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ABSTRACT
          This monograph provides definitions, guidelines, and
recommended practices for assessing and improving institutions of
higher education in South Carolina which are congruent with the
accreditation standards and criteria of the Southern Association of
Colleges and Schools. The first section defines key terms and states
that overall institutional effectiveness reflects the quality,
productivity, and efficiency of programs of instruction, scholarship,
and service, as defined and prioritized in an institution's mission.
The next section identifies 10 steps in assessing institutional
effectiveness including: (1) defining program goals; (2) defining
program objectives; (3) prioritizing objectives; (4). describing
program strategies; (5) selecting assessment methods; (6) designing
an assessment plan; (7) implementing the plan and measuring progress;
(8) analyzing and evaluating results; (9) using results to identify
program strengths and weaknesses; and (10) using evaluation
information to improve programs and allocate resources. The following
section offers recommended options for assessing academic programs
and non-academic and administrative programs. The final section
considers indicators of institutional effectiveness and lists
potential quality indicators goruped into indicators of quality
outcomes, quality processes, quality inputs, productivity/efficiency
outcomes, process productivity/efficiency, and input
productivity/efficiency . (DB)

South Carolina Higher Education Assessment (SCHEA) Network Recommendations for Defining and Assessing Institutional Effectiveness

August, 1994

INTRODUCTION

The purpose of this document is to provide definitions, guidelines, and recommended practices for assessing and improving institutional effectiveness in higher education. It is hoped that the information provided will help guide the development of assessment and institutional effectiveness policies and practices at the program, institution, and state levels to *enhance* the quality of education and services for all those served by higher education institutions throughout South Carolina. These recommendations are also designed to be congruent with the accreditation standards and criteria of the Southern Association of Colleges and Schools.

CONTENTS

DEFINING INSTITUTIONAL EFFECTIVENESS
IN HIGHER EDUCATION

Institutional effectiveness as a process in higher education is the *close integration of planning, budgeting, research, and assessment* to achieve the mission of the institution with quality, productivity and efficiency. Institutional effectiveness provides direction to the institution, improves the quality of institutional programs and services, and assures accountability to both internal and external constituencies by demonstrating the extent to which a college or university achieves its stated mission or purpose.

Higher education institutions generally have missions/statemer of purpose which include the primary goals of *instruction, scholarship, and public service*, although these will vary in emphasis from institution to institution.

- **Instruction** includes all curricular and support efforts designed to directly or indirectly result in student learning and development. This includes all academic programs, as well as academic support and student support programs.

- **Scholarship** is broadly defined as contributions to the development, advancement, or dissemination of higher education or an academic discipline. It includes research and publication, artistic expression, professional practice, and other forms of scholarly production, as well as scholarship support efforts such as grant writing and professional development activities.

- **Service** consists of professional activities intended to benefit constituencies either inside or outside the institution. External service includes work for professional or disciplinary organizations, for other educational groups or institutions, for
-- business and industry, and for-individuals, groups, and agencies from the local community to the society at large. Internal service includes, but is not limited to, administrative and committee work at all levels of the institution, extra-instructional work with students, and special projects or assignments.

Each institution should also have systematic strategies to attain its goals. The functional strategic unit for institutional goal attainment is a **program**. Each program has mission-derived objectives serving one or more institutional goals, and personnel responsible for its operations.

Program quality must be primarily determined by assessing results (outcomes, outputs) in relation to inputs and processes. To accomplish this, each program must operationally define its intended outcomes, and assess its own degree of success at outcomes attainment. Those assessed outcomes must then be evaluated in relation to inputs (or starting points) and processes used, and compared to internal and external standards of quality. Internal standards are those established by the program and other institutional entities. External standards include "model" programs established by learned societies, or professional associations, "approved programs" promulgated by specialized accreditors, credentialing organizations or governmental agencies, and equivalent programs at peer institutions.

Program productivity is the number or volume of successful outcomes or accomplishments. It is sometimes expressed as the ratio of program successes to failures. *Program efficiency* is the function of **both productivity and cost** (in money, time, and resources). In order to assess efficiency, each program must define the strategic resources - i.e., personnel, facilities, equipment and supplies - it utilizes to attain its outcomes, and their costs. Program productivity divided by program cost thus provides a measure of program efficiency which can be compared to similar internal and external standards as those for quality (e.g., institutional budget requirements, costs of "model" or equivalent programs on other campuses).

Overall institutional effectiveness reflects the quality, productivity, and efficiency of programs of instruction, scholarship, and service, as defined and prioritized in an institution's mission. Quality must be determined independently from productivity and efficiency to avoid distorting the integrity of all, and quality should be weighted more heavily in evaluating effectiveness. An institution's effectiveness consists of the effectiveness of all its operations and programs. The primary purpose of assessment is to document and improve such effectiveness.

ASSESSING INSTITUTIONAL EFFECTIVENESS
IN HIGHER EDUCATION

For a higher education institution to assess its effectiveness, it must measure the quality, productivity, and efficiency of its programs and evaluate those results. Although an institution's programs will differ in many ways, the basic effectiveness assessment process for all programs, academic and non-academic alike, will consist of common steps such as those outlined below.

1. **Define program goals,** clearly related to (a) the mission and stated goals of the institution, (b) student/service recipient interest, and (c) consumer needs. For academic programs, the goals of instruction, scholarship, and service should all be addressed, with instruction being the primary goal, students being the primary recipients, curriculum being the primary strategy, and more advanced educational programs, employers, or society-at-large being the primary consumers of program products or graduates. Most non-academic programs have a service priority, with students (directly or indirectly) or other internal or external constituencies being primary recipients and consumers.

2. **Define program objectives** in operational or measurable terms that specify outcomes or what is expected from successful program completion. Instructional objectives should be stated as the student learning (knowledge and skills) and development (attitudes and behaviors) expected of those who successfully complete an academic

program. Scholarship and service objectives should also be stated in terms that define expected results or products.

3. **Prioritize objectives** based on their importance to mission and goals and on previously determined needs of service recipients and consumers. Such priorities should determine the relative emphasis on subsequent strategies and assessment methods for each objective.

4. **Describe program strategies** responsible for assuring the attainment of program objectives and their cost. For academic programs, strategies would include components of curriculum and instruction and co-curricular requirements designed to produce or enhance student learning and development. Strategies also include the policies and procedures which foster and support scholarly and service outcomes.

5. **Select assessment methods** which are expected to measure how well program strategies are attaining program objectives in a valid and practical manner. *Validity* refers to the accuracy and utility of an assessment measure for the particular purpose it is being used to serve. *Internal validity* relates to how accurately the measure determines the attainment of program objectives. *External validity* relates to the generalization or comparability of results to other programs across the region or state.

6. **Design an assessment plan** specifying how, when, where, and by whom program objectives will be assessed. It is extremely important for the plan to have the input of those knowledgeable about, involved in, and affected by the attainment of objectives it is designed to assess. It should include multiple measures that meet

minimum criteria of internal validity, external validity, and practicality. Assessment methods should be implemented on a regular, systematic schedule designed to enhance the attainment of objectives, minimize disruptions to programs and services, and correspond with cycles of-planning, budgeting, and other decision making procedures.

7. **Implement plan/measure progress** in attaining program objectives. The successful implementation of assessment methods requires administrative support and the cooperation of those implementing and responding to such methods. Implementation should be carried out with the full population of persons or elements to be assessed or, where this is impossible or impractical, with a representative sample. Wherever possible, assessment should be embedded in ongoing activities (i.e., in course content or degree requirements, routine faculty or department reporting, and service delivery and follow-up).

8. **Analyze and evaluate results.** Results should be fully and accurately analyzed and evaluated by program personnel, supervisors, and assessment experts. Only results determined to be validly related to program quality, productivity, and/or efficiency should be used for subsequent decision-making and planning.

9. **Use valid results to determine program strengths and weaknesses.** Results pertaining to program quality, productivity, and efficiency should be compared to internal *and* external standards of effectiveness in order to determine strengths, weaknesses, and needs for future improvement.

10. **Use resulting information to improve programs, determine planning and budgeting needs, allocate resources, and generate accountability reports.** Such uses of assessment results constitute "closing the loop" in order to improve the quality, productivity, efficiency; and/or accountability of a program. Many instructional, curricular, policy, and/or procedural improvements can be accomplished relatively quickly and forthrightly by program personnel making internal changes. Longer term and more costly changes may necessitate the support of the planning, budgeting, and resource allocation system of the institution or even the state or other funding bodies. The process of integrating assessment with decision-making should maximize quality and productivity while minimizing cost in the attainment of goals and objectives by an institution and its administration, faculty, staff, and students.

RECOMMENDED OPTIONS FOR ASSESSING PROGRAMS
IN HIGHER EDUCATION

Although no single measure can validly assess the range of objectives addressed by higher education programs, the following options for assessing academic, nonacademic, and administrative programs are recommended for consideration:

Academic Program Assessment Measures

- *for student knowledge competencies* - a locally-developed criterion-referenced measure such as a comprehensive exit examination (for internal validity), and a regionally or nationally normed standardized achievement test or one or more external examiner(s) from the program's national association, or from a model or peer program at another institution (for external validity). Other examinations, criterion-referenced commercial tests, archival records, in-class probes or classroom research methods, portfolios, papers, or projects may also be useful in assessing student knowledge.

- *for student skills competencies* - performance appraisal and/or performance simulations, plus archival records, portfolios, or other relevant performance-based projects deemed useful by program faculty.

- *for student attitude and behavior characteristics* - behavioral observations, exit interviews, focus groups, and surveys of alumni and significant third parties, plus archival records, logs, and other portfolios.

Non-Academic and Administrative Program Measures

- interviews with and/or surveys of at least a representative sample of service recipients and consumers, including open--ended questions regarding their needs, the quantity and quality of services received, and suggestions for improving program objectives, strategies, and assessment measures.

- objective measures (e.g., behavioral observations or archival records) of the quantity of services needed (e.g., number of service requests, by category) and quantity of services rendered (e.g., number of satisfactory services, by category).

- whatever other information regarding the quality and/or quantity of services the program personnel deem useful.

INDICATORS OF INSTITUTIONAL EFFECTIVENESS
IN HIGHER EDUCATION

The following section describes potential indicators of quality and productivity/efficiency in higher education. No single indicator can be interpreted in isolation or applied equally to every type of institution and program. Indicators should be viewed in the context of *overall* institutional effectiveness processes and in relation to

A. the mission of the institution;

B. the program goals and objectives that support the institution's mission; and

C. the abilities, characteristics, needs, and goals of incoming students and others served by the institution.

Although indicators may provide a "snapshot" of some aspects of quality and efficiency, most do not typically answer the critical question of *why* a program or institution has performed at a particular level of effectiveness. A review of assessment data in general and indicators of quality and efficiency in particular is thus best accomplished within an *overall* joint review of effectiveness by experts both internal and external to the institution.

Each indicator listed below appears under one of two categories, *quality* or *productivity/efficiency*, based on the aspect of institutional effectiveness *primarily* measured by that indicator. Additionally, three subcategories denote whether each indicator primarily measures:

- **Inputs** (I = what the institution receives to work with);
- **Processes** (P = how the institution tries to accomplish its work, i.e., program strategies);
- **Outputs**/outcomes/results (O = the products of its work);
- Some **combination** of the three.

(NOTE: Outcomes are the most important "bottom-line" indicators of effectiveness. The most valid indicators will describe outcomes/results **and** help identify the process strengths and/or weaknesses responsible for the results, so that improvements can be made to enhance program and institutional effectiveness.)

POTENTIAL INDICATORS OF *QUALITY* IN HIGHER EDUCATION

(**Not** listed in order of importance or practicality.)

Indicators of Quality Outcomes/Results (O) [with Input(I) and Process(P) combinations noted in parentheses]

- Student achievement (O) and/or gains (O, I) in such areas as:

    A. Problem solving/creative thinking

    B. Critical thinking

    C. Scientific reasoning/skills

    D. Aesthetic sensitivities/appreciation

    E. Quantitative skills

    F. Writing/communication skills

    G. Research skills

    H. Major studies

    I. Self-declared goals

- Skilled performance in recitals, exhibits, internships or similar activities (O)

- Student performance on a) licensing exams, b) professional exams, and c) graduate school admissions tests (O)

- Employment rates of graduates in chosen field (for those students who express employment in chosen field as their primary post-graduation goal) (O)

- Graduate school admission rates (for those students in senior institutions who express admission to graduate school as their primary post-graduation goal) (O)

- Academic success of transfer students (for two-year institutions) (O)

- Academic success of undergraduate alumni in graduate programs (for senior institutions) (O)
- Employer ratings of graduates (O)
- Academic performance of targeted student groups (e.g., athletes, minorities, non-traditional students, etc.) (O)
- Student evaluations of curriculum, instruction, and services (O, P)
- Alumni ratings of the quantity and quality of preparation for career or other post-graduation activities (O, P)
- Alumni ratings of the quality of instruction, advising, and curriculum (O, P)
- Special recognition/honors received by students, graduates, and alumni (O, P)
- Ratings of the institution and its programs by external audiences (e.g., polls, media lists, etc.) (O, P)
- Ratio of nationally accredited programs to programs eligible for national accreditation (O, I, P)
- External reviews of institution and programs (O, I, P)
- Observed or reported alumni (or student) attitudes and behaviors (O, I, P)

Indicators of Quality Processes (P) [with Inputs(I) and Outcomes(O) combinations noted in parentheses]

- Ratings of the institution and its programs by external evaluators (P)
- Student ratings of instruction, advising, services, and programs (P)
- Reports of program changes made as a result of internal or external reviews (P)

- Faculty, staff, and student ratings of administrative organization, procedures, and personnel (P)
- Average class size (P)
- Equipment condition and amount (P)
- Lower-division courses taught by full-time or senior faculty (P)
- Percent of students receiving career advising (P)
- Percent of budget devoted to instruction and instructional support services (P)
- Percent of budget devoted to faculty and staff and f/s development (P)
- Personnel membership, participation, leadership roles, and/or offices held in professional associations and/or service organizations
- Types and range of student development programs offered (P)
- Student grievances (assuming similar grievance procedures exist for all institutions) (P)
- Student reports of out-of-class interactions with faculty (P)
- External program reviews (P, O)
- Types and range of public service activities, and number/types of persons receiving such services (P, O)
- Types, recognition, and number of faculty scholarly activities (P, O)
- Special recognition/honors received by faculty and staff (P, O)
- Alumni ratings of instruction, advising, services and programs (P, O)
- Faculty, staff, and administrative ratings of advising, services, and programs (P, O)
- Percent of faculty with terminal degrees in appropriate field (P, I)
- Ratio of nationally accredited programs to programs eligible for national accreditation (P, I, O)

Indicators of Quality Inputs [with Process(P) combinations noted in parentheses]

- SAT scores and other admission or placement test results, and high school ranks of incoming students (I)
- Percent of students meeting full admission requirements and prerequisites (I)
- Incoming student collegiate and career goals (I)
- Percentage of admitted students requiring developmental/remedial courses (I, P)
- First term performance of transfers (I, P)

INDICATORS OF INSTITUTIONAL PRODUCTIVITY/EFFICIENCY

Indicators of Productivity/Efficiency Outcomes/Results [with Process (P) combinations noted in parentheses]

- Graduation rates (4 yr./6 yr. for senior institutions, 2 yr./3 yr. for two-year institutions) (O)
- Graduate placement rates (O)
- Number/percent of targeted student groups (e.g., minorities, non-traditionals, athletes, particular skills, etc.) graduating (O)
- Numbers of persons served through continuing education offerings (O)
- Number of faculty publications, performances, presentations to professional groups, and similar scholarly activities (O, P)
- Number and types of public service/community outreach activities and number and types of persons benefiting from such activities (O, P)
- Number/percent of targeted faculty or staff employment (e.g., minorities, women, etc.) (O, P)

Indicators of Process Productivity/Efficiency [with Output(O) and Input(I) combinations noted in parentheses]

- Credit hour production (P)
- Costs per FTE (P)
- Retention and attrition rates (P)

Indicators of Input Productivity/Efficiency [with Input (I) combinations noted in parentheses]

- Institutional income (i.e., budget allocation, grants, gifts, etc.) (I)
- Payroll (I)
- Expenditures per FTE (P, I)