- Attention to accountability has resulted in increased attention being given to measures of institutional effectiveness.
- For decades, the oft-used measures employed were inputs and outputs. Most recently, outcomes have increased in importance as colleges and universities must demonstrate their effectiveness through efficiency and quality.

- As a result, there is growing interest in answering such questions such:
  - What should students learn?
  - How well are they learning it?
  - What measures and procedures does the institution utilize to determine that it is effective?
  - To what extent does the institution offer evidence that demonstrates its effectiveness to the public?
  - What does the institution plan to do with this evidence to improve outcomes?

- Results-oriented questions such as these have resulted in applying outcomes assessment processes in an effort to measure institutional effectiveness. Institutional effectiveness is concerned, in part, with measuring:
  - accountability (e.g., institutional fiscal efficiency) and
  - educational quality and improvement (e.g., student learning).

### Outcomes versus Learning Outcomes

- Student outcomes and student learning outcomes are not the same.
- Student outcomes refer to aggregate statistics on groups of students (e.g., graduation rates, retention rates, transfer rates, and employment rates for a graduating class).
  - Such outcomes are institutional outcomes and are used to compare institutional performance.
  - They do not measure changes in students themselves due to their college experience.
  - these outcomes are outputs and reflect what the institution has accomplished; they do not reflect what (or how much) students learned.

## Outcomes versus Learning Outcomes

- Student learning outcomes encompass assorted attributes and abilities, both cognitive and affective, that reflect how the student experiences at the institution supported their development as individuals
- Cognitive outcomes include demonstrable acquisition of specific knowledge and skills:
  - What do students know that they did not know before?
  - What can they do that they could not do before?

- Major Players
  - American Association for Higher Education (AAHE)
  - Association of College and Research Libraries (ACRL)
  - Council for Higher Education Accreditation (CHEA)
  - Regional Accrediting Bodies

- Regional Higher Education Institutional Accreditation Associations:
  - develop standards by which to evaluate institutions
  - in the past, their standards have been inputs and outputs based, focusing on processes and structures concerning the delivery and use of library services.
  - to increase accountability, these bodies are placing more pressure on institutions to measure what students learn through assessment processes.
  - by focusing on results, rather than counting heads and library books, the regionals say, they are holding colleges accountable
  - want institutions to prepare assessment plans that measure outcomes within the institution.

- NEASC has revised their standards to include an emphasis on information literacy as a student learning outcome, and has assigned that role to academic libraries.
- NEASC Standard Seven: Library and Information Resources
  - Standard 7.4
    - Professionally qualified and numerically adequate staff administer the institution's library, information resources, and services. The institution provides appropriate orientation and training for use of these resources, as well as instruction in basic information literacy.

### Measures of Library Use

#### inputs

- the materials used to provide services such as collections, staffing, the physical facility and installed information technologies
- usually described in financial terms

#### outputs

- measures quantifying workload undertaken and/or completed, such as the number of books circulated or the number of reference questions answered
- valuable measures for making decisions about staffing levels, setting hours of operations, etc.

### Measures of Library Use

- It is important to track the library's inputs and outputs
  - libraries organize, track and evaluate measures by applying internal management information systems
  - report these measures via annual reports and surveys
- Problems with library measures:
  - Librarians often misidentify outputs as outcomes
  - There is also confusion concerning definitions and applications
    - What is a login? What is a hit? Is a login a hit?
    - What is a page retrieval? An abstract or a page from a full text article?
  - Lack of standards leads to this confusion.

### Measures of Library Use

- Input and output measures miss the point:
  - If the mission of the University is teaching and research, how do these outputs measure that?
  - Outputs measure use of inputs they do not measure results.
- Inputs and outputs are insufficient for assessing outcomes.
- Therefore, assessment is conducted to measure outcomes.

#### **Outcomes Assessment**

- Defined: change in ...
- Local focus through institutional self-evaluation
- Planning/ implementation/ analysis
- Types of measures (information literacy or research)

### Outcome Measures in Libraries

- Outcome assessment
  - is user oriented rather than institution centered
  - are statements about what students will know/think/be able to do as a result of our programs.
  - are not statements about what the library should/could do to bring about desired outcomes.
  - measures changes in library users as a result of their contact with an academic library's programs, resources and services
    - student known content, developed skills and abilities, and acquired attitudes and values

#### Outcome Measures in Libraries

- measures the contributions the library made to the university or college's educational mission as a whole
- conducting student learning outcomes assessment is designed to improve library services.

### Evaluation versus Assessment in Academic Libraries

- Evaluation and assessment are not synonymous
- Evaluation measures whether or not a system does what it is designed to do in an efficient and effective manner.
  - personnel evaluation; systems evaluation
- Assessment measures learner performance

# Developing Partnerships with Faculty

- Kenneth Smith's report, New Roles and Responsibilities for the University Library: Advancing Student Learning Through Outcomes Assessment, states that the library must move from a content view (books, subject knowledge) to a competency view (what students will be able to do).
- He contends that the student learning outcomes identified by ACRL are often common to learning outcomes identified by faculty for departmental courses and programs.

# Developing Partnerships with Faculty

- Therefore, the library could assist the student learning and assessment efforts of the academic programs by:
  - delivering "offerings" defined as "units of learning materials designed to develop competency in specific learning outcomes that are considered important by the library and by other academic programs."
  - incorporate the offerings into required courses
- The offerings are a means to "give the library a curriculum (its own set of course segments) and an opportunity to connect this curriculum to other academic programs."
- The library must internally develop these learning units and then
  proactively convince the faculty that the library can "contribute to the
  learning outcomes of the academic program," because it is unlikely
  that the academic department will formally request such assistance
  from the library.

#### Direct Methods

- Qualitative: developmental portfolios, think-aloud protocol, and directed conversations
- Quantitative: content analysis, evaluation of theses/dissertations, tests (even ones administered as pre- and post- tests), videotape and audiotape evaluation, and nationally developed tests

#### Indirect Measures

- Qualitative: focus group interviews, curriculum and syllabus evaluation, exit interviews, external reviewers, observation, self-assessment
- Quantitative: general surveys

### Direct Learning Outcomes Assessment

- Sawyer Library, Suffolk University
  - 10 modules related to our learning outcomes assessment plan
  - Pre- and post-tests measure learning from a librarian-led instruction
  - Uses an instructional shell to manage test results (WebCT)
- Daniel Library, The Citadel
  - Librarian-led instruction during freshman courses
  - Pre- and post-test over the semester measures application of learning steps to find research
  - Paper-based; librarians review each student's submitted preand post tests

#### Example (Kathleen Dunn, p. 28)

- Core Competency: "locate and retrieve information, in all of its various formats using, when appropriate, technological tools."
- Scenario: "You've been selected to lead a group of students on a four-week trip to another country. In preparation you need to find background information on the country's history, current events, language, local customs, art, and music. How would you locate the information? What type of information would you expect to find?
- How can we assess the extent to which scenario met <u>and change</u> over time????

### Another Example

- Objective: to reduce the number of retrievals (hits) per search on aggregate and specialized databases
  - Is this objective measurable? What types of measures would you apply?
  - Can this objective be taught? How?
  - How would you measure if anything was learned?
  - What will the results tell you?

### Some Relevant Readings

- Association of College and Research Libraries. Information Literacy Competency Standards for Higher Education. <a href="http://www.ala.org/acrl/ilcomstan.html">http://www.ala.org/acrl/ilcomstan.html</a>
- Association of College and Research Libraries. Standards for College Libraries 2000 Edition. <a href="http://www.ala.org/acrl/guides/college.html">http://www.ala.org/acrl/guides/college.html</a>
- Association of College and Research Libraries. Task Force on Academic Library Outcomes Assessment Report, June 27, 1998. <a href="http://www.ala.org/acrl/outcome.html">http://www.ala.org/acrl/outcome.html</a>
- ERIC Clearinghouse on Assessment and Evaluation. <a href="http://ericae.net/">http://ericae.net/</a>>
- Smith, Kenneth R. New Roles and Responsibilities for the University Library: Advancing Student Learning Through Outcomes Assessment. <a href="http://www.arl.org/stats/newmeas/outcomes/HEOsmith.html">http://www.arl.org/stats/newmeas/outcomes/HEOsmith.html</a>