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ABSTRACT

The search for indicators of quality for colleges and universities was initiated during the past decade and many variants of these efforts have emerged in Europe, Australia, and on the North American continent. In the financial squeeze of the 1980s and 1990s, demands for quality and excellence in the conduct of higher education have continued to increase. In Canada, demands for quality and excellence in colleges and universities have dealt with student access, educational programs, faculty, administration, and institutional support services. Little consensus, if any, has been achieved on criteria of quality and excellence, on the operational definition of these concepts, or on their use in the praxis of postsecondary education. This report discusses the many uses that could be made of quality indicators by all postsecondary education constituencies. The possible uses for indicators of quality and excellence that are discussed include the following: improving university/college dialogue with governments; accreditation criteria; defining criteria and faculty performance in teaching, research, and service assessment; the linking of resources, reputation, and talent development; and accessibility to assessment, quality, excellence, and improvement. Contains 64 references. (GLR)

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Number 10 Fall 1992

CSSHE Professional File

The Use of Quality and Excellence Indicators in Post-secondary Education

by

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CSSHE Professional File

The purpose of the Professional File is to present one or more possible solutions to a current problem in post-secondary education. The solutions that are described have been found to be effective on at least one campus. Upon recommendation of the co-editors, topics and authors are approved by the Publications Committee and the Executive Council of CSSHE. The Professional File is published up to four times per year by CSSHE and is distributed free of charge to CSSHE members. The issues try to address timely topics. Improvement in the quality of post-secondary education has been of concern to both colleges and universities. Post-secondary institutions throughout the world have found indicators of quality helpful in examining the excellence of their institutions. These indicators and their possible uses are discussed in this issue. The author is principal investigator on a national project to identify criteria and indicators of quality and excellence in Canadian colleges and universities. The project has been funded by the Social Sciences and Humanities Research Council in its strategic grants program. Your comments and suggestions regarding this series are always welcome.

Norman Uhl and Gilles Jasmin, Co-editors

The Use of Quality and Excellence Indicators in Post-secondary Education

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Abstract

The search for indicators of quality for colleges and universities has been initiated in this past decade and many variants of these efforts have emerged in Europe, Australia and on the North American continent. In the financial squeeze of the 1980s and 1990s, demands for quality and excellence in the conduct of higher education have continued to increase. In Canada, demands for quality and excellence in colleges and universities have dealt with student access, educational programmes, faculty, administration and institutional support services. Little consensus, if any, has been achieved on criteria of quality and excellence, on the operational definition of these concepts as well as their use in the praxis of post-secondary education. This *Professional File* discusses the many uses that could be made of quality indicators by all post-secondary education constituencies. The topic has generated over 800 entries in major higher education bibliographic sources in the last ten years.

Sommaire

C'est au cours de la dernière décennie qu'ont commencé les travaux sur des indicateurs de qualité applicables aux collèges et universités. Diverses variantes de tels indicateurs ont vu le jour un peu partout en Europe, en Asie et en Amérique du Nord. Au début des années 80, nous sommes entrés dans une ère de compressions financières. Cette situation perdure et plus que jamais la gestion de l'enseignement supérieur doit se préoccuper de qualité et d'excellence. Au Canada, nous avons abordé la question de la qualité et de l'excellence dans les collèges et universités par le biais de travaux sur l'accès aux études, sur le contenu des programmes d'enseignement, sur le personnel enseignant, sur l'administration des établissements et sur les services qui y sont offerts. On ne s'entend pas encore, ou alors si peu, sur la façon de mesurer qualité et excellence, ni sur la définition opérationnelle de ces concepts ou encore sur l'utilisation pratique de mesures de ce type dans l'enseignement postsecondaire. Ce numéro des *Dossiers* est consacré aux nombreuses utilisations que l'on pourrait faire des indicateurs de qualité dans les divers secteurs constitutifs de l'enseignement supérieur. Un recensement des principales bibliographies sur l'enseignement supérieur révèle que ce sujet a été l'objet de quelque 800 articles ou ouvrages au cours des dix dernières années.

The quest for quality and excellence indicators is an outgrowth of public demands for accountability as well as procedures for the assessment, evaluation and accreditation of college and university programs and services. As pointed out by Conrad and Blackburn (1985), "Public disenchantment with educational institutions, pressures for accountability and declining resources are but three factors that have precipitated a renewed interest in quality." Essentially, higher education in Canada has been asked to do more and better with fewer financial resources and to define better its priorities through strategic planning approaches, focusing mission and objectives, and revisions in response to changing needs in Canadian society, in the global economy and world competitiveness. In short, post-secondary institutions in Canada have been asked "to measure up". Thus the movement toward better defined criteria and indicators of improvement in quality and the pursuit of excellence.

REVIEW OF LITERATURE

It is not the purpose of this presentation to attempt to summarize the literature on the subject of quality and excellence in colleges and universities. As principal investigator of a continuing national project on the identification of criteria and indicators of quality and excellence in Canadian colleges and universities (Nadeau, Donald, Konrad, Laveault, Lavigne; 1992), this writer has compiled a 48 page bibliography on the topic through literature searches in ERIC, Dissertation Abstract International, Canadian Education Index, EDUQ, etc., covering the last 20 years. With the exception of one or two articles and a few papers presented at national conferences and Learned Societies, this field of study is practically non-existent in Canada. Therefore, it is not surprising that in response to recent articles on measures of excellence appearing in national magazines, post-secondary education institutions have become more concerned with the development of quality indices. The problem of defining these very concepts of "quality", "excellence" and "improvement" are matters of continuing debate. As Tan (1986) indicated, there is a complete void in the definition of quality and excellence in higher education. As pointed out by Morgan and Mitchell (1985), at least six approaches to quality and excellence appeared to dominate the field of reform proposals in the pursuit of quality and excellence. These were the political economy approach, the productivity approach, the value-added approach, the

producer consumer quality approach, the content approach and the eclectic approach.

Nadeau (1990) in the above mentioned ongoing collaborative project, developed a working hypothesis model of quality and excellence within a systemic view of INPUTS, PROCESSES and OUTPUTS in colleges and universities where six "areas" of quality and excellence indicators interact in multidimensional space namely, **students, programs, faculty, administrators, institutional services and external context** of the institutions. As presented by Chaffoe (1984), Astin (1991) and others, the many faces of quality are present in most arenas where discussions are held about post-secondary education. For some, quality and excellence have to do with how well institutions achieve their objectives, for others it is the talent development approach (Astin, 1991), for others yet, it is the suitability of programs with the world of work, still for others it is equated with innovation, competitiveness, revitalization, prosperity, productivity, integration, high standards of student and faculty performance, responsiveness to society, improvements of all kinds, challenging the highest potential as well as the elitist views.

Glendening (1990) stated: "Quality is in the eye of the beholder and like charity it begins at home". Such a view clearly points to the need for **consensus development approaches** in the search for criteria and indicators of quality, excellence and improvement in colleges and universities. According to Mayhew et al. (1990), "academic quality, an abstraction, is determined through informed judgement, as is aesthetic quality. Every educational institution insists that its primary commitment is to 'quality' or 'excellence', terms that are used interchangeably."

For the purpose of the present praxis oriented discussion, criteria and indicators of quality and excellence are defined as those characteristics of all components of colleges and universities for **which there is some consensus** as to their contributions to the successful attainment of specific institutional missions and objectives. Indicators of quality and excellence do not exist by themselves or by administrative fiat or by some declarations of a special interest group, professional or otherwise. They must be declared as such on the basis of wide consensus based on research and information. Hengst (1984) spoke of "awareness" and "level of agreement". Otherwise they remain objects of controversy.

Indicators of quality and excellence are the extent to which resources, structures, activities, policies, products, services, students, faculty, administrators, programs and institutional support are linked to the achievement of the mission and specific objectives of the institution. In this paper the terms "quality" and "excellence" will be used interchangeably as synonyms. As pointed out by Skinner and Tafel (1986), "there is limited agreement about the criteria of excellence and how to determine it.... Excellence is a fluid concept ..."

Development of indicator systems in the early eighties in England and Germany were mainly structured around quantitative indicators of institutional output performance. Sizer (1981), Frackmann (1987), and Cuenin (1987) surveyed the development of indicators of performance in higher education in twenty-two OECD countries including indicators of **input, processes and output** of post-secondary education institutions and systems.

As far back as 1970, in a statement by its Commission on Higher Education, the Middle States Association of Colleges argued that the fundamental characteristics of **excellence** in higher education are alike for all institutions and that the criteria of quality must be interpreted in the light of their particular mission and objectives. Criteria of quality were seen to be related to objectives, programs, faculty, library, learning center, students, student personnel services, plant and equipment, finance and accounting, administration, governing board, evaluation of results and innovation and experimentation. Similar domains of quality indicators were outlined by Ewell (1984), Yorke (1986), Schmidtlein (1989), Quendot (1989), Litten and Hall (1989) and Skinner and Tafel (1986). In their book, *The Quest for Quality: the Challenge for Undergraduate Education in the 1990s*, Mayhew, Ford and Hubbard (1990), set an agenda for strengthening academic quality which included reforming the curriculum, streamlining extracurricular services, maintaining a high-quality professoriate, fostering competent teaching, strengthening academic leadership and rethinking decision-making roles and authority. These are the principal domains for the search of indicators of quality and excellence.

But beyond these continuing concerns for definition and the theoretical underpinnings of these concepts, one **can point to the many practical uses of indicator systems** in higher education and

speculate on possible uses where it has not yet been fully documented. The remainder of this paper outlines in very brief form these practical applications.

SOME CRUCIAL REMINDERS

Before discussing the possible uses of indicators of quality and excellence in post-secondary education, the following matters are presented as some of the important reminders for anyone to consider in relation to indicators of quality and excellence in colleges and universities.

Achieving consensus

Defining the domain of quality and excellence indicators first must be arrived at on a consensus basis. In fact, one could argue that an indicator of quality can only be recognized as such and be useful if it is defined by consensus of post-secondary education stakeholders.

Multidimensionality of indicators

As complex open systems, post-secondary education institutions and systems exist in multidimensional space. Indicators of quality and excellence exist for students, programs, faculty, administrators, institutional internal services and external context, for individual units and across units. Indicators of quality and excellence have been used for measures of input, reputation, processes, outcomes and value-added gains.

Interaction of indicators

Indicators of quality and excellence on these multiple dimensions interact with each other in the post-secondary education space in complex ways beyond simple linear relationships or simplistic "A then B" observations or conclusions.

The temptation of reductionism

Practicality and expediency often argue in the short term for the proposition that "the fewer the number of indicators, the more manageable and the better." The validity and reliability of indicators would argue for "the more the merrier" and for triangulation. Blind uniformity ignores context and diversity of purpose. Profiles of quality and excellence are more compatible with our pluralistic societies and systems

of post-secondary education.

Focusing on context

Indicators of quality and excellence are defined in the context of a college and university or a system in relation to its **mission** and **objectives** and defined and sanctioned by society and governments. Stripped of this reality, indicators of quality and excellence act as free falling bodies in weightlessness, as in a vacuum. As Borman et al. (1987) wrote: "Quality is a multidimensional concept and one that is subject to change. Its significance and normative value are determined by the **context**. This contextual specificity points to the existence of a frame of reference on the basis of which the quality judgement ought to be made." Bogue and Saunders' (1992) definition of quality in post-secondary education is a constant reminder of the centrality of context.

The moving target of quality and excellence

Quality now, mediocrity the next day, needed improvement all the way. Where better is possible, good is not enough. Indicators of quality and excellence are subject to change and are the very business of colleges and universities as well as any education system. **Planned change** is the "name of the game" for the better and the best. Strategic planning serves as a constant correction factor in the pursuit of quality and excellence. Quality is an elusive concept.

Macro and micro indicators and levels of use

Indicators of quality and excellence can be applied on a unit level (micro), an institutional level and on a systemwide level (macro indicators). The windows of quality and excellence come in all shapes, forms and sizes.

Quality and excellence exist in the realm of perceptions

Colleges and universities operate and do business sandwiched in between the "holder of the purse" and the consumer-client conceptions and perceptions of what constitute quality and excellence. Indicators of quality and excellence are defined through the eyes of our stakeholders and beholders.

The formative and the summative functions of indicators of quality and excellence

Indicators of quality and excellence are present in **inputs, processes and outputs** of colleges and universities for each domain referred to above. Concerns for quality indicators of output of colleges and universities must be examined in the light of the inputs and processes within the institution. Concerns for results and productivity are better explained by looking at the process each step of the way. Indicators of progress toward quality and excellence need to be present in order to adjust the course along the way, acting as the compass for the journey.

The rating game or making the grade

Indicators of quality and excellence are neutral in themselves. It's the value or weight placed on them in attempts to judge or compare institutions, programs, etc., and to rank order them that reduce their usefulness as benchmarks for improvement in the pursuit of quality and excellence from within. Defining the full domain of quality and excellence indicators may be the best answer to such exercises. Webster's (1985) statement on "How not to rank universities" should be of interest in this area. As stated by Borman et al. (1987): "If comparisons between institutions are to be made, indicators need to be visible in order to offer a platform for communicating information and responding." Dialogue about choice, form and method of application is needed for meaningfulness and acceptability.

Need for an interpretative framework

Post-secondary education institutions and systems must define the educational philosophy and the values they hold for the valid interpretation of quality and excellence indicators on the several domains of their operations. Such a framework obtained initially through wide stakeholders input may avoid the misuse and misinterpretation of information in the quality and excellence space.

THE MANY USES OF INDICATORS OF QUALITY AND EXCELLENCE

The following list of possible uses of indicators of quality and excellence in post-secondary education institutions and systems is offered on the basis of this writer's overview of the literature on quality and excellence in post-secondary education as well as research and practices in evaluation in and about

colleges and universities. Added to that is this writer's twenty-eight years of research, teaching in evaluation and observing and studying higher education. This list has no particular order of importance; or preference, or priority in terms of use. The utilization of quality and excellence indicator systems requires planning and judgement as well as consideration of the crucial reminders stated above.

Use #1. Search for a common language

The identification and definition of indicators of **quality and excellence** in post-secondary education should clarify the vocabulary, the referents and the meanings attributed to these concepts from within and from without each institution. They should anchor the rhetoric about quality and excellence for constituencies and stakeholders alike. When criteria and indicators of quality and excellence are sought through consensus building at all levels of institutional functioning, they should serve as a powerful common ground on which all actions and decisions can be openly and clearly explained and understood by all. Whether they be quantitative or qualitative, common operational definitions and rationale will go a long way to clarify our common understanding in and about post-secondary education. In their evaluation of the State of Florida University System's Indicator of Excellence program, Coles and others (1987), point to the fact that the indicators of excellence program, has provided a structure for communication that did not exist before. The exercise of identifying indicators, which were to be used for reporting, provided the opportunity for dialogue about quality among educators and elected officials which had not taken place with such intensity previously. Recommendations that were made included improvement of the quality and meaning of the data reported for indicators, that each institution have its own set of indicators in context and that progress be reported on the basis of institutional mission. They concluded also that, "if the indicator program is to be successful, its design must be that of a **formative evaluation**", and that, "additional indicators must be developed and agreed upon."

Use #2. Comparable information systems

As Smith (1991) clearly pointed out, institutions of higher education in Canada need to inform their publics better about their operations and to make available the data to accompany their demands for public support and funding. In the Canadian context,

with ten provinces and two territories responsible for their own post-secondary education system, such a basic information system based on quality and excellence indicators can serve as a common thread in **intrainstitutional, interinstitutional** and **interprovincial** boundaries. Ewell (1984) presented a framework for needed information for excellence. Indicators can be used to describe important characteristics of post-secondary education and to demonstrate how and where it is making a difference. Integrated information systems based on agreed upon indicators of quality and excellence in all domains of post-secondary education would no doubt improve present day piecemeal, incomplete information, whether at the institutional, provincial or national levels. (This writer is well aware of the many valid and not so valid criticisms and methodological problems of the Smith report. Nevertheless, I will be referring to it in the following pages. I consider many of Smith's findings and opinions as hypotheses requiring further evidence and validation. This is the faith of the Royal and not so royal commissions that seem to be the caricature of higher education research in this country. However, the Smith report may be the best recent statement on the national concerns and opinions, if not fact, about post-secondary education in this country.)

Use #3. Achieving consensus on quality and performance

The rising waves of concerns for quality and excellence in post-secondary education of the last decade on the North American continent and in the last five years in Canada have brought to the forefront the need for consensus on provincial and national agendas for post-secondary education. The concerns about what is valued in higher education, about the setting of priorities and indeed about the very mission and goals of colleges and universities, require developing and achieving consensus on the congruence of higher education with societal changes, needs and developments. Indicators of quality and excellence will help relieve the concerns in these troubled waters by at least pointing to the lighthouses for all to see and appreciate. Kuh (1981) stated that, "the major challenge ahead is to fashion context-relevant definitions of the concept excellence to guide institutional policy studies designed to enhance quality." "Quality is a by-product of the human experience and is therefore subject to multiple realities. Nothing short of a holistic approach characterized by

multiple data sources, triangulation or cross-validation methods, and solicitation of student and faculty reports can be afforded if accurate and useful estimates of quality are expected." According to Levine (1982), "quality is a measure of the best a particular institution can achieve. It is a standard that necessarily varies from college to college. Institutions must have a certain universal quality and a certain individual quality."

Use #4. University/college dialogue with governments

Few would dispute the fact that these are times for improving dialogue between colleges, universities and governments. Financial restraints and cutbacks make it imperative that institutions justify their priorities and budget requests. Fruitful dialogue within and outside the institution with governing bodies is necessary so that proper choices are made in response to societal changes. As stated by Borman et al. (1987), "In order to make these choices, an understanding is needed of the performance of institutions so that the government and the institutions themselves can establish premises for making evaluation as a basis for policy decisions." The use of quality and excellence indicators with common meaning could be an important vehicle for such a dialogue and could also be helpful in responding to critics and politicians.

Use #5. Describing student body, access, development and products

Indicators of quality and excellence can be used to describe and characterize a student body in different ways. Quality and excellence indicators can be used in recruitment, selection, admission and retention decisions, first in determining access routes and defining admission requirements as well as describing entrance cohorts. Secondly, indicators could serve as guideposts in the students' development stages while progressing through institutions, and could bring attention to those important characteristics purported to be central in the institution's mission and objectives in regard to student development. Indicators of quality and excellence can be used to analyze student learning and communicate programs and institutional expectations. Important indicators can be the basis for assessment of value-added components of programs and services at graduation time and can link student achievements and competencies to expectations and the world of work. Quality and

excellence indicators could be the "start of something new" for institutions to clearly declare their intentions and clearly represent the student populations they are targeting, responding, serving and graduating. It should remove some of the uncertainties of prospective students, parents, institutional decision makers, and employers as well as those who hold the public purse.

Use #6. Improvement agenda

In their pursuit of quality and excellence in all aspects of the institutions, colleges and universities are seeking to go beyond rhetoric in their improvement efforts. In order to set the improvement agenda, indicators of quality and excellence could set the course on the who, where, what and why of proposed action plans. In following a planned change strategy on the basis of the incremental hypothesis, institutions can use commonly agreed upon quality and excellence indicators to properly diagnose their strengths and weaknesses as well as discrepancies in expected results to redress points of stress in the institution, to set goals for improvement, to prioritize budget allocations to such efforts and finally to judge the progress and the improvement efforts and results. Beyond pronouncements and declarations of intentions to improve, quality and excellence indicators could keep institutions "honest" and provide some realism to their image, thereby increasing the trust of their stakeholders since what institutions say they do and what they actually do appear in full view.

Use #7. Defining standards

One of the more troublesome aspects of institutional functioning for colleges and universities viewed from within as well as from outside constituencies is the problem of adequate criteria and standards of achievement and performance. Quality and excellence indicators can help to define the "uniqueness" as well as the generally important factors to be considered when establishing standards of input, progress and results. Two sets of standards are generally of interest, namely criterion-referenced standards and norm-referenced standards. In judging what is considered "minimal", "acceptable" or "excellent" on some aspect of institutional functioning, colleges and universities are pressed more and more to clarify for their publics (internal and external) the benchmarks they themselves use and those that could reasonably be expected from the community and governments. Such standards could serve as the

basis for improvement and/or decision making. Indicators of quality and excellence arrived at co-operatively and agreed upon can be obtained for students (at entrance, in progress and at graduation), programs (structure, content, characteristics), faculty (teaching, research, service), administrators (leadership, management, etc.) and institutional services (internal, external). These could serve as powerful anchor points for establishing standards specific to the institutions and their sub-units as well as for provincial systems in general. Russ Edgerton (1991), president of the American Association for Higher Education (AAHE), in reviewing all the recent "signs and proposals for educational reforms and improvements in the United States" wrote that "national standards are coming ... national standards are coming."

Use #8. Monitoring progress toward goals

It is widely held that judgements about quality and excellence must consider the specific institutional missions and goals of each college and university. Such missions and goals presumably have the sanction of governments who created them. Indicators of quality and excellence, again arrived at co-operatively and agreed upon, could help in those judgements of "fitness to purpose" for all aspects of the institution as well as in the steering of the institution toward the achievement of those goals. Quality and excellence indicators could monitor progress, serve as referents for adjustments along the way as well as in judging the extent to which objectives are achieved. Webster (1990), presented a framework for quality assurance in Canadian Universities. Despite the rhetoric, few colleges and universities in Canada (and elsewhere for that matter) have as yet developed to any extent monitoring and follow-up procedures on decisions, actions and impacts. Cases in point are student follow-up after graduation, faculty evaluation and development, program changes and revision, customer/client/participant satisfaction and the list goes on. These have been raised, albeit sometimes superficially by Smith (1991). Monitoring at the micro level of the college and university operations based on quality and excellence indicators can serve as building blocks for the more global macro institutional levels and systems of post-secondary education.

Use #9. Self-study procedures

Few institutions in Canada have well

developed self-study procedures. Ewell (1984) reminds us of "the self regarding institutions-information for excellence." Images of "ivory towers" are still rampant in regards to post-secondary education in Canada. Many institutions have taken a position of looking at themselves through standing or ad hoc committees with very little, short, medium or long-term information on which to base decisions and proposed actions. By definition, self-study procedures are developed and used by a given institution to assess on a regular basis all aspects of its functioning. This includes periodic examination of missions and goals, institutional functioning and climate, needs inventories, community and stakeholders input. Quality and excellence indicators could form the basis for data collection and interpretation in the light of unit or institutional objectives. Instrumentation as well as goals of self-studies could be improved on the basis of careful selection of indicators of quality and excellence. As stated by Marcus et al. (1983) in *The Path to Excellence: Quality Assurance in Higher Education*, "what will be convincing, will be a continuing and rigorous review by individual institutions of the quality of their own programs. Such reviews must be comprehensive, forthright, and decision-oriented, their results must be made public and the results must actually be used to strengthen offerings if the public and those who hold the public trust are to be satisfied."

Use #10. Accreditation criteria

Accreditation is a fact of life in post-secondary education on the North American continent whether it be accreditation of professional schools and programs by professional associations (specialized accreditation) or accreditation of degree granting status for entire institutions by accreditation bodies jointly established by institutions themselves on a regional basis (institutional accreditation) as seen especially in the United States. Whether it be at the program level or at the unit or institutional levels, the accreditation model has generally the same approaches. Information is gathered through institutional channels on the one hand and external review panel procedures on the other. Finally, a review panel analyzes and interprets the information and formulates recommendations for accreditation. In *Understanding accreditation: Contemporary Perspectives on Issues and Practices in Evaluating Educational Quality*, Young et al. (1983) describe accreditation as "predominantly a voluntary activity", "a premier example of self regulation",

"focuses primarily on **judging educational quality - an elusive concept**", "functions as an evaluative process", and "provides outside consultation". It requires a clear statement of mission and objectives, a self-study, an on site visit and an independent commission decision. As stated by Christal and Jones (1985), "The purpose of accreditation is to **assess and enhance the quality** of educational institutions and programs." Accreditation describes programs or institutions, examines resources, describes utilization of resources and indicates whether outcomes have been achieved. In defining standards, data structure and instrumentation, and in interpreting findings, the use of quality and excellence indicators serve as common threads along which strengths and weaknesses are diagnosed and specific avenues of improvements realistically suggested.

Use #11. Evaluation criteria and programs

Program evaluation and reviews seem to have taken hold in colleges, and particularly in universities in Canada in recent years. Documents of CREPUQ (1991) as well as program reviews in several Canadian universities (e.g., Alberta, McGill, UQAM, Moncton) are but a few examples of these. Whether for new program planning, implementation or evaluation, or for revisions of existing programs, criteria and measures are selected or developed for the purposes of improving decision making on programs. Problems of criteria, standards and instrumentation are of constant concern in all program reviews. Indicators of quality and excellence are needed in the selection of the most important factors to consider in reference to program structure, content and characteristics as well as the adequacy of programs in relation to the needs of clientele and society generally. The availability of quality and excellence indicators is also important in program resource allocation and delivery. The reader is referred to two previous issues of the *CSSHE Professional File* (Harris & Holdaway, 1987; Holdaway et al., 1991) on this topic. Quality and excellence indicators could guide program development, help monitor implementation and assess program impacts. As pointed out by Barak (1986), program reviews as instruments for improving quality and effectiveness of academic programs are becoming ways of life in most institutions. Quality and excellence indicators could form the basis for data and information under review. Berquist and Armstrong (1986) referred to seven indicators of quality programs and sought to

demonstrate how effective program planning can contribute to quality in undergraduate education. Chickering and Gramson (1987) outlined **Seven Principles** for good practice in undergraduate education. These were student-faculty contact, co-operation among students, active learning, prompt feedback, time on task, high expectations and respect for diverse talent and ways of learning. These among others would seem to be crucial indicators of program quality if agreed upon. These authors (Chickering and Gramson, 1991) have edited a more complete analysis of these seven principles with three other contributors reporting research findings and implications for faculty and institutional analysis.

Use #12. Defining criteria and faculty performance in teaching, research and service assessment

One of the most current topics in higher education in Canada is the quality of teaching. Smith (1991) has surveyed the Canadian scene on this important function of universities in Canada and has offered some recommendations. The very definition of teaching is also a matter of debate. What is quality teaching and how is excellence in teaching recognized across the land and within any given institution? The answer is not clear.

When one looks at procedures for evaluating, recognizing or rewarding quality teaching in Canadian colleges and universities, one is often left wondering on what basis the criteria and standards were selected when assessments of quality teaching are undertaken. Instrumentation is often ad hoc with little evidence of validity and reliability. Important indicators of quality in teaching must be obtained from all constituencies in order to make appropriate judgements based on agreed upon dimensions and in order to make adequate interpretations for improvements and for decisions and actions. Defining the domain of quality teaching will point to the mosaic of indicators contributing to its definition and its recognition.

The same can be said of the research functions and the service functions of faculty in post-secondary education. In the present discussions around the "new scholarship" advocated by Boyer (1990) in particular and on the diversification of criteria for assessing research productivity as explained by Creswell (1986), the search for indicators of quality and excellence is on. The present calls for partnerships and "links" of colleges and universities with their many

communities (local, regional, scientific, business, professional, etc.) are adding to the already high demands for quality in service delivery on post-secondary institutions. Universities and colleges are asked to render quality service to the development of the global competitiveness and to solve the practical problems of Canadian society. Quality and excellence indicators of service would surely provide common grounds for communication and understanding.

Use #13. Strategic planning

Strategic planning is clearly off the shelves and into the mainstream of institutional affairs in colleges and universities in Canada. Rationalization due to financial cutbacks has necessitated a prioritizing of objectives, activities and services of post-secondary institutions. Resource allocation and reallocation on the basis of these "planned strategies" has brought to attention the need to manage and plan change from within and from without. The process as well as the end product of strategic planning in colleges and universities have focused on those things that institutions do well and those that they should do better with due recognition of their respective mission statements and goals. It is in this arena that the main players have been let loose in the **search and the pursuit and sometimes the rescue of quality and excellence**. The use of quality and excellence indicators appears crucial to the success of strategic planning and associated procedures such as zero-based budgeting with "short term pain for long term gain" as the motto. West (1988) described the resource allocation model for UK universities and its links to strategic planning, research policy and performance indicators in universities. Steeples (1988) and Schmidlein and Milton (1990) have described the applications of strategic planning in colleges and universities.

Use #14. Public reporting

The need for open public reporting of college and university activities has surfaced in recent years as a result of demands from the public, the media, as well as the governments and Royal and national/provincial commissions. This openness to constituencies has created the need for better reporting of results, resources and the delivery of services. All of the above, as calls for quality and excellence, have crossed the borders from the south since the early 1980s and have permeated Canadian society and its

institutions of higher learning.

Constituencies within and outside the institutions have seized the rhetoric and are asking for information on what they perceive as the essentials of quality and excellence (Lewis and Benedict, 1991; *Actualité*, February 1991, etc.). In this context, the use of quality and excellence indicators cooperatively developed and agreed upon can serve the two purposes of "mirrors to the outside world" and "windows on the institution". Such transparency could be the most important contributor to a college or university's efforts in regaining its public's support and trust.

Use #15. Educating our publics and shareholders

It is clear from recent media reports, the Smith (1991) report and political and government positioning, that institutions of post-secondary education have to actively inform and educate their publics and stakeholders about their activities, objectives, programs and resources. Indicators of quality and excellence should help clear misconceptions and misperceptions of college and university business and clarify their roles and known impacts. Indicators of all kinds could render a precious service to institutions or subunits as barometers on which input, process, progress and results could be pictured in full view. Support and respect for post-secondary education institutions do not simply happen in these troubled times, they have to be earned and constantly nurtured. As stated by Fairweather (1988), we need to go beyond the "halo effect" in examining and showing specific institutional and program characteristics of quality and excellence. Perceptions are image representations of the mind and if colleges and universities are sending unclear messages resulting in distorted or false diagnosis from its partners, then indicators of quality and excellence keyed to purpose are needed to set the record straight. Post-secondary education institutions need to inform their clientele (students/customers/clients) what they might expect to get from attendance in specific terms.

Use #16. Assessing support services

In many of their operations, colleges and universities function much like any social organization. They have a wide array of student services as well as academic and administrative support services. From the bookstore to the library, from maintenance of the physical plant to financial and management services,

from student residences to student counselling and guidance services, all of these and others are parts of the climate, the functioning and the essential resources of any college or university. Indicators of quality of these services are many, several of which are related to content and delivery. User friendly and consumer/client satisfaction are quintessentials. Accessibility and affordability are key elements of delivery. Indicators of quality of these and others would serve the dual purpose of defining the nature of these services as well as providing important benchmarks for evaluation, progress and decision making.

Use #17. Accountability

In most variations on this theme in post-secondary education, there appear the notions of efficiency, cost effectiveness, returns on investment and public accounts of financial and managerial affairs of the institutions. Simply put, is the public getting its money's worth in post-secondary education? Indicators of quality and excellence would obviously point to an institution's achievements in its major activities and provide useful input in responding clearly to demands of accountability for which, willing or not, a college or university has just about no choice. Audits are coming! Audits are coming! These are still distant echoes of our neighbors to the south. With adequate indicators of quality and excellence, institutions should welcome auditing and accountability. There lie the important issues! It is assumed that any institution would prefer to be assessed on known quantities and qualities rather than being pictured through "shotgun approaches".

Use #18. Total quality management (TQM)

As stated by Marchese (1991), "viewed broadly, TQM is a call to quality and mindset about improvement." A more complete treatment of the subject is to be found in *Total Quality Management in Higher Education* by Sherr and Teeter (1991). Seymour (1991) described TQM initiatives in twenty-two colleges and universities in the United States. These concepts are just entering the higher education scene on this continent. Assuming that some of Deming's philosophy and variations thereof will not take forty years to penetrate the operations of colleges and universities in Canada, one can extrapolate the success of such an approach seen elsewhere within the confines of post-secondary education. The total quality approach to management

breathes quality and excellence indicators. It operates with, on, within and about quality and excellence. Its case rests on quality, from beginning to end. Inputs, processes and outcomes of quality are all of central concern. **Process** is the most critical dimension of quality. Each unit is called to service in the pursuit of the better and the best. Improvement is the daily agenda. Under this approach, **quality assurance** in colleges and universities need agreed upon indicators to provide information for progress and decision making. TQM has some of the most important elements of what many of us are preaching in colleges and universities. The use of quality and excellence indicators to measure and practice what we advocate is a statement of the obvious, at least to some of us. In response to public and student demands, colleges and universities may have to adopt quality as their first priority.

Use #19. Defining the domains of faculty and administrator performance and achievement

Faculty and administrator evaluations are conducted in many colleges and universities across Canada. Procedures and instrumentation vary widely and the use of the evaluation information for improvement and administrative decision making often give rise to conflict and controversy. In this respect, Canadian colleges and universities are not much different from their counterparts elsewhere. Central to these personnel evaluation efforts is the establishment of criteria and standards of performance. The identification of agreed-upon quality and excellence criteria and indicators for faculty and administration would go a long way towards improving the situation and would give way to the development of sound procedures and instrumentation to evaluate teaching, research productivity, service and administrative functions. These topics have been well described by Seldin (1984, 1988, 1990).

Use #20. Demonstrating multidimensionality of quality and excellence in the improvement space

The search is on everywhere for quality and excellence in post-secondary education. Definitions of these concepts are numerous. The selection and use of some indicators as well as the use of only a restricted number to judge and thereby make decisions about colleges and universities have resulted in controversy according to Sizer (1981) and Cuenin (1987). What is emerging is the clear message that

quality and excellence are multidimensional concepts that must be linked to institutional mission and goals. These dimensions of quality and excellence interact in the improvement space. They are elusive and moving targets which are never fully achieved. Morgan and Mitchell (1985) echoed the multidimensional view of quality in stating, "the nature of the educational process is so complex that an eclectic approach to researching excellence is virtually mandatory." The development of indicators of quality and excellence for all aspects of a college and a university are critical to ensure elementary justice in evaluation and to give attention to **context** in interpreting data and information. Improvements and the pursuits of quality and excellence are multi-source, multi-purpose, multi-method, multi-faceted. In these times of rationalization no stones are left unturned. Each institutional function, activity, program, project, etc., requires examination. Using important quality and excellence indicators, in full view and with wide acceptance, provides the framework for description, analysis and diagnosis of the past and present, with clear directions for the future.

Use #21. Responding objectively and scientifically to calls for quality and excellence from within and from without

Calls for quality and excellence have origins within the institution whether coming from students, faculty, administrators, or service personnel. They also come from alumni, interest groups, the community, the media and governmental bodies, in many ways, shapes and forms. To respond objectively with information and to give credible answers to "a measure of excellence", colleges and universities need to find and explain their "niche" within the universe of post-secondary education in Canada and beyond. Responding with well-founded alternatives to alleged wrongful characterization, with evidence anchored to quality and excellence indicators related to specific mission and objectives may be the most appropriate route to take for institutions who oftentimes pride themselves on reason, scientific methodology, truth and the conscience of society. Is it not the case that what colleges and universities are most sadly lacking these days is a full measure of credibility? Using quality and excellence indicators to define its "niche" of quality in post-secondary education, a college or university would run the high stake risk of being listened to and appreciated for its true value. As stated by Litten and Hall (1989) in an article titled "In the Eyes

of our Beholders...", "the management of colleges and universities will have to become actively engaged with the dialectic created by internal and external perspectives on quality in higher education. The effective marketing of colleges and universities will require a capacity for relating both the objectives and the views of the producers of educational services and those of the consumers of these services. Research must be pursued on both sides of the issue; more refined and comprehensive data on how consumers approach and process information on college quality and on how institutions define and implement quality in their programs are needed."

Use #22. The mosaic of diversity for the good, the better, and the best

The post-secondary education systems in Canada (12 or more) have developed over the years in response to needs and are valued for their diversity. As characterized by Smith (1991), there is a place in the sun for the "good", the "better" and the "best" in comparison. These are the many faces of quality and excellence. Beyond tradition and reputation, there is still a good measure of value placed on the diversity of colleges and universities across the land. Our Canadian pluralistic society would not have it any other way. What is needed of course, is a good representation of that diversity with specific missions and objectives at the centre of the picture of the institution. A taxonomy of indicators of quality and excellence can then serve the **useful purpose of establishing general and unique "profiles" of quality and excellence** for each institution on their central components namely: students, programs, faculty, administrators, internal services and external environments. As pointed out by Chaffee (1984), "Quality can only be improved locally, with reference to local history and context. The best treatment is unique to the patient. Achieving high quality requires both **doing well and being good.**" As stated by the FACET Commission at St. Petersburg Junior College (1990), "The National Commission on Excellence in Education ... defined an excellent school or college as one that sets high expectations and goals for all learners, then tries in every way possible to help students reach them. By this definition, every institution, within the context of its own history, mission, goals and community served, can seek excellence." Kuh (1984) argued that, "identification and articulation of the unique factors that constitute institutional quality are important to colleges and universities ... Becoming

acquainted with factors that seem to be more directly related to institutional quality can assist prospective students, parents, counselors (and all other stakeholders) in drawing more informed and accurate conclusions about the quality of colleges and universities. Such information should be far more useful to prospective students and their advisors for comparing institutions than **traditional indicators of quality**." Bogue and Saunders (1992) have strongly argued for profiles of quality and excellence in the diversity of institutional missions.

Use #23. Linking resources, reputation, talent development and accessibility to assessment, quality, excellence and improvement

Indicators of quality and excellence are used to link resources, reputation, talent development and accessibility to assessment of quality and excellence. With the many competing roles and responsibilities assigned by society and governments to colleges and universities, many are attempting to be everything to all and seem unable to make the necessary linkages within their own operations. Plans are oftentimes put aside for the sake of expediency, opportunism, knee jerk reactions and questionable risks. To maintain balance and at the same time adjust priorities, indicators of quality and excellence could help avoid the temptations of the moment to seek short term gains rather than coasting on long term, well thought out plans for progress and improvement. Ad hoc, one shot undertakings may contribute to the running after several rabbits with the high risk of missing them all. With financial pressures operating in all colleges and universities, a case can easily be made for "temporary diversions" on the course and riding on "quick fixes" which can drain resources on the medium term and provide unnecessary distractors to institutional mission. Quality and excellence indicators could help sharpen focus and avoid losing sight of the important. Responding to **targeted needs** is one thing, responding to **all needs** is a sure recipe for missing the boat altogether.

Use #24. The quest: The pursuit of quality and excellence

Quality and excellence is a journey, not a destination. Someone has said that if a college or university president dared to announce that his or her institution had achieved quality and excellence, he or she should either resign or be fired. In higher education,

the destination is always changing. Institutions are moving constantly from **small steps to bigger leaps** of quality and excellence. Quality and excellence is not a spectator sport, it requires proactive determination on known axes of development. Quality and excellence indicators are the benchmarks, the road signs for people, units and institutions to check, heed to and take adequate readings in order to proceed with a minimum of certainty and sanity. Sherr & Lozier (1991) state that everyone, every unit must be involved in maintaining and improving the quality of an institution at all levels. "Quality assurance cannot be delegated to someone else." No one can sit on the fence hoping it will happen. As building blocks, attention to quality and excellence indicators ensures that the house will not fall into pieces.

Use #25. Development of measurement and evaluation instrumentation of importance

The identification and deliberate use of important quality and excellence indicators will provide the needed "domain" definition within which priorities for measurement, assessment, observation and data collection will focus. Smith (1991) came to the conclusion that there is very little instrumentation available for Canadian universities to demonstrate what they are doing. Although Canadian colleges and universities can borrow instrumentation and adapt their content and use, the need for contextual assessment remains. Targeting specific domains for instrument development and validation at the institutional, provincial, regional or national levels where indicators of quality and excellence are considered important will provide the needed trust for better information systems across institutional and provincial lines. As stated by Coate (1991), "Quality is what customers say it is, not what universities (or colleges) tell them it is. Both internal and external customers want to receive the same high quality service at all times with no surprises. **Progress can only be determined and improved upon by measurement.**" In "Assessment and TQM: In Search of Convergence", Ewell (1991) saw assessment in higher education as a "quality movement" that has many of the TQM approaches. He wrote: "In industry, TQM arose largely as a response to a real crisis of competitiveness and profitability. For better or for worse, higher education feels no parallel crises as yet - though the public and its elected officials are, I believe, becoming increasingly restless. Guided by the proven principles of TQM, assessment can help institutions to develop a mechanism for responding in advance to challenges that many think

are coming. Acting now, as the experience of industry has shown, is a far better strategy than waiting for change to be dictated by circumstances." As echoed by Edgerton (1991), "National standards are coming! ... National standards are coming!" Is this not true for Canada? In this context, quality and excellence indicators would be crucial.

Use #26. Understanding provincial planning and agenda in the Canadian context of quality and excellence in post-secondary education

Interinstitutional and interprovincial cooperation in post-secondary education in Canada can hardly be described as proactive. The interface of universities, colleges and secondary schools is at the center of many heated discussions. Each province and territory has its own agenda and independent planning (one exception may be the Maritime provinces with the Maritime Provinces Higher Education Commission). Indicators of quality and excellence in post-secondary education would increase the likelihood of cross border collaboration, opening up understanding of barriers and provide a common ground for dialogue and exchange. As institutional rivalries are broken down and interprovincial cooperation may be on the increase, quality and excellence indicators will be important grounds for consensus building and communication. If barriers everywhere are breaking down in so many areas of human activity, if the "Europe of the twelve" are able to coordinate their higher education systems with common understandings, then the need for cooperative planning and agenda setting on the Canadian scene in post-secondary education may give the needed focus to cooperatively developed and agreed-upon indicators of quality and excellence.

Use #27. The high school/college/university and world of work interface

As more and more partnerships are sought and developed between educational institutions and business, industry, the professions and the world of work generally, the need for common understanding and common language for proper linkages comes to the forefront. In recent years, colleges and universities have been encouraged to improve the "quality" of their graduates in order to meet the competitive edge and increase productivity in the work place. Indicators of quality and excellence are crucial to communicate

needs and show results. Recent work by the Conference Board of Canada (1990) and the Corporate Higher Education Forum (1991) point in that direction. Making those crucial "connections" to ensure quality and excellence at all levels of educational systems are particularly important in the Canadian context with its twelve systems. Articulation agreements are being sought and improved upon where they already exist. In *Educational Excellence for Iowa* (1984), the Joint Committee on Instructional Development and Academic Articulation of the State Board of Regents clearly stated that unification and "improved communication and articulation vertically and horizontally within the educational system is the key to improvement." To improve quality in two year colleges, the Southern Regional Educational Board (1987) recommended improved placement standards in college, strong partnership with high schools, assessment of students' performance and improving transfer programs.

Use #28. Establishing the research, development and evaluation agenda in post-secondary education

A final use of quality and excellence indicators is in the establishment of research, development and evaluation agendas in post-secondary education in Canada. Universities and colleges are among the few institutions that do very little research on themselves, while being active consumers and producers of research on everything else. As everyone knows by now, a system that does not have the basic functions of R & D and Evaluation runs high risks of stagnation and extinction. This is especially true for a constantly changing system of colleges and universities. Indicators of quality and excellence used in the context of R & D & E constitute the basic dependent, independent and controlled variables of main interest in efforts at providing evidence and substance to the improvement over the status quo in post-secondary education. On a more general framework, they could serve to set credible research, development and evaluation agendas to which "critical mass" can be applied in the pursuit of quality and excellence at the micro and macro levels of post-secondary education. As Berdahl et al. (1987) indicated: "The literature on the topic consists largely of critiques and proposals by study groups or interested parties, polemics or more reasoned discussions of issues, or case descriptions of programs and initiatives (usually undertaken by those who have initiated or implemented them); and

second, there is little or no research on the efficacy or impact of such activity. There also appears to be relatively few individuals actively engaged in collecting systematically information or doing research related to this arena." Policy analysts and evaluation researchers interested in looking at improvement efforts and assessing their impacts could use commonly understood quality and excellence indicators in order to better focus their activity.

CONCLUSION

This *Professional File* has dealt with the possible, the probable, the actual and the desirable usefulness and utilization of criteria and indicators of quality and excellence in colleges and universities. This extensive overview of the research literature and practices covering over fifteen years of major bibliographic sources provides the reader with a wide acquaintance of what has been proposed, advocated and actually attempted or done. Each of the above uses of quality and excellence indicators could be expanded in detail with specific "examples" in Canadian colleges and universities.

In the last eighteen months in Canada, several national commission or study group reports have addressed problems of colleges and universities in their quest for quality in times of severe financial constraints. The OECD indicators project at the K-12 level of public education sponsored by the Council of Ministers of Education in Canada (CMEC) is in progress. Developments at these levels may have repercussions on the post-secondary sectors as more links are being sought. At the post-secondary level, efforts by the Council of Ontario Universities (COU) and the Quebec Ministry of Higher Education and Science (MESS) among others have attempted to define mainly quantitative indicators at a global level. In February 1992, the Quebec Ministry (MESS) through its Conseil des Collèges (Council of Colleges) published a three volume series pointing to quantitative indicators in the college network. These indicators have not yet been associated to "quality" of students, courses or programs. In New Brunswick, a government Commission on Excellence in Education has been at work since October 1992 with a wide mandate over all levels of education.

The several national reports presently under discussion across Canada (e.g., the symposium of The Canadian Society for the Study of Higher

Education at the Learned Societies annual meeting in Charlottetown) and the governments' freezes on budgets for post-secondary education, coupled with the public demands for quality and accountability, will push colleges and universities to clarify their mission and demonstrate that appropriate expectations are being achieved. If the trends mentioned by Miller (1986) extend to the Canadian scene (as in many instances they do) there will be a continued increase in institutional evaluations, a continued surge of interest in quality post-secondary education, growth in interest toward value-added education, continuation of the rating game and there will be increased proficiency in evaluations of institutional quality.

This writer has been at work in the last two years on a national project (with a team of four researchers) to identify and validate criteria and indicators of quality and excellence in colleges and universities across Canada (Nadeau, Donald, Konrad, Lavigne and Laveault, 1992). Using consensus building techniques this project aims at defining the domains of quality and excellence and obtaining wide input from some twenty different stakeholders in post-secondary education. In addition this writer is attempting to create a national DIRECTORY of "exemplars" of quality and excellence across the country for the benefit of researchers and practitioners. This could contribute to the needed input in the tough decisions facing institutions and systems across Canada. Obtaining consensus on definitions as well as the essential criteria and indicators of quality and excellence will avoid the pitfalls of recent attempts at defining and using indicator systems for decision making about higher education in Canada. It is hoped that the input of the higher education community will be fully heard and considered in these economic, administrative and political decisions. Hopefully, the content of this issue of the *Professional File* will contribute to an understanding of the issues involved.

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