coincided with the rapid increase in the use of IT" that has been observed in many fields and sectors if not limiting to distance education" (Brynjolfsson, 1993, p.67). In these cases, people argue that new technology implementation does not necessarily lead to higher profitability or productivity in an educational institute.

Concerning the second point, enrollment size, it is not clear whether the majority of distance learning institutes could actually assure or aim for the necessary enrollment size to realize the quality-cost-accessibility balance posited by Daniel. His model seems to be based on "mega-universities" with enrollments of more than 100,000, but as we saw in Jung (2005c) in the quality assurance section, there are only about eleven distance education institutes that could meet the *mega* requirement for the Daniel's triangle as of 2004. In this sense, the Daniel model may have limitations in its applicability but it may be more valid, especially for open and distance learning institutes, where anyone is accepted to pursue education, which may not apply to the majority of other institutes of smaller size.

On the other hand, however, some research has found evidence to the contrary. For example, in the case of a Canadian research university that has been experimenting with online programs, the break-even point was reached with 280 students in its fifth year (Bates, 2005), and in the case of a Canadian single-mode distance university, with 34 students in its third year (Fahy, 2007). These two cases were highlighted because the former is an example of a traditionally campus-based university where the enrollment size is limited for two reasons; only a small intake was possible for the experiment due to institutional factors and the intake is highly controlled (selective) due to its being a recognized competitive university. The second result is also suggestive because a small enrollment can still produce profits if other factors can be successfully managed. These cases at least support the idea that even a small enrollment size can realize the triangle of quality-cost-accessibility.

Finally, the third point, the quality feature. It may be argued that accessibility of education to *anyone anywhere anytime* could conflict with the notion of *uniqueness* as a quality standard that we saw at the very beginning of the paper; even though larger revenues may succeed in maintaining the quality of education or *betterness* of distance education as compared to others, some people may opt against it simply because it is open to everyone. This is another kind of "quality dilemma" (Parker, 2004, p.385) that results from the realization of cost-accessibility. If this is the case, the triangle of quality-cost-accessibility may be said to fail the uniqueness element of quality in people's criteria.

Learner outcomes

On the empirical dimension, whether distance education can actually provide learning that is equal to traditional face-to-face learning is said be one of the major concerns among people. Accordingly, much research has been done in this area and a series of overviews of comparative studies in learner outcomes between distance and traditional learning exist. For our purposes, this research direction can be said to demonstrate quality (or lack, accordingly) of distance education in comparison to traditional education.

In Russell's (1991) "No Significant Phenomenon," a review of 355 research reports that compared distance and face-to-face learning published since 1928 was conducted, and concluded that any significant difference in learner outcomes was not the result of the mode of learning. This review was followed up in 1999 by Phipps and Merisotis (Robson, 1999), which extracts about 40 "original research" reports published during the 1990s from Russell's review (p.11). Phipps and Merisotis undertook a critical examination focusing on the research methods used in the reviewed papers and conclude that "the overall quality of the original research is questionable and thereby renders many of the findings inconclusive" (p.3), though overall they support the finding of "no significant phenomenon." A similar critique of the research methodology adopted by Russell is also found in Rumble (2001). More recently, a comprehensive review by Bernard et al. (2004) that examined 232 comparative studies of distance and face-to-face learning published between 1985 and 2002 concluded that "DE [distance education] outperforms their classroom counterparts" (p. 379), which is different from previous reviews of a similar kind. Therefore, from the perspective of learner achievements at least, distance education is now considered to have equal or even superior learning effectiveness to traditional learning.

A notable contribution by Bernard et al. is that they went one step further than previous reviews and provide a new research scheme to the comparative study by making the distinction between synchronous distance learning (time and place dependent) and asynchronous distance learning (time and place independent). Basically, they found that when comparing synchronous distance and face-to-face learning and asynchronous distance and face-to-face, higher performance was observed with asynchronous distance learning and synchronous face-to-face learning. Hypothetically, it is no surprise that asynchronous technology usage for distance learning could lead to higher learner outcomes and favorable perceptions because it can more easily meet the needs of individual learners in different times and places whereas synchronous technology usage for distance learning may be regarded as a poor alternative to face-to-face learning.

Though highly comprehensive studies have been already conducted in this area, we should carefully examine the period over which the research results were collected and under what media and social conditions certain data were collected; that is, if we assume that further research and practice will support positive results for online education, it is natural that the accumulation of contemporary positive results for distance education or online learning when compared to older research results will gradually change the statistical balance of the total learning effectiveness of distance education from negative to positive. Evidence that this concern may be justified can be found in the most recent comparative research by Sahin (2006 in Russell, 2007) at Anadolu University (Turkey) which reports that "there is a significant difference *in favor of the Internet based distance education*" (italics added) compared to traditional education.

Finally, as far as learner outcomes are concerned, the older notions of the inferior quality of distance education compared to traditional education can be said to be overcome: it is now necessary to focus on what learning environments best bring about better learning regardless of whether its provision is traditional or distance or face-to-face or online, being free from older notions regarding the delivery mode of education itself.

CONCLUSIONS

The first section of this paper first developed its own interpretations of quality issues in distance education and provided a framework of how the notion of quality could be applied to the issue of quality in the field. The following sections examined some of the major positions and approaches representing the current state of the field. Quality assurance, credit banks, cost and accessibility issues were felt to produce greater insights as research areas, whereas the research concerning people's perceptions and learner outcomes that have been established on the research schemes of comparison with traditional learning were found to be less promising for future practice. In the process, suggestions for further research regarding quality issues in distance education were formed.

Firstly, it could be argued that many of the approaches that rely on comparative arguments between traditional and distance education are losing their foundations as research schemes because the distinction between the two educational delivery modes is being eroded. This leads to the suggestion at the beginning of this paper that the research question, "How can we assure quality of distance education as we have with traditional education?" is becoming, "How can we realize quality learning in distance education that is different from traditional education?" and, "How can we assure quality in education regardless of whether it is traditional or online?"

Secondly, it is useful to make a distinction between distance universities of different types such as ODL (open and distant learning), dual-mode, or multi-mode universities, some of which have only recently started offering online courses at a distance, because each could be founded on different educational philosophies and have different financial resources. As we saw, the mission of ODL is to improve access of education, and therefore meet the conditions of relatively large enrollment sizes, and structured management systems that are backed up with official funds whereas others often run their distance education sections more modestly, with the policies and customs of their campus-based counterparts underlying them. In which category of institution research and practice has been done and in which category certain situations are located or will be located should be carefully examined when analyzing and applying the results to a specific context.

Thirdly, it may be useful to further develop how to approach quality issues by using the two axes made evident in this paper; that is, *betterness* and *uniqueness*. As we saw, *betterness* is the notion of quality based on comparison whereas *uniqueness* is the ultimate value of the notion of quality that stands alone. One problem with quality based on comparison is that the basis for comparison could shift between specific features such as tuition fees, course materials, students' services, easier or wider access, teaching techniques, library size, etc. In this sense, it could be said that *uniqueness* becomes the key to assuring longitudinal quality by drawing learners who are attracted uniquely to a specific program/course in itself. In other words, if we wish to survive for a long time, we need to aim for *both betterness and uniqueness*.

Finally, it is fair to say that the field of distance education does not currently have evaluative frameworks to investigate and define the quality issue in a systematic manner. Rather, the field is in the process of borrowing and testing the functionality of the systems that were developed and are practiced in other fields and disciplines. What we need now is to articulate the needs and problems that are *unique* to distance education so as to establish better frameworks that clarify the problems of education in general and those specific to distance education.

The most difficult part of the issue of quality is that, however we try to clarify the mechanism, anyone can state his/her preferences based on their own criteria that are inaccessible to others. A remark made during the telephone interview to NIAD-UE may well summarize the difficulty of the issue, "We have been talking a lot about quality and quality assurance in higher education here but what actually is quality? It's not evident at all. It's not easy to have only one definition!"

REFERENCES

AALE (American Academy for Liberal Education). (2006). *Overview of application process*. Retrieved April 21, 2007, from http://www.aale.org/pdf/2006ProcessforAccreditation.pdf

AACRAO (American Association of Collegiate Registrars and Admission Offices). (2007). Transcript. Retrieved April 23, 2007, from http://www.aacrao.org/transcript/

Alberta Government. (2000). IQAS (International Qualifications Assessment Service). Retrieved April 23, 2007, from http://employment.alberta.ca/cps/rde/xchg/hre/hs.xsl/4522.html

APQN (Asia-Pacific Quality Network). (2007). Home. Accessible at http://www.apqn.org/

Bates, A. W. (2005). *Technology, e-learning and distance education* (2nd ed.). London and New York: RoutledgeFalmer.

Bernard, M. R., Abrami, P. C., Lou, Y., Borokhovski, E., Wade, A., Wozney, L., et al. (2004). How does distance education compare with classroom instruction? A meta-analysis of the empirical literature. *Review of Educational Research, 74*(3), 379-439.

Bichelmeyer, B., & Molenda, M. (2006). Issues and trends in instructional technology: Gradual growth atop tectonic shifts. In M. Orey, V. J. McClendon & R. M. Branch (Eds.), *Educational media and technology yearbook* (Vol. 31, pp. 3-32). Westport, Connecticut: Libraries Unlimited.

British Council. (n.d.). Distance learning. Retrieved April 17, 2007, from http://www.britishcouncil.org/jp/taiwan-about-us-newsletter-whats-on-november-2005-distance-learning.htm

Brynjolfsson, E. (1993). The productivity paradox of information technology. *Communications of the ACM, 36*(12), 67-77.

CHEA (Council for Higher Education Accreditation). (2007). Home. Accessible at http://www.chea.org/default-original.asp

CVU-UVC (Canadian Virtual University). (2004). Accessible at http://www.cvu-uvc.ca/english.html

Daniel, J. (2003). *Mega-universities = mega-impact on access, cost and quality.* Retrieved April 10, 2007, from http://portal.unesco.org/education/en/ev.php-URL_ID=26277&URL_DO=DO_TOPIC&URL_SECTION=201.html

DEC (Distance Education Council). (n.d.). Accessible at http://www.dec.ac.in/

e-Gov. (2006a). *Distance university establishment standards.* Retrieved November 5, 2007, from http://law.e-gov.go.jp/htmldata/S56/S56F03501000033.html

e-Gov. (2006b). *University establishment standards.* Retrieved November 5, 2007, from http://law.e-gov.go.jp/htmldata/S31/S31F03501000028.html

e-Gov. (2007). *Professional graduate university establishment standards.* Retrieved November 5, 2007, from http://law.e-gov.go.jp/htmldata/H15/H15F20001000016.html

Fahy, P. (2007). *Advanced technology for distance education and training*. Alberta: Athabasca University.

Frydenberg, J. (2002). Quality standards in e-learning: A matrix of analysis. *The International Review of Research in Open and Distance Learning*. Available at http://www.irrodl.org/index.php/irrodl/article/viewArticle/109/189

Hamalainen, K., Haakstad, J., Kangasniemi, J., Lindeberg, T., & Sjolund, M. (2001). *Quality assurance in the nordic higher education -- accreditation-like practices: Enqa occasional papers 2.* Retrieved April 19, 2007, from http://www.enqa.eu/files/nordicquality.pdf

IHEP (Institute for Higher Education Policy). (2000). *Quality on the Line: Benchmarks for success in Internet-based distance education.* Washington, DE: IHEP. Available at http://www.ih ep.com/Pubs/PDF/Quality.pdf

INQAAHE (International Network for Quality Assurance Agencies in Higher Education). (n.d.). Accessible at http://www.inqaahe.org/

JIHEE (Japan Institute for Higher Education Evaluation). (n.d.). Accessible at http://www.jihee.or.jp/

Johnson, K., & Johnson, H. (Eds.). (1998). *Encyclopedic dictionary of applied linguistics.* Oxford: Blackwell Publishers Ltd.

Jones, E. T., Lindner, J. R., Murphy, T. H., & Dooley, K. E. (2002). Faculty philosophical position towards distance education: Competency, value, and educational technology support. *Online Journal of Distance Learning Administration, 5*(1), 1-10.

JUAA (Japan University Accreditation Association). (2007a). *Accreditation*. Retrieved April 24, 2007, from http://www.juaa.or.jp/en/accreditation/university.html

JUAA. (2007b). *Evaluation results*. Retrieved April 23, 2007, http://www.juaa.or.jp/accreditation/universi

ty/result_2006.html
JUAA. (2007c).*Tokyo declaration.* Retrieved April 23, 2007, from http://www.juaa.or.jp/en/images/about/Tokyo%20Declaration.doc.pdf
Jung, I. S. (2005a). Cost-effectiveness of online teacher training. *Open Learning, 20*(2), 131-146.
Jung, I. S. (2005b). Implications of WTO/GATS on quality assurance of distance education (including e-learning) for higher education, *UNESCO Regional Seminar on the Implications of WTO/GATS on Higher Education in Asia and the Pacific*. Seoul, Korea.
Jung, I. S. (2005c). Quality assurance survey of mega universities. In C. McIntosh & Z. Varoglu (Eds.), *Perspectives on distance education: Lifelong learning and distance higher education* (pp. 79-98). Vancouver: Commonwealth of Learning.
Koul, B. N. (2006). Towards a culture of quality in open distance learning: Present possibilities. In B. N. Koul & A. Kanwar (Eds.), *Towards a culture of quality: Perspectives on distance education* (pp. 177-187). Commonwealth of Learning.
Macquarie University. (2007). *Doctor in professional communication.* http://www.international.mq.edu.au/study/areas_coursedetails.aspx?cse=382&CourseLevelID=1&StudyOptionID=5&Location=Online&mi=710
Matheos, K., & Archer, W. (Winter 2004). From distance education to distributed learning surviving and thriving. *Online Journal of Distance Learning Administration, 7*(4).
Matkin, G. W. (1997). The basics of course financial planning. In *Using financial information in continuing education: Accepted methods and new approaches* (pp. 65-83). Phoenix, AZ: American Council on Education/The Oryx Press.
Mayer, K. A. (2002). Quality in distance education. *ASHE-ERIC Higher Education Report, 29*(4), 1-121.
MEXT (Ministry of Education, Culture, Sports, Science and Technology). (n.d.a). *Guidelines for Quality Provision in Cross-border Higher Education.* Retrieved April 21, 2007, from http://www.mext.go.jp/a_menu/koutou/shitu/index.htm
MEXT. (n.d.b). *Required credits for graduation for campus-based and distance universities.* Retrieved April 23, 2007, http://www.mext.go.jp/b_menu/shingi/chukyo/chukyo4/gijiroku/004/010801/010831e7.htm
Naughton, J. (1984). *Soft systems analysis: An introductory guide*. Milton Keynes: The Open University Press.
NIAD-UE (National Institute for Academic Degrees and University Evaluation). (n.d.a). *Awarding of Degrees.* Retrieved April 18, 2007, from http://www.niad.ac.jp/n_gakui/ninteisisetsu/index.html
NIAD-UE. (n.d.b). *Transition of the number of applicants who acquired a degree.* Retrieved April 18, 2007, from http://www.niad.ac.jp/n_gakui/juyoshiryou/1174662_892.html
NIAD-UE. (n.d.c). *Awarding of Degrees.* Retrieved April 26, 2007, from http://www.niad.ac.jp/index_e.
NIAD-UE. (2007.4.23). *Future of NIAD-UE*. Telephone interview.
NIME (National Institute of Media Education). (2007). *Research report concerning the use of IT such as e-learning in higher education: 2006 academic year.* Retrieved April 22, 2007, from http://www.nime.ac.jp/reports/001/main/eLearning-jp.pdf
Nobel, D. F. (2001). *Digital diploma mills: The automation of higher education*. New York: Monthly Review Press.
OALD (Oxford Advanced Learner's Dictionary). (2005). *Quality*. Retrieved March 8, 2007, from http://www.oup.com/oald-bin/web_getald7index1a.pl
ODLQC (Open & Distance Learning Quality Council). (2007). Accessible at http://www.odlqc.org.uk/
OECD (Organization for Economic Co-operation and Development). (2005). *Guidelines for quality provision in cross-border higher education.* Available at http://www.oecd.org/dataoecd/27/51/35779480.pdf
Parker, K. N. (2004). The quality dilemma in online education. In T. Anderson & F. Elloumi (Eds.), *Theory and practice of online learning* (pp. 385-421).
Phipps, R., & Merisotis, J. (1999). *What's the difference? A review of contemporary research on the effectiveness of distance learning in higher education.* Retrieved February 28, 2007, from http://www2.nea.org/he/abouthe/images/diseddif.pdf
QAA (Quality Assurance Agency for Higher Education). (n.d.). Accessible at http://www.qaa.ac.uk/
Ramage, R. T. (2002). *The "no significant difference" phenomenon: A literature review.* Retrieved March 3, 2007, from http://www.usq.edu.au/electpub/e-jist/docs/html2002/ramage.html

Robson, R. (1999). *The no significant difference phenomenon.* Retrieved January 21, 2007, from http://www.eduworks.net/workshop/tutorial/index.cfm?type=slide&number=2.50

Rumble, G. (2001). Re-inventing distance education, 1971-2001. *International Journal of Lifelong Education, 20*(1-2), 31-43.

Russell, T. (1999). *The no significant difference phenomenon* (5th ed.). International Distance Education Certification Center. Available at http://www.nosignificantdifference.org/

Russell, T. (2007). *No significant difference phenomenon: Entries for 2006,* Retrieved April 16, 2007, from http://www.nosignificantdifference.org/search.asp

Saltzberg, S., & Polyson, S. (1995). Distributed learning on the world wide web. *Syllabus, 9*(1), 10-12.

Sherry, A. C. (2003). Quality and its measurement in distance education. In M. G. Moore & W. G. Anderson (Eds.), *Handbook of distance education* (pp. 435-459). Mahwah, NJ: Lawrence Erlbaum Associates, Inc., Publishers.

Sloan-C. (2003). *Sizing the opportunity: The quality and extent of online education in the united states, 2002 and 2003.* Retrieved March 3, 2007, from http://www.sloan-c.org/publications/survey/survey03.asp

Sloan-C. (2006). *Making the grade: Online education in the united states, 2006.* Retrieved March 3, 2007, from http://www.sloan-c.org/publications/survey/survey06.asp

Smith, P. L. & Ragan, T. J. (2005). *Instructional design* (3rd ed.). Hoboken, NJ: Wiley Jossey-Bass Education.

Universities Com. (2007). *Distance Learning Online Doctorate Programs.* Retrieved April 16, 2007, from http://www.universities.com/Distance_Learning/Degrees_PhD_Programs.html

UCE (University Correspondence Education). (2005). *Guidelines for the education of correspondence universities.* Retrieved March 26, 2008, from http://www.uce.or.jp/info/guideline.pdf

University of Calgary. (2006). *Doctor of Education (EdD) online.* Retrieved April 16, 2007, from http://www.educ.ucalgary.ca/gder/htdocs/programs/item.php?id=5

Wedemeyer, C. A. (1981). *Learning at the Back Door: Reflections on Non-Traditional Learning in the Lifespan*. Madison, Wisconsin: The University of Wisconsin Press.

WorldWideLearn.com. (2007). *Compare Top Online Doctorate/Ph.D. Degree Program Schools.* Retrieved April 16, 2007, http://www.worldwidelearn.com/online-doctorate/degree-comaprison.htm