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วารสารวิธีวิทยาการวิจัย ปีที่ 18 ฉบับที่ 1 (มกราคม - เมษายน 2548)

Quality Assessment and the Accreditation of a College Academic Program

Teara Archwamety

Max McFarland

ABSTRACT

The histories of both quality assurance (as used in manufacturing/business sectors) and accreditation (as used in educational institutions) were outlined. An ERIC database search indicated the merging of the two concepts in the last 20 years. An account of how a school psychology program in the U. S. went through accreditation was next narrated. Then several quality systems (both general and specific) were compared and contrasted-ISO (International Standards Organization), TQM (Total Quality Management), EQF (European Quality Award Framework), and NASP (National Association of School Psychologists). Finally, Stufflebeam's CIPP (Context, Input, Process, Product) evaluation model was used to integrate the various quality systems.

Introduction

Manufacturers and business as well as educational institutions, in order to thrive, will need to make an effort to improve or maintain the "quality" of their products or services. In the manufacturing or business sectors, this effort is through the implementation of some form of "quality assurance (QA)" system while in educational institutions it is through "accreditation."

The International Standards Organization (ISO) defines *"quality" as "the totality of features and characteristics of a product or service that bear on its ability to satisfy a given need"* (see Doherty, 1997, p. 239). On the other hand, *"accreditation" is defined as "a system for recognizing educational institutions and professional programs affiliated with those institutions for a level of performance, integrity and quality which entitles them to the confidence of the educational community and the public they serve"* (see Chernay, n.d., p. 1; Fagan & Wells, 2000, p. 28).

History of Quality Assurance and Accreditation

Both the quality assurance system in manufacturing/business sectors and accreditation of educational institutions have a long history. The expression "quality assurance" was originally associated with the manufacturers or businesses while "accreditation" has been used in connection with educational institutions.

Quality Assurance (QA)

In manufacturing, from 1800s to 1920s, control of quality was viewed as "exact" with specification (of product), production, and inspection (in that linear order) considered independent of one another. In the 1920s, Dr. Walter Shewhart pointed out that control of quality is, in fact, a matter of "probability." He then re-conceptualized specification, production, and inspection as linked together in a wheel which is known as the Shewhart Cycle (see Voehl, 1995, p. 24). The repeating of the cycle led to continuous improvement. Statistical process control (SPC), one of the most widely used quality management tools today was also begun by Dr. Shewhart in the 1920s (see Doherty, 1997, p.241). The first SPC used in production process control by

Dr. Shewhart was in the form of a control chart (see Hare, 2003, p. 58). Later Dr. Deming popularized and expanded on his mentor Dr. Shewhart's concept which resulted in what is known as the Deming Wheel. The Deming Wheel depicts an iterative process involving a four-step sequence-plan, do, check, and act (Voehl, 1995, p. 24; Hansen, 1994, p. 163). In 1950 Dr. Deming started working with Japanese managers on quality management. Three years later he began to see the positive transformation in Japan. He tried to persuade managers in America to adopt this practice, but no one listened until NBC TV network broadcast the famous special "If Japan can...Why Can't We?" in 1980 (Tribus, 1995). Today, Dr. Deming's influence in Japan is acknowledged by the "Japanese Deming Quality Prize" offered to outstanding manufacturers or businesses (see Doherty, 1997, p. 243). After 1980, the quality assurance movement spread internationally, culminating in the introduction of ISO 9000 (the quality standards for organizations set up by the International Standards Organization) in 1987. Today thousands of organizations worldwide have been registered as complying with ISO standards (see Kubiak, 2003, p. 42).

Accreditation

The history of the accreditation of educational institutions is about as long as quality assurance in manufacturing or business sectors. Accreditation began around the turn of the 19th Century when colleges started to establish minimum admission standards and course equivalencies to allow transfer of credits from one college to another (Colbeck et al., 2003). The Federal Department of Education maintained lists of recognized colleges as far back as 1867. There were also lists of high schools approved by colleges for admission purposes. The University of Michigan was the first to do so in 1871. Regional accrediting agencies maintained lists of accredited colleges as early as the 1920s. The increase in the number of accrediting agencies since the 1920s necessitated the formation of NCA (the National Commission on Accrediting) in 1950 to coordinate accreditation activities. NCA changed to COPA (the Council on Postsecondary Accreditation) in 1975. By 1980, COPA had more than 70 professional agencies and six (Middle State, New England, North Central, Northwest, Southern,

and Western) regional accreditation associations. The Association of Specialized and Professional Accreditors (ASPA) was formed in 1993 after the dissolution of COPA (see Fagan & Wells, 2000). CHEA (the Council for Higher Education Accreditation) was formed in 1996 (see Colbeck et al., 2003). There are several levels of accreditation: institutional or university (sometimes called college) level, college within university (sometimes called school within college) level, and program within college (or school) level. For example, NCA (the North Central Association of Colleges and Schools) accredits a university. NCATE (the National Council for Accreditation in Teacher Education) accredits a College of Education within a university. APA (the American Psychological Association) and NASP (the National Association of School Psychologists) accredit a School Psychology program within a College of Education.

The Fusion of the "Quality Assurance" Concept and "Accreditation" in the Education Sectors

In the past 20 years or so, the concept of quality assurance which originated in the manufacturing and business sectors has found its way into colleges and universities in connection with accreditation. One of the authors of the present paper conducted an ERIC database search using (a) the term "accreditation," (b) the term "quality assurance," (c) the term "quality assessment," and (d) the term "accreditation" logical-ending with the term "quality assurance." The frequency counts (in blocks of five years) of articles and documents written on those four topics are as shown in Figure 1.

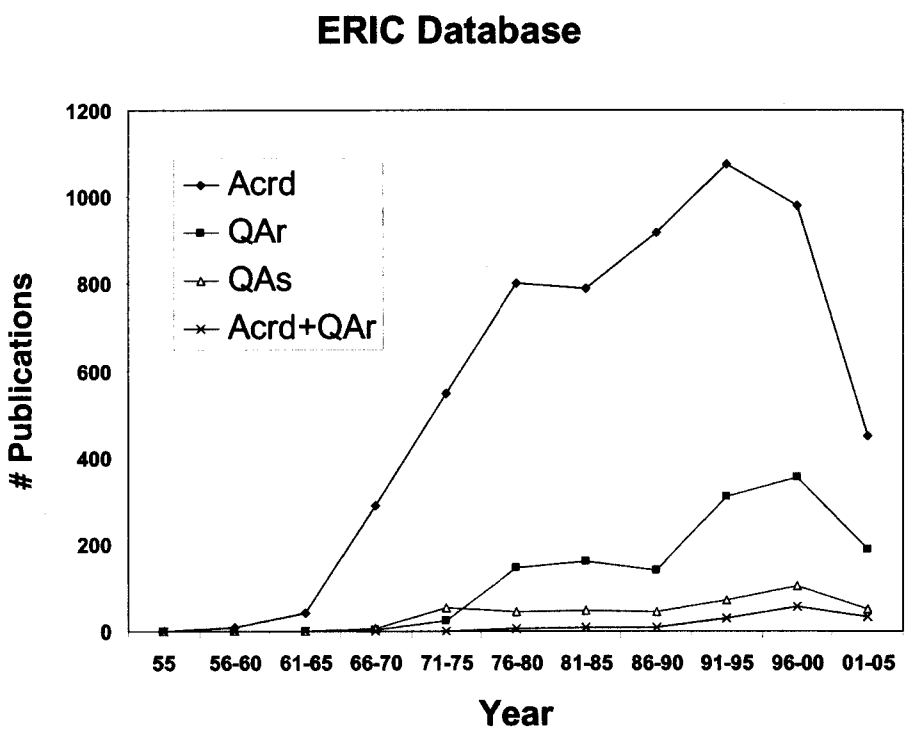

Figure 1. Frequency counts (in blocks of five years) of articles and documents written on four topics: accreditation (Acrd), quality assurance (QAr), quality assessment (QAs), and accreditation + quality assurance (Acrd+QAr).

It is evident from Figure 1 that (a) the most popular topic in connection with quality of educational institutions or programs is "accreditation," (b) the expression "quality assurance" is more popularly used than "quality assessment," and (c) the concept "quality assurance" has been increasingly used in connection with "accreditation" of educational institutions in the past 20 years. The ERIC and other literature searches have also yielded several articles and documents describing the implementation of quality assurance systems (originated in the manufacturing or business sectors) to improve the quality of educational institutions in several countries, e.g., the U.S. (Tribus, 1994), the U.K. (Storey, 1994), European countries (Karapetrovic, Rajamani & Willborn, 1998), and Australia (Berry, 2002).

The spread of the manufacturer/business model of quality into the educational sector has opened up choices for educational institutions to have their quality assessed or assured. An educational program or institution could theoretically choose to be *accredited* by an accrediting organization such as those mentioned earlier, or it could choose to be *registered* with the International Standards Organization (ISO) if that is available in the area. Note the difference between the two terms-"accredited" (educational model) and "registered" (business/manufacture/business model). While accreditation of educational institutions (or programs) is more prevalent right now in the U.S. and Canada, registration with ISO of educational institutions (or programs) is more popular in Europe. Karapetrovic et al. (1998) compared the *accreditation* of engineering education in the U.S. by ABET (Accreditation Board for Engineering and Technology), and in Canada by CEAB (Canadian Engineering Accreditation Board), with the *registration* of engineering education programs in Europe by ISO. The accreditation process and ISO *registration* process are similar. First the educational institution or program submits a set of documents (oftentimes quite extensive) that show compliance with the standards or guidelines set. This is usually followed by a site visit, conducted by an accreditation team or an ISO registrar. Finally, if the educational institution or program is found in compliance (with the standards or guidelines), accreditation or registration is granted. Otherwise, the accreditation or registration is denied.

If an educational institution or program could choose between being accredited or ISO *registered,* this is worth noting that accrediting agencies are usually *national* but ISO is *international.* On the other hand, if an educational institution does not seek to be registered or accredited as a quality institution but simply wants to improve in quality, it could install or implement one of several other quality assurance systems. One such popular system is TQM (Total Quality System) which has Dr. Deming as one of its pioneers or gurus (see Doherty, 1997). TQM to improve education, for example, was implemented at Mt. Edgecumbe High School in Alaska, U.S., (see Tribus, 1994), and at the University of Wolverhampton, U.K. (see Storey, 1994).

Quality Assessment of a Specific Educational Program-School Psychology

According to Doherty (1994, p. 12), there are essentially three basic quality systems that a college or program could choose: (a) ISO, (b) TQM, or (c) a special system devised by the college or program itself. The authors would like to add a fourth category that would include accreditation systems such as NCATE, APA and NASP used in the U.S., and rewarding systems such as the EQF (European Quality award Framework) system used in Europe. (see a description of EQF in Doherty, 1997.)

The School Psychology Specialist Degree Program at the University of Nebraska-Kearney in the U.S. is accredited by NASP (the National Association of School Psychologists) and NCATE (National Council for Accreditation of Teacher Education). The program was first conditionally accredited in 1994 and achieved full accreditation in 1997 by NASP (see Fagan & Wells, 2000). NASP became a constituent member of NCATE in 1976. In 1987 formal NASP approval of programs was sanctioned by NCATE (see Fagan & Wells, 2000). As a result, a school psychology program approved by NASP automatically becomes approved by NCATE. It is worth emphasizing here that NCATE accredits at the college of education level while NASP accredits at the program (specifically school psychology program) within the college of education level. In the following paragraphs, the accreditation process that the School Psychology Specialist Degree Program at the University of Nebraska-Kearney went through will be outlined.

Stage 1. Four to five years before accreditation, the director of the school psychology program studied the detailed standards (known also as "guidelines") set up by NASP. There are four *main* standards with several *specific* standards within each main standard (National Association of School Psychology, 2000) as given below.

Standard 1. *Program Context and Structure.* There are 10 specific standards referring to mission or objectives of the program, opportunity for students to get involved with colleagues and professors and participate in profession development, minimum number and qualification of professors, and length of study and supervised

internships required of the students.

Standard 2. *Domains of School Psychology Training and Practice.* This specifies that students must study and demonstrate competence in 11 domains of school psychology as given below.

1. Data-based decision making and accountability.
2. Consultation and collaboration.
3. Effective instruction and development of cognitive/academic skills.
4. Socialization of development of life skills.
5. Student diversity in development and learning.
6. School and systems organization, policy development, and climate.
7. Prevention, crises intervention, and mental health.
8. Home school/community collaboration.
9. Research and program evaluation.
10. School psychology practice and development.
11. Information technology.

Standard 3. *Field Experiences/Internship.* This area includes five specific standards that require the collaboration (with a written agreement and plan) between the school psychology program and the internship site. The minimum hours of internship and supervision are also specified.

Standard 4. *Performance-Based Program Assessment and Accountability.* There are three specific standards. They require that the school psychology program have systematic and valid procedures, e.g., of performance assessment type, (a) to evaluate the program effectiveness itself, (b) to admit students into the program and track their progress, and (c) to ensure that, at the end of the program, the students are able to integrate domains of knowledge learned in delivering school psychology services.

Stage 2. The director of the school psychology program, with program colleagues' help, prepared various documents and empirical data addressing each of the specific standards within the four main standards. Work in this stage involved:

1. Updating assessment data from (a) advisory committee, (b) graduate program evaluation, (c) PRAXIS test results, and so on.

2. Reflecting on program quality, student outcome data, etc., to recommend modifications in School Psychology Committee. Program modifications or changes were ongoing-five, four, three, two years before accreditation

3. Preparing the portfolio for NASP folio review. This took about a year with a total of approximately 160 hours spent.

This stage culminated in a large portfolio of about 550 pages.

Stage 3. The finished portfolio was then sent by insured mail to NASP for the so-called folio review-a form of external audit. The waiting then began.

Stage 4. The response from NASP finally came in a letter. It was good news. If the response in stage 4 is positive, the accreditation is complete. If the response is negative (with shortcomings noted), the program of study could send a rejoinder to try to change *NASP's decision. If NASP still insists on denying the accreditation, the* program needs to address the shortcomings in the future and to reapply for NASP accreditation at a later time. Note that there is no site visit by NASP. The site visit, however, is conducted by NCATE, at which time the portfolio for NASP folio review could again be examined.

Comparison of NASP Quality System with Some other Systems

The more well known and generic quality systems mentioned earlier are ISO, TQM, and EQF. Table 1 compares the specific NASP quality system with these more generic systems using the 12 basic elements of quality systems as identified by Doherty (1997).

Table 1 Elements of Various Quality Systems

Basic element	ISO 9000	TQM	EQF	NASP
Continuous improvement	x	x	x	x
Delight the customer	x	x	x	x
People involvement	x	x	x	x
Process control	x	x	x	x
Effective system	x	x	x	x
Flat organization	x	x		
Internal audit	x	x	x	
External audit	x	x	x	
Internal evaluation	x	x	x	x
External evaluation	x	x		
Self assessment	x	x	x	
Compliance	x	x	x	

Note. Part of this table is an excerpt from Table 1 in Doherty (1997).

NASP standards required continuous improvement as indicated in Standard 4.1 that in an approved program, "systematic, valid procedures are used to evaluate and improve the quality of the program..." The "delight customer" element is shown in the requirement of "instructional evaluation...field supervisor evaluation..." The "people involvement" element is shown in Standard 1.3 requiring that the students "have opportunities to develop an affiliation with colleagues, faculty, and the profession..." The "process control" component is addressed in Standard 4 ("Performance-based Program Assessment and Accountability"). The "internal and external" audit elements are achieved through the NASP requirement of the program to prepare a comprehensive account of the program's input, process, and product in a portfolio for "folio review." The "internal and external" evaluations of the program are required by Standard 4. Finally, the "Compliance" element is indicated by the fact that a school psychology program has to be in compliance with all NASP's four standards before it could be accredited.

Conclusion

The historical review of quality assurance in manufacturing/business and accreditation in education have identified various quality systems that are generic such as ISO, TQM, EMF, and those that are more specific such as NCATE, APA, and NASP. Despite some specific differences among them, they all share the same *four basic components in a CIPP evaluation model,* namely, (a) Context, (b) Input, (c) Process, and (d) Product (see Stufflebeam, 1973). An organization's goal of "continuous improvement" (see Table 1) and the pressure or need to be in "compliance" with ISO or accreditation standards provide the "Context" of the situation. The "internal and external audits" constitute the examination of the "Input." The "people involvement, process control, effective system, flat organization and self assessment" elements indicated in Table 1 correspond to the "Process." Finally, the "internal and external evaluations" in Table 1 are directed at the "Product" of the organization. Of the four basic components of CIPP, the most important is probably the "process" as indicated by the so-called "Process Principle" which says *"The quality of the product is determined by the quality of the process which produces it. If you want to improve a product or service, concentrate on improving the process which produces it"* (Tribus, 1994, p. 101). In manufacturing and business, reviewing research literature on quality assurance or setting up an R&D (Research & Development) unit within the organization could help identify effective processes in producing quality products. In education, reviewing research literature and/or conducting research in educational psychology could help identify effective processes in bringing about better student achievement and quality education. Without research literature or an R&D center, quality product may still be achieved provided that the *process and product are closely monitored and changes made to the process when necessary* to affect the product in the right direction.

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