

THE CONCEPT OF EDUCATIONAL QUALITY

A.M. ABDELGHANY*

I. Introduction

In Zen and the Art of Motorcycle maintenance (Pirsing, 1974) a professor writes this definition of quality on the blackboard: " Quality is a characteristic of thought and statement that is recognized by a non-thinking process. Because definitions are a product of rigid, formal thinking, quality cannot be defined." Then, below the definition he adds: " But even though Quality cannot be defined, you know what Quality is!" (pp.200-201)

The need for defining quality in quantifiable terms is a new one in the field of education. Before the requirements for accountability emerged, vague references to " educational quality" would be made with very little thought of what " quality" really meant. Dwindling financial support, both public and private, as well as diminishing trust in the accomplishments of the education system have, however, forced educational institutions to review the question of what constitutes quality in a new light.

While it is true that " quality is an elusive attribute" (Cartter, 1966, P.251), educators have learned to their dismay that neither the public nor legislators can be satisfied by vague generalities in the discussion of educational quality. Parents are usually incensed by the fact that their children cannot read or write; graduates are frustrated because they cannot get jobs;

* Assistant professor, Department of Biostatistics and Demography, Institute of Statistical Studies and Research, Cairo University.

employers are dissatisfied because their employees do not possess adequate job skills. One assumes that at least a partial explanation of these problems is that education is lacking in quality; therefore, one way of solving these problems would be to increase quality in educational institutions. Before quality can be increased, however, it must first be defined, and we must also establish not only that quality is lacking, but how much is lacking.

Before tackling so difficult a task as defining and measuring quality, perhaps we should try to establish why we would wish to assess the amount of quality present in an educational institution.

There is an argument against evaluation, it states, that it is logically impossible to evaluate anything in the absence of special goals against which to measure outcomes. Since education has several levels and each one has its own goals, therefore, how does one evaluate against heterogeneous goals? Another argument is that there are many facets of education which cannot be measured. A third objection related to the previous one is that measurement of only those measurable aspects of education will result in a distortion of values, eventually emphasizing those aspects which are measurable at the expense of those which are not.

In defense of evaluation, Mood claims the following:

(1) some kind of rough approximation, at least, is possible because most of us do agree on certain elemental results of education such as the ability to read, write, calculate, and understand to some degree our physical and social environment; (2) the attempt to develop reasonable quantitative indices for evaluation will generate valuable dialogue about goals and generally serve to sharpen crucial issues in that dialogue; (3) the mere measurement of certain educational outcomes may well lead to general agreement that some outcomes are obviously unsatisfactory even though goals are not agreed upon. (1966, P. 276)

If there is not a need for evaluating educational quality, how, then, do we tackle the problem of definition ? Given that the intuitive approach is no longer a viable one, perhaps the best way to deal with such a topic is to concentrate on the reflectors, or indicators of quality. Questions that might be asked concerning quality might be: what are the leading indicators of quality ? What measures can be used to assess the degree to which these indicators are present in an educational system ?

Several approaches may be used in defining and assessing educational quality. One method is the measurement of student inputs-infering the nature of an institution from the kind of student it attracts. Another approach measures student outputs and tracks the later success of graduates of an institution, while another bases its assessment of quality on the quality of faculty, and still another uses such measures as per Pupil expenditures, teacher/pupil ratio, etc. A fifth approach surveys scholars in certain fields concerning the degree of excellence possessed by academic departments in those fields. These approaches are not mutually exclusive and a combination of several may be used in evaluation.

A complicating factor in using indicators of quality in evaluating institutions is the fact that different educational institutions may have different goals and objectives. All institutions, therefore, would not assign the same values to the same indicators. Somehow, a realistic assessment of quality must take this fact into account.

One way of dealing with this problem might be to attempt to achieve consensus among the different groups affected by an educational system. Another approach might be to adapt the evaluation method to suit the goals and objectives of each system being evaluated. A recent trend in the evaluation of educational quality measures quality by the degree to which the institution fulfills its goals and objectives. Measures might be input, output or outcome, and process or environment.

II. Quality in Elementary and Secondary Education

A great part of the studies done in this area begin by setting goals and objectives of the educational process and then judging educational quality according to how much or how little these goals are met by the system. The Colorado study, for example, lists as a goal five dimensions of educational quality to be achieved by the system: 1. Human quality, 2. Quality of skills, 3. Quality of knowledge, 4. Learning quality, and 5. Civic quality (Gibson, 1970)

The procedure for evaluation followed, roughly, by most studies is the following as taken from the Pennsylvania Plan.

(1) Defining the goals of education, (2) translating the goals into measures of pupil performance, (3) determining and applying to the schools measurable standards of performance, (4) conducting research looking toward the constant improvement of the measures and of the content and methods of instruction, (5) providing technical services to help schools benefit from the data-(Dyer, 1966. p. 244)

Once goals and objectives are selected, how does evaluation of quality take place? How does the system determine whether or not goals and objectives have been met, and to what extent they have been met? Some researchers point to indicators of quality as benchmarks testing an education system. Indicators can be considered the reflectors of quality; very often they are characteristics of a system which, when present indicate the presence of quality education.

Some researchers have examined the nature of the relationship between educational resources, socioeconomic and racial characteristics, and student academic performance (Kurth, (1973). There have been several major studies associating input and process

variables with various measures of school quality or output. The attempt has been made to predict various educational outputs or other measures of quality from measures of student and community input and educational processes.

Given the general consensus of opinion that criteria for judging educational quality vary from school to school, some educators have attempted to generalize by developing indicators common to all institution. Robert A. Bowser (1971), for example, gives twelve indicators or "signs" of quality education.

III. Quality in Post-Secondary Education.

In the establishment of goals (or indicators) of quality and related measures for higher education, the same general factors are present as in elementary and secondary education, although the goals, indicators, and measures may differ. Results of studies to determine meaningful indicator and measures of quality in higher education, however, have been considerably less specific than those for secondary and elementary education. A frustrated author of one dissertation on the quality of higher education wrote:

Existing literature illustrate the lack of meaningful measures or indicators of the quality of educational institutions. Quality is mentioned frequently in the literature, yet most writers have done little more than refer to quality as something elusive for which institutions should strive. Instead of attempting to identify the components of quality through systematic research, the determination of the quality of educational institutions have been left to the subjective judgment of individuals. (Walters, 1970, p.26).

Early studies on the evaluation of quality in higher education stressed such indices of quality as ratio of library books to number of students, proportion of Ph.D.'s on the faculty, etc. (Lazarsfeld and Thielens, 1958; Blackburn and Gerber, 1974) and tended to assume that the more of these an institution had, the better was the quality of education.

Recent literature on educational quality in higher education stresses "measures," the quality of education being "measured" by the degree to which the institution fulfills its goals and objectives. Measures have been grouped as "input," "output or outcome," and "value added".

David Brown (1970) defines "input" as the "value of 'goods in process' when received by higher education" (P.37). Astin (1970) considers student inputs to be "talents, skills, aspirations and other potentials for growth and learning that the new student brings with him to college".

"Outputs," according to Brown (1970), "are the value of 'goods in process' when shipped out by higher education" (p.37). Student outputs would include measures of the departing students' achievements, knowledge, skills, values, attitudes, aspirations, interests, daily activities, and contributions to society. Although students are considered the primary outputs of an educational institution, another type of outcome measure might be research produced or scholarship published.

The "environment" or "process" is any aspect of a higher educational institution that is capable of affecting the output. This may include variables such as administrative policies and practices, curriculum, faculty, physical plant and facilities, teaching practices, etc. These environmental variables can, presumably, be changed or manipulated through reallocation of resources.

Keller (1969) introduces the concept of "benefits" which he defines as " the longer term assessment of the quality and quantity of outputs, using external, less academic, more total measures of the economic, social, and personal attributes of alumni" (P.81). Measures of benefits, therefore, might be :1. a first offered wage; 2. Cumulative income (over a certain number of years); 3. Proportion of graduates into the management level (by a certain amount of years after graduation); 4. number of papers published in scholarly and technical journals; 5. rate of election to selected professional groups or posts, and so forth.

The measure designated as "value added" is compatible with the use of input and output measures. Keller(1969) explains that in order

to have some idea of what the institution did to its students it is essential to know their condition at the time of their admission as well as when they graduated. In this way some credible measure of value added can be achieved; and it is , properly, cost per unit of value added which should be used as a test of efficiency.(p.79).

One might say that value added is the difference between inputs and outputs; however, this does not take into account the amount of progress which occurs in an individual outside of the educational environment.

A major task in the evaluation of educational quality is the choosing of objectives and sub-objectives and the identification of output measures for these objectives. An important factor in choosing objectives is how the institution perceives itself; that is, what role it believes it should fill.

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