

AN ABSTRACT OF THE DISSERTATION OF

Marilyn Ellen Davis for the degree of Doctor of Education in Education
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Abstract Approved: _____

Betty Duvall

The study was designed to determine how learner outcomes, one aspect of a comprehensive assessment plan at an urban community college in the Northwest, may have influenced professional practice. Research subjects were selected from a group of forty-four faculty who participated in a college sponsored professional development activity. The purpose of this activity was to provide resources for faculty to develop curriculum from a learner outcomes perspective. The researcher was interested in how the adoption of learner outcomes may have influenced pedagogical methods, instructional content, classroom assessment, or other aspects of professional practice.

Research participants responded to open-ended interview questions administered by the researcher. The shared phenomenon being investigated was the experience of community college faculty who were directly involved with transforming instructional objectives to learner

outcomes and/or assisting other faculty with the conversion. Data were analyzed following a five-step process based on phenomenological research methods. Five themes were evident in the data: 1) importance of the process (writing outcomes and designing curriculum); 2) changes in classroom instruction; 3) classroom assessment modifications; 4) the integrative nature of the experience; and 5) changes in the classroom experience for students. The data indicated that participants shared two common experiences—writing outcomes and changing the syllabi as a result of incorporating learner outcomes.

The findings indicated that learner outcomes influenced professional practice. However, the degree of influence was not at the same level of intensity for all participants and the degree of influence was not related to the number of years a participant had been teaching. Experienced faculty with twenty or more years of experience were distributed among three subgroups which denoted the degree of influence on professional practice or the amount of change evident from lower to higher levels of intensity.

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Community College Faculty Experiences with Learner Outcomes
and the Influence on Professional Practice

by
Marilyn Ellen Davis

A DISSERTATION

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I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

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Marilyn Ellen Davis, Author

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Community College Faculty Experiences with Learner Outcomes and the Influence on Professional Practice

CHAPTER 1. INTRODUCTION TO THE STUDY

FOCUS OF THE STUDY

The educational assessment movement in the nation's community colleges and universities was launched in the mid-1980s with the publication of numerous reports by commissions and task forces that focused on improving the overall quality of education in the United States. The Nation at Risk report (National Commission on Excellence, 1983) was one of over 30 national reports and more than 150 task forces to document the deteriorating quality of American schools and colleges (O'Banion, 1994). State legislators, taxpayers, the general public, the military, and private industry echoed the findings from these reports by demanding evidence to show that "the large and growing amount of public money being spent on higher education is producing educated adults" (Halpren, 1987, p. 5). The reports called "for increased 'accountability' in higher education, precise assessment of institutional effectiveness and evidence that institutions were accomplishing their goals" (Welker & Morgan, 1991, p. 25).

The higher education community responded to externally generated criticism by developing new assessment methods to document institutional

effectiveness. Colleges traditionally have evaluated institutional and program effectiveness by examining inputs such as faculty qualifications, teacher-student ratios, facilities and equipment, and curricular and library resources, etc. (Hogan, 1992). The process operated under the assumption that quality could be assured by assessing the inputs. "Indeed, much of the accountability movement in higher education can be explained by a loss of confidence...that the academy is capable of determining appropriate performance" (Ewell, 1987, p. 12). Clearly, the inputs-based evaluative methods so prevalent in higher education would no longer be sufficient to ameliorate public concern about the quality of higher education. The concern for accountability launched a nationwide, multidimensional, outcomes-oriented assessment movement to measure institutional effectiveness. This study is focused on one aspect of assessment—the faculty experience with outcomes-based assessment at the classroom level.

The National Governors' Task Force on Quality (1986) emphasized the importance of using multiple assessment methods to assess institutional effectiveness by asserting that "postsecondary institutions must assess student learning and ability, program effectiveness, and institutional accomplishment of mission" (p. 159). Prus and Johnson (1994) analyzed the diverse types of assessment methods used by colleges and universities to measure institutional effectiveness. The methods they identified include:

commercial, norm-referenced and locally developed tests; oral examinations; competency-based performance appraisals; simulations; self-reports or third party reports (employers, transfer institutions) derived from questionnaires, surveys, exit or other interviews; behavioral observations; external examiners (may be part of a program review); internal archival records such as retention or completion rates; portfolios; student goal attainment; and institutional effectiveness indicators.

McMillan (1994) provides an excellent overview of how institutions have coped with assessing institutional effectiveness by stating that higher education is expected

to examine itself from every possible angle and to share the results of this examination with its consumers. Colleges are expected to assess student skills on entry, assess student progress toward meeting their goals, assess the outcomes of educational experiences on exit and beyond, assess educational programs from a variety of perspectives (cost, quality, need), assess institutional effectiveness in terms of all of the above elements, and assess whether the institution is operating in the most productive manner possible (p. 5).

Strategies to assess effectiveness can be classified into three distinct types or levels: institutional, program, and course (Brookhart, 1999; Ewell, 1987; Sell, 1989). Proponents "who adopt a broad view of assessment see all aspects of higher education as subjects for assessment: students, educational and administrative personnel, curricula, programs, departments, and institutions" (Davis, 1989, p. 9). These types or levels of assessment

are the major components of what McMillan (1994) describes as a comprehensive model or a model that assesses “student progress and outcomes as well as programmatic and institutional effectiveness” (p. 10). A more narrow view of assessment, where the preponderance of assessment literature is concentrated (Gray, 1989; Jacobi, Astin & Ayala, 1987; Palomba & Banta, 1999), focuses on student learning or student outcomes assessment.

Student assessment may occur at the time of admissions into an institution for diagnostic and placement purposes; at specific times during the college experience, i.e., at midpoints in the pursuit of a certificate or degree; or at the course or classroom level. “Some would assert that assessment in its purest form has the improvement of learning and teaching as its primary purpose and that it focuses on individual students” (Terenzini, 1989, p. 647). At the course level, students can be assessed for mastery of course outcomes which “involves students and teachers in the continuous monitoring of student learning” (Angelo & Cross, 1993, xiv).

The Palomba and Banta (1999) definition of assessment is commonly seen in the literature. They define assessment as “the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development” (p. 4). Successful assessment programs involve faculty, current and former

students, staff, administrators, and business and industry partners; goals and objectives are clearly defined; meaningful data are collected and analyzed; assessment results are distributed throughout the organization; and data are used to improve institutional processes and to support other efforts such as planning and accreditation studies (Erwin, 1991).

PURPOSE OF THE STUDY

The purpose of this phenomenological study was to describe the experiences of selected community college faculty with the assessment of learner outcomes at the course level. The study focused on the faculty experience with developing, adopting, implementing, and assessing instruction based on learner outcomes at a large, urban community college in the Northwest. Over the past five years, Portland (Oregon) Community College faculty have been gradually replacing instructional objectives listed in course content guides with learner outcomes.

The researcher was interested in how developing and implementing course-based learner outcomes may or may not have altered instructional methodologies, influenced course content, supplemented or replaced existing student assessment techniques, improved the quality of instruction and learning, or affected other aspects of professional practice. The most

important aspect of the study was to describe the faculty experience with learner outcomes.

RESEARCH CONTEXT

Portland Community College is one of approximately 1,150 institutions throughout the United States providing comprehensive postsecondary educational services to residents in legislatively defined geographic areas. Community colleges enroll “44% of all US undergraduates” (American Association of Community Colleges, 2002) and offer programs and services to meet the continuing educational needs of district residents. Community colleges grant two-year associate degrees and offer a wide variety of educational services for individuals with diverse learning needs and goals. These include: a pre-baccalaureate two-year college transfer curriculum; terminal certificate and degree professional technical programs to prepare individuals for job entry; developmental and adult basic education courses; job specific and contracted training programs for business and industry clients and/or their workforce; and non-credit personal enrichment courses through community education.

The diverse educational needs of the general public and the business and industry communities in the Portland Community College district are met through programs and services offered at three comprehensive

campuses, three workforce centers, and facilities strategically located throughout the district to be within easy access for district residents. The three comprehensive campuses in the Portland Community College district—Cascade, Rock Creek, and Sylvania—provide lower division college transfer courses, more than 80 professional technical two-year degree or certificate programs, basic education courses, and a wide variety of non-credit personal enrichment courses. Custom-designed training is offered at the workforce centers through the Open Campus to meet the job upgrade needs of business, industry, labor, and government.

Leadership at each of the three comprehensive campuses and the Open Campus is provided by a campus executive dean under the supervision of the college president. In addition to their campus responsibilities, campus executive deans manage district-level assignments. Instructional programs at each comprehensive campus are organized by division under the leadership of a dean of instruction who reports to the executive dean. Each division is managed by a dean who reports to the campus dean of instruction. A division dean is responsible for directly supervising faculty, planning and managing the class schedule, and developing and managing the division budget.

A full range of support services is available to students, including comprehensive academic advising, counseling, job placement services,

financial aid, placement and diagnostic testing, career development and decision making assistance, and tutoring on a drop-in or scheduled basis. These services are managed by a student development dean at each comprehensive campus. This individual also reports to the campus executive dean.

All transfer and professional curricula are developed and approved by faculty through Subject Area Committees (SACs). There are approximately 65 discipline-specific SACs throughout the college district. Full- and part-time faculty from each discipline regularly meet to discuss curricular and program issues; part-time faculty receive stipends if they choose to attend the meetings. Each SAC has an elected faculty chair and an appointed administrative support person (a division dean). SACs are organized at the district or campus level depending upon where the program is offered within the college district. A district-wide dean of academic services is responsible for coordinating SAC activities in conjunction with the campus deans of instruction and division deans.

The context of this study is specifically related to the comprehensive assessment plan adopted by Portland Community College in 1997 in response to Standard 1.B, Planning and Effectiveness and Policy 2.2, Educational Assessment from the Commission on Colleges, Northwest Association of Schools and Colleges. All higher education institutions in the

United States are geographically organized by state under six regional accrediting associations. These associations are recognized by the United States Department of Education as the agencies responsible for establishing evaluative criteria to accredit schools, colleges, and universities. Accreditation is a voluntary, self- and peer-evaluation process devised to promote academic quality, to facilitate transferability of academic credit from one educational institution to another, and to respond to public accountability issues.

The Portland Community College Assessment Committee, organized in 1995 under the leadership of the dean of academic services, designed a comprehensive, integrated assessment and planning system in response to criteria from the Northwest Association of Schools and College. The plan was adopted after the 1997 evaluative visit by the Association. The decision to incorporate four assessment components (listed below) was based on Portland Community College's assessment history (program reviews were already being used and the effectiveness indicators were under development); its values regarding the importance of the student experience; a set of guiding principles established by the assessment committee; the organizational culture of a multi-campus environment; a targeted literature review; and trends identified through a best practices search of colleges in the Northwest and other institutions throughout the

nation. The plan was based on the assumption that assessment data would be used for planning purposes to improve teaching and learning and to promote student success. The four assessment components incorporated into the plan were:

Institutional Effectiveness Indicators – The indicators were designed to broadly measure student success and institutional effectiveness. An annual report is compiled to document student enrollment trends, completion rates, satisfactory progress, student goal attainment, etc. The first institutional effectiveness indicators report was presented to the Portland Community College Board of Directors in October 1996, before the assessment plan was adopted.

Program and Function Reviews – Program reviews have been used to evaluate professional technical curricula for more than 10 years; lower division reviews were added during the 1993-94 academic year. This process was continued under the new assessment system and the plan included provisions for expanding the reviews to functional areas such as student services, financial aid, registration, etc.

Learner Outcomes – Learner outcomes, as defined in the Portland Community College model, are measures of student learning or what students will be able to do with what they have learned in class.

Instructional objectives or statements of what students are expected to learn have been replaced gradually by learner outcomes and new assessment methods have been adopted to assess these outcomes. The term “learning” outcomes may also be used in this context.

Core Outcomes – A set of core outcomes designed to assess student achievement in broad areas such as communications and problem solving have been adopted by the college. Students will be expected to demonstrate achievement of these outcomes as an integral part of an associate’s degree.

One of the goals for the plan was to incorporate learner outcomes in all Course Content and Outcome Guides by 2002. SACs are responsible for developing and approving learner outcomes for their respective courses and SACs have discretionary authority to determine how the outcomes will be assessed. SACs may decide to have faculty uniformly assess outcomes by writing specific processes into the course guides or the SAC may provide assessment recommendations only. All faculty are expected to use the guides to develop course syllabi and to teach the agreed upon outcomes and content. The format for the guides was changed in 1998 from a “Course Content Guide” to “Course Content and Outcome Guide” to denote the change from content-focused instructional objectives to learner outcomes.

The process of converting objectives to outcomes started in 1997 with the formation of a Learner Outcomes Team. The team was organized as a faculty development activity to train twenty faculty leaders to assist others with writing learner outcomes. Faculty were recruited during fall term 1997 to participate in a 30-hour learning experience facilitated by a consultant. The primary goal for the Learner Outcomes Team was to prepare facilitators to lead SACs through the conversion process. Teams were also organized for academic years 1998-1999 and 1999-2000.

SIGNIFICANCE OF THE STUDY

The two broad purposes of assessment—accountability and improvement—are clearly differentiated in the literature. In the early stages of the assessment movement, colleges and universities responded to external mandates by taking administratively initiated and accountability-oriented actions. “In most cases, these macro-level, top-down assessment efforts involved relatively few faculty, and their efforts rarely trickled down to the classroom level” (Angelo & Cross, 1993, p. 7). As the assessment movement matured, faculty became active participants by functioning as campus leaders, serving on committees, designing and implementing data collection systems, collecting and analyzing data, and using assessment results to improve programs and services to students (Palomba & Banta,

1999). The importance of faculty involvement is unequivocally documented in descriptive literature and research studies but the active faculty voice is blatantly missing.

The literature provides information on the number of faculty involved with assessment (Levin & Clowes, 1991); how faculty assess programs to improve overall quality (Barak & Sweeney, 1995; Hoey, 1995); what methods faculty are using to assess program and course goals (Gentemann, Fletcher & Potter, 1994; Palomba & Banta, 1999; Shipley, 1994); the impact of certain types of assessment (Catlin & Kalina, 1993); and what students are learning in the classroom based on classroom assessment activities (Angelo & Cross, 1993). Palomba and Banta (1999) affirm that:

a key to assessment success is involving faculty in the process. Given their responsibility for designing and delivering the curriculum, faculty members' voices are absolutely essential in framing the questions and areas of inquiry that are at the heart of assessment (p.10).

Surprisingly, a very limited amount of research on assessment has been done from the faculty perspective over the fifteen plus year history of the movement. The researcher reviewed dissertations on assessment in general and outcomes assessment and organized them into the following categories to document what type of research has been conducted. Faculty

may have been involved; however, the studies have not been conducted to document faculty perceptions about learner outcomes.

1. Outcomes achievement in the discipline — may include comparative instructional methods, program delivery methods such as onsite and distance learning or a comparison of various curricular offerings.
2. Evaluation of program or service quality — from the student perspective at the undergraduate or graduate levels.
3. Impact and progress toward responding to state mandated assessment or accreditation standards.
4. Case studies or documentation of methodologies used to develop outcomes assessment plans for departments, divisions, or institutions.
5. Documentation of how assessment results are being used in decision making or in planning processes.
6. Perceptions of legislators and boards of trustees.
7. Research on various forms of student assessment such as standardized and criterion referenced tests or portfolios.
8. Achievement of outcomes by target groups such as returning women, older adults, minorities, freshmen, transfer versus native

students, non-traditional degree programs, credit and non-credit classes, etc.

Due to the insufficient amount of research conducted to document the active faculty voice with learner outcomes and assessment, this study was designed 1) to explore the faculty experience with developing, implementing, and assessing learner outcomes in a community college environment, and 2) to investigate the relationship between learner outcomes and the dynamic of the teaching and learning process in the classroom. McMillan (1988) believes that “assessment is an integral aspect of the teaching-learning process, it is an essential part of what is done by faculty in each course and department. Assessment is most effective when...implemented by faculty in their classes” (p. 1).

DELIMITATIONS

This study focused on the learner outcomes portion of the Portland Community College assessment plan, and in particular, the experiences of a selected group of faculty who developed learner outcomes for their courses. The sample size is not intended to represent all faculty at the college nor community college faculty in general. Conclusions from this study are applicable only to a specific group of faculty and cannot be generalized to the entire faculty at the college or to faculty in other colleges.

DEFINITIONS

Definitions applicable to this study were generated from cited references in the review of literature and from the researcher's experience with the Portland Community College assessment plan.

Accountability — “the act of being responsible to various publics external to the college for implementation of its mission” (Roueche, Johnson & Roueche, 1997, p. viii).

Assessment — “Assessment is an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance” (Angelo, 1996, p. 3).

Assessment plan — a collaboratively developed plan based on an institutional planning process that involves the entire institution in making decisions about what assessment components will be included to meet the institution's assessment goals and/or external mandates.

Authentic response — a participant response that documents his or her experience with learner outcomes without regard to the researcher's position at the college or her responsibilities related to developing the Portland Community College assessment plan.

Classroom assessment — techniques used to systematically and continuously obtain feedback on what students are learning in the classroom (Angelo & Cross, 1993).

Epoche — a term used in phenomenological studies to recognize and isolate the researcher's *a priori* theories, assumptions, prejudices, or expectations prior to data collection and during the analysis phase.

Institutional effectiveness — the “process of articulating the mission of the college, setting goals, and using the data to form assessments in an ongoing cycle of goal setting and planning” (Grossman & Duncan, 1989, p. 5).

Instructional Objectives — “a clear statement of what the student is expected to learn and what specifically will be measured to determine success” (Stone, 1996, p. 31).

Learner outcomes — statements of what students will be able to do with what they have learned. Achievement of learner outcomes is

assessed at the course level. Learner and learning outcomes are often used interchangeably.

Learner Outcomes Team (LOT) — a 30 plus hour professional development activity organized by Portland Community College for full- or part-time faculty to help them learn about and use systems-oriented thinking for program and curriculum development. The major purpose of this volunteer activity was to provide resources to help faculty write and use learner outcomes as a basis for instruction.

Lower division transfer — a course of study for individuals who are interested in transferring credits earned at a two-year college to a four-year college or university. Students typically transfer with an Associate of Arts degree and achieve junior standing upon completion of 90 credits and/or the degree.

Participant — faculty who were involved with the LOT experience and consented to be interviewed by the researcher for the purpose of documenting their experience and for relating any meaning associated with their involvement; a research project participant.

Portland Community College (PCC) — the research site for this study.

Professional practice — a term used for this study to comprehensively describe activities associated with education as a

profession including curricular and program planning; enhancing one's knowledge base or technical skills; adopting/adapting new instructional methodologies or refining/improving existing instructional techniques; enhancing student and program assessment and evaluation methods; implementing techniques to improve student learning; grading strategies; etc.

Professional technical programs — two-year programs designed to prepare individuals for entry into employment. Students may earn a certificate and/or a terminal Associate of Applied Science degree. Some of the credits may be transferrable to a four-year college or university.

Student outcomes assessment — measures used to document student achievement of educational goals such as graduation, transfer, and employment rates, achievement of general education goals, retention data, etc. The level of specificity may vary by institution and could include achievement of certain skill sets such as communication, critical thinking, problem solving, or other skills and abilities. Data from student outcomes assessment may be used to measure institutional effectiveness and these data are generally an integral part of an institution's effectiveness strategy.

CHAPTER 2. REVIEW OF THE LITERATURE

INTRODUCTION

The Secretary of Education in 1981, Terrell H. Bell, chartered the National Commission on Excellence in Education to assess “the quality of teaching and learning in our Nation’s public and private schools, colleges and universities” (National Commission on Excellence in Education, 1983, p. 1). The Commission’s report, A Nation at Risk: The Imperative for Education Reform, concluded that the future of the nation was in jeopardy because “the educational foundations of our society are presently being eroded by the rising tide of mediocrity that threatens our very future as a Nation and a people” (p. 5). Indicators of risk included the declining adult and youth literacy rates, declines in scholastic aptitude scores, a steady deterioration of math and science achievement, complaints from business and industry about basic skill deficiencies for entry level employees, and the challenges created by technological innovations. The majority of the reports focused on kindergarten through grade 12; however, the Commission recommended “that schools, colleges, and universities adopt more rigorous and measurable standards, and higher expectations for academic performance and student conduct” (p. 27).

The Commission's report stimulated nationwide discussions about improving the quality of education in schools, colleges, and universities through purposeful educational reform efforts. The problem was clearly stated in the opening section of the document. The report "seeks to generate reform of our educational system in fundamental ways and to renew the Nation's commitment to schools and colleges of high quality" (p. 6). This report and others challenging the quality of the nation's educational system piqued the interest of the general public, state and federal policy makers, professional associations, and other national commissions. They articulated an "increasing interest and, in some cases, a demand of educational institutions to demonstrate greater accountability" (Hudgins, 1993, p. 3).

A corollary to the Nation at Risk specifically for higher education was the 1984 report from the Study Group on the Conditions of Excellence in Higher Education. The seven member study group was appointed by the National Institute of Education to review the literature on teaching, learning, and excellence in higher education and to make recommendations for improving undergraduate education in the nation's colleges and universities. One of the major theses of the Study Group's final report, Involvement in Learning: Realizing the Potential of American Higher Education, was that the "realities of student learning, curricular coherence, the quality of

facilities, faculty morale, and academic standards no longer measure up to our expectations” (p. 19). The report prescriptively outlined new standards of excellence. Recommendations were divided into three major sections: 1) student involvement, 2) high expectations for educational outcomes, and 3) assessment and feedback.

The study group recommended that “community colleges and universities establish and maintain high standards of student and institutional performance” (p. 14). The recommendations were purposefully general because the study group acknowledged the importance of institutional autonomy by stating that standards, to have credibility, must be developed by an academic institution. They also acknowledged that standards (stated as outcomes) must be assessed, that assessment data should be used to improve teaching, learning, and program quality, and that assessment results be publically disseminated.

The National Governors’ Association also focused on outcomes assessment as a means to improve educational quality. The Association’s 1986 report, Time for Results, was published to document the work of seven task forces organized in 1985 to review the quality of education on a national level and to make recommendations for improving the entire system of education from elementary schools to colleges and universities. Hearings were scheduled during a twelve-month period throughout the

country to solicit input from parents, teachers, students, and educators. The report indicated that “today’s graduates are not as well prepared as students of past decades. Gaps between ideal academic standards and actual student learning are widening” (p. 155). Among the evidence presented to document these gaps were declining scores on standardized tests for college graduates applying for post-baccalaureate programs, and complaints from employers about the decreasing competence levels of college graduates in basic academic, communication, interpersonal, and workplace skills.

The Task Force on College Quality (National Governors’ Association, 1986) recommended implementing “systematic programs that use multiple measures to assess undergraduate student learning. The information gained from assessment should be used to evaluate institutional and program quality” (p. 161). The Wingspread Study Group proffered a similar recommendation on the assessment of student learning in their 1993 report, An American Imperative: Higher Expectations for Higher Education. They recommended rigorous assessment of what “students know and are able to do in order to improve both student and institutional performance” (p. 20).

THE RESPONSE THROUGHOUT THE NATION

State-level involvement with assessment has been documented by the National Center for Education Statistics (United States Department of Education, 1996). In 1987, only fifteen states had implemented initiatives to assess student achievement. By 1990, assessment policies had been adopted by two-thirds of the states. As of 1995, 58% of the 48 states that were inventoried required some form of "institution-centered" assessment. Institution-centered policies require colleges to develop assessment procedures that "are governed by state-level guidelines for the development of assessment measures, but require no commonality across institutions" (United States Department of Education, p. 5). Most of the institution-centered policies require institutions to submit annual or biennial reports to a state level organization or agency.

Nine states, or 19%, mandated reports or evaluative measures such as comprehensive testing at specified times, i.e., at the end of the sophomore year. Of the nine states with mandated policies, six (Arkansas, Florida, South Dakota, Tennessee, Texas, and Wisconsin) require a common or standardized instrument to assess student outcomes such as the Collegiate Assessment of Academic Proficiency (measures student achievement in core general education skills) published by American

College Testing. The remaining 23% of the states have no policy requirements for assessment.

In the late 1980s, actions by the United States Department of Education and the Council on Postsecondary Education (COPA) significantly changed accreditation standards for measuring institutional effectiveness. There are six non-governmental, regional accreditation associations—Middle States, New England, North Central, Northwest, Southern, and Western. Each association has one or more commissions which are responsible for developing accreditation standards for kindergarten through grade 12 schools and for postsecondary degree granting institutions. Categories for commission membership are defined in the Commission's bylaws and include representatives from institutions within the association and the general public. Commission members are appointed or elected to serve multi-year terms.

The associations apply for recognition to the Secretary of Education, United States Department of Education under Title 34 of the Code of Federal Regulations, Part 602. An association's application is evaluated by Department staff and the staff analysis is forwarded to the National Advisory Committee on Institutional Quality and Integrity. The committee reviews the application, and listens to oral presentations from the Department, the applicant, and interested third parties.

COPA issued a special report in 1986 encouraging postsecondary institutions to “sharpen statements of mission and objectives, to identify intended outcomes [and] develop additional effective means of assessing learning outcomes and results” (Council on Postsecondary Education, 1986, p. 12). In 1987, the Secretary of Education issued new regulations for recognizing accrediting agencies. CFR Part 602.17 indicated that an accrediting agency “systematically obtains and considers substantial and accurate information on the educational effectiveness of postsecondary education institutions or programs, especially as measured by student achievement” (Federal Register, 1987, p. 173).

The voluntary accreditation process is based on a self-evaluation and a peer review process coordinated by an association to promote academic quality and to facilitate transferability of academic credit from one educational institution to another. “Accreditation in higher education is defined as a collegial process based on self- and peer assessment for public accountability and improvement of academic quality” (Council on Higher Education Accreditation, 1998, p.18). Accreditation is recognized as the most widely accepted process to measure institutional quality and effectiveness by the federal government and colleges and universities.

The accreditation process begins with a self-study by the institution in response to an association’s evaluative criteria and standards. The

institution submits the self-study report to the association. The report is reviewed by the association and it is distributed to a peer team of faculty and administrators in preparation for an on-site evaluative visitation. The association is responsible for appointing the team, organizing the institutional visit, and coordinating on-site activities at the institution. The team is appointed from the association's membership or from adjacent associations. The team's major responsibilities are to verify findings from the self-study by interviewing administrators, faculty, and staff, and to prepare a report which includes commendations, recommendations, and findings. The report is submitted to the association for review and action by commission members.

The commission reviews the committee report, interviews the chair of the evaluation committee for the on-site visit, and the chief academic administrator of the institution prior to granting or reaffirming accreditation. Institutions may be accredited for ten years with a five-year review depending upon the association's guidelines for initial and continuing accreditation.

In addition to the federal government authorization, accreditation associations may also apply for recognition to the Council of Higher Education (CHEA). The council was formed in 1996 and assumed many of the same functions as its predecessor, the Council on Postsecondary

Education which disbanded in 1993. CHEA is a non-governmental agency organized to coordinate and advance self-regulation through accreditation, to provide a public voice for accreditation, especially with the federal government, to warrant quality of the accrediting associations through a recognition process, and to serve its constituents—member colleges and universities. The recognition process “affirms that standards and processes of accrediting organizations are consistent with quality, improvement, and accountability expectations that CHEA established” (Council on Higher Education, 1998, p. 2).

The policies and procedures developed by CHEA in 1998 require the accreditation associations to address five standards. The standard on public accountability requires accrediting associations to “have standards that call for institutions to provide consistent, reliable information about academic quality and student achievement and thus to foster continuing public confidence and investment” (CHEA, p. 6). These standards were similar to regulations established by the United States government in 1987.

According to Losak (1990), the new requirements for accreditation standards were “a significant departure from process measures historically used by regional educational accrediting agencies” (p. 1). For example, the Northwest Association of Schools and Colleges (the association that accredits Portland Community College) has adopted standards for planning

and effectiveness, Standard 1.B and Policy 2.2, Educational Assessment (Northwest Association Accreditation Handbook, 1999). The Policy on Educational Assessment states that:

The Commission on Colleges expects each institution and program to adopt an assessment plan responsive to its mission and its needs. In so doing, the Commission urges the necessity of a continuing process of academic planning, the carrying out of these plans, the assessment of the outcomes, and the influencing of the planning process by the assessment activities (p. 36).

The standards require “each institution to formulate a plan which provides for a series of outcome measures” (p. 37) and to identify how the outcomes affect the educational program of students. There is also an expectation that “the institution systematically reviews its institutional research efforts, its evaluation processes, and its planning activities to document their effectiveness” (Standard 1.B. 8, p. 27), and to “communicate evidence of institutional effectiveness to its public” (Standard 1.B. 9, p. 27).

PURPOSES OF ASSESSMENT

Assessment, as commonly defined in the literature, is the “systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development” (Palomba & Banta, 1999, p. 4). The Angelo (1996) definition provides a more detailed view of assessment by stating that it is:

an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicitly and public; setting appropriate criteria and high standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance (p. 3).

Cross and Steadman (1996) describe the purpose of assessment from two perspectives—assessment-for-accountability and assessment-for-improvement. For the past fifteen years, accountability has been the external driving force behind the institutional effectiveness/assessment movement. Assessment-for-accountability is designed to quantitatively measure institutional effectiveness for extrinsic purposes such as responding to higher education's critics or legislative mandates— one of the driving forces behind the institutional effectiveness movement. "As the assessment movement matured, attention turned more heavily to the uses of assessment to improve the quality of education" (Cross & Steadman, 1996, p. 8).

The emphasis of the assessment-for-improvement perspective is to improve the quality of educational programs and services provided to students and to improve the overall effectiveness and efficiency of the institution (Erwin, 1991; Marchese, 1987). According to Ewell (1988), "assessment is about institutional change; an ultimate objective is to help

create a campus culture that is better informed about and more conducive to improvements in teaching and learning” (p. 15). Palomba and Banta (1999) recognize the bipartite nature of assessment by stating that “the biggest challenges for assessment with respect to serving dual purposes is to generate information based on locally developed methods that can be reported to external audiences in meaningful ways” (p. 332).

Cross and Steadman’s (1996) differentiation between the purposes of assessment is compatible with the two broad categories of assessment described in the literature—formative and summative—terms borrowed from evaluative methodology (Scriven, 1973). Formative assessment is associated with assessment-for-improvement; summative with accountability (Erwin, 1991; Sims, 1992; Terenzini, 1989). Davis (1989) views the formative/summative categories as “a more meaningful, less complex, conceptually clearer way to think about the purpose of assessment” (p. 8). These distinctions are important from an assessment design perspective. One of the first questions asked in the planning process is what to assess. Is the emphasis on accountability, improvement or both?

Questions should also be asked about what methods will facilitate the achievement of assessment goals and objectives. “Good assessment almost always requires multiple measures...both quantitative and qualitative” (Folger & Harris, 1989, p. 88). Others (Calhoun, 1995; Erwin,

1991; Ewell, 1987; Sell, 1989) support the Folger and Harris perspective of using multiple assessment strategies to measure institutional effectiveness. Patton's (1990) observations about program evaluation apply to institutional assessment. "No single source of information can be trusted to provide a comprehensive perspective on the program....Using a combination of data types increases validity..." (p. 244).

THREE LEVELS OF ASSESSMENT

Assessment plans are generally institution specific; each institution develops an assessment plan consistent with its mission, its goals, accreditation standards, or in response to state mandates, if applicable. Institutions make decisions about what to assess, where the data will be collected, how the data will be analyzed, what reports will be produced, and what resources need to be allocated to support the plan. Three distinct categories or levels of assessment are evident in the literature—institutional, program, and course or classroom. All three types of assessment may be included in a comprehensive assessment system to measure institutional effectiveness or the institution may decide to concentrate on one or two types depending upon the goals of the assessment plan. According to Folger and Harris (1989) an institution's

assessment plan must “be consistent with its mission, environment, and resources so that it provides information useful to decision-makers” (p. 43).

INSTITUTIONAL ASSESSMENT

“Effectiveness [at the institutional level] suggests that a college has a discernible mission, is producing outcomes that meet constituency needs, and can conclusively document the outcomes it is producing as a reflection of its mission” (American Association of Community Colleges, 1994, p.8).

Grossman and Duncan (1989) define institutional effectiveness as a “process of articulating the mission of the college, setting goals, and using the data to form assessments in an ongoing cycle of goal setting and planning” (p. 5). The focus of the definition is on process, the process of ascertaining how to effectively measure institutional effectiveness. This can be accomplished through an institutional planning process that involves the entire institution in identifying what assessment methods are currently being used and determining what additional data need to be collected.

Differentiating between existing and future assessment methods ensures sufficient data will be available to make definitive judgments about institutional quality. These deliberations must take into consideration the overall mission and the culture of the institution, the necessity for assessing effectiveness from multiple perspectives (Erwin, 1991; Ewell, 1987), how assessment data will be used for ongoing institutional or strategic planning,

and the costs associated with implementing a comprehensive system of assessment (Ewell, 1986; Sell, 1989). Roueche et al. (1997) aptly described the relationship between institutional effectiveness and assessment by stating that institutional effectiveness “can legitimately be identified as the engine that propels colleges toward identifying appropriate assessment strategies that...will provide viable and sufficient evidence of institutional accountability” (p. viii).

Throughout the literature it is evident that student outcomes assessment is one of the most predominate methods for measuring institutional effectiveness (Astin, 1991; Banta, Lund, Black, & Oblander, 1996; Ewell, 1987; Jacobi et al., 1987; Sims, 1992). Student outcomes are used to measure overall student achievement in general education or in the major or discipline. Outcomes may also be established to measure transfer rates, entrance into employment, licensure rates, etc. These data are aggregated to demonstrate overall institutional effectiveness and they are primarily quantitative in nature. “Outcomes assessment is seen as [a] way for institutions not only to demonstrate their effectiveness in tangible ways, but also to utilize data in the continuous effort to devise methods and strategies to improve teaching and learning” (Patton, 1999, p. 222).

Cowart (1990) surveyed member institutions from the American Association of Community Colleges “to study and advance the use of

student outcomes measures for assessing institutional effectiveness in two-year institutions” (p. 7). She categorized outcomes into three sets: 1) academic progress and employment outcomes; 2) student learning outcomes (defined as foundation and process skills and competency in general education or field of study); and 3) student satisfaction. The study indicated that 61% of the institutions who responded to the survey use academic progress and employment outcomes to assess institutional effectiveness; slightly over 35% used student learning outcomes, and student satisfaction measures were used by 55% of the institutions. One of the most interesting findings associated with the study was that academic progress and employment outcomes were given higher or far higher priority than the assessment of student learning outcomes.

A similar, but expanded set of outcomes measures are used by Johnson County Community College (Overland Park, Kansas) to assess institutional effectiveness. Several different types of data are collected to ensure comprehensiveness. Methods used include: 1) follow-up surveys of former students; 2) assessment of student achievement in reading, math, writing, and critical thinking; 3) program reviews; 4) course grade and retention analyses; 5) student evaluations of instructors, counselors, advisors, student services, resource centers, instructional and computer labs, the library, and auxiliary services (food services and bookstore); and 6)

community image and economic impact studies (Seybert, 1990). The model is based on four interrelated data sets: student and institutional measures, and internally and externally-directed measures. These data sets correspond to the broad purposes of assessment—accountability and improvement.

Institutional effectiveness is also assessed by using indicators which may be similar to or incorporate student outcomes. A Community College Roundtable, established in 1992, under the auspices of the American Association of Community Colleges, recognized the need for consistently assessing institutional effectiveness in the nation's community colleges. The group identified thirteen core indicators which correspond to the six broad missions of the community college—career preparation, transfer, developmental education, general education, customized training and business and industry services, and community education. The Roundtable members recommended that the core effectiveness indicators be used to “improve programs and services at their colleges and to reference them as authoritative sources with various external groups, who undertake to evaluate key components of the college's mission” (American Association of Community Colleges, 1994, p. 26).

Roueché et al. (1997) surveyed 147 community colleges in the United States and Canada to determine what indicators these institutions

were using to measure effectiveness. A stratified random sample was selected from the membership of the American Association of Community Colleges and the Association of Canadian Community Colleges. Colleges were divided into one of three categories before random sampling occurred: multi-campus or multi-college systems and large and average sized non-district-affiliated colleges. Twenty-one effectiveness indicators were selected for the survey and included the thirteen identified by the Community College Roundtable. The colleges were asked to rate the relative importance of the indicator on a scale of one to five which ranged from “not very important” to “critical”. The survey indicated that the majority of colleges routinely tracked 20 of the 21 indicators. “The five most commonly used indicators...were degree and completion rates, growth, cost containment, diversity, and the number and rate of students who transfer” (p. 45).

At Midlands Technical College in South Carolina, six critical success factors have been adopted to assess institutional effectiveness. Each factor is measured by a series of effectiveness indicators and performance standards. The system is based on the practice of using “outcome-based assessment of actual achievement as compared to intended results” (American Association of Community Colleges, 1997, p. 27). The success factors are an integral part of a strategic planning model which uses multiple

data sets to measure institutional effectiveness. Data are collected, analyzed, and reported annually. Midlands uses the data “to celebrate the successful accomplishment of goals and to make essential improvements in the college’s programs and services” (p. 79).

At the institutional level, assessment data are collected “throughout the institution’s instructional, research, and public service functions as well as its administrative and educational support components” (Nichols, 1995, p. 3). These data provide tangible, quantifiable evidence to comprehensively document institutional effectiveness to external groups, the institution’s stakeholders and the community. It is equally pertinent to internal audiences for use in overall planning and institutional improvement.

ASSESSMENT AT THE PROGRAM LEVEL

Two very different types of assessment at the program level are described in the literature—academic program review and programmatic or assessment in the major (Johnson, McCormick, Prus, & Rogers, 1993). A program review is designed to measure quality by examining program *inputs* such as faculty qualifications; faculty to student ratios; student completion rates; relevancy of curricular content; the adequacy of materials, supplies, equipment, library resources, etc. The 1993 Campus Trends Report, a project sponsored by the American Council of Education (El-

Khawas, 1993), indicated that nine out of ten public institutions used program review and they are being used “for formative purposes (to suggest ways to improve programs) and for summative purposes (to judge how well programs are doing)” (p. 22). The process operates under the assumption that quality can be defined and assured by inputs and that outcomes are implied rather than explicitly assessed.

The efficacy of using program review for accountability or improvement purposes was documented in a multidimensional study conducted by Hoey in 1995. Surveys were sent to chief academic officers at 253 colleges; 136 responded. Of this number, 87% of the institutions were formally using program review and 25% indicated that the practice had been initiated within the past two years. Hoey attributed the latter to external mandates for accountability from state agencies or accreditation associations.

The study was designed to determine the short- and long-term impact of program reviews. Respondents were asked to rate the importance of using program review for external and internal purposes. The ratings ranged from a low of 3.0 (on a scale of 1-5 with 5 being the highest) to an upper score of 4.28. An explanation for the higher ratings “may be that once program review is mandated and adopted, administrators quickly realize its benefits as a vehicle for planning, keeping abreast of developments among

the various programs a college offers, and improving external relations” (p. 51).

The study also examined the long- and short-term impacts of program review, leadership support, organizational communications, the impact of college organizational structures in relation to the frequency of response to program review recommendations, stakeholder involvement, and the relationship between the use of program reviews and accreditation standards. Hoey’s research

established that program review is widely used as both an accountability and program improvement mechanism in public two year institutions, that substantial conceptual and incremental use of program review results is in evidence, and that organizational factors such as key leadership support, organizational communication, clear understanding of the purposes of program review, and frequent action on recommendations at all organizational levels explain a notable amount of the variance in reported long-term impact of program review on two year colleges (p. 57).

Program review and its relationship to decision-making processes such as institutional planning and budgeting and how program review relates to student outcomes assessment were the foci of a Barak and Sweeney study done in 1995. A random sample of 750 two- and four-year, public and private higher education institutions were surveyed. Research subjects responded to a survey (return rate of 60%) and the researchers conducted follow-up telephone interviews with 32 institutions. Results from

this survey indicated that using program review in decision making and with student outcomes assessment have been successful based on the following results:

approximately 85 percent of the institutions surveyed use program review in their planning processes, 77 percent budgeting and 63 percent with student outcomes assessment....The success of the use of program review is very high; approximately 80 percent found its use in planning works at least somewhat well. In budgeting, 69 percent found that program review use works at least somewhat well, as did 57 percent of those who integrated program review with student outcomes assessment (p. 13).

Barak and Sweeney were able to identify one common dominator that defined whether a college successfully utilized program review data for decision making. It depended upon "one individual who insisted that the results be used in institutional decision making" (p.15).

Gentemann et al. (1994) recognize the historical benefits of program review; however, they believe current program review practices are inadequate measures of quality. The inputs-focused program review process so prevalent in postsecondary institutions is not consistent with the accreditation standards related to outcomes assessment. They recommend refocusing academic program review by establishing program goals; aligning the goals with the curriculum; selecting appropriate measures of student learning for each goal; collecting data to document student achievement; and providing feedback to the faculty for curricular

improvement. The benefits of “conceptualizing the academic program review as a process that is learning-centered and uses student-based information to determine success expands the context in which the curriculum is established, revised and implemented” (p. 42).

Erwin (1991) approaches assessment from a similar perspective. He believes academic “departments...should state program objectives before they choose assessment methods...it is important that what is to be assessed be stated as clearly and specifically as possible before any assessment method is planned” (p. 36). He suggests using valid and reliable commercially available instruments to assess program goals and/or developing institutional-specific assessment methods based on organizational needs. Erwin is an advocate for using multiple assessment methods, communicating the results of program assessment activities, and involving faculty and staff in the analysis and dissemination stages.

Programmatic assessment of student outcomes or assessment in the major is the second type of program level assessment. “The overriding purpose of [programmatic] assessment is to understand how educational programs are working and to determine whether they are contributing to student growth and development” (Palomba & Banta, 1999, p. 5).

Programmatic assessment is based on objectives or program outcomes developed and assessed by faculty. “Outcomes are statements of standards

which describe the expected role performances that learners must demonstrate before they graduate from a program” (Shipley, 1994, p. 6). Role performance requires students to internalize, integrate, synthesize, and apply what they have learned in the program. An integral part of the decision making process to adopt program outcomes includes discussions about curricular content, teaching strategies, and assessment techniques. “Learning outcomes...will, inevitably, affect organizational infrastructures, teaching and learning approaches, assessment and evaluation practices, and even existing value systems” (p. 4).

Program reviews and programmatic assessment have similar purposes. Both are designed to measure the quality and integrity of an instructional program, to determine curriculum relevancy, to identify strengths and weaknesses, to facilitate program improvement, and to address accountability issues. Data, especially from program reviews, may also be used to make resource allocation decisions and to determine the future of a program. The major difference between the two types of program level assessment relates to use of student outcomes data. Programmatic assessment is more frequently based on the identification and measurement of student outcomes or program goals.

COURSE-BASED AND CLASSROOM ASSESSMENT

The attention given to faculty involvement with assessment at the course level is under-represented in the literature according to Brookhart (1999). She points out that assessment literature in higher education “is focused on institutional assessment of outcomes and on anonymous classroom assessment techniques [rather] than on classroom assessment of individual students’ achievement.” (p. 92). Brookhart is an advocate for assessing student achievement of *course* goals. She recommends establishing course goals, designing instructional and assessment activities to achieve the goals, articulating the goals to students by including the goals in the syllabus, and providing explicit standards for achievement.

Course-based assessment data may be used to improve teaching strategies, to modify the curriculum based on the feedback received from students, and to support institutional and program assessment efforts through the use of aggregate student data obtained at the course level.

Palomba and Banta (1999) recognize the benefits of course-based assessment by stating that it

helps faculty clearly see which learning objectives are being addressed, as well as how well these objectives are being met. Because of its link to the classroom, course-based assessment contributes to understanding and improving the curriculum (p. 334).

However, Palomba and Banta view course-based assessment as one of several methods to measure program effectiveness and do not recommend using course-based methods to replace programmatic assessment.

The Angelo and Cross (1993) model for classroom assessment is distinctly different from the course-based approach Brookhart prefers. According to Angelo and Cross (1993), classroom assessment “involves students and teachers in continuous monitoring of students’ learning. It provides faculty feedback about their effectiveness as teachers and it gives students a measure of their progress as learners” (p. xiv). Classroom assessment techniques, or CATs, are the most distinctive feature of the Angelo and Cross model. CATs are formative assessment “instruments faculty can use to find out how much, how well, and even how students are learning what they are trying to teach” (p. 25).

Steadman (1998) and Catlin and Kalina (1993) studied the impact of CATs in the instructional environment. One phase of the Catlin and Kalina qualitative study of eight two-year colleges in Northern California compared classes that did and did not use CATs to determine the impact on retention, grade distribution, course completion by gender and ethnicity and the classroom environment as measured by the College and University Classroom Environment Inventory. Participants for this portion of the study were randomly selected instructors who received training on how to use

CATs. Data were gathered by having each trained instructor use or withhold CATs in the same course, during the same term, but in a different section. Comparative data for the two classes where CATs were used indicated that overall retention increased by only 1% but female retention rates increased by 9%. Grade distributions were similar among the class sets; however, "A" grades in the CATs classes were 5% higher. In another comparative analysis between trained faculty who used CATs and untrained instructors who did not use CATs, significant differences in the classroom environment were evident. The "findings strongly suggest that when CATs are consistently and readily applied, there are major differences in how students feel about the classroom environment" (p. 58).

Steadman's (1998) study involved faculty and students from California community colleges. The purpose of the study was to examine faculty and student experiences with classroom assessment (CATs) by surveying, interviewing, and observing participants. Her findings indicated that "faculty in the study expressed high levels of satisfaction with the outcomes of Classroom Assessment for themselves and their students. Student reports were consistent with their teachers' comments" (p. 33). The results of Steadman's study were similar to a research project conducted by Soetaert (1998). She surveyed faculty who used CATs and the students in

their classes. The faculty and students reported that CATs improved the quality of learning and enhanced the learning environment.

The unit of analysis for course-based and classroom assessment is with the student (Ewell, 1992). As a formative process, course-based and classroom assessments are designed to monitor student achievement throughout the learning experience. "...analysis of student performance is an integral part of the teaching and learning process. Students receive regular feedback on their knowledge and skill development, and teachers use the same information to shape their teaching strategies" (Terenzini, 1989, p. 647). Cross and Steadman (1996) describe this process as "*small-scale assessments conducted continually in college classrooms by discipline-based teachers to determine what students are learning in that class*" (p. 8).

OUTCOMES ASSESSMENT AT THE COURSE LEVEL

At Alverno College (a small, private, liberal arts institution in Wisconsin), faculty view improvement of instruction and learning is an integral part of the curriculum development process. The Alverno curriculum is based on clearly articulated student outcomes, performance criteria, faculty assessment, feedback of student performance, and student self-assessment to cultivate learning that lasts. Alverno defines learning that lasts as "an integration of learning, development and performance—and

what kind of education contributes to it during and after college”

(Mentkowski, 2000, p.1). For the past twenty years the Alverno faculty have been engaged in structured discussions about teaching and learning and they have been doing action research to document how assessment has improved teaching, learning, and professional practice at their institution. The curriculum design, implementation, evaluation, and improvement cycle is an ongoing, interactive process among faculty and in response to how students experience learning. “This led to a greater understanding of how to build curriculum around progressive outcomes...and how to integrate these with various and changing developmental needs, stages, and styles of different learners” (Mentkowski, 2000, p. 61).

Barr and Tagg (1995) discuss the importance of what they call learning outcomes in their article on the Learning Paradigm or learning-centered instruction. They compare the prevalent and less effective teacher-centered instruction with a system designed to focus on what students learn. In learner-centered systems, the ends or outcomes are more important than the means or methods of instruction and learners are more actively engaged in learning experiences through teamwork and other cooperative classroom activities. For example,

Instead of fixing the means—such as lectures and courses—the Learning Paradigm fixes the ends, the learning results, allowing the means to vary in its constant search for the most

effective and efficient paths to student learning. Learning outcomes and standards thus would be identified and held for all students or *raised* as learning environments become more powerful (p. 21).

The ends or learning outcomes are essential to develop, maintain, and improve the quality of instruction and more importantly the quality of learning. Outcomes are assessed at the classroom level by instructors who have been prepared to assess instruction by using formative and summative methods.

The process of establishing course outcomes and identifying strategies to assess them directly engages faculty in the institution's overall effectiveness plan and helps to alleviate faculty perceptions about administratively imposed assessment strategies. According to Rogers (1995), "faculty must have primary responsibility and concomitantly ultimate authority for setting the educational outcomes within their respective academic departments" (p. 157). Faculty also need to be involved with determining how assessment results will be used and by whom. This is of particular concern if assessment data from outcomes at the classroom level is aggregated for program evaluation purposes without recognizing the importance of using multiple methods of assessment to determine program quality (Terenzini, 1989).

Similarities are evident between outcomes assessment at the course level and W. Edwards Deming's continuous quality improvement cycle (Scherkenbach, 1991; Soetaert, 1998). There are four action steps in Deming's total quality management (TQM) cycle: develop a *plan* to improve a process or business function, *do* (carry out the plan), *check* (by collecting, examining, and studying data), and *act* (improve quality and performance of the original plan). The plan-do-check-act cycle is continuous in nature and assessment is an integral part of the repetitive cycle. The cycle is repeated until the desired results are achieved.

An analog to TQM in higher education at the course level is the curriculum planning, teaching, learning, and assessment process. Instructors identify course outcomes or objectives (Erwin 1991; Palomba & Banta, 1999), plan instructional activities, engage students in learning activities to achieve the outcomes, and use multiple methods to assess student achievement throughout the learning process. Reviewing assessment results while students are in the process of learning (during the course) provides opportunities for the instructor to assist students who are having difficulty achieving the outcomes and/or to adjust learning activities to improve student learning. This is consistent with Astin's (1991) views. He believes "assessment and feedback should be an ongoing, iterative

proceeding that is integral to the learning process rather than a one-time activity carried out only at the end of the learning process" (p.184).

SUMMARY

The 1993 Campus Trends report (El-Khawas, 1993) documented the types of assessment methods that were being used in the nation's colleges and universities. The American Council on Education sent a survey to a stratified random sample of 510 higher education institutions from a list of over 3,400 two-year colleges and universities. Of the 406 institutions who responded, "97 percent of the institutions had some type of assessment activity during the past year" (p. 21). Four types of assessment were evident: 98% were using student outcomes assessment; 82% indicated that program reviews were being used; total quality management or other continuous process improvement techniques were in place for 70% of the institutions; and 35% indicated that other, non-specified improvement measures were utilized. This report clearly indicated that student outcomes assessment is very prevalent in higher education, but the report did not include a discussion about where assessment is taking place or who is involved with assessment. One of the criticisms about the assessment movement has been that it is often focused at the institutional level and

leadership is provided by administrators and/or staff associated with institutional research or similar offices.

Angelo and Cross (1993) have expressed their concerns about the lack of faculty involvement with assessment. They state that “it has been a major problem to get faculty involved in the assessment process and to complete the feedback loop that would enable teachers to use these data to improve student learning” (p. 6). Assessment of student outcomes at the course level provides an opportunity for faculty to actively participate in an institution’s overall approach to measure institutional effectiveness. Involving faculty is an essential component to accurately assess student learning and to use the results from assessment to improve the overall quality of teaching and learning. According to Vandament (1987), institutions that have

developed successful assessment programs report several positive gains for faculty: renewed enthusiasm for teaching, revitalization of interest in students’ educational growth and in learning across the disciplines, and newfound pleasure in working with colleagues from one’s own and other departments and schools (p. 27).

This purpose of this study was to describe the faculty experience with student outcomes assessment at the course level and to determine how the incorporation of student or learner outcomes may have affected any aspect of professional practice.

CHAPTER 3. RESEARCH DESIGN

RESEARCH PERSPECTIVE

A phenomenological perspective was used to conduct the study with selected faculty from Portland Community College. Phenomenology as defined by Spiegelberg (1975) is a "philosophical movement whose primary objective is the direct investigation and description of phenomena as consciously experienced, without theories about their causal explanation" (p. 3). Phenomenology is one of five qualitative research traditions identified by Creswell (1998). "A phenomenological study...focuses...on a concept or phenomenon...and seeks to understand the meaning of the experience of individuals about this phenomenon" (p. 38). Research based on phenomenological methodologies assumes

that *there is an essence or essences to shared experience*. These essences are the core meanings mutually understood through a phenomenon commonly experienced. The experiences of different people are bracketed, analyzed, and compared to identify the essences of the phenomenon (Patton, 1990, p. 70).

Phenomenological research has been used in the fields of nursing, education, psychology, and social sciences. According to Streubert and Carpenter (1995), "phenomenology as a method of research offers nursing an opportunity to describe and clarify phenomena important to practice,

education and research" (p. 47). In higher education, students, administrators, and faculty have been involved in phenomenological studies, e.g., new teachers in nursing education; the lived experiences of faculty over sixty-five; older adults attending college; male nursing students; women administrators; mid-life community college academic administrators; new doctoral students; minority students; beginning counselors; and college student advocates for student justice. Phenomenological research topics evident in the literature include: multi-cultural education; collaborative learning experiences; mentoring African American female administrators; a fraternity hazing incident; and cooperative work experience. The purpose of studying the lived experience is

to determine what an experience means for the persons who have had the experience and are able to provide a comprehensive description of it. From the individual descriptions general or universal meanings are derived, in other words, the essences or structures of the experience (Moustakas, 1994, p. 13).

A phenomenological strategy was selected for the study based on the nature of the inquiry and the researcher's position within the institution. The researcher was responsible for initiating PCC's assessment plan in 1995 and for overseeing its implementation until 1998. The ethnographic and case study approaches were deemed inappropriate as a research methodology even though the assessment plan was culturally situated

within an organization. The researcher was not able to effectively function as a participant observer to study “the meanings of behavior, language, and interactions of the culture-sharing group” (Creswell, 1998, p. 58) while planning and implementing the assessment strategy for the college. The grounded theory method (Strauss & Corbin, 1990) was eliminated because the study was not designed to proffer any theories about the cause-and-effect relationship between learner outcomes and the improvement of instruction and learning and/or other aspects of professional practice. The researcher was interested in investigating the faculty experience with adopting learner outcomes (the phenomenon) and identifying the essence (or the commonality) of the shared experience to better understand and document how faculty perceive learner outcomes.

The study was designed to discover how the adoption of learner outcomes *may* have influenced pedagogical methods, instructional content, classroom assessment, or other aspects of professional practice (potential themes). An emphasis on “may” was warranted in the early stages of the study because the data could have indicated that the faculty experience with learner outcomes did not align with these themes and subtle or significant variations to the anticipated themes may have emerged from the data. As Munhall (1994) points out, “researchers need to be open to varying perceptions of the same phenomenon or experience when collecting

material and listening to individuals” (p. 37). The faculty experience with learner outcomes was of paramount importance to the researcher as opposed to any preconceived theories about the adoption process or any associated results. According to Moustakas (1994),

phenomenology, step by step, attempts to eliminate everything that represents a prejudgement, setting aside presuppositions, and reaching a transcendental state of freshness and openness, a readiness to see in an unfettered way, not threatened by customs, beliefs, or prejudices...(p. 41).

RESEARCH QUESTIONS

The shared phenomenon being investigated was the experience of Portland Community College faculty who were directly involved with transforming instructional objectives to learner outcomes and/or assisting other faculty with the conversion. The following research questions guided the investigation of the faculty experience.

1. What was the faculty experience with developing and implementing learner outcomes?
2. Were instructional methodologies and content discussed as the outcomes were developed? Were syllabi and learning assignments reviewed?
3. Were assessment methods for the outcomes identified?

4. Were changes in any aspect of teaching and learning evident with the incorporation of outcomes?
5. How did students respond to the outcomes after they were incorporated into course guides/syllabi? Did the instructor solicit feedback from students? Did students provide unsolicited feedback to the instructor?
6. Did faculty report any differences in how and what students learned with the outcomes format?
7. What factors influence improvement of instruction from the faculty perspective?
8. How did the Learner Outcomes Team experience compare to other professional development activities?

PARTICIPANT SELECTION

The phenomenon investigated for this study related to the experiences of full or part-time faculty members at Portland Community College who participated in the Learner Outcomes Team (LOT) experience. Purposeful sampling was used to select participants for the interviews, the primary data collection method. According to Streubert and Carpenter (1995), "purposeful sampling is used most commonly in phenomenological inquiry. This method of sampling selects individuals...based on their

particular knowledge of a phenomenon for the purpose of sharing that knowledge” (p. 43). Creswell (1998) adds another dimension to the selection process; participants in a phenomenological study “must be individuals who have experienced the phenomenon being explored and can articulate their conscious experiences” (p. 111). Purposeful sampling was selected for two reasons: 1) the researcher wanted to identify the *shared* experience of knowledgeable research participants (the LOT faculty), and 2) the researcher did not plan to generalize beyond this group of participants nor strive for a representative sample.

Criterion sampling is one of fifteen strategies Patton (1990) and Creswell (1998) suggest to purposefully identify participants. The criterion listed below were developed by the researcher prior to sample selection.

1. Full or part-time faculty from the Cascade and Sylvania campuses (excluding Rock Creek) at Portland Community College who participated in the Learner Outcomes Team experience and incorporated learner outcomes into at least one course guide or helped other faculty write outcomes.
2. Faculty who were supportive as well as skeptical about the efficacy of learner outcomes.
3. Representatives from lower division and professional technical courses and programs.

4. Experienced and newly appointed faculty. Experienced teachers are defined as those individuals who have taught more than 10 years. (See Appendix A – Participant Profile).

Data were collected at two of the three comprehensive campuses at Portland Community College—Cascade and Sylvania. Rock Creek faculty were excluded from the study because the researcher is an administrator at that campus. Participants for the study were selected from an initial list of 44 faculty by using the criterion listed above. This group of faculty volunteered to participate in one of the three Learner Outcomes Teams organized by the college over a three year period. There were 17 faculty from each of the first two years and ten from the third and final year. Twenty-four faculty were eliminated from the initial list for one of the following reasons: faculty who taught at the researcher's campus or didn't meet the established criteria, were going on a sabbatical leave, were no longer employed by the college due to retirement, job changes, or in one instance, death. Letters of invitation to participate in the study were sent to the remaining 20. Of this number, 14 agreed to participate in the study but two did not respond to the researcher's correspondence to set up an interview. The initial contact with participants included basic information about the research project, their role, and the role of the researcher.

The sample size in qualitative research may be relatively small and particularly small for phenomenological studies according to Morse (1991). Creswell (1998) indicates that a phenomenological study based on criterion sampling may be “up to 10 people” (p. 113). Patton emphasizes that “there are no rules for sample size in qualitative inquiry” (p. 184). Two criteria for determining sample size are suggested by Seidman (1998): sufficiency and saturation. Is the sample size sufficiently large enough to represent the phenomenon being researched when the findings are conveyed to others outside the study? Saturation is reached when the researcher begins to hear repetitive information from the interviewees or as consistent patterns emerge from the data.

The possibility of including faculty who did not participate in the LOT experience was considered in the initial design of the study. Seidman (1998) suggests that “selecting participants to interview who are outside the range of those in the center of the study is an effective way for interviewers to check themselves against drawing easy conclusions from their research” (p. 46). The researcher decided to include only those individuals with LOT experience as the data were collected and analyzed. It became evident that there were commonalities to the shared experience and sufficient data were obtained from the initial interviews.

The rights of the research participants were addressed in the Human Subjects Application Form submitted to the Oregon State University Institutional Review Board. The application included an Informed Consent document for participants (Appendix B). The purposes of the consent form were: 1) to ensure individuals understood the nature of the research project; 2) to guarantee confidentiality of data and to protect anonymity; 3) to address the issue of vulnerability due to the personal nature of the interview; 4) to review their rights as a participant; and 5) to define the voluntary nature of their participation. The researcher also followed Portland Community College's protocol for conducting research at the institution. The appropriate administrators on each campus were contacted and they agreed to support the project which allowed the researcher to interview faculty on their campuses.

Prior to the interview, participants fully understood that they had the right to withdraw from the research project at any time. They also had an opportunity to ask questions about any aspect of the study, to discuss the role of the researcher as a senior administrator at the college, and to discuss the possibility of any coercion regarding their participation in the project. Participants were informed about the relationship between the experiences they divulged in the interview and the data analysis process. Permission to release information obtained in the interviews was discussed

and participants understood how the results of the study would be disseminated.

All of the participants were asked to read and sign the consent form before the interview began. Interviews were conducted with the understanding that the interviews and subsequent data were confidential. Participants understood that their identities would be protected by assigning pseudonyms; however, anonymity could not be guaranteed. A considerable amount of information from the interview was included in the data analysis chapter and “a reader who knows the participant may recognize him or her” (Seidman, 1998, p. 56). Lengthy, detailed descriptive information about participants was avoided to mitigate recognition.

DATA COLLECTION

The essence of the shared faculty experience with learner outcomes was documented through a structured interview process to identify common themes. Participants were asked to respond to open-ended questions during an interactive, in-depth interview facilitated by the researcher (Appendix C).

The interview questions were designed to avoid making any judgements about the faculty experience or to determine if there was a cause-and-effect relationship between the adoption of learner outcomes and

any aspect of professional practice. Initial interviews were scheduled for approximately one hour. A maximum of three 20-minute follow-up conversations was planned for each participant either in person, via telephone or e-mail.

The interview and subsequent follow-up conversations were planned to elicit authentic responses from each participant based on his or her experiences with writing and using learner outcomes in an instructional environment. The interviewer asked follow-up questions during the interview based on participant responses to provide opportunities for the interviewee to explore new or related topics or to initiate questions that may have influenced or redirected the focus of the study. Moustakas (1994) provides an excellent overview of how the researcher interacts with participants in an interview.

The phenomenological interview involves an informal, interactive process and utilizes open-ended comments and questions. Although the primary researcher may in advance develop a series of questions aimed at evoking a comprehensive account of the person's experience of the phenomenon, these are varied, altered, or not used at all when the co-researcher [participant] shares the full story of his or her experience (p. 114).

All interviews were audio taped to ensure data were collected accurately. "By preserving the words of the participants, researchers have their original data. If something is not clear...the researchers can return to

the source and check for accuracy” (Seidman, 1998, p. 97). Participant responses were also documented in the researcher’s field notes. Of particular interest were: 1) each participant’s observations and unique experiences with learner outcomes; 2) key phrases or quotes that could be extracted from the interview to succinctly represent their observations and experiences; 3) new topics or ideas that needed to be explored during subsequent interviews with faculty; 4) any non-verbal communication that was evident and applicable to the research topic such as one’s enthusiasm or observable discomfort with the interview process and; 5) the researcher’s general observations about the proceedings.

The researcher reviewed and augmented her field notes by listening to the tapes using a transcription machine with a numerical marker. Direct quotes were added to the field notes to produce a narrative summary of the interview for each participant. Marker numbers were used throughout the summaries and for direct quotes to ensure accuracy. This denotation system enabled the researcher “to trace interview data to the original source on the interview tape at all stages of the research” (Seidman, 1998, p. 95).

DATA VERIFICATION

Creswell (1998) recommends eight methods to verify the integrity and credibility of the data and the research process. He suggests

researchers select at least two of the eight; the methods selected for this study included:

Triangulation — “Triangulation involves checking information that has been collected from different sources or methods for consistency of evidence across sources of data” (Mertens, 1998, p. 183). Secondary data sources obtained from participants such as course content guides and syllabi, selected course materials, student assignments, assessment methods, and other documents related to the conversion process were collected and analyzed to verify the interview data.

Whenever possible comparative samples were used to identify pre- and post-conversion patterns and to corroborate participant perceptions about his or her experience with learner outcomes.

Member Checks — Participants had the opportunity to review a summary of their experiences as investigated during the interview and to comment on the summary of findings. Lincoln and Guba (1985) describe this process as a “member check” and consider it “the most crucial technique for establishing credibility [of the data]” (p. 314). The process “involves taking data, analyses, interpretation and conclusions back to the participants so that they can judge the accuracy and credibility of the account” (Creswell, 1998, p. 203).

Clarify researcher bias — The researcher acknowledged her source of bias and used the epoche process to address these issues.

Epoche is a term used in phenomenological studies to recognize and isolate a researcher's *a priori* theories, assumptions, prejudices, or expectations.

Epoche helps enable the researcher to investigate the phenomenon from a fresh and open viewpoint without prejudgement or imposing meaning too soon. "This suspension of judgement is critical in phenomenological investigation and requires the setting aside of the researcher's personal viewpoint in order to see the experience for itself" (Katz, 1987, p. 46).

The researcher used the epoche process before the interviews began and during the data analysis process (Moustakas, 1994). According to Patton (1990), "epoche is an ongoing analytical process rather than a single fixed event" (p. 408).

Rich, thick description — The researcher provided detailed descriptions about the research setting and the participant experience to enable "readers to transfer information to other settings" (Creswell, 1998, p. 203). The faculty voice was used to document their experiences and to ensure accuracy.

DATA ANALYSIS

The purpose of the data analysis process for this study was to identify the essence of a shared experience by participants in the study who converted instructional objectives to learner outcomes and used these outcomes in an instructional setting. The analysis was dependent on the philosophical belief that the meaning assigned by individuals to the experience under investigation could be reduced to specific meaningful themes. Data were analyzed in five stages using phenomenological frameworks suggested by Patton (1990) and Moustakas (1994).

Stage 1 – Epoche. The “epoche” process was used to carefully identify personal bias in relation to participant experiences described in the interview process, to recognize personal connections to the experiences, and to enter the analysis phase with an open mind. The researcher set “aside previous knowledge or personal beliefs about the phenomenon under investigation to prevent this information from interfering with the recovery of a pure description of the phenomenon” (Streubert & Carpenter, 1995, p. 33). The researcher was cognizant of her bias toward the subject through her role in the development of the Portland Community College assessment plan. Her main goal was to accurately represent participant views and to report findings based on their experiences and their experiences only.

Stage 2 – Bracketing. Data were “bracketed” by reviewing participant summaries to denote key phrases or concepts applicable to the research questions or to identify patterns within the participant responses. These data were transferred to a separate document and each data point from the original summaries were marked by a line number. This allowed the researcher to trace bracketed data to its original source throughout the analysis process. Data were also analyzed by delineating participant responses for each interview question. These data were displayed on spreadsheets, analyzed, summarized, and reported in the research findings.

Stage 3 – Horizontalizing. The data were “horizontalized” by assigning equal weight to all data and organizing the data into meaningful clusters. Miles and Huberman (1994) recommend clustering to generate meaning from the data. Clustering is an inductively interactive process used to form categories and “to understand the phenomenon better by *grouping* and then *conceptualizing* objects that have similar patterns or characteristics” (p. 249). This stage of the analysis included both positive and negative aspects of the participant experience (Morse, 1991) and the data may have been used in more than one cluster. “Clusters must be held lightly in the analyst’s mind; you have to ward off premature closure” according to Miles and Huberman (1994, p. 250).

Stage 4 – Identifying Themes. The clusters from Step 3 were analyzed to identify themes based on the commonalities of the faculty experience. Irrelevant, repetitive, or overlapping data were eliminated as the data were analyzed. Five general themes were evident in the data.

Stage 5 – Identifying the Shared Experience. The essence of the shared experience was identified by analyzing the horizontalized data, reviewing the themes, and examining the faculty experience for each research question.

THE RESEARCHER

The researcher is currently the dean of instruction at the Rock Creek Campus, Portland Community College (faculty from this campus were not included in the study). Prior to taking this position in 1998 she was the dean of academic services, the individual responsible for facilitating the development of the comprehensive assessment plan, responding to the Northwest Association's Commission on Colleges Evaluation Committee Report, and preparing for the subsequent focused interim visit in 1997. The dean for academic services was also responsible for designing the implementation strategy for the assessment plan, hiring and working with the LOT consultant to prepare faculty for assuming leadership roles within

the college, and serving as the internal and external spokesperson for the entire assessment plan.

The researcher recognized her bias toward the Portland Community College assessment plan and the pedagogical link between learner outcomes and professional practice. Her undergraduate degree is in teacher education and she has experience with planning, developing, and implementing educational programs. All of these programs were designed by writing instructional objectives, competencies, or outcomes. She has also facilitated program development activities with secondary and community college instructors in a variety of leadership roles. In one of her positions, she was responsible for establishing a competency-based system for curriculum design.

The researcher was also aware of the perceptions research participants may have about her role in the development of the plan and as an advocate for learner outcomes. Participants were asked to set aside any perceptions they had related to the researcher's role as an administrator at Portland Community College and her previous leadership activities with the assessment plan and program development. This step was essential to ensure participants authentically described their experiences with learner outcomes to the researcher.

CHAPTER 4: FINDINGS

INTRODUCTION

The primary purpose of this research project was to determine how professional practice may have changed as a result of converting instructional objectives to outcomes. The study involved community college faculty who participated in one of three Learner Outcomes Teams (LOT), a college-sponsored professional development activity. The LOT experience was designed to help faculty understand philosophical concepts associated with learner outcomes, to identify how outcomes are used as a basis for curriculum and program development, to learn how to write program/course outcomes, and to use what they learned to assist other faculty. Data were collected by having participants respond to a structured interview questionnaire orally administered by the researcher. The interview questions (Appendix C) were divided into three separate but interrelated sections: 1) participant experiences with learner outcomes; 2) using learner outcomes in the classroom; and 3) comparing professional development activities to the LOT experience. Clearly identifiable patterns were evident in the data even though participant responses were somewhat repetitive among the sections.

The interviews and the subsequent follow-up discussions were designed to document the participant experience with converting instructional objectives to learner outcomes for one or more courses, helping other faculty write outcomes, organizing classroom instruction to achieve the outcomes, and assessing student achievement for the stated outcomes. The researcher was also interested in the positive and negative aspects of the participant experience with learner outcomes. Participant experiences were analyzed by using a multi-stage data analysis process which conformed to phenomenological research principals (Moustakas, 1994; Patton, 1990). The analytical process was designed to identify common themes among the data, to reveal the shared experience, and to determine if a core meaning or an essence was assigned to the shared experience.

FIVE THEMES

Five broad areas or themes were evident in the data and included two experiences shared by all participants. The broad themes were directly related to changes in professional practice as a result of writing and using learner outcomes in the classroom. The discernible themes based on the participant experience were: 1) importance of the process; 2) changes in classroom instruction; 3) classroom assessment modifications; 4) the

integrative nature of the experience; and 5) changes in the classroom experience for students. Each of these themes will be explored in detail by using the faculty voice to describe their experiences. These descriptions include the two experiences shared by all participants—writing outcomes and changes to course syllabi. The negative aspects of their experiences and their observations about the Learner Outcomes Team compared to other professional development activities will also be delineated.

THEME 1: IMPORTANCE OF THE PROCESS

The LOT experience was based on the learning-centered, outcomes-based curriculum design process developed by Stiehl and Lewchuk (2002). PCC was one of the pilot sites for their model. The model is a significant departure from the traditional content-focused curriculum development process currently used by educational institutions at all levels. With a content-driven process, design activities focus on content, and outcomes are usually not identified. This curriculum is based on what will be taught rather than what will be learned; the outcomes model is focused on what the student will learn and be able to do with what they have learned in the class. Stiehl and Lewchuk believe

our curriculum design process, more often than not, focuses on what new topic should be covered, in which course it should be covered, and which faculty member wants to cover

it. It's as if we see ourselves living and working in a laboratory that is separate from the rest of life. It's a process that will not survive the scrutiny of the 21st century (p. 3).

Writing outcomes based on the Stiehl and Lewchuk model uses a key principal of asking what “students need to be able to DO ‘out there’ in the immediate or near future” (p. 40). “Out there” is defined as beyond the classroom walls in preparation for the one’s life roles in society. Developers use this question to write learner outcomes and to design curriculum. All classroom activities, learning assignments, and assessment strategies are derived from the outcomes.

The LOT work sessions were designed in response to the college’s curriculum development culture. The process of writing outcomes and recommending curricular and program changes at Portland Community College is done by faculty as members of Subject Area Committees (SAC). SACs are organized by instructional disciplines and all full-time faculty attend regularly scheduled meetings throughout the academic year. Attendance is not mandatory, but encouraged for part-time faculty. LOT participants were expected to facilitate discussions with other faculty primarily through the SACs upon completion of the LOT work sessions.

Data indicated faculty view process from two different perspectives:

1) writing and thinking about outcomes and the concomitant changes associated with curriculum, instruction, and/or assessment; and 2) the

specific design process from the Stiehl and Lewchuk curriculum development model.

The Process of Writing Outcomes

Writing outcomes is a dynamic and interactive process. The process influences how faculty think about teaching, learning, instruction, and assessment. All of the participants in the research study wrote outcomes for at least one class, eleven worked with a SAC to write course outcomes and develop curriculum, and all but one of the participants used the LOT materials or shared them with other faculty. Ten of the twelve participants worked with full- or part-time faculty within their departments. Eight assisted faculty from other disciplines either in groups or individually, and seven facilitated discussions with at least one other SAC in addition to their own SAC. Rebecca's experience with her own SAC is similar to other participants. She used the LOT materials at her SAC work sessions, she helped fellow SAC members write outcomes, and she made a presentation to the program advisory committee. Her SAC worked throughout the academic year to develop their outcomes; other SACs scheduled special meetings or organized retreats to allow sufficient time to develop the outcomes and to discuss instructional strategies and assessment techniques.

One of the participants who worked with her own SAC indicated that the process of developing outcomes established a true team of faculty and strengthened relationships within the department because they were able to focus on outcomes rather than on the content as they usually did. Many of the participants talked about “our”, “us”, or our department or team. The traditional content-focused process seems to threaten some of the faculty due to the territorial nature of the discussion—they view classes as belonging to certain faculty. With outcomes, they focused on each others classes without concern; the process was more holistic and supportive of the team’s interpersonal relationships according to Diane. Iris echoed the same sentiments. As faculty began to use outcomes, their approaches to teaching changed and it changed the professional climate—faculty were more collegial and they were excited about trying new things and comparing what they had done with others.

For Libby, one of the best things that came out of the learner outcomes writing process was that it allowed her to sit back and think about teaching and learning even though she hasn’t converted very many classes. It also kept her “thinking about implementing techniques to improve student learning.” Using outcomes “caused me to think...in terms of not teaching students but helping them learn, which was a major paradigm shift in itself” according to Shirley. Karen stated that the process of developing learner

outcomes helped her focus on her teaching as opposed to content.

Margaret indicated she became less focused on content and more concerned about student learning; this changed her attitude about teaching and she made some profound changes as a result of the LOT experience. "Now my attitude is, here's what math is, how can I help you get it?" Before, she followed rigid rules and regulations and was not very open with students, as if to say, "I know the secret...and I'm not going to let you know what it is", which is how she was taught.

One of the follow-up questions the researcher asked a participant during an interview was whether the process of writing outcomes went beyond the mechanics of making the conversion from objectives to outcomes. Faculty were charged with the task of replacing instructional objectives in Course Content Guides (CCGs) with outcomes in the new Course Content and Outcome Guides (CCOGs). Libby indicated that dealing with outcomes is a philosophy; "it's more than just writing this document [the CCOG] that meets this criteria." The hard part "is thinking about how your whole class is learning. Writing the outcomes is the easy part." Karen said the process also "makes us look at things in a different way; it makes us go outside the box and challenge ourselves, to maybe go out of our comfort zone a little bit."

Diane and the other faculty she worked with in her department discovered the process “saves, energy, and it is more focused.” A statement from James is perhaps the most profound with regard to the importance of the process. What “this whole outcome phenomena has done, it....has provided me with a framework; a mental framework by which I can see my activities differently. I see what I do in class differently. It has changed my perspective on things.”

James’ framework is similar to Senge’s (1990) mental models. These models “are deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action” (p. 8). Senge views mental models as one of the keys to implementing systems thinking—the fifth discipline or the cornerstone for improving organizational effectiveness. Systems thinking and visualization are also an integral part of the Stiehl and Lewchuk (2002) model. “Being able to think in visual images reveals connections and relationships that are difficult to communicate through text” (p. 3).

The Design Down Process

The Stiehl and Lewchuk (2002) curriculum development model includes a design down process which begins with identifying the outcomes. This process is non-linear in nature and there are four developmental tasks

for the process. Programs and/or courses are designed by identifying intended student outcomes and then “determining appropriate assessment tasks, establishing standards for the tasks, identifying in detail what must be learned (concepts and skills) in order to demonstrate the outcome” (Stiehl and Lewchuk, p. 81).

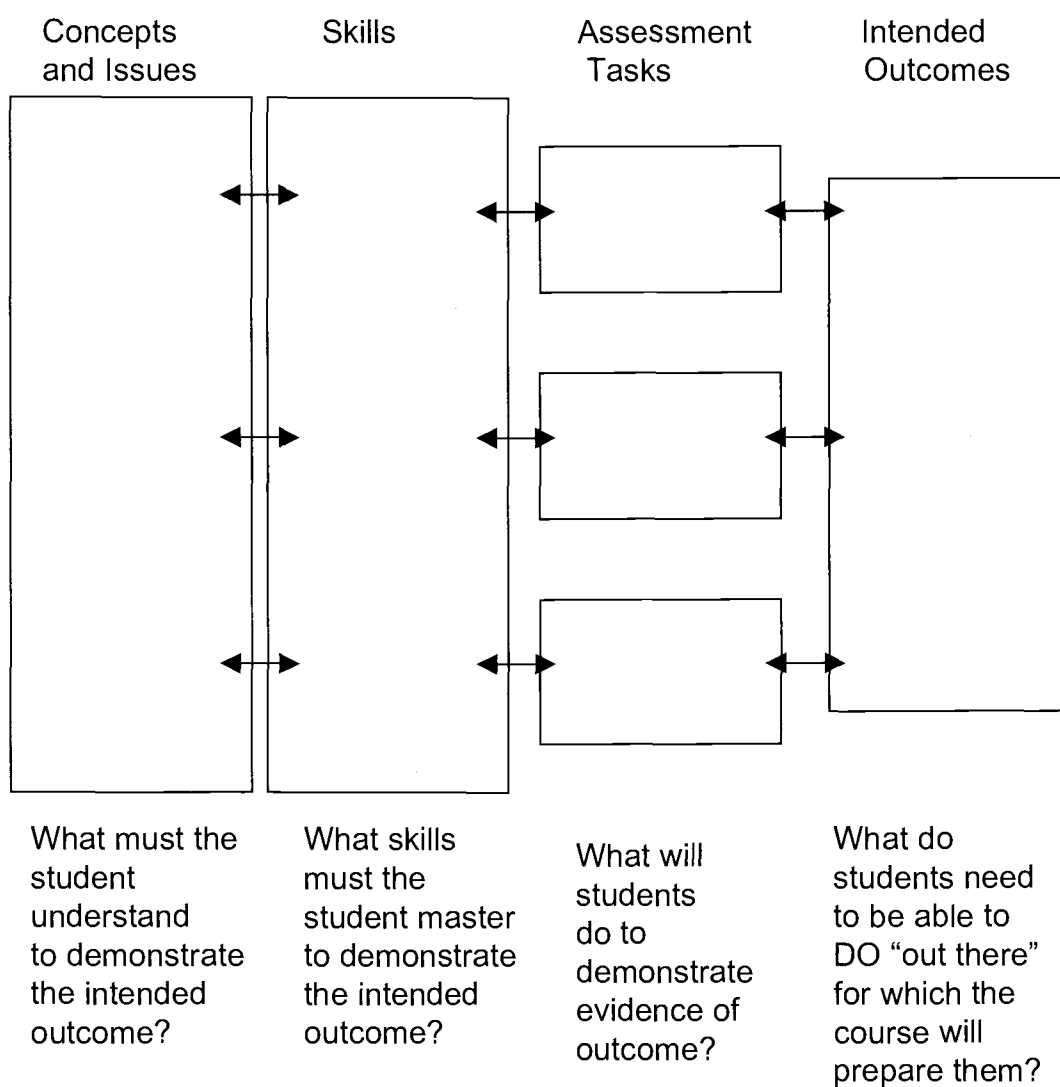
The term “design down” is derived from where the process begins. Developers start by identifying intended student outcomes for a program or course. Designers then move between and among the three other columns to identify concepts and issues, skills, and assessment tasks. Content is determined by the outcomes and it is couched in the concepts, issues, and skills (various levels of specificity). Refer to the Course Outcome Guide Template (see p. 80). The design down process is very different from the traditional content-driven system.

One of the primary purposes for the LOT was to prepare attendees to facilitate discussions with other faculty throughout the college. This was done for individual instructors, department faculty, or through a SAC. The design down template was one of many tools faculty used to help others understand the dynamics of designing outcome-based courses and converting objectives to outcomes. LOT members used this tool very successfully; others found it cumbersome or decided that it impeded

Template: Course Outcome Guide

Course Title _____

Theme(s) _____



progress. Some participants reported changes in professional practice as a result of using the design down process.

Margaret stated “The [design down] process is the whole thing that really makes the difference. You look at the end product. For me it refocused the whole way I look at my course.” The process “freed me up to change the content all around, and not to be so traditional in my teaching methods and it helped me look at the course in a completely different way.” The design down process appealed to Marcia from a theoretical perspective because it is “not linear; it’s circular. That made a big difference to me; I can tell you that really made a *big* difference to me because I’d always been taught it’s [curriculum design] pretty much linear.” It doesn’t matter where you start in the process. You can move from column to column and refine it over time. That “was very significant to me.” In this passage, Marcia was comparing the LOT experience with her undergraduate and graduate preparation in teacher education (Appendix A).

Iris was concerned about her facilitation assignment because there had been some negative e-mails sent throughout the college about outcomes. However, she successfully used the design down process with several SACs. As she said, “It was really one of my beginning experiences in trusting the process.” She enthusiastically endorsed the process and

observed that “disparate individuals from all sorts of different backgrounds came together and it worked—the process works. That was so affirming.”

THEME 2: CHANGES IN CLASSROOM INSTRUCTION

An experience shared by all participants was developing outcomes for their own classes; their end product was the Course Content and Outcome Guide (CCOG). Before Diane wrote outcomes for her classes, she focused on content and chapters in the textbook. Now she relates content to the outcomes, looks at things more globally, and reinforces the purpose of the class by referring to the outcomes throughout the term. She also used outcomes to help students understand how all classes within the program are linked. Another beneficial aspect of using outcomes related to overall changes in the classroom. With outcomes, “learning is more energized, moving, it’s not stagnant.”

One of the difficulties faculty had with developing outcomes was with the conversion process itself. Paulette indicated that the “hardest thing [when working with other faculty]—and it was also the hardest for me—was to get away from thinking in terms of competencies and mastering of skills and to think more globally.” However, as a result of incorporating outcomes, her department no longer looks at isolated competencies; they now look at

the bigger picture. The researcher asked Paulette what the value was of thinking more globally. Paulette replied that “there is an end product; it provides benchmarks for students; students know exactly, up front, what they are going to be able to do.” It also “makes faculty really look at what they are trying to accomplish.” Paulette summarized her experience by stating that it was positive and valuable. “It has given me insight, I did draw meaning from the experience; it has definitely changed the way I design my classes—instructional methodologies, the way I test.”

Shirley’s experience was similar to Paulette’s. “It changed almost everything I did. I was the expert, and I stood up and delivered material, and I delivered tests and I answered questions, and computed grades.” She reduced her lecture time, incorporated more group activities, focused on problem solving activities, and changed her assessment strategies, or as she said, “it changed darn near everything I did about teaching.” Diane believes outcomes changed how faculty teach because it’s a different way of thinking and relating to students. James’ experience was not as dramatic as Shirley’s but he decided to change a long-standing, nationally recognized practice which is included in the texts for his subject area. “It was my questioning of what students can do with what they’re learning that has caused me to eliminate that part of my curriculum. I am coming to the conclusion that it just has absolutely no practical value whatsoever.”

Other participants said they reduced the amount of time devoted to lecturing, included more group assignments and projects to foster team-work, and incorporated problem solving activities, case studies, or scenarios. These activities were based on the issues, concepts, and themes associated with the outcomes. Students were also expected to do oral presentations. Prior to using outcomes, faculty provided information to students via their lectures. Students are now engaged in research activities for their projects and presentations by using a variety of resources such as the Internet to broaden how information is received. Karen reported that “students are much more responsible for participating and being part of the whole learning process.”

Among the benefits of assigning team-based projects and more actively involving students, is that it builds cohesion in the classroom. Iris uses team building exercises to foster trust at the beginning of the class. This is done very subtly but it is “clearly part of what I do as a teacher...I create cohesion in my class.” It is tied to learner outcomes. When asked how this is different from using objectives, Iris replied that “it’s more powerful; it’s more inclusive; you get to the meat of it; it’s not so narrow and it’s more integrative.”

A recurring issue associated with converting objectives to outcomes was the impact on instructional content. This was of particular concern for

disciplines with accreditation agencies who specify content, competencies, and/or require testing for licensure. Research participants indicated that some of the faculty they worked with thought outcomes would significantly change content, reduce its scope, or they would have to revamp their entire curriculum. One group of faculty expressed their frustration by lamenting “I have to change everything again.” This statement was in reference to a tendency in the educational profession of adopting the latest trends and then abandoning them for yet another innovative practice.

The data clearly indicated that content did not significantly change with the incorporation of outcomes for most of the participants. Only three of the twelve participants indicated changes in content. One professional technical program added a diversity requirement, an elective, and they talked about how a writing requirement should be sequenced among the courses. However, the curricular content for this program did not significantly change.

Conversely, the entire curriculum was restructured for another professional technical program. Faculty used the design down process to respond to student questions about how the courses were structured and the relevancy of courses in relation to industry standards. Four courses were eliminated and four were added. Faculty also instituted a common case study for all courses. “The case study follows an organization as it

changed from simple communications systems to complex systems as the course work advances” (Stiehl & Lewchuk, 2002, p. 60). The case study approach is an analog for other courses and programs where projects or analytical problem solving assignments were added to help students apply what they have learned in the classroom.

Another example of how outcomes impacted content was with the mathematics curriculum. The college received a federally-funded grant in 1996 to revise the entire curriculum—one year before the first LOT was organized. Outcomes were not an integral part of the initial grant but the two ideas were blended as both activities proceeded. Everything changed as a result of the grant project—instructional methods, content, technology, and textbooks. According to Marcia, one of the major purposes for the grant was to make math more relevant to students. For example, she stated that “any student coming out of any one of our math classes should be able to go out into the world and find an application for the math they did [in college]. They would recognize a math situation.”

Although significant content changes were not evident, except as noted above, the researcher asked one participant how outcomes influenced content. Iris said that “it became richer and students are gaining it in depth that wasn’t possible before. It’s a whole piece rather than just a fragmented segment. It is more global.” She realized that she had shifted

her focus from content to a more learner-centered approach. “I still have to teach the skills, but I do it in such a different way now—it’s a shift.” Rebecca recalled a similar experience. “The classes that I have been involved with are very much learner-centered; it’s made a difference to a whole group of students and a whole group of teachers.”

All of the participants changed their syllabi—the second shared experience. Ten of the participants included outcomes in their syllabi; the other two made changes to reflect new learning assignments/activities. This was a logical extension of writing the CCOG. Katherine said she had always thought about what students should be able to do at the end of a writing class but she hadn’t done this for her literature classes.

I began to write syllabi that talk specifically about what students would be able to do as people who read and enjoy poetry...as readers of fiction including what concepts they would know and understand...but specifically what they would be able to do....That’s been very helpful to me because it’s helped me think about being more articulate about what I was trying to teach.

James, Diane, Margaret, Paulette, Rebecca, and Iris go over the outcomes in their syllabi with students at the beginning of the class and they may also refer to them throughout the term. At the beginning of the term, Iris also does an anonymous pre-assessment with her students by giving them two colors of self-sticking notes—one for what they already know and one for what they would like to learn. The results are shared with the entire

class. This process seems to help students “have a better buy-in” for the class and it is useful to determine if students are in the right class.

Diane noticed that her syllabus changed from a static document to a dynamic one by incorporating outcomes. It became more user friendly for students and fostered perception checks throughout the term to determine if students were achieving the outcomes; this was a significant change for her. The researcher asked Paulette about the value of outcomes in a syllabus. For clinicals, “it caused me to think more broadly and to ask myself, what do I really want the students to get out of this class—what do I want them to take into the profession. It made me think more clearly and to be more definitive.” She also said that students tend to compare themselves to one another; outcomes help students track their own progress and they make their own decisions about how to improve.

Robert was one of two individuals who indicated that changes were not evident in classroom instruction. He said, “I don’t think there was really too much change as a result of this because...most of the people in the program had an eye for outcomes in the first place...this whole thing has reinforced and clarified what we had been doing in the past.”

According to Rebecca, the outcomes-centered curriculum design process generated a lot of interest among faculty and it was revitalizing because of the connections. “Connections with the outside world—instead

of just concentrating so much on academia,... [faculty] think about what students are going to do once they leave this classroom or once they leave college." Marcia said "It is important to put yourself in the position of being out there looking inward at what the college is doing with respect to the general public."

THEME 3: CLASSROOM ASSESSMENT MODIFICATIONS

Discernible differences in classroom assessment were evident when faculty incorporated learner outcomes. Ten of the 12 participants indicated that they discussed assessment strategies as the outcomes were being written and 11 of the 12 changed their assessment strategies. Diane pointed out that it is hard to separate classroom assessment strategies from learning activities; when learning activities changed, assessment strategies were also modified.

Faculty reported that they engaged in more frequent or formative assessment and used this type of assessment to provide graded and non-graded feedback to students (Angelo & Cross, 1993). Formative assessment provides ongoing feedback to the learner throughout the term. End of term assessment is considered summative; students receive an overall evaluation of their performance for the term. Others used assessment tools such as rubrics, scoring guides, and portfolios, or they

replaced some of their summative, objective test items with problem solving or applications-oriented questions.

Several faculty changed their instructional strategies by including projects that required students to apply what they were learning in class. Scoring guides or grading criteria were used to assess project-based learning. Karen's thinking about what she looked for in terms of student performance changed when she started assigning projects, using scoring guides, and asking application questions. She wants students to be able to apply knowledge and information rather than checking to see that they have memorized minutia. "That has truly changed." Iris also changed her assessment strategies when she assigned projects. Instead of relying on objective, knowledge-based tests, she said, "I believe that I get a better assessment of their deeper knowledge rather than just surface knowledge." For Katherine, "it's made me pay more attention to designing tests that were demonstrations of skill rather than demonstrations of knowledge."

Assessment protocols for the math curriculum changed significantly, primarily because of the grant project. More periodic assessment and a greater variety of assessment tools were required, i.e., projects, group activities, portfolios, etc. The need for more periodic or regular feedback was also evident as a result of James' and Diane's experiences with outcomes. James distributes a questionnaire for some of his classes at mid-

term to ask what kind of progress students are making towards achieving the outcomes. This is repeated at the end of the term when they review the outcomes again. He said, "I am much more aware of how students are reacting to all of this; it has also affected how I evaluate students." Diane also solicited feedback from students in the middle of the term and used their input to make appropriate changes.

The LOT experience helped refine assessment practice in Rebecca's program. Faculty had already replaced objective exams with problem solving and applications-oriented tests prior to the LOT and they had been experimenting with portfolios and scoring guides. Faculty continued to refine the criteria for these tools. Rebecca said students like the scoring guides because it gives them a better picture of what faculty expect and what potential employers desire in their employees. Faculty like the guides as well, according to Karen and Libby, because it makes grading easier and the grades are more consistent; faculty follow the same criteria they provide to students. The guides also help faculty clarify their thinking about student work.

A more systematic approach to assessment was used in Shirley's program. At the program level, "agreement was reached on specific assessment methods that would be used in each class regardless of how it was taught." The program faculty discussed assessment strategies for the

capstone experience and the case study. The outcomes caused her to focus on assessment for her own courses. She had to pay attention, from day one, to whether students would achieve the outcomes at the end of the class; irrelevant content was eliminated. Shirley's focus changed from assessing content or knowledge to assessing outcomes. This pattern was repeated by others—Diane, Rebecca, Libby, Karen, James, Iris, and Katherine.

THEME 4: THE INTEGRATIVE NATURE OF THE EXPERIENCE

The data indicated participants approached instructional design from a more integrated perspective when programs/courses are based on outcomes. Nine of the 12 participants changed their instructional methods; 11 of the participants revamped their assessment strategies, 10 changed their assignments, and nine revised learning activities. Participants viewed these changes in relation to one another—as one element changed, others may have followed. Some of the participants also integrated outcomes with learning styles theory and brain research; others discovered how outcomes compliment service learning and learning communities. The genesis of these changes was writing and thinking about outcomes and/or using the design down process.

Diane viewed her syllabus, the content she planned to deliver, and student assessment separately before she developed outcomes—now they are more integrated and she assesses against outcomes rather than content. Iris said she can't think about outcomes without considering instructional and assessment strategies. "To me, it's part and parcel." She indicated that the LOT experience helped her integrate outcomes with the work she had been doing on brain research, learning styles, and creating nurturing learning environments. Iris confirmed that the LOT experience "was a great tool for me to synthesize who I am as a member of a teaching/learning community." Margaret and Diane also integrated outcomes with learning styles.

Katherine effectively used outcomes to help other faculty establish learning communities. Designing a learning community involves instructors from two or more subject areas who cooperatively design a new course based on their disciplines and a common theme. The new course provides a unique learning experience for students. Instructors face the challenge of fairly representing the combined disciplines in the new course. "It helps to talk about outcomes in order to get people beyond disciplinary questions." The researcher asked Katherine if it was hard for faculty to focus on outcomes when planning a learning community. She said, "It's a very hard step for people who are used to being autonomous in their classes."

The connection between outcomes and service learning became evident when James started to incorporate service learning into his classroom assignments. Through service learning, students receive credit for doing volunteer work in the community. Service learning is usually an optional assignment for students; however, it could be an integral part of the course. According to James, students apply the theories and concepts they have learned in class to everyday experiences through their service learning projects.

Karen and Paulette were accustomed to thinking about curriculum design in terms of discrete but interrelated competencies (as per their accreditation agency requirements). They faced the challenge of integrating outcomes with competencies. As a result of writing outcomes, Paulette's department no longer looks at just the isolated competencies; they have integrated the two concepts. The hardest part for faculty was to think broadly and to go beyond individual competencies. She said working with outcomes "makes faculty really look at what they are trying to accomplish." The faculty in Karen's department had a similar experience. They had to reconcile how outcomes interfaced with competencies. They decided that outcomes focus on the bigger picture and competencies break down the curriculum into greater detail. They are different but compatible.

THEME 5: CHANGES IN THE CLASSROOM EXPERIENCE FOR STUDENTS

Participants were asked how students responded to outcomes and if any differences were evident in how and what students learned using the outcomes format. Five of the participants received unsolicited feedback from students. Students commented on how much they learned (but this could not be solely attributed to outcomes), they appreciated the opportunity to receive more frequent feedback (formative assessment) throughout the term, and they valued being more actively involved with their learning, i.e., projects, case studies, and problem solving exercises. Most of these comments were tangentially related to outcomes because faculty could not conclusively verify student feedback was directly related to using outcomes. None of the participants were able to provide verifiable responses. Test scores, grades, or other forms of assessment were not available to correlate use of outcomes with discernible changes.

When Paulette went through the transition to outcomes, especially for her lecture classes, she said it was very transparent to students—even when she took the time to review the outcomes at the beginning of the classes. In her clinical classes, the outcomes were used by students to measure their progress. According to James, he doesn't believe students are thinking in terms of outcomes even though he discusses the outcomes

at the beginning of the class; they are still focused on the content. "That paradigm still dominates."

Three of the participants solicited formal feedback from students. This was done at the end of the term by asking students about their experiences with outcomes, or in one case, as new assessment tools were introduced. Feedback from students was very positive. They liked the new instructional techniques, assessment methods, or changes in assignments faculty initiated, such as the case study one program created to emulate real world-centered projects.

Anecdotal information on how the student experience changed in the classroom as a result of incorporating outcomes was shared by nine of the participants. The faculty Iris worked with said students learn in a different way. "Students are more actively involved; they are co-creating their learning" and they are more thoughtful learners. Diane surmised that student learning improved because she made changes based on the feedback she received from students during the term (formative assessment).

The case study Shirley uses in her program provides an opportunity for students to apply what they are learning in the classroom. With the case study, "there is a lot more synthesis of the various content, concepts, and competencies to get a bigger picture" because the case study is based on

“real” world applications from industry. Shirley stated that “It wasn’t so much that they [students] learned anything different so much as they learned it in context and I think the learning was greater because of that.” James’ experience with service learning was similar to Shirley’s. James believes that his efforts to make direct applications to outcomes through service learning seems to be working. Students are applying what they have learned in class. He reported that students “are reading the textbook differently—paying more attention to details and they are talking about situations they have encountered in the workplace.”

According to Marcia, math “students are getting a very different course than they used to get.” The classes now include team building experiences to emulate the real world. One of the goals for the math program is to have students effectively communicate with mathematics on the job and with others. Connections to the workplace were also evident with Paulette’s experience. She is responsible mainly for clinical instruction. With outcomes, students are able to measure themselves against established standards in a given class and throughout the program. Outcomes have also been beneficial for faculty; they “forget what it is like to be a novice.” Engaging students in problem solving and critical thinking also functions as a link to the real world. Based on Paulette’s experience, these two activities help “students to think ahead, to think before they act and to

anticipate what might happen....[It] makes them a better professional; they will be more successful in their career.”

Karen and the other faculty in her department who embraced outcomes described their experiences as being “much more fun” because you can see students apply the knowledge they have learned. Outcomes made it easier for Katherine to conference with students to discuss their work. Students understand what “they will be expected to do but can’t yet do—how they will learn to do these things” and they also understand what “they need to be able to do when I send them out into the world.”

NEGATIVE ASPECTS OF THE EXPERIENCE

Portland Community College’s assessment strategy for incorporating outcomes was culturally situated in the Subject Area Committee structure. All curricular changes made by faculty, including the adoption of learner outcomes, are developed, reviewed, and recommended for approval by the respective SAC. The Curriculum Committee, a standing subcommittee of the Educational Advisory Committee (EAC), reviews SAC recommendations and forwards them to the Educational Advisory Committee. The EAC is the academic policy body for the college. SAC recommendations for course/program changes are approved by the EAC and then forwarded to the president’s office for final approval.

One of the purposes of the LOT experience was to prepare faculty to assume leadership roles within their own SAC or for a SAC from another discipline. Faculty who volunteered for the LOT knew that they would be responsible for helping faculty write outcomes for programs and courses within the construct of the SACs. They also knew that these changes would most likely need to be approved by the Curriculum Committee and the EAC. The faculty-to-faculty approach for adopting outcomes was selected in response to the role of the SACs within the institution and to help mitigate well documented resistance to outcomes assessment by faculty (Banta and Associates, 1993; Erwin, 1991; Jacobi et al., 1987; Nichols, 1995; Palomba & Banta, 1999; Tebo-Messina & Van Aller, 1998). “Some faculty view assessment as a threat to academic freedom” (Palomba & Banta, 1999, p. 71). They are also concerned about how data will be used, especially if they think learner outcomes data will become associated with faculty evaluation. “Most resistance goes away when faculty begin to participate in assessment” (Erwin, 1991, p. 28) and a clear distinction is made between student outcomes assessment and faculty evaluation.

Research participants experienced some resistance from faculty within their SAC, department, or with another SAC. Faculty questioned why the college was adopting outcomes and they expressed concern about the futility of the process—it was just another administrative-imposed exercise.

For Katherine, most of the objections were related to “reinventing the wheel; we are just using a different form [the CCOG] and it didn’t need to be done.” They also groused about starting yet another meaningless project when this one was finished; however, faculty changed their forms.

Margaret’s experience with resistance was associated with how outcomes would impact instructional content. Faculty felt content would be compromised or “left behind when outcomes were adopted.” They discussed this fear and questioned “why are we doing this?” It took time to work through the issues but they eventually developed the outcomes primarily because the conversion was required.

One of the departments thought it was a complete waste of time according to Paulette, who worked with a SAC other than her own. She speculated that faculty from that SAC did not realize the benefits of converting objectives to outcomes. Paulette’s experience with her own SAC was more positive. Rebecca said “some of the SACs took it [the conversion process] very seriously and it was very helpful for them, and others did blow it off.” Faculty in Karen’s department saw the conversion process as “just another thing to do” and some faculty expressed concern about giving up traditional tests in the lecture portion of their classes as new assessment techniques were adopted. She felt it was difficult for faculty “to see the

importance of planning evaluations or assessments for the outcomes rather than the knowledge [content].”

Marcia indicated that there are still faculty who “just want to get it done—show me the form and let’s get it done.” Diane’s experience with outcomes was very positive, but she said that “if someone hadn’t come and said you need to do this, we probably wouldn’t have taken the time to do it.” James stated that the faculty in his SAC “have seen other efforts come and go; it becomes a matter of just developing a template and applying the template to all of the courses.” He also said that the outcomes discussion “means very, very little” to faculty in his SAC. They haven’t discussed teaching methodologies or assessment because they believe outcomes mean standardization.

Most of the participants indicated that the LOT experience was very beneficial and it was favorably ranked in comparison to other professional development activities. For Katherine, the LOT experience was a “total waste of time” and “a lot of the exercises required me to deconstruct things I had already deconstructed.” She felt that she didn’t learn anything because she has been teaching from an outcomes perspective for a long time and many of her colleagues have been using them as well. She indicated that “the [outcomes] terminology is probably new...that was...clarifying for

us....The meat of what outcomes education is about was already happening for most of us, most of the time.”

THE LEARNER OUTCOMES TEAM EXPERIENCE AND PROFESSIONAL DEVELOPMENT

One of the advantages participants had as a member of a Learner Outcomes Team compared to other faculty was a prolonged experience with the outcomes-based curriculum design process (30 plus hours of professional development). They had the opportunity to philosophically discuss the benefits of using outcomes and to be guided through the writing and curriculum development process. Diane expressed how the LOT experience inspired her by saying that “as we talk I didn’t realize how powerful the training [LOT] was and I never realized that it would impact not just my teaching but...the way I think through things.”

During the interview, participants were asked to describe what influences professional practice, to identify types of professional development activities they are involved with, and to compare these activities with the LOT experience. The LOT experience was cited as the most beneficial professional development experience by four participants; two equally ranked outcomes to other experiences, and six indicated other experiences were more beneficial. These included high school and

community college articulation programs, participating in the grant-funded math project, attending graduate school, teaching web-based classes, coauthoring a textbook, and joining a grant sponsored study group on creative approaches to teaching. Karen indicated her master's program in postsecondary adult and continuing education was of significant benefit to her overall professional development, but she recognized the impact of using outcomes by stating that they "helped me to have a focus on my teaching. Instead of trying to teach the way I was taught 25 years ago; they've given me a focus for teaching in the 2000s."

The researcher asked James how thinking about outcomes has affected his approach to professional development. He said:

It comes back to that eventually. How can I use this concept of learning styles in my classes, how does that help me to teach more effectively, and how does that affect what students are learning, and what they are able to do with what they learned? So outcomes is really the basis; it's really the groundwork, it really is. I do eventually keep coming back to that.

Robert attested to the effectiveness of the LOT experience by stating that it "makes more sense and it's more instructive and valuable than any of the old systems that we have used." Robert also made an astute observation about his experience with outcomes as it relates to management control systems. "We teach these things [control systems] in

our management courses...[the outcomes process is] a control instrument of sorts.”

One participant separated the overall process of writing outcomes from her personal experience with the LOT. As noted above, Katherine did not endorse the efficacy of the LOT experience but she recognized the beneficial aspects of the writing process by stating that “it has made quite an impact. It’s helped people really think a lot more intentionally about what they are doing...it has been extremely helpful for some people, some divisions to be able to think about where they are headed.”

CHAPTER 5. SUMMARY AND RECOMMENDATIONS

INTRODUCTION

The primary purposes of the study were to document the experiences of faculty who developed and used learner outcomes in a community college setting and to determine how outcomes may have influenced professional practice. Participants were selected from a group of faculty who volunteered for one of three college-sponsored Learner Outcomes Team experiences. Data were collected by asking participants to respond to open-ended questions during an interactive interview with the researcher. A multi-step process was used to analyze the data and to identify common themes. The following themes emerged from the faculty experience with outcomes: 1) importance of the process; 2) changes in classroom instruction; 3) classroom assessment modifications; 4) the integrative nature of the experience; and 5) changes in the classroom experience for students. Participants universally shared two experiences—writing outcomes and changing their syllabi.

The research findings in Chapter 4 were presented using the faculty voice. The summary of research findings is based on the research questions developed to guide the study. Data have also been summarized in Appendix D.

SUMMARY OF FINDINGS

Question 1: Faculty experiences with learner outcomes.

The faculty experience with learner outcomes can be classified into three broad categories: 1) the Learner Outcomes Team experience; 2) subsequent work with faculty; and 3) their own experiences.

The Learner Outcomes Team – Research participants were selected from a list of forty-four faculty who attended one of three college-sponsored professional development activities designed to build the institution's leadership capacity and to understand and implement learner outcomes. The activity became known as the Learner Outcomes Team. The team experience was based on the Stiehl and Lewchuk (2002) curriculum development model. Volunteers received thirty plus hours of instruction on the philosophical underpinnings of the model and they learned how to write outcomes from the perspective of what students should be able to "do" with what they learned in the classroom. Team members were expected to work with other faculty to help them write, use, and assess learner outcomes upon completion of their Learner Outcomes Team experience.

Subsequent work with faculty – Team members were assigned to work with their own Subject Area Committee (SAC) or another SAC. This was accomplished at SAC or department meetings, at special workshops or retreats, or through individual consultations with these faculty. The degree

of involvement was defined by the group or groups each team member supported; assistance may have been provided over a period of months or a team member may have met with individual faculty or a group only once.

Their own experiences with developing and using outcomes – All of the participants recognized and valued the process of writing outcomes from the Stiehl and Lewchuk perspective and used it to write outcomes for one or more of their classes. This method or process of writing outcomes reinforced connections to the external world beyond the academic environment, and fostered and strengthened internal relationships among faculty within departments and the SACs. Focusing on outcomes promoted teamwork and more collegiality among faculty because the discussions were no longer content-centered.

Of the three experiences, most of the findings are associated with their own experience with learner outcomes primarily because their experiences with other faculty were in group settings and they did not solicit feedback from these individuals. However, research participants who worked within their own department described their experience from this perspective as well and identified the beneficial aspects of incorporating learner outcomes for themselves and their department.

The design down process (Stiehl and Lewchuk) was successfully used by some participants to work with faculty or as a basis for their own

curricular changes. Research participants did not universally use the entire design down process and participants differentiated between writing outcomes—the first step in the process—and the remainder of the tasks. The problems research participants encountered were related to terminology (concepts, issues, skills), the format, or the nonlinear nature of the process. Others found the process too cumbersome or difficult to explain; however, they were able to effectively use the first step in the process—writing outcomes from the perspective of what students should be able to “do” as a result of taking a class.

Participants encountered some resistance to outcomes from faculty as they facilitated the writing process. Some faculty felt it was just another institutional-imposed requirement they had to address. Others thought it was a waste of time or they wanted to take the path of least resistance by quickly getting it done or using a template to “fill in the blanks.” Faculty who expressed their concerns viewed the process of converting objectives to outcomes from a compliance standpoint. They did not see it as an opportunity to think about teaching and learning and to make revisions based on their discussions about outcomes.

Question 2: Discussions among faculty about instructional methods and content, syllabi, and learning assignments as outcomes were developed.

The purpose of this question was to determine whether instructional methods, content, learning assignments, and syllabi were discussed as a result of learning how to write learner outcomes. The data from this study corroborated Shipley's (1994) observation that "learning outcomes...will, inevitability, affect...teaching and learning approaches, assessment and evaluation practices and even existing value systems" (p. 4). Writing the outcomes from the perspective of what students should be able to do promotes an examination of how instruction is organized and delivered in the classroom. Most of the participants discussed instructional methods, learning assignments, and activities as the outcomes were developed. They discussed the instructional content of classes and it may have become a focal point for the discussion especially when faculty felt that outcomes would have a deleterious impact on content. Concerns about having to drastically change content, rewrite curriculum, or reduce the number of topics were ameliorated when faculty began to see the benefits of incorporating outcomes or as they proceeded with the writing process.

Question 3: Assessment methods identified for the outcomes.

Eleven of the participants reported that they revised their assessment strategies to more effectively assess newly developed outcomes and new instructional methods. They used a variety of strategies such as scoring guides and rubrics to assess student work or their testing strategies changed to include more problem solving applications. Many of the research participants provided more opportunities for students to measure their own progress throughout the term. This was done through formative assessments. Summative strategies may have changed as well. Some of their tests were redesigned to include synthesis and application questions as compared to the traditional knowledge focus which usually tests content.

Question 4: Changes in teaching and learning.

The process of writing outcomes inspired faculty to think about teaching and learning in general and how to improve instruction to enhance student learning (also refer to Question 6). Nine of the participants changed their instructional methods, ten modified their student learning assignments, and nine revamped their in-class learning activities to ensure students achieved the outcomes. Participants reported that they reduced the amount of time spent lecturing and increased group work or team-based projects.

Faculty incorporated case studies or scenarios, and designed problem solving, critical thinking, or synthesis activities.

Outcomes became an integral part of the syllabi for ten of the participants. Some of the participants reviewed the outcomes with students at the beginning of each class. One of the participants who did not incorporate outcomes in her syllabi distributed outcomes to her students as classes started via the Course Content and Outcome Guide which was also given to students.

Changes in one or more of the above elements may have instigated additional modifications because outcomes are part of an integrated system for organizing and delivering instruction. The process of writing outcomes generated philosophical discussions about teaching and learning and helped faculty look at the learning environment from a more integrated, global perspective. It also helped them think more globally about the purpose and content of their classes. For one of the participants, outcomes became the common denominator for developing learning communities. Instead of focusing on content, faculty from two disciplines developed outcomes for the combined classes that defined the learning community.

Two research participants had to ascertain the degree of compatibility between outcomes and their accrediting agency's mandated competency format. Other participants provided alternative assignments to

reinforce outcomes by incorporating service learning or volunteer work into their classroom assignments. For service learning, students agree to work in the community for a specified amount of time in an area related to the instructional content of the class. All of these changes are examples of how outcomes improved teaching or enhanced learning.

Question 5: Faculty solicited and unsolicited feedback from students.

Three of the participants directly asked students about their experiences with outcomes; all of their responses were positive. Five of the participants received positive, unsolicited feedback from students; however, these comments could not always be directly attributed to the incorporation of learner outcomes.

Question 6: Faculty reported differences in how and what students learned.

The data indicated that curricular content did not significantly change as a result of incorporating learner outcomes; however, changes were evident in the student experience. Research participants shared these anecdotal experiences: students were able to track their progress more easily, especially when formative assessment strategies were used; outcomes became the focal point for learning and the content was contextually reoriented to achieve the outcomes; less emphasis was placed

on instructor delivered content via lectures; students contributed to the knowledge base of the class through their projects and presentations; students became more actively engaged in their own learning through problem solving, synthesis exercises, and team projects; and other strategies were adopted to connect classroom instruction with the world outside the learning environment or to the workplace. As a result of these changes discernable differences were evident in the learning environment for students and instructors.

Question 7: Influences on improvement of instruction.

This question was a prelude to Question 8. The researcher wanted to know how the Learner Outcomes Team experience compared with other professional development activities. During the interview, participants were asked to identify what factors influence professional practice and to define how these experiences may have ultimately lead to, or had a beneficial impact on, instruction. The most often cited professional development activity (n=6) was attending workshops sponsored by external organizations or the college. These could have been related to one's field of expertise or pedagogy. This was followed by activities sponsored through professional associations, serving on college committees, peer to peer interaction, and reading professional publications.

Question 8: The Learner Outcomes Team experience compared to other professional development activities.

The Learner Outcomes Team experience, as compared to other professional development activities, was described as the most beneficial by four participants. It had a significant impact on how and what they taught and provided a new framework for teaching. Six participants cited other activities as being more beneficial than the team experience and two rated the team experience equal to others.

CONCLUSIONS

For the participants in this research project, the data indicated that the process of writing outcomes influenced professional practice and fostered discussions about instructional methods, classroom assignments/activities, and assessment strategies. The process also changed the foci of the discussions from what students will learn (content) to what students will be able to do with what they have learned, or a change from instructor-centered teaching based on instructional objectives to learner-centered instruction. Eleven of the twelve participants changed one or more aspects of professional practice. However, not all of the participants experienced the same degree or type of change and most of the reported changes were based on the personal experiences of the participants versus

their work as a facilitator to help other faculty learn about and write outcomes.

Three levels of intensity or influence on professional practice were evident in the data (Appendix E). Two participants were placed at Level 1. Participants in this group indicated that their experience with learner outcomes was beneficial and professional practice was influenced, but not as significantly as other participants. These individuals indicated that they were already teaching from an outcomes perspective; however their experiences with the Learner Outcomes Team helped to clarify and reinforce what they were already doing. They wrote outcomes, changed their syllabi, and for one of the two, assessment practices were influenced. One of them worked with his SAC and met with the individual who writes Course Content and Outcomes Guides for his department based on input from faculty who teach the courses. The other participant used outcomes to facilitate discussions about learning communities. One of the two indicated that the Learner Outcomes Team experience was more valuable than other curriculum design systems used by the college; the other participant stated that the team experience was absolutely not beneficial.

For participants at Level 2 (n=4), the overall experience with outcomes was more beneficial and there was a greater influence on professional practice. All of these participants worked with their SAC, other

SACs, or facilitated discussions with individuals or groups. Instructional strategies changed; however, content did not significantly change. They may have increased the amount of small group work in class, assigned individual or group projects, reduced the amount of time they devoted to lecture, or incorporated service learning to provide optional student assignments. The most often cited change in assessment was with formative methods or using scoring guides to assess student projects.

The most significant influence on professional practices was attributed to participants at Level 3. They described their experience with outcomes as being very beneficial. More significant changes were evident in their classroom assignments and learning activities as compared to the other levels. Three of the participants at this level modified content for their curriculum. They all placed an emphasis on problem solving exercises or case studies to reinforce learning and to become more learner-centered. They significantly modified their assessment techniques, especially with formative approaches and multiple measures such as portfolios, peer or self-assessment. Three of the six individuals in this group rated the Learner Outcomes Team experience as the most beneficial and one as equally beneficial to other professional development experiences.

The researcher compared the levels of intensity with graduate or undergraduate work in teacher education. Of the nine participants with

formal preparation, 5 of these participants were at Level 3; 2 participants were in Level 2; and both participants in Level 1 had formal preparation in teacher education. Of the three who did not have formal preparation, 2 were at Level 2 and 1 was at Level 3. The researcher concluded that formal preparation in teacher education is not a contributing factor to define the level of intensity or amount of change evident in professional practice as a result of incorporating learner outcomes.

Of particular interest to the researcher was how faculty were distributed among the three levels in relation to their years of teaching experience. The average year of teaching experience for each group was: Level 1, 25 years; Level 2, 27 years; and Level 3, 20 years. The median years of experience was also calculated. The average and median years were very similar. The researcher concluded that the number of years of teaching experience was not a significant factor to differentiate among the levels of intensity for this study even though Level 3 participants collectively had fewer years of experience. This was due to the difference between the fewest number of years teaching—6 years—and the highest—34 years. Similar degrees of difference were not evident in the other two levels.

One of the reasons this study was based on phenomenological research methods was to define the essence or meaning of the shared experience. Writing outcomes and changing syllabi were the only two

experiences universally shared by all of the research participants; however, eleven of the twelve changed their classroom assessment strategies. Outcomes were incorporated into their syllabi or the syllabi were changed to reflect instructional modifications. Of the two shared experiences—writing outcomes and changing their syllabi—one could be described as having universal meaning among the participants. All of the participants valued or assigned meaning to the process of writing outcomes and they articulated the benefits of using outcomes to design curriculum and to engage students in outcomes-based instruction. This was especially significant for individuals at Level 3. However, there was an institutional expectation for replacing instructional objectives with learner outcomes.

The Learner Outcomes Team experience was valued by eleven of the participants and they used the instructional resources from their team experience to work with other faculty for their assigned SAC or with their own SAC. Value was assigned to the team experience for two reasons: the quality of the facilitation and prolonged engagement—thirty plus hours of instruction. The experience was purposefully structured to avoid the pitfall of focusing on a short-term activity designed to only teach faculty how to write learner outcomes. The length of the experience allowed participants to learn about outcomes from multiple perspectives such as writing, designing curriculum, revising assessment strategies, etc., and experiencing new

frameworks for thinking about teaching and learning. Faculty volunteered to participate, they received a stipend, and they were expected to work with a SAC to share their knowledge and experience with learner outcomes. Over a three-year period, all of the SACs (60 plus in number) should have been able to work with an individual who participated in a Learner Outcomes Team.

The learner outcomes portion of the Portland Community College assessment plan was approached from an organizational learning perspective and the strategy was purposefully situated within the culture of the Subject Area Committees. SACs are the operational units within the institution responsible for initiating and recommending curricular change. Developing and revising course outlines is one of the major responsibilities for a SAC. These outlines were historically based on instructional objectives. The diffusion mechanism selected for replacing objectives with outcomes was the Learner Outcomes Teams.

A successful diffusion process for any change project according to Rogers (1962), is dependent upon four critical elements: 1) define the innovation. The process of converting objectives to outcomes was clearly defined in the college's assessment plan; 2) communication among individuals. The primary method for disseminating the plan was through small and large group presentations and discussions at the college; 3)

communication within a social system. The faculty and the Subject Area Committees are subcultures with the social system of Portland Community College. Information about the conversion process was provided to faculty and the college established the learner outcomes teams to provide resources for adopting learner outcomes; and 4) accomplish the change over time. The conversion process was designed to be achieved over a 3-6 year period.

Rogers makes a distinction between diffusion and adoption. "Diffusion occurs among persons while adoption is an individual matter" (p. 76). Individuals generally proceed through five stages of adoption: awareness (the individual receives or seeks introductory information); interest (seeks additional information but does not act); evaluation (accepts or rejects adoption); trial (may try a small scale adoption), and adoption (continues to use the innovative idea). Individuals who successfully implement change usually experience all of these stages; however, there are variances in the adoption rate. Early adopters more quickly respond to and embrace change. Late adopters learn through the experiences of early adopters and they may not go beyond the interest or evaluation stage until the efficacy of the change is substantiated.

Participants from this study could be considered early adopters. This was done by design—the strategy selected to introduce change was the

learner outcomes team experience—and by choice, faculty volunteered for the outcomes team. Participants of this study, and in particular those individuals in Levels II and III, experienced all of these adoption phases as a result of participating in a Learner Outcomes Team, through their work with SACs, or subsequent changes in teaching, learning, or assessment for their own classes. Team members had the advantage of learning more about outcomes than their counterparts (30 or more hours of instruction) which may have contributed to the intensity of influence on professional practice. The “train the facilitators/leaders” process is a cost effective way to innovate but late adopters did not have access to the depth of information provided to team members. This difference needs to be recognized and factored into the design process.

Participants of this study also functioned as “opinion leaders” (Rogers, 1962). Opinion leaders play an important role in the change process because they influence the actions of others and they are generally the early adopters. The Learner Outcomes Team experience prepared faculty for this role. Team members were expected to work with SACs upon completion of their team experience and to facilitate peer-to-peer learning with other faculty in the institution. In several instances, faculty who volunteered for a Learner Outcomes Team were nominated by their SAC which could indicate that these individuals may already have an influential

role in their SAC. The PCC diffusion/adoption process was intentionally designed to be a peer-to-peer endeavor to help alleviate faculty concerns about the adoption of learner outcomes.

A major consideration for the peer-to-peer strategy was to identify the role of the SACs in the change process because they are culturally situated in the college's curriculum and program development system. For change to be effectively implemented, adoption strategies must be responsive to the organizational culture and its subcultures (Galpin, 1996). Organizational culture is defined as the conscious and unconscious assumptions, values, and beliefs held and shared by individuals in a group or organization (Schein, 1992). Culture functions as a mechanism to determine how the organization responds to change and to help ease concerns, conflicts, or anxiety associated with variations to the norm (Yukl, 1989). Potential sources of resistance should be identified during the design phase of an innovative project and processes should be developed to accommodate or mitigate opposition.

Several of the participants in this study experienced faculty resistance to change when they worked with a SAC or in their department. Resistance is usually evident in the evaluation stage when individuals decide to adopt or reject innovation. Peer influence is very important during this stage but is less important in other stages (Rogers, 1962). The SACs

were identified as an integral part of the change process at PCC during the cultural analysis phase of planning for the adoption of learner outcomes.

The SACs were also a potential source of resistance. The learning needs of these committees had to be addressed as the process was designed.

The peer-to-peer strategy was considered to be the most effective method for addressing SAC needs. The planners also knew that approaching a significant institutional change from a top-down, administratively lead process would not be effective (this was mentioned by several participants in the study). The primary purpose for organizing the learner outcomes teams was to prepare faculty to lead the adoption process and to provide a learning resource for the organization.

Learning is the process by which innovations are adopted and organizational learning is an essential component for successfully implementing change (Rogers, 1962; Senge, 1990; Argyris, 1992; Beckhard and Pritchard, 1992; and Bass and Avolio, 1994). Senge defines a learning organization as “continually expanding its capacity to create the future” (p. 14) and to effectively manage change and foster innovation. In a learning organization, leadership is a collective activity, it is about empowering others to lead in their spheres of influence by building leadership communities within the organizational structure (in this case, the SACs), and encouraging leadership throughout the organization (Kofman and Senge,

1993). Under these circumstances, organizational learning becomes an embedded cultural norm.

An essential task for implementing the learner outcomes portion of the assessment plan was to consider how the institution “learns” and what aspects of the organizational culture promote learning. The college purposefully decided to hire a consultant to teach the institution how to write and assess learner outcomes—both of which were new concepts for most of the college’s faculty. Rogers (1962) would define a consultant as a “commercial change agent”. He states that commercial agents are more important during the early adoption phase. The participants in this study could be considered early adopters due to their experience with a learner outcomes team and their subsequent work with SACs; later adopters received information from a peer faculty leader. In summary, the results of this study support Portland Community College’s strategy to adopt outcomes from a learning organization perspective. The strategy was culturally situated in the organization and ultimately in the Subject Area Committees. These strategies influenced professional practice for the individuals in this study.

RECOMMENDATIONS FOR FURTHER RESEARCH

The college's approach for establishing learner outcomes was based on a "prepare the facilitators model." Learner Outcomes Team participants were expected to use what they had learned in the work sessions to assist other faculty; however, the facilitators did not replicate their team experience in subsequent meetings with faculty. Research participants facilitated discussions on how to write and assess outcomes based on the needs of the groups and the circumstances of the setting. Research data are not available to describe the learner outcome experience for faculty who attended sessions facilitated by a Learner Outcomes Team participant.

The question arises as to whether changes in professional practice for these individuals would be similar to, or at the same level of intensity as compared to the research participants of this study. One of the participants speculated that she may not have benefitted as much from the experience if had she not been involved with the Learner Outcomes Team. The experiences of non-team faculty at Portland Community College could be documented to substantiate whether or not the magnitude of change throughout the organization was similar to the participants of this study.

This study could be replicated at another institution where the Stiehl and Lewchuk outcome-based curriculum design model has been used to compare the experiences of two different groups of faculty and to further

document influences on professional practices as a result of basing instruction on learner outcomes. Careful consideration would have to be given to the design structure of the professional development activity for faculty from other institutions. The PCC process engaged learners in a prolonged experience and it was culturally situated within the institution.

In summary, the faculty experiences for this group of participants conclusively indicated that learner outcomes influenced professional practice. Differing levels of intensity were evident among the participants; however, all of the participants assigned meaning to one of the two shared experiences. The impact of writing outcomes from the perspective of what students should be able to “do” was universally endorsed as a concept to enhance learning.

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APPENDICES

APPENDIX A

PARTICIPANT PROFILE

Participant	Status	Years of Teaching	Years at PCC	Formal Teacher Education	Degrees
1	Full-Time	13	7	Graduate	Bachelor's in a discipline; Master's in Curriculum and Instruction
2	Full-Time	30	16	Undergraduate Graduate	Bachelor's in a discipline; Master's in teaching
3	Full-Time	28	12	No	Bachelor's and Master's in a discipline
4	Full-Time	25	18	Undergraduate and Graduate	Bachelor's in a discipline; Master's in education based on a discipline
5	Full-Time	19	13 Part-time 6 Full-time	Graduate	Associate of Applied Science in a discipline; Bachelor's in General Studies, Master's in Post-Secondary Adult Education
6	Full-Time	25	25	Undergraduate	Bachelor's, Master's – both in a discipline

Participant Profile (Continued)

Participant	Status	Years of Teaching	Years at PCC	Formal Teacher Education	Degrees
7	Full-Time	34	17	Undergraduate Graduate	Bachelor's in a discipline; Master's in a discipline and Curriculum and Instruction
8	Full-Time	21	21	Undergraduate	Bachelor's and Master's in a discipline
9	Part-Time	6	4	No	
10	Full-Time	25	16	Undergraduate Graduate	Bachelor's in discipline; Master's in Education
11	Part-Time	25	10	No	Bachelor's in a discipline; equivalent to a master's in a discipline from a foreign university
12	Full-Time	25	20	Undergraduate	Bachelor's, Master's – both in a discipline

APPENDIX B

INFORMED CONSENT DOCUMENT
Community College Leadership Development Program
Oregon State University

- A. Title of the Research: Community College Faculty Experiences with Learner Outcomes and the Influence on Professional Practice
- B. Investigators: Dr. Betty Duvall, Professor, School of Education, Oregon State University; Marilyn Davis, Doctoral Student, School of Education, Oregon State University and the Dean of Instruction, Rock Creek Campus, Portland Community College.
- C. Purpose of the Research Project: The purpose of this research project is to describe the experiences of community college faculty with learner outcomes. The study is focused on the faculty experience with developing, implementing, and assessing instruction based on learner outcomes. The researcher is interested in how developing and implementing course-based learner outcomes may or may not have altered instructional methodologies, influenced course content, supplemented or replaced existing student assessment techniques, improved the quality of instruction, or affected other aspects of professional practice.
- D. Procedures: As a participant in this study, I understand that I will be involved in the following:
 - 1. Pre-study screening. There will not be any pre-study screening.
 - 2. What participants will do during the study. Participants will be asked to respond to open-ended questions during an interactive, in-depth, 1-hour interview facilitated by the researcher. They will also be asked demographic questions such as the number of years they have been teaching. They will be contacted after the interview by the researcher via telephone or email to clarify information discussed during the interview. There may be up to three follow-up conversations for no more than 20 minutes each via telephone or email.

All interviews will be audio taped to ensure data are collected accurately. Participant responses will also be documented in the researcher's field notes. If a participant requests that the interview not be taped, the researcher will rely on her field notes. Participants will receive a summary of their interview but the audio tapes will not be directly transcribed. The researcher will use her field notes (and the audio taped interviews, if applicable) to write the summary for the individuals to review. Participants will be asked to respond to the summary for accuracy during one of the follow-up conversations.

The tapes will be stored at the researcher's place of residence and the researcher will be the only individual who has access to the tapes. The tapes will be electronically erased upon completion of the dissertation.

E. Risks and Benefits

3. Foreseeable risks or discomforts. There are no foreseeable risks or discomforts associated with participation in this research.
4. Benefits to be expected from the research. This study is designed to explore the faculty experience with developing, implementing, and assessing learner outcomes in a community college environment and to determine if the assessment of learner outcomes at the course-level impacts any aspect of professional practice. Understanding the dynamic between outcomes and professional practice may influence how colleges and universities design assessment programs to measure institutional effectiveness or how faculty design, deliver and assess instruction to enhance student learning.

- F. Confidentiality. All information obtained from the interviews and follow-up conversations will be kept confidential. Participants will not be identified by name. I understand that I may be quoted, that the quotes will not be attributed to my name and that quotes may be attributed to a pseudonym. I realize I can request that anything disclosed in the interview not be quoted. The only persons that will have access to the information are the investigators.

- G. Voluntary Participation Statement: I affirm that my participation in this study is completely voluntary. I understand that I may either refuse to participate or withdraw from the study at any time. I understand I will also have an opportunity to ask questions about any aspect of the study and/or my role as a participant, to discuss the role of the researcher as a senior administrator at the college where I am employed, and to discuss the possibility of any coercion regarding my participation in the project.
- H. If You Have Questions. I understand that any questions I have about the research study or specific questions should be directed to Marilyn Davis at 503-614-7555 or to Dr. Betty Duvall at 541-737-5179. If I have questions about my rights as a research participant, I should contact the IRB Coordinator at the Oregon State University Research Office, 541-737-3437 or via email at IRB@orst.edu.

My signature below indicates that I have read and understand the procedures described above and I give my informed and voluntary consent to participate in this study. I understand that the interview will be audio taped and that I may request to not have the interview taped. I further understand that I will receive a signed copy of this consent form.

Signature of Participant

Printed Name of Participant

Date Signed

APPENDIX C

PARTICIPANT INTERVIEW GUIDE

Part 1 — Learner Outcomes – Developmental Aspects

1. There were a number of different activities associated with the learner outcome project at PCC, i.e., serving on the assessment team; participating in the learner outcome training; functioning as resource person for a Subject Area Committee (SAC), working with your own SAC or other SACs to revise course content guides; writing learning outcomes for one of your courses; etc. How have you been involved with learner outcomes?
2. For each of the activities identified in question 1, please describe, in detail, your experiences.
3. If you helped a SAC develop outcomes, were instructional methodologies and content discussed as the outcomes were developed? Were syllabi or learning assignments changed?
4. Were assessment methods discussed? What was the nature of the discussion? Were changes made?
5. What other topics were discussed as the outcomes were developed?

Part 2 — Learning Outcomes – Implementation

6. Please describe your experience with using learning outcomes in the classroom.
7. From your own personal experience or from the perspective of a SAC, were changes in any aspect of teaching and learning, assessment or any aspect of professional practice evident with the incorporation of outcomes?

Professional practice is defined as activities associated with education as a profession including curricular and program planning; enhancing one's knowledge base or technical skills, adopting/adapting new

instructional methodologies or refining/improving existing instructional techniques; enhancing student and program assessment and evaluation methods; or implementing techniques to improve student learning; grading strategies; etc.

8. Student Experiences – Did you or other SAC members ask students about their experiences with outcomes?
9. Did students provide unsolicited feedback?
10. Did you find or did SAC members report any differences in how and what students learned using the outcomes format?

Part 3 — Professional Development and Impact on Professional Practice

11. What factors influence professional practice?
12. What types of professional development activities do you usually become involved with? Workshops, conferences, university classes, etc.
13. What professional activities have you been associated with in relation to teaching methodologies, innovative instructional techniques, learning how to teach, curriculum development, technology in the classroom, etc.
14. Have any of these activities had a beneficial impact on what you do in the classroom or other aspects of professional practice?
15. What has been the *most* beneficial/influential professional development activity or activities in that it had a significant impact on your own learning, how you thought about teaching/learning, curriculum development or classroom learning activities/management?
16. How did your experience with learner outcomes compare to other professional development activities you have been involved with?
17. Summary – How would you summarize your experience with learner outcomes? The SACs experience with outcomes?

18. How would you summarize the college's experience with incorporating learner outcomes? Perhaps, as compared to other college initiatives?
19. How would you characterize the overall impact, if any, on professional practice throughout the college and on faculty professional development?
20. Are there other faculty you would recommend I speak to about their experiences with learner outcomes?

APPENDIX D

DATA SUMMARY

Experience	Participant											
	1	2	3	4	5	6	7	8	9	10	11	12
Wrote outcomes	x	x	x	x	x	x	x	x	x	x	x	x
Worked with a SAC	x	x	x	x	x	x	x	x	x	x	x	
Changes Instructional Methods	x	x	x	x	x		x	x	x	x		
Content Changes	x						x		x			
Changed Syllabi	x	x	x	x	x	x	x	x	x	x	x	x
Changed Assignments	x	x	x	x	x		x	x	x	x	x	
Changed Learning Activities	x	x	x	x	x		x	x	x	x		
Assessment												
Discussed	x	x	x	x	x	x	x	x	x	x		
Changed	x	x	x	x	x		x	x	x	x	x	x
Solicited Student Feedback			x		x				x			
Unsolicited Student Feedback			x		x	x				x	x	
Most Beneficial Professional Development Activity*	E	O	E	O	O	O	L	O	L	L	L	O

*L = LOT most beneficial activity

O = Other activities more beneficial

E = LOT and other activities equally beneficial

APPENDIX E

AFFINITY GROUPS
IMPACT ON PROFESSIONAL PRACTICE

Level	Number of Participants	Experience with Outcomes Influence on Professional Practice
Level 1	2	Beneficial Experience – professional practice influenced but practices did not significantly change as a result of the experience. Wrote outcomes, changed syllabi. Practices already based on outcomes.
Level 2	4	More Beneficial Experience – greater influence on professional practice. Wrote outcomes, changed syllabi, some/limited changes in assessment or refined assessment strategies; limited changes in instruction.
Level 3	6	Very Beneficial Experience – greatest influence on professional practice. Wrote outcomes, changed syllabi, changed assessment (more formative), changed instructional methods, assignments, and learning activities.