As metrovolitan universities respond to calls for improved assessment, they must include approaches applicable to their increasing population of adult students. This article analyzes the attributes of adult students and the programs that serve them, and outlines some general principles for planning assessment and selecting strategies appropriate to this group. Examples illustrate the variety of methods, including assessment of experiential learning, that have emerged from adult and nontraditional higher education. These methods can be applied more widely by institutions seeking to develop assessment programs responsive to the full range of their students.

Appropriate Assessment Strategies for Adult Students

Assessment has always had a special place in programs for adult students. When programs geared to adults were first founded, whether as units of existing universities or as freestanding alternative institutions, they needed to establish academic credibility in order to survive and prosper. At the same time, their innovative instructional methods and curricular designs did not readily lend themselves to conventional evaluative measures. As Alexander Astin has explained, indicators of program quality in higher education traditionally relied on such input variables as high school records and test scores of entering students, quality of academic facilities, and reputation of programs among academic peers. Because many of these traditional indicators were irrelevant to programs for adult students, demands for demonstrations of quality stimulated attention to the effects of programs on student learning—to outcomes rather than to input variables.

The development of assessment methods appropriate to adult students arose not only in response to external demands for accountability but also from adult educators' desire to fashion programs responsive to the special characteristics of their students, whose complex learning careers might involve varied paths to common learning goals. Consequently, the input model that Astin criticized was never very workable in adult higher education. Because common inputs could not be assumed, an emphasis on outcomes has always been prominent in the assessment of adult learners.

The focus on outcomes in programs for adults has generated insights and practices that can contribute to the broader assessment movement in higher education. Many institutions, including metropolitan universities, are now serving increasing numbers of adults at the same time that they must respond to calls for greater attention to quality and learning outcomes. An understanding of the issues involved in the assessment of adult students has thus become a particularly timely concern.

This article will consider the special relevance to metropolitan universities of strategies for assessing adults. Broad principles for developing appropriate assessment strategies are derived from the attributes of adult students and the institutional contexts of programs that serve them. These principles are then applied to more specific issues in the selection and implementation of appropriate methods and instruments, with practical examples drawn from my own institution, State University of New York (SUNY) Empire State College, and elsewhere.

Adult Students and Metropolitan Universities

Adult students constitute an increasing segment of students enrolled in colleges and universities. Over 40 percent of students in institutions of higher education are twenty-five years of age or older, and this pattern is expected to persist over the next decade. The presence of adult students in significant numbers must be recognized as institutions face increased demands to demonstrate their effectiveness.

For metropolitan universities, assessment approaches geared to adult students are particularly relevant. A 1988 survey for the College Board by Carol Aslanian and Henry Brickell found that 85 percent of adult college students live in metropolitan areas. Metropolitan universities not only serve large numbers of adult students but also tend to enroll students who at younger ages have many of the attributes of adult students. While the most convenient definition of "adult student" refers to age, it is not simply age but life responsibilities that characterize adult students. In this broader definition, adult students are those who must balance multiple roles, including that of employee, parent, community member, and student. They attend school part time, and their patterns of attendance include part-time enrollment and periods of "stopping out" to deal with increased responsibilities in another role or to earn money to continue college studies.

As metropolitan university students, regardless of age, increasingly combine study with employment and extend their study beyond four full-time years toward the baccalaureate, the sharp distinction between traditional college students and adult students becomes blurred. These trends indicate that the attributes of adults need to be considered in the development of all comprehensive programs of assessment at metropolitan universities.

Attributes of Adult Students

Adult students differ from traditional college students in attitudes, goals, learning experiences, and learning styles. A key characteristic of adult students arises from the fact that they typically have considerably more experience as consumers of goods and services than the younger student. This experience creates a set of attitudes that shape the adult students' expectations of the institution. Keenly aware of the cost of college to them in money, time, and conflict with other obligations, they demand their money's worth in program quality and access to services. In contrast with younger students accustomed to subordinate roles in relation to authority, adult students expect institutions to treat them as capable and mature clients whose views are important to the institution.

This consumer attitude can be a source of both resistance to and support for assessment. While adult students may be reluctant to comply with assessment activities that have no relation to their own goals, they can also be valuable partners in assessment if meaningful forms of participation are made available to them. Involvement could include, for example, critiquing instruments, participating in focus groups to identify and refine assessment questions, or advising about the translation of assessment findings into program improvement. Although adult students' busy schedules will limit the number who can take such an active role, the participation of some student representatives will do much to enhance an assessment program's credibility. For all students, regardless of their involvement in developing the assessment program, a clear explanation of its contributions to their learning and goals is essential in eliciting student cooperation.

In pursuing college study, adults students have high expectations not only of the institution but of themselves. In contrast to many younger students, adults have a strong sense of urgency about the completion of their studies. Earning a degree or course credits is often tied to career goals or requirements with specific time frames. In addition, adult students who have made the decision to return to college usually wish to bring what they perceive as unfinished business in their lives to a prompt conclusion. Assessment can support goal attainment within a short time frame by providing inventories of goals or learning styles, which can assist in goal clarification or provide feedback about progress in learning.

While some generalizations are useful, it is also important to keep in mind that adult students are not a homogenous group, as K. Patricia Cross points out in her analysis of the psychological and sociological characteristics of adult students. Variations in age, role, and experience relate to differences that are significant in the learning process, including learning styles, academic self-confidence, clarity of goals, and preparation for college-level study. A fuller description of these dimensions appears in Sharan B. Merriam and Rosemary S. Caffarella's recent book *Learning in Adulthood*.

Adult students typically enter college after a hiatus in their formal education. Often, they will bring a mix of highly developed skills in current use, rusty but once proficient skills, and gaps where requisite

skills need to be developed. A returning adult student will, therefore, need a realistic assessment of academic strengths and weaknesses that reflects the individual's particular constellation of skills. This kind of assessment requires more complex methods than those used with students entering college directly from high school.

For younger students who have gone through a recent and common sequence of studies, a placement or proficiency examination yielding a single score or performance level often provides sufficient information for advisement and program assessment purposes. For adult students, assessment methods need to provide more detailed information within a general skills area such as writing or mathematics. In programs for adults, the most useful methods are those that generate not a single score but more finely differentiated information, such as a profile of skills, that identifies specific areas needing attention. In a writing assessment, for example, a profile might include competencies in specific grammar elements, word choice, organization, sequence, coherence, and other component skills.

Adult students have a strong interest not only in understanding their specific skills, but also in gaining control over their own learning processes and reactivating or developing learning skills that they can carry beyond the academic context. Assessment programs can respond most effectively to this interest by building in self-assessment strategies. The inventory of mastery skills and general knowledge provided in Empire State College's Prologue Program illustrates this approach. The Prologue inventory presents questions in eight key areas for successful college study, including information retrieval, communication, critical analysis, quantitative reasoning, and time management.

The varied profiles of adult students' skills reflect the fact that their learning careers extend over a period of time far longer than the conventional two- or four-year course of study in the traditional full-time degree program. Adult learners often change their goals over time and acquire an array of knowledge and skill that often does not follow the pattern of formal curricula, where general education precedes specialization and theory precedes application. Because adult students often gain extensive learning in the workplace and other settings, the structure and sequence of their learning often differs from that of traditional students. For example, professional or technical learning may be more fully developed than theoretical knowledge. Adult educators are, therefore, called upon to devise fine-grained methods of assessment that could accommodate the varied learning histories of adult students.

These methods, known collectively as prior learning assessment, necessarily focus on competencies that are the outcome of learning experiences, rather than on the structure, process, and content of the learning experience itself. In ascertaining a student's level of competence, prior learning assessment adopts a model of learning that can recognize multiple dimensions and varied profiles of achievement. Susan Simosko's handbook gives a valuable overview of the range of methods in use, including examinations, portfolios, and performance and product assessment. Many of these can apply to campus-based as well as noncollegiate learning.

Institutional Contexts

Assessment programs for adult students must recognize not only the variation among these students but also the variation in the institutional contexts of programs that serve them. Adult students may enroll in programs intended primarily for traditional students or they might participate in separate programs, divisions, or entire institutions that serve an adult student population. Different issues arise in carrying out assessment activities in different program contexts.

When adult students are in the minority, it is important to ensure that they are not overlooked in programs for the assessment of learning outcomes. Sensitivity to the circumstances of adult students can ensure that they are appropriately represented in assessment studies. Inclusion of adults can be improved with such simple steps as collecting assessment data at places and times when adults are available and choosing instruments whose language recognizes that not all students are full-time and residential.

Assessment in programs and institutions where adult higher education is the primary mission must carefully select a set of strategies that are both appropriate to their students and comparable to approaches used with other student populations. While these programs can usefully draw on methods characteristic of adult higher education, such as prior learning assessment, they should not be limited to these approaches. The inclusion of methods used with younger students as well can provide a richer array of possible strategies and counteract tendencies to treat programs for adults as outside the mainstream of higher education. A program for adults might, for example, use principles of prior learning assessment to devise a qualitative assessment of performance in the major and combine that approach with a standardized test of achievement. This multimethod approach would permit conclusions both about accomplishment of specific program objectives and about student performance in relation to external expectations. The following section offers more specific advice about the selection of assessment strategies that are appropriate to adult students in various program contexts.

Selecting Appropriate Methods

Several general principles can be derived from a review of the characteristics of adult students and the programs that serve them:

- choose methods that are involving and related to students' learning;
- use instruments that can reflect the complex patterns of adult learning;
- include self-assessment strategies;
- recognize the special circumstances of adult students;
- employ multiple methods.

As assessment increasingly becomes a part of the normal business of institutions serving adult students, these principles can guide the planning of an appropriate assessment strategy.

Getting started in assessment need not be a large and daunting task. Developing a thoughtful and realistic plan is an important step, but the process of planning should not be so protracted that actual assessment activities are delayed. A modest beginning that engages faculty, students, and administrators and yields tangible results can form the basis for more comprehensive work. The greatest benefits of assessment are gained with an approach that is responsive to quality concerns, grounded in the values of adult higher education, and consistent with the institution's or program's mission and goals.

In response to a SUNY initiative, Empire State College, which is a part of the SUNY system, developed a comprehensive plan that followed a few key principles: look at what you already do, see how it can be made more informative, work incrementally. For many years, the college used a method for academic program review that brought together panels of faculty reviewers who evaluated student degree portfolios using a standard protocol for content analysis. Instead of creating a new method in response to the call for intensified assessment efforts, the college decided to revise the existing protocol and augment the portfolio contents to include more

A workable assessment plan must consider how to gain support from the faculty.

samples of student work. The college also conducts surveys of students and alumni for various purposes, but these have previously been done with little connection to other assessment activities. In the upcoming round of panel reviews, the sample of students whose portfolios are evaluated will also receive a questionnaire on goal attainment and perceived

growth in self-directed learning skills. These modifications are expected to produce more useful results with the same expenditure of effort.

A workable assessment plan must consider how to gain support from the faculty who are the most directly involved. Approaches that have clear relevance to faculty have a greater likelihood of acceptance. For example, the Classroom Assessment method developed by K. Patricia Cross and Thomas Angelo offers techniques that can have immediate impact on the learning process and teaching effectiveness. Diana Kelly of Fullerton College used Classroom Assessment with part-time faculty teaching adult students. Both faculty and students responded favorably, with faculty reporting an improved sense of students' progress and greater capacity to modify instructional approaches in response to student feedback, and students indicating increased involvement and more effective learning.

In selecting specific instruments, it is important to bear in mind that many standardized instruments for the assessment of college students assume a traditional student body and campus experience. Norm-referenced tests are often standardized using only students in their late teens to early or middle twenties, making the interpretation of scores of adult students problematic. Careful scrutiny of test manuals or queries to test publishers can establish the applicability of a norm-referenced test to an adult student population. Another approach in selecting a standardized instrument is to opt for a criterion-referenced test, in which scores are

interpreted in relation to a standard of mastery rather than to comparison groups of individuals with comparable demographic characteristics.

Using the latter approach, Empire State College chose the Academic Profile, published by Educational Testing Service, as one instrument in the evaluation of a program enrolling both recent high school graduates and older students. The test was well accepted by both younger and older students, and the criterion-referenced scores provided all students feedback about their level of proficiency in college skills and knowledge areas that was useful both for individual advisement and program evaluation.

The language of standardized tests may also be predicated on a traditional residential campus experience. Therefore, many items do not elicit meaningful responses from adult students who are part-time, commuters, enrolled in evening or off-campus divisions, and have major life responsibilities outside the student role. An examination of a specimen of the instrument under consideration can indicate whether items use language appropriate to the adult students circumstances, location, and means of learning. In some areas, especially those related to student personal development, the best course may be to develop an instrument specifically geared to adults. For example, the problem of inappropriate or irrelevant items in existing measures of college students' goals led Empire State College faculty member Judith Gerardi to develop the Adult Learner Goals Inventory.

Assessment instruments also vary widely in their demands on students' time. Adult students usually limit their time on campus to class meetings, conferences with advisors, sessions in the library or other facilities, and other scheduled, task-related activities. Time constraints make it difficult for them to accommodate requests or requirements for participation in lengthy testing or other data-gathering sessions. These constraints make measures that are embedded in classes, assignments, or other activities integral to the student's program particularly attractive. Cross and Angelo's Classroom Assessment techniques and the course-embedded strategy outlined in D. W. Farmer's

book provide helpful models.

Assessment of adult students can make effective use of data and materials that are collected for other purposes. Especially appealing are approaches that combine instructional innovations with assessment. A project conducted by Anne Bertholf of Empire State College illustrates this strategy. Adult students who displayed writing problems were systematically tracked to examine the relation between participation in academic support activities and outcomes such as retention and improvement in writing skills. The tracking system relied largely on information routinely entered in students' records. Discussion of the results led writing faculty to develop an approach in which a writing journal and self-assessment instruments were used to enhance students' ability to meet the writing demands of the college's independent study mode of instruction. The dynamic interplay of assessment and practice in this case brought clear benefits to students and faculty.

The emphasis in adult higher education on the development of skills in self-directed learning has led to experimentation with self-assessment

instruments that ask students to reflect on their intellectual skills and learning processes. Also useful are instruments that provide students with feedback about their performance. The array of methods described in this section indicates that there is no single best way to do assessment. Choices must be made on the basis of program goals, student characteristics, institutional contexts, and concerns about quality.

Conclusions

The methods and insights of adult educators have the potential, as yet largely untapped, to contribute to the assessment movement. Programs for adults grew out of student-centered and client-oriented principles that proponents of assessment and quality management now advocate for all institutions of higher education.

Although adult students and programs geared to their needs have thus far had relatively little visibility in the assessment movement, there are some efforts under way to support improved assessment for this population and to share these approaches with a wider audience. The American Association of Higher Education (AAHE) Assessment Forum has provided opportunities for informal meetings of individuals interested in the assessment of adult students. The newsletter *Adult Assessment Forum*, first published in 1991, presents articles on issues of policy and practice in this area. The Practitioner Research Program of the National Center on Adult Learning has provided small grants for projects that link assessment activities with the learning process. The studies by Kelly and Bertholf cited above were supported by this program.

Recent calls for more authentic assessment methods that evaluate students in real-life contexts have a familiar ring to adult educators, involved in the assessment of adults' prior college-level learning that may occur in many settings, both academic and nonacademic. The principles and practice of prior learning assessment can offer valuable insights and ideas for the assessment of instructional and institutional effectiveness. This form of assessment calls for the same judgments that are needed to evaluate classroom-based learning. Faculty evaluators must define criteria for effective performance, develop statements of learning outcomes, set standards of achievement, and match assessment method to the content area and student goals.

The assessment of adult students presents some special concerns. Consequently, assessment models and methods drawn from programs for traditional students cannot be assumed to have instant applicability to adults. However, the interaction of adult educators and the wider assessment community presents opportunities as well. The judicious transfer of insights and effective methods from programs for adults to more traditional programs and vice versa can strengthen the assessment initiative in higher education as a whole.

Note

Information about the newsletter *Adult Assessment Forum* is available from Robert Gambles, Production Editor, Adult Assessment Forum, 4615 E. Elwood Street, P.O. Box 52069, Phoenix AZ 85072-2069. Guidelines and other information about the Practitioner Research Program of the National Center on Adult Learning is available from Timothy Lehmann, SUNY Empire State College, One Union Avenue, Saratoga Springs, New York 12866. Information on other assessment activities at Empire State College is available from the author at the same address.

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