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A CASE STUDY OF A SELF-ASSESSMENT PROCESS
FOR ADULT UNDERGRADUATES

A Dissertation Presented

by

RUTH F. HOOKE

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

September 1988

School of Education

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A CASE STUDY OF A SELF-ASSESSMENT PROCESS
FOR ADULT UNDERGRADUATES

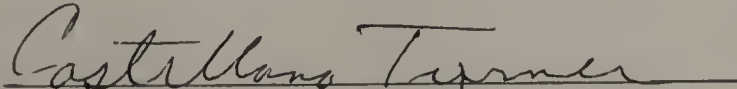
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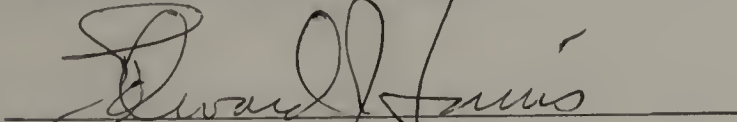
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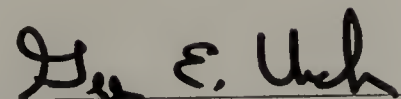
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ABSTRACT

A CASE STUDY OF A SELF-ASSESSMENT PROCESS

FOR ADULT LEARNERS

SEPTEMBER 1988

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Despite the growing number of undergraduates over the age of 25 in America's colleges and universities, there is little attention to their needs, competencies and experience in the recent literature on outcomes assessment in higher education. Both the theory and practice of outcomes assessment tend to be geared toward the traditional age student.

This exploratory case study was undertaken to answer two research questions: What are the characteristics of an appropriate self-assessment process for adult learners? Can a procedure be developed that embodies these characteristics and is feasible within an adult degree program? Drawing from the insights of adult development theory and general assessment literature, six characteristics of such a process were identified: 1) Uses open-ended questions;

2) Explores connections between cognitive and affective learning; 3) Allows time for reflection and integration; 4) Is accomplished in a supportive group; 5) Serves the learner; 6) Serves the institution. A process with these characteristics was implemented with a group of adult learners in a course in the University Without Walls program at the University of Massachusetts at Amherst. An open-ended questionnaire, first discussed in class sessions and then answered in writing at home, allowed participants to describe their educational gains and to evaluate the program in which they had participated. The case study uses qualitative methods of data presentation and analysis, drawing on transcripts of class discussions, on the written answers, and on observation notes made by the facilitator/researcher.

The results show that a procedure with these characteristics is feasible within an adult degree program. The learners demonstrate their ability to be reflective about their learning outcomes and to make connections between cognitive and affective learning. In a post-assessment questionnaire they note positively the opportunity for self-assessment in a group setting which allowed ample time. The feedback they give is of potential value to the program in which they participate.

The conclusions of the study indicate that a procedure with these six characteristics has potential for use within other adult degree programs and possibly also for use with traditional age undergraduates.

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C H A P T E R I

STATEMENT OF PROBLEM

Two out of every five college undergraduates are over the age of 25. This is one of four startling statistics with which the National Institute of Education begins its 1984 report on the conditions of excellence in American higher education. This statistic is given, along with others about the number of female, minority, and part-time students, to indicate the tremendous diversity of today's undergraduates (National Institute of Education [NIE], 1984, p. 5).

A decrease in the absolute numbers of traditional-age college students partly accounts for the increasing proportions of adult students, but the numbers of adults are increasing as well. The number of women undergraduates between the ages of 25 and 34 almost tripled between 1972 and 1984, while the number of women students 35 and over more than doubled (1986 Statistical Abstract).

College attendance patterns have also changed. One in every three college freshmen has delayed entry to college after high school, more than two in five undergraduates attend college part time, and over half of the bachelor's degree recipients take more than the traditional four years to complete the degree (NIE, 1984,

p. 7). Increasing numbers of students have had experience in the work world, continue to work while attending school, live off campus in their own establishments, have started their families, and are, in these and other ways, fulfilling adult roles in our society.

Despite these statistical and social realities, however, adult students are rarely mentioned in the national studies and reports of the 1980s on the conditions and prospects for higher education and in the growing literature on educational assessment. The literature and public debate about higher education continue to portray undergraduates as if they were all 18 to 22, living in dormitories, and making the transition from high school.

The failure to consider the adult status of growing numbers of undergraduates is even more significant when one realizes the importance of these national reports to the American educational world in the 1980s. Although the first national report on the status of contemporary American education focused primarily on primary and secondary education, subsequent reports on higher education have been produced by such prestigious bodies as the Association of American Colleges (1985), the National Endowment for the Humanities (1984), the National Institute of Education (1984), the American Association of State Colleges and Universities (1984), and the Carnegie Foundation for the Advancement of Teaching (1987). Such groups have enormous influence on the policies and practices that affect the lives of millions of students. With few exceptions,

these reports portray undergraduates in their traditional mode, namely as 18-22-year-old youths.

For instance, William Bennett, in the National Endowment for the Humanities report, To Reclaim a Legacy, starts off by questioning "whether today's colleges and universities are offering America's youth an education worthy of our heritage" (Bennett, 1984, p. ii, emphasis added). The National Institute of Education report, Involvement in Learning, tells students to get involved in campus clubs and activities and to work no more than 15-20 hours a week, advice obviously intended for younger students (NIE, 1984, p. 78).

Another related educational development makes the same mistake. Arising from a national concern for accountability and educational excellence raised in the reports mentioned above, the federal government, most state governments, and hundreds of institutions have launched assessment efforts -- efforts to discover what students have actually learned as a result of their college experience. The assessment movement has already made an impact on American higher education and will continue to do so (Ewell, 1987). In the movement to data, however, there has been an almost total lack of attention to adult learners.

The movement itself is complex; Marchese (1987) lists six different approaches to it: (1) The Assessment Center approach involves observing competencies to do a task. (2) Assessment as Learning checks developing competencies as an on-going part of teaching and learning. (3) Assessment as Program Monitoring uses

multiple measures of learning, repeated over time, aimed at giving feedback to a program. (4) Assessing Student Learning and Growth emphasizes changes in skills, attitudes, values, motivation. (5) Assessment as Standardized Testing measures a sample of behavior, under controlled conditions. (6) The Senior Examiner uses outside examiners to verify the knowledge and abilities of senior undergraduates (pp. 4-6). However, across the diverse nature of this movement, Marchese finds the following underlying assumptions in assessment: the emphasis on learning as a key indicator of quality, the emphasis on expert judgment, the use of multiple methods, the emphasis on improvement of performance, the need for feedback, and the importance of developing in students the abilities and habits of self-assessment (p. 7). This latter emphasis is close to the concerns of this study.

There has been a recent wave of literature on assessment in higher education and yet adult learners are rarely mentioned, whether the focus is on theory or practice. The students who are to be assessed are seen as young people and the methods used for their assessment are those which are appropriate to that age group. In spite of the reminders of age diversity in the national reports on higher education, and in spite of the dramatic demographic trends, there is little discussion of the special needs and concerns of the adult learner.

For example, both Northeast Missouri State University (1984) and Alverno College (1985) offer very thorough descriptions of their

successful assessment programs. Yet neither mentions the adult status of some of their learners as a factor to be considered, despite the fact that Alverno has a weekend college for adults and NMSU, as a state university, probably has many students over 25; the age of their students is not mentioned in either report. In the five comprehensive papers prepared for the National Conference on Assessment in October 1985, sponsored by the American Association of Higher Education and the U.S. Department of Education, there appears to be only one mention of adult learners (U.S. Department of Education, 1985). In the general literature on assessment and in the descriptions of specific institutional programs also found in the literature, the implications for practice with adults of assessment theories and methods are not spelled out and the competencies and needs of adults are not considered in the design of outcomes measures for undergraduates.

It is the premise of this study, however, that there is a need to consider the adult status of many learners in designing assessment programs. There are many reasons for this premise. The first concerns the educational and life situations of undergraduates 25 years old and older. It is possible to generalize that they have made a break in their education somewhere, either after high school or after some part of college, perhaps several times. They are probably no longer living with their parents, nor dependent financially on them. Consequently, they are either working to support themselves or they are women supported by husbands or by the welfare

system. They may have considerable experience in the work world, perhaps at a professional level. Finally, they have made a conscious choice to return to school, despite the complexity of their lives. For all these reasons, their experience of higher education will be different than that of traditionally aged students. This difference in experience means that both educational goals and outcomes will tend to be different for adult learners and points to the need for different modes of assessment.

A second reason why the adult status of these learners needs to be considered is that they may have a significantly different level of maturity. For instance, Joseph (1978), in an article which argues that institutions need to adapt to adult learners, mentions the need for schools to provide "a level of maturity, in content and style, of required experiences commensurate with the expectations of a sophisticated adult audience" and describes such learners as having "the possibility of assuming personal responsibility and initiative for (their) education" (p. 12). Both the request for more mature educational experiences for adults and the possibility of their taking a greater share of responsibility point to adult-oriented assessment modes.

Third, the fact that adult learners have lived longer and have, in all probability, undertaken at least some important life tasks means that they may be further along in any one or perhaps several of the stages of adult development. Adult development will be discussed in the literature review, but here it is important to note

that adult students are likely to experience education differently from students who are less advanced on the developmental scale; they will even understand its purpose differently (Weathersby, 1981). Such a difference suggests a need for assessment which is adult-referenced in means as well as in goals.

These arguments suggest that the adult status of all older learners should be considered in planning assessment programs. This ideal may be difficult to realize, however, when adult learners are incorporated into regular college or university programs and not set apart by specific services, programs or curricula. On the other hand, when adult learners are set apart in any of these ways, as they are in a number of academic programs across the country, it becomes both possible and appropriate to design assessment programs which recognize their status.

This dissertation is designed to contribute to the knowledge and practice of assessment by presenting a model of an outcomes assessment program for use with adult undergraduates. It takes the position that, among the many possible ways of assessing educational outcomes, one of the most appropriate for adults is that of self-assessment. This is based on the following considerations.

The word "assess" comes from the Latin "assidere," meaning "to sit by, especially of judges in a court," and it originally meant "to fix or determine the rate or amount of," particularly in relation to taxation; that is, it meant to determine the worth or value of something so that the proper tax could be levied. Of the

many meanings listed in Webster's Second International Dictionary (1959), only #4 comes close to the way in which the word is used in this dissertation; it gives as a meaning of "assess":

"Figuratively, to appraise, evaluate." A search for the meaning of "evaluate" leads to the word "value," a word with multiple meanings. The meanings most relevant to the concerns of this dissertation are: #5 - "Relevant worth, importance, or utility; degree of excellence or usefulness," and #4 - "The quality or fact of being worth while, excellent, useful, or desirable."

It is these two meanings of "value" (and, by association, "assessment") which come closest to the way in which the latter word is used in this dissertation. Here assessment is used to mean determining the worth, importance, utility, or degree of excellence of a given educational experience; moreover, since we are talking about a learner's self-assessment, it is used to mean a determination of these qualities from the learner's point of view. Further, although the words "worth," "importance," and "utility" imply a self reference (that is, for instance, worth to the individual), "degree of excellence" implies an other reference (that is, excellence according to some other criterion than simply worth to the individual). In either case, whether self-referenced or other-referenced, the self-assessment described in this study will focus on a look by individual learners at their educational experience with an eye to determining what about that experience proved to be of worth, importance, utility, or excellence to the learners and

what about it might be changed to make it more so. Thus, the self-assessment will contain both a look inward at the self and a look outward at the program. Moreover, the categories and terms used to describe this worth will not be predetermined by an outside assessor but will instead be chosen by the learners themselves.

This definition is in contrast with other definitions of assessment and self-assessment in higher education today. For instance, Hartle (1985) quotes (and calls "good") MacKinnon's definition (1975) of the traditional meaning of assessment:

. . . assessment is a method for the psychological evaluation of individuals that involves testing and observing individuals in a group setting, with a multiplicity of tests and procedures, by a number of staff members. Through a pooling of test scores and subjective impressions, the assessors formulate psychodynamic descriptions of the assessees' behavior in certain kinds of roles and situations (p. 2).

Hartle underscores the implications here by stating that "A true assessment would focus on the individual learner" (as opposed to a class or group); in this way his thinking is close to the usage in this study. On the other hand, both in this definition and in Hartle's subsequent description of the six ways in which assessment is used in higher education today, the roles of assessor and assessee are clearly defined: the assessor sets the categories and the assessee is judged by them.

Moreover, this essential relationship of assessor to assessee obtains even in systems like that of Alverno College, in which much emphasis is placed on "self-assessment." According to its statement, Assessment at Alverno College (1985), self-assessment

"includes understanding of what she (the learner) achieves, how she achieves, why she did what she did, and what she might yet do" (p. 13). However, upon closer observation, it becomes apparent that the self-assessment described here is the internalization by the individual of the "eight general abilities" which the Alverno faculty has agreed upon and the ability to determine which of four levels of competence one has achieved. The ultimate criteria for judgment still originate outside the learner, however much she may internalize and agree with them. Although there is obviously much of value in the Alverno approach and although it clearly prizes and promotes assessment by the self, that assessment is still within the framework of others' criteria and thus contrasts with the definition in this study.

However, the possibility of self-assessment by one's own criteria and/or with the self as the ultimate judge of worth is not entirely absent from higher education literature. It is found in works by those writers who use adult development theory to inform their understanding of the educational process. This theory espouses the idea that adults pass through identifiable stages as they mature and that each stage provides a more complex understanding of themselves and of the world around them.

For instance, Chickering (1977) presents a developmental picture of evaluation. According to Chickering, at the highest levels of development, although there should be an evaluative input from "teacher, peers, system, and self," the self is "the final judge."

Chickering also suggests that the ability to evaluate is the highest intellectual achievement, characteristic of those who have reached the "Integrated" stage and have developed "personally generated insight about self and nature of life" and "increasing capacity to manage own destiny" (pp. 90-91). The implication is that there is a correlation between the learner's development of these capacities and the ability to be the final judge of her own achievement.

Moreover, Chickering is not alone in this kind of thinking. He states that he:

. . . draws on materials developed by Harold Lasker and his associates for use with and by adults at the Harvard Graduate School of Education, on observations by Jack Noonan at Virginia Commonwealth University, and on my own research and experience (1969, 1973, 1974). The relationships also are consistent with other substantial bodies of research and theory (p. 89).

Thus, there is an indication, at least among those who take a developmental view of education, that learners can grow in their ability to evaluate themselves in a meaningful way and can become adequate or perhaps excellent assessors of their own learning experience. Therefore it would follow that an appropriate form of assessment for adult learners, especially at the end of an educational process, is the kind of self-assessment being defined here: the determination of the worth, importance, utility, or degree of excellence of a given educational process to the individual, using the categories of meaning most appropriate to that person.

This study draws on the insights of adult development theory to determine the characteristics of adult learners that are most relevant both to the way in which a self-assessment process for adults should be carried out and to the content of such assessment. Using this information and insights from assessment literature, the study describes the characteristics of an appropriate self-assessment process for adult undergraduates completing a higher education program. The word "appropriate" is used here and throughout this work to describe a process that takes into account the experience, needs, and abilities of adult learners in its means and its goals; the process is appropriate to adults both because it meets their need for mature understanding of their learning and because it draws on their ability to assess their own learning in a meaningful way.

A case study is then used to test these characteristics in an outcomes assessment exercise with a group of adult learners. Data from the exercise is analyzed with the intention of affirming, modifying, or deleting aspects of the characteristics or process. Although the study findings cannot be generalized beyond the group of learners involved in the exercise (or learners from the same adult degree program), many findings and insights should be of interest and value to other practitioners, either in the assessment field or in adult higher education.

C H A P T E R I I

STUDY DESIGN AND METHOD

Introduction

This study examines the theory and practice of assessment in higher education with a special focus on self-assessment of adult students. The purpose is to determine the characteristics of an appropriate self-assessment process for adult learners through examining relevant literature in adult development theory and assessment theory and practice, to describe a case study in which a procedure with these characteristics was tried out with a group of adults who were completing a higher education program, and to analyze the data collected from this exercise.

The problem to be examined is summarized in two research questions: (1) What are the characteristics of an appropriate self-assessment process for adult undergraduates? (2) Can a procedure be developed that embodies these characteristics and is feasible within the confines of an adult degree program?

Study Design

To answer the research questions, a three-step research design was employed. Step 1 involved the preliminary identification of the characteristics of an appropriate self-assessment process for adult undergraduates. These characteristics were drawn from the insights and implications of two bodies of literature: adult development theory and recent writings about assessment in higher education.

The second step of the study involved an exercise in self-assessment carried out with adult learners in a regularly scheduled university course, the Integrative Seminar of the Inquiry Without Walls program of the University of Massachusetts at Amherst, during the spring semester 1987. This researcher was the course instructor. The exercise took place during the first seven sessions of the course. Data were collected in the form of written responses to a questionnaire, tape recordings of class discussions of the same questions, written observations made by the instructor following class sessions, and written responses to a post-exercise questionnaire. In the third step, the results were analyzed to answer the two research questions.

The overall design of this study is that of an exploratory case study. According to Yin (1984), the focus on a "what" question, in this case "What are the characteristics of an appropriate self-assessment process for adult learners?", is a "justifiable rationale for conducting an exploratory case study," the goal of which is "to develop pertinent hypotheses and propositions for further inquiry"

(p. 17). Given the facts that: a) little has been written about self-assessment for adult learners; b) few, if any, procedures have been designed with the special needs and interests of adults in mind; c) these characteristics are suggested by the literature rather than being prescribed by it; and d) the characteristics are drawn from two different fields which are not ordinarily joined together, an exploratory case study is justified.

Moreover, the use of the case study method was further warranted because it fulfilled two other conditions which Yin (1984) says are important in a case study. One is that it examined "contemporary events" (p. 19); the events in this case were the learners' presently unfolding assessments of their learning experience. The other is that "relevant behaviors cannot be manipulated" (p. 19). In this case study, there were no pre-tests which would have allowed for post-tests and the subject matter of the questions was learners' self-assessment of their own learning outcomes, which could not be manipulated.

Qualitative research methodology was employed. The methods for data collection followed the four "elements" of collecting qualitative data, as outlined by Patton (1980). Drawing on Lofland's (1971) work, Patton describes these elements as:

- 1) getting close enough to the people and situation studied to be able to understand what is going on;
- 2) capturing what is actually taking place and what people are actually saying;

- 3) giving a description of people, activities, interactions;
and
- 4) using direct quotations from people, both spoken and
written (p. 36).

The first element was fulfilled in that this researcher was instructor of the course and thus in close touch with all members of the group studied during the seven weeks of data collection. Tape recording of class sessions and collection of written answers to two different questionnaires fulfilled the second element. Class notes made right after the session met the requirement of the third element and, finally, direct quotations from both oral and written comments are used throughout the data presentation.

Study Setting

The setting for the study was a course within the framework of the Inquiry Without Walls (IWW) program. IWW is a subset of the University Without Walls (UWW), an undergraduate degree program for returning adults at the University of Massachusetts (UMass). UMass, the major state university of Massachusetts, has about 19,000 undergraduates and 6,000 graduate students and is located in Amherst. The University Without Walls, in operation since 1971, has about 300 undergraduate adult students located in three learning centers around the state, of which the largest group is centered in Amherst, the site of this study.

The Inquiry Without Walls portion of the University Without Walls was designed for adults with little or no previous college experience; its major focus is on general education. IWW grew out of a collaboration between UWW and the Inquiry Program (IP); the latter offers to mostly traditional age students an alternative means of fulfilling the University's general education requirements. Following the IP model, the IWW required curriculum is comprised of an introductory general education course, three "modes of inquiry" courses (one each in humanities, social science, and science), and a final Integrative Seminar (site of the exercise in the study), and a "celebration evaluation," at which the learner meets with a faculty committee to ascertain her completion of the general education requirement. The whole IWW process takes about two years, during which time the learner meets with an advisor to design a supplementary educational program made up of university general education courses, independent studies, and beginning work in the academic area of concentration, the latter being equivalent to the major. The purpose of the Integrative Seminar is to bring this series of educational experiences into an integrated whole so that the learner will both experience a sense of completion, while at the same time fulfilling a requirement, and also be able to proceed with a strong base into the chosen area of concentration. During the seminar, the learner prepares a "celebration evaluation portfolio," which includes written evaluation of herself and the program. The site of the exercise in this study was the Integrative Seminar held during the spring semester 1987.

Study Population

The exercise in self-assessment conducted as part of this study involved twelve undergraduate adult students, 9 from IWW and 3 from IP. Adult students are considered here to be either those 25 years of age or older or those who have taken a significant break from school at some point in their educational career. Ten of the group fit both definitions; two fit the latter. The choice of the group was based on the following:

- 1) They represent a cross section of learners in the IWW and IP programs; they were not specifically selected for the purposes of the study. They were the ones who were programmatically ready for the seminar at this time.

- 2) In common with Integrative Seminar participants in other semesters, they had recently completed the general education portion of their undergraduate education.

- 3) In common with other IWW and IP students, they had (a) an individual advisor, and (b) input in planning their own course of study.

- 4) In common with other adult learners anywhere, they had the advantage of life and work experience.

Since the members of the group had much in common with other adult learners in the program of which they were a part and also with other adult learners, they appeared to be an appropriate group for the adult self-assessment process in the exercise.

In the data presentation and analysis which follows in Chapters IV and V, the 12 learners in the seminar will frequently be quoted. However, to preserve confidentiality, they will be referred to by pseudonyms. Since knowledge of their age, sex, ethnic background, academic interests, and present work situation will provide a context for their answers to the questions in the study, a short description of each learner by pseudonym is given here.

The Learners

Geneva is a 50-year-old white woman who works as a receptionist and bookkeeper in a home for the elderly. She had held a variety of part-time human service jobs, most related to the elderly, previous to her present position. At the time of the case study, she was in the process of divorce proceedings with her husband of 27 years, a top executive in a large and prestigious insurance company. She has a married daughter and grown son. Her area of concentration in UWW is Gerontological Counseling.

Eve is a 59-year-old white woman who works as a nurse in a student infirmary in a nearby college for women. She had spent most of her adult life as a nurse, working part-time while her four children were growing up, most recently at a nursing facility for the elderly. She is married to an oral surgeon; her children are now in their 20s and her eldest daughter was married during the period of the study. She is studying Women and Society.

Joan is a 27-year-old white female who is presently working full time as a student. She worked in a variety of office jobs in

state agencies before beginning college at the age of 23. She is one of the three Inquiry Program students in the case study and is currently a senior in Social Thought and Political Economy major. She lives with a male partner in university housing.

Rob, the only male in the case study, is a 51-year-old white male, currently employed as the plant manager in a utility plant. He holds a number of licenses in utility plant engineering and related trades and has worked his way up the ladder in the utility business after holding a number of factory and semi-skilled jobs. He is married and has five children, only the youngest of whom, a boy of 15, lives at home. His area of concentration is Utility Plant Management.

Carla is a 46-year-old Puerto Rican woman who lists her present occupation as "housewife and full-time student." She is married to a Costa Rican businessman, now a graduate student; they have four children ranging in age from 7 to 21. She also does some catering on a part-time basis. Mastering English has been difficult for her, especially since she had only minimal formal education in Puerto Rico. She is studying Hotel, Restaurant, and Travel Management.

Mary is a 33-year-old white female who lists her occupations as "midwife-healer - waitress." She has traveled widely and lived abroad for a good part of her adult life. She is married to a musician and she became the foster mother of a one-year-old boy during the time of the case study. Her area of concentration is Botany and Herbal Healing.

Sara is a 24-year-old white female currently supporting herself as a student by doing housecleaning. The previous year, she had run her own business as a landscaper, and before than she had worked as a waitress. She is single. As one of the three learners in the study who are in the Inquiry Program, she is majoring in anthropology.

Rachel is a 23-year-old white female currently working part-time as a waitress while being a full-time student. She has previously worked in a bagel deli. Also a member of the Inquiry Program, she is studying English with an emphasis on creative writing. She is single.

Fatima is a 30-year-old black female from a West African country. She lists her present occupation as "Adult Educator - Women's Programme Office," although she was on leave from that position during the time of the case study. She is married and has two young children. Her area of concentration is Adult Non-Formal Education.

Sandy is a 45-year-old white female who works as a clerical assistant in one of the university departments. Previously, she had held similar positions in other university departments. She is divorced, the single parent of four teen-age children. Her area of concentration is Archaeology and Writing.

Kate is a 32-year-old Native American female who is a full-time student. She also works as an artist and has shown some of her work professionally. She is the divorced mother of a 7-year-old son. Her area of concentration is Native American Art.

Martha is a 62-year-old white female who works as a secretary in a state education agency. She is married to a retired minister and the couple have a mentally handicapped adopted son. She has held a variety of volunteer positions in the human service and youth leadership field. Her area of concentration is Creative Writing for Children.

In summary, there were 12 participants in the case study, 11 females and one male. All of them participated in every part of the study.

Instruments

The study required the development of two instruments. The first was developed from a list of characteristics of an appropriate self-assessment procedure for adult learners. The characteristics were identified, defined, and elaborated from the relevant literature in adult development theory and the literature on higher education assessment, especially outcomes assessment. This procedure was necessary because there is little, if any, theoretical material which describes directly an appropriate self-assessment process for adult learners. Thus, the characteristics had to be derived by indirection and implication from these two bodies of literature.

From these two sources there is evidence that an appropriate self-assessment process for adults is one that is or does the

following (abbreviations of the characteristic are given after each, for identification purposes later on):

- 1) Uses open-ended questions (open-ended).
- 2) Explores connections between cognitive and affective growth (cognitive/affective).
- 3) Allows time for reflection and integration (time).
- 4) Is accomplished in a supportive group of peers (group).
- 5) Serves the learner (serves learner).
- 6) Meets institutional needs (serves institution).

Fuller descriptions of these characteristics and the relevant literature from which they were drawn will be provided in Chapter III.

From these characteristics, a self-assessment questionnaire, Instrument 1, was developed, which forms the basis of the case study. Instrument 1 includes the following questions:

- 1) What stands out for you as you think back on your college education? What surprised you about it?
- 2) What changes have you noticed in yourself as a result of your educational experience? What changes do you notice in relation to your job? Your family? Your community? Your future plans? Your ability to think and to communicate?
- 3) What particular learnings or experiences in IWW/UWW were most important in creating these changes? Describe in detail at least one experience and its effects on you.

- 4) What would you change about IWW/UWW if you could? What would you change about the university?
- 5) What would you change in your educational program? What would you have done differently? Why?
- 6) What do you think is the purpose of a college education? Have you changed your views on this since entering the program?

In this group of questions, number 1 was designed to be as open-ended as possible, in order to reflect the first characteristic (open-ended). Numbers 2 and 3 were designed to assess the connections between affective and cognitive learning and thus relate to characteristic 2. Numbers 4, 5, and 6 were designed to meet the need of the institution for feedback and thus speak to characteristic 6 (serves institution). The six questions were submitted to the participants over a period of six weeks in order to satisfy the requirements of characteristic 2 (time), and were discussed by the entire group to allow for characteristic 4 (group).

The second instrument used in the study, Instrument 2, is a written questionnaire which asked students to evaluate the self-assessment process after the initial questionnaire was completed. It was developed by the researcher and reads as follows:

- 1) Did this self-assessment questionnaire help you? How?
- 2) Was there enough time to think about the issues? Too much?
- 3) Was the group process valuable? In what ways?

- 4) Would you recommend this process to the next group of students? Why or why not?

This instrument also relates to the characteristics of an appropriate self-assessment process for adult learners. Question 1 directly addressed the characteristic of service to the learner, while question 4 addresses it indirectly. Question 2 raises the time question from the perspective of the learners and question 3 does the same in relation to the group process. Thus, the two instruments are both related to the characteristics of an appropriate self-assessment process for adult learners and all the characteristics are addressed. Data from both the instruments allow for analysis of the characteristics of an appropriate self-assessment process for adult learners.

Procedures for Data Collection and Data Treatment

The exercise in self-assessment took place within the framework of a regularly scheduled four-credit university course. The course met weekly for two and one half hours. The self assessment process was designed to be the major focus of the first half of the semester, namely for seven sessions; about half of each session was devoted to this project.

During the first session of the course, the full procedure was carefully explained to the participants. They were invited to become participants in a research project and their written permission was sought. After it was obtained, the first question

was given and the members were encouraged to think about it for the next week's class. During the following week's class, the first question was discussed by the group and the second question was asked, to be thought about during the week, and so on through six weeks and six questions. In addition, the class was divided into six sets of partners, designated "peer-pairs"; each member of a pair took notes of the other's spoken answers to the question and gave the notes to the partner at the end of the class. Class members were asked to write a two-page written answer to the question discussed that week, using the partner's notes as a starting point; these papers were submitted the following week.

At the beginning of each class, the question given out the previous week was presented for discussion by the facilitator without further comment; the facilitator intervened as little as possible, just enough to clarify some of the statements. Plenty of time was allowed for response and silence was not interrupted. An attempt was made to provide an unhurried and accepting atmosphere. When it seemed that most participants had said what they wanted to say, the facilitator called on those who hadn't spoken (usually just one or two members) to see if they had anything further to add. Counting time for directions, for asking and answering the six questions on Instrument 1, and for a final evaluation and discussion of the assessment process, the whole procedure took between seven and eight hours of class time.

This amount of time was given to the procedure for several reasons. First, it allowed the participants time for reflection and integration, in keeping with one of the characteristics of an appropriate self-assessment process for adult learners. Second, it produced a more complete set of data, since all members, even quiet ones, had a chance to speak in class and all had a second opportunity to answer the questions in writing at home. Third, it may have produced a more accurate set of data, since participants were not pressed for quick answers, which might have been superficial.

The final procedure involved recording observations immediately after each class session. The facilitator/researcher's observations included material about seating arrangements, the apparent mood of the class, the responsiveness to the question at hand, attendance, unusual events, points stressed by the learners, and any other observations which seemed relevant to the focus of the case study. These observations were labeled "class notes."

All written answers to the questions on Instrument 1 were collected and copied in duplicate; the originals were returned to the writer. One copy of the learner's answers to all the questions was filed in a folder marked with that person's name; another copy of each answer was placed in a file according to the number of the question being answered. The file by learner was kept whole in order to provide an easy reference to the context and origin of the comments, whereas the other set of answers was coded by student

initial, page and paragraph so that sections to be used as data in answering the research questions could easily be identified.

Each class discussion was tape-recorded and the tapes were transcribed. Transcriptions for each question were added to the question files. Another copy of the transcription of each question was kept whole for easy reference to the context of the remarks. In the set filed by question, each speaker was identified, as well as the question number and the page and paragraph numbers, so that sections used in answering the research questions could be easily identified. This also made possible accurate reference to the context and origin of remarks. The transcriptions were not broken into sections and placed in the individual learner's file, partly because there was already a complete set of written answers to each question in that file and partly because the labeling of each learner's contribution on the complete transcript made possible references to the origin of the remarks. The class notes were also copied so that one copy could be kept in its entirety for easy reference to context, while the other was cut up as sections were relevant to answering the research questions.

The written answers to the post-assessment questionnaire (Instrument 2) were collected but not copied. Since this was a one-page questionnaire and the answers were relatively short and easily re-read, the pages were kept intact but were used in conjunction with the student and question files. A final piece of data was the transcribed class evaluation of the assessment process, which took

place on 4/2/87 after the process had been completed; one copy of this was kept intact and the other was available to be cut into relevant sections in answering the research questions.

In preparation for answering the research questions, a file was made for each of the six characteristics in the first question and an additional file was made for the second research question. Relevant passages of data were placed in each of these files and arranged within the file according to emerging themes.

Data Analysis and Presentation

In analyzing and present the data, all sources are used, including transcriptions of the class discussions, the learners' written answers to the questions in Instrument 1, the class notes, and the written answers to Instrument 2. Each characteristic of an appropriate self-assessment process for adult learners is analyzed separately by examining the learner files, the question files, the Instrument 2 responses, and the class notes. The entire body of data was read with that characteristic in mind. After the data for each characteristic are analyzed, an analysis of the whole set is made to see if it is appropriate as a whole or whether any characteristics needed to be added. Finally, the process as a whole is re-analyzed to answer questions about the feasibility of the procedure. Here the categories of analysis are the feasibility of: (a) the procedure as a whole and of each instrument; (b) the time dimension; (c) the group setting; and (d) the leadership provided by

the facilitator. The material in Chapter IV was analyzed to examine the feasibility of the entire exercise. For the feasibility of the instruments, the time, and the group setting, the major sources of data are written answers to Instrument 2, the transcribed class evaluation of 4/2/87, and the class notes. Class notes are the major source of data for the analysis of leadership.

The data presentation in Chapter IV is organized by characteristic; the data presentation in Chapter V is organized by the analytical categories listed above. Wherever possible, the actual words of the source are used, whether the source is spoken remarks, written comments, or class notes. In this way, both the data collection and the data presentation follow Patton's (1980) guidelines for a qualitative research design.

In summary, the goal of this exploratory case study is to document as fully as possible the entire process from beginning to end in order to discover both the learners' answers to the questions and the ways in which they understood and reacted to the process. A variety of data are used, including written documents in the form of learners' answers to the questions, class interviews transcribed on tape, and written observations made immediately following the class. In this way, the case study drew on what Yin describes as its "unique strength," "the ability to deal with a full variety of evidence" (p. 20). In this way also, the greatest possible accuracy could be given to answering the two research questions.

C H A P T E R I I I

REVIEW OF THE LITERATURE

Introduction

This case study uses a self-assessment process which is designed to conform to a set of characteristics drawn from the research literature on adult development theory and assessment theory and practice. After a general overview of the literature in these two fields, this review will provide a more detailed view of the way in which the literature in both fields points to six characteristics of an appropriate self-assessment process for adult learners. The characteristics will be listed as a group and then it will be shown how each characteristic evolved from the implications of the literature, especially as writings from the two fields are used as two lenses through which to look simultaneously at those characteristics.

The literature to be reviewed comes from two different fields of study. The first is adult development theory, whose origins go back to Sigmund Freud's work in the early 20th century on the developmental stages of children, as it was elaborated by Erikson (1950) to cover the entire life span of adults. For the past 35

years, various theoreticians have evolved their own concepts of the stages of adult development; the literature review will cover those writers in the field whose work seems to have the most relevance for the higher education practice of assessment.

In contrast with this well-established field, the second body of literature to be reviewed, that of assessment in higher education, is a relatively new one. Although some writers have been concerned with assessment issues for years, the major body of written work stems from concerns of the early 1980s, expressed originally in, and spinning off from, a sequence of national reports which criticize the educational system in the United States and ask for greater accountability. Within the written work in this field, the focus in this part of the literature review will be on theoretical work on outcomes assessment in higher education, that is, ways of establishing what learners have actually gained from an educational program.

In addition to the review of assessment theory, there will be an examination of contemporary practice in the assessment of adult learners. It will be shown that adults are not mentioned in general overviews of assessment practice, that outcomes assessment instruments are generally designed for the traditional age student, and that, although there are instruments which might be adapted for adult learners, the only one actually designed for adults is quite specific to the program for which it is designed, and therefore not easily adaptable to other programs.

In the absence of existing procedures or instruments for self-assessment for adults, the review will conclude with a consideration of the implications of the literature for the appropriate characteristics of such a process.

Adult Development Theory

Many scholars have proposed a variety of theories of adult development. Some espouse psychosocial or phase theories, which emphasize the common individual and societal tasks which each individual undertakes as he grows older; leading figures in this type of development theory include Daniel Levinson, Bernice Neugarten, and Roger Gould. Another group of theoreticians promotes what are often called stage theories, the idea that we pass through distinctive and increasingly complex developmental stages as we seek to interact with our world and to make meaning of it. Important thinkers among this group include Jane Loevinger, Carol Gilligan, and Robert Kegan.

Other thinkers have taken either one or both of these theoretical perspectives and have shown how they apply to the theory and practice of higher education. Leaders in this field include Laurent Daloz, Rita Weathersby, Jill Tarule, and Arthur Chickering. The latter has collected into a book (1981) a comprehensive series of articles on the way in which the developmental perspective can provide insight for many aspects of higher education practice, including teaching, advising, curriculum development, student services, and program evaluation.

However, the full implications of the developmental perspective for the practice of assessment in adult higher education have yet to be spelled out. The implications for the form and content of assessment of adult learners have to be drawn, therefore, directly from a review of the work of the adult development theorists.

One of the major contributions of the developmentalists to the practice of assessment is the emphasis which many of them place on the interrelationship between cognitive and affective growth. For instance, Loevinger (1976), whose work is frequently cited in discussions of adult development, identifies eight stages of ego development, as follows: Impulsive, Self-Protective, Conformist, Self-Aware, Conscientious, Individualistic, Autonomous, and Integrated. She indicates how the different aspects of each stage - such things as "cognitive style," "conscious preoccupations," "interpersonal style" - are interrelated. This is also known as the structural concept of development; the ego is understood to be a structure in which all aspects of the self develop together. If one part grows, all grow.

Kegan (1982) takes this concept further by stating that cognitive and affective growth are inextricably combined because the two have a common root in evolutionary activity. All growth involves meaning making, the ability to understand one's world and relate to it in increasingly complex ways. Thus, the intellectual growth which learners achieve through an educational program cannot be fully understood when looked at in isolation from other kinds of

growth. One implication of such thinking for this study is that any outcomes assessment must not only consider both cognitive and affective growth but also the connections between the two.

Another contribution of developmental theory to assessment practice is Chickering's (1977) idea of change in the appropriate mode and arbiter of evaluation as one climbs the developmental ladder. At Loevinger's stage 3 (Conformist Stage), evaluation is by teacher only, according to Chickering; at her stage 8 (Integrated Stage), evaluation is appropriately done by teacher, peers, system, self, with self as final judge. Such a claim points to the advisability and possibility of using a self-assessment process with adult learners, many or most of whom will have advanced to the stage where they can be the final judge of what they have gained from their educational experience.

Weathersby (1981) shows that the individual's concept of the purpose of education changes as one moves into the higher stages of development; Belenky, Clinchy, Goldberger, & Tarule (1986) cite changes in epistemology and growth in the ability to state with conviction what one thinks. Although not all adult learners are predictably at the higher stage of development, Weathersby (1981) found that 81% of entering students at one adult degree program were at least at Loevinger's stage 5 ("Self Aware"), compared with 31% of traditional age college freshmen who had reached that stage (p. 58). Learners at different stages of development will have very different ideas about what has been important to them about their education

and thus the use of open-ended questions will allow this difference to emerge.

Implications for the process can also be found in Daloz's (1986) description of the teacher/mentor as one who guides and encourages development and in Chickering's (1981) view of development as the aim of all educational processes. With this perspective, assessment itself could be seen as part of the developmental process, needing to serve the learner and enhance her development as much as it serves the purposes of the institution. Kegan's (1982) notion of "subject-object relations" points to the possibility of growth through one's becoming an "object" to oneself; self-assessment of adult learners could be seen as just such a reflective process.

Levinson's (1978) work points to the various phases of life through which adults progress as they grow older. Each phase has its own developmental task, involving the individual in relation to his world. This means that adults in any educational program will vary greatly from one another both in the kind and scope of the tasks they are performing outside school and in the way in which their learning experiences are integrated with those tasks. Such variation points to the use of open-ended questions in any assessment program in order to understand the complexity and richness of this integration; it also points to the need for an assessment process with enough time for those connections to be made.

Finally, Kegan's (1982) idea of the "holding environment," that is, an environment that confirms, contradicts, and continues as being necessary for development to take place, has a number of implications for both the content and process of assessment. One is the importance of the larger context of all learning and the suggestion that a supportive environment is necessary for educational growth to take place. If outcomes assessment can also be a learning experience, as Loacker, Cromwell, and O'Brien (1985) have discovered at Alverno College, then its potential can perhaps be best realized in a supportive group.

These are just some of the developmentalists whose work seems relevant to the study's concerns; consideration of other theoreticians and a fuller discussion of some of the works listed above will be contained in the subsequent literature reviewed by characteristic.

Outcomes Assessment in Higher Education

The second body of literature to be reviewed is that of assessment theory and practice in American higher education. This literature grew out of the concerns for greater accountability and for educational excellence, which were raised in a number of national reports of the 1980s. Assessment of what students have actually gained through a college experience was seen as an important means of ascertaining what educational programs are accomplishing, as well as a way of providing feedback for the

improvement of those programs. Some of the literature is theoretical, describing what assessment ought to be and to do, and other literature describes the workings of various assessment programs.

Assessment literature contributes some insights which are important to the development of a plan for assessing adults' outcomes in higher education programs. For instance, Hartle (1985) and Capoor (1985) point to the growing demand for accountability in all educational programs, a demand which comes from state governments, the national government, accrediting agencies, and the public. Astin (1985) shows how assessment both reflects and can transform educational goals and values. Adelman (1985) calls upon educational institutions to develop thoughtful assessment plans, making sure that they are institution-specific, not mere copies of others' programs. Ewell (1984) insists that assessment be systems-oriented, allowing for feedback of results to all segments of the institution. Such insights have implications both for the importance of assessment programs for adult learners and for the form of such programs.

As for the content of assessment, Boyer (1987) and many others state that it must reflect what is important to the institution, not trivialities. Pascarella (1986) and others point to the need for and possibility of assessment to be "value-added," that is, to reflect what has been gained through the educational process itself, rather than through other causes such as maturity and environmental

factors. Loacker and her associates at Alverno College (1985) show that all assessment processes must ultimately serve the learner, whatever their form or content.

On the other hand, none of these writers specifically mentions the needs and concerns of adult learners when it comes to assessment. Updates on assessment state of the art, such as those by Ewell (1987) and Marchese (1987), do not mention the adult learner. In fact, Hutchings (1987) poses as one of seven important questions to be answered about assessment the following question:

Isn't most of what's going on in the name of assessment geared toward "traditional" 18-22 year-old learners? What about adult learners? (p. 14)

She then proceeds to answer the first question in the affirmative; her perspective as director of the AAHE Assessment Forum can be considered a well-informed one.

Nor is the situation any different in practice. In a survey entitled "Evaluating Adult Learning and Program Costs," Lehmann (1981) actually examines the evaluation of programs for adults, rather than looking at assessment of adult learning. Moreover, of the "six different approaches to program evaluation" (p. 751) which he believes are relevant to adults, only one, Program Effectiveness and Related Costs (PERC) of Empire State College, is actually designed for use with adults. Upon closer examination, even PERC is oriented specifically toward the learner's experience at Empire State; for instance, its "Program Completion Questionnaire," one of the major pieces of its complex series of questionnaires for

learners to fill out, contains long sections entitled "Mentor-student Relationship" and "Learning Contracts," in which respondents are asked to evaluate their experience with these particular program components (Palola, Lehmann, Bradley, and Debus, 1977, no page number given).

Of the five remaining approaches examined by Lehmann, the College Outcome Measures Project (COMP) of the American College Testing Program is designed for use with students of all ages, though not specifically for adults. Its three "Process areas" (Communicating, Solving Problems, Clarifying Values) and three "Content Areas" (Functioning Within Social Institutions, Using Science and Technology, Using the Arts), are relevant to some of the needs and interests of adults, but the complexity and cost of the testing procedures make this approach prohibitive for use with most adult learners. Moreover, the procedures lack the open-ended quality so important to adult learners in their own self-assessment.

The four remaining approaches which Lehmann examines were not specifically designed for adults. The Institutional Research Program of the Educational Testing Service (ETS) is primarily focused on program evaluation rather than learning outcomes. The Student Outcomes Information Services, National Center for Higher Education Management Systems (NCHEMS) is primarily focused on cost studies. The Outcomes of Undergraduate Education Project, Harvard University, studies traditional age students. The Student Information Form of the Cooperative Institutional Research Program of the

University of California, Los Angeles, appears to be addressing the recent high school graduate. Examination of sample questionnaires of these programs indicates that they are brief, do not contain open-ended questions, are aimed at the traditional age student, and are intended to be quickly filled out. None offers adult learners the freedom to reflect on their own learning outcomes in a way that the diversity of their backgrounds, expectations, and experiences would suggest. Moreover, none is, or provides the basis for, a self-assessment process for adult learners.

However, despite this lack of existing procedures and practice of assessment of adult learners, this overview of general assessment literature and adult development theory leads to the conclusion that adult developmentalists and scholars of assessment practice have provided important insights suggesting that a self-assessment process for adult students, designed with their developmental levels in mind, is important and can be developed. This overview also justifies the need for an exploratory case study to develop the nature of such a process.

Literature Review by Characteristics

The preceding overview introduces the idea of the relevance of adult development theory and general writings on assessment to the development of an appropriate self-assessment process for adult learners; it also indicates the lack of existing procedures to meet

this need. The literature also points to the following characteristics of an appropriate self-assessment process for adult learners in a higher education program:

- 1) Uses open-ended questions.
- 2) Explores connections between cognitive and affective growth.
- 3) Allows time for reflection and integration.
- 4) Is accomplished in a supportive group of peers.
- 5) Serves the learner.
- 6) Serves the institution.

The literature will be examined to see how it points to each of these characteristics.

Uses Open-Ended Questions

Patton (1980) defines the open-ended question as follows:

The truly open-ended question does not presuppose which dimensions of feeling, analysis, or thought will be salient for the interviewee. The truly open-ended question allows the person being interviewed to select from among that person's full repertoire of possible responses (p. 212).

Many strands of thought converge to suggest the need for an appropriate self-assessment instrument for adult learners to contain open-ended questions. Primary among those is the adult developmental view, which emphasizes the differences in developmental stage between individuals in any group of adult learners. For instance, Weathersby (1981), using Loevinger's (1976) eight categories of ego development, showed that of the adult learners entering the Goddard College Adult Degree Program, 3% were at the Preconformist Stages,

16% were at the Conformist Stages, and 81% were at the Conscientious (Postconformist) Stages and above. Even though the study did not break down the respondents of the latter group into their respective four higher stages, Weathersby believes that even greater differences would be revealed if this were to be done. She states:

An extraordinarily interesting question is how far beyond conventional (i.e., conformist) stages adult students have ventured. Data from adult students in nontraditional undergraduate programs suggest that they have moved far beyond indeed, much farther than is believed representative of the general adult population. Although the proportion of students at each stage will vary across programs and institutions, most groups of students will exhibit a wide range of individual differences in ego levels. Adult students, taken as a group, probably exhibit both the highest stages and the greatest range of diversity (p. 58).

Weathersby goes on to point out some of the implications of this wide diversity. One of them is the difference in the way learners perceive education and its purposes, depending on their developmental stage. Typical answers on Loevinger's sentence-completion test to the sentence stem "Education . . ." range all the way from an instrumental view of the purpose of education at the Conformist Stage (i.e., "Education is an essential requirement in acquiring a good job") to global and all-encompassing views at the Autonomous and Integrated (i.e., highest) Stages, (i.e., "Education is the development of the entire man, mental, physical, and spiritual") (quoted in Weathersby, 1981, pp. 60-61).

Such differences in perception will affect the way adults engage any learning experience, the kind of curriculum they choose,

and what they value as outcomes. Moreover, as Chickering (1977, 1981) points out, development is and should be a major outcome of study; therefore whatever stage an individual begins a program of study will change in the course of the study, leading to differences in perceptions of purposes, programs, and outcomes, both within individuals and between them.

Tarule and Weathersby (1980) summarize both the initial and ongoing reasons for differences in adult learners in the following statement:

These differences include life situations that give rise to further needs and desires for education, the adaptive tasks of the life-cycle that accompany academic study, the frameworks of meaning and motivation to which new cognition, attitudes, skills, and behaviors are assimilated, the differentiated importance and perception of various features of an educational environment, and the outcomes of study that are most personally valued (p. 43).

The implication here for assessment is that an instrument which uses open-ended questions will allow these differences between individuals to be expressed. Learners with differing perceptions of what is "personally valued" in an educational outcome will be able to state what those values are and to what extent the program enabled them to meet those values. Moreover, open-endedness in questions will allow learners to catalogue the ways in which they changed their perceptions as a result of the educational process and possibly even how that change occurred.

Belenky et al. (1986) suggest another reason for the use of open-ended questions in a self-assessment process for adult learners. They write about the initial difficulty of, and then the

increased ability for, speaking in one's own voice, especially for women, as they move through the developmental "positions," as these writers call them. This was a conclusion they came to after using open-ended questions (including the one with which the instrument in this study begins) in a study of women of many different ages in a variety of educational settings. The data they received gives unique and sometimes unexpected insights into the learners surveyed, suggesting both the importance of being encouraged to speak in one's own voice and the value to the researcher (and thus the assessor) of using open-ended questions. Although this would be true of learners of any age (Belenky and her colleagues interviewed both younger and older learners), it may be particularly true of adult learners, given the diversity of their experience and of their understanding of the purposes of education. Thus the work of these researchers suggests that using open-ended questions with adult learners will promote authenticity of response, a chance to speak in one's own voice, and consequently a rich and valuable variety of data.

Chickering's (1977) work suggests a third reason for adult self-assessment to contain open-ended questions. A developmentalist with a keen interest in educational outcomes, Chickering has done extensive research with adult learners. In conjunction with Lasker and Dewindt, he has indicated the relationship between Loevinger's eight developmental stages and a variety of educational practices, one of which is evaluation. According to this analysis, at the Conformist Stage the appropriate locus of evaluation is "by

teacher only," whereas at the Integrated Stage the locus is "by teachers, peers, system, self; self final judge" (pp. 90-91). Open-ended questions would allow adult learners, the great majority of whom are at the upper end of the developmental scale, to be that final judge.

Thus the work of a number of developmentalists suggest the efficacy and value of open-ended questions in outcomes assessment, both from the point of view of the learners and from the point of view of the assessor. Open-ended questions allow learners to reflect their own diversity of experience and outcome, allow them to be the final judge of what is important, and therefore produce authentic data of potential value to the researcher/assessor.

Patton (1980) supports this view from the point of view of the researcher. Speaking of the tendency of the 1970s to individualize educational programs, he writes:

Highly individualized programs operate under the assumption that outcomes will be different for different clients. Not only will outcomes vary along specific common dimensions, but outcomes will be qualitatively different and will involve qualitatively different dimensions for different clients. Under such conditions, program staff are justifiably reluctant to generate standardized criteria and scales against which all clients are compared (p. 62).

Not all educational programs for adults are highly individualized, but many are and thus they can expect their outcomes to differ from person to person. Such difference suggests the need for open-ended questions in order to capture the nature and diversity of outcomes. Such an approach may also serve the purposes of the institution to

gain a sense of the many different results of its programs. This research-oriented view appears to corroborate that of the developmentalists, pointing to the diversity of learners, the diversity of programs, and the expected diversity of outcomes as an argument for procedures which "allow the person being interviewed to select from that person's full repertoire of responses," as Patton describes open-ended questions (p. 212).

Explores Connections Between Cognitive and Affective Growth

It is a convention in educational literature (i.e., Kegan, 1982; Parker, 1987) to divide learnings or outcomes into two broad categories, cognitive and affective. For instance, one of the eight "key ideas" which constitute the basic components of the original University Without Walls plan is "Concern for both cognitive and affective learning" (1972, p. 12). Although affective learning can be broken into many component parts, the use of the term is a shorthand way of describing all the areas of learning which are not purely intellectual or factual, that is, that are not cognitive. Affective learning thus includes values, attitudes, sensibilities, personal qualities, interpersonal competencies, and the like.

Many writers about assessment have stated the need for assessment procedures to examine affective outcomes as well as cognitive ones. For instance, Claxton, Murrell, and Porter (1986) state:

Too often logistics involved in outcomes assessment push institutions to measure low level skills and reductionist thinking. While much of what students need to know is in the area of factual information, institutions typically

see their purpose as helping students become highly integrated persons who have a humane sense of values and abilities in problem solving, critical thinking, and interpersonal relations. Hence, careful thought about institutional purpose reminds us of the importance of having assessment procedures geared to a wide range of competencies (p. 3).

Stewart, President of the College Board, speaking of the ethical issues related to assessment, says,

Regardless of what our tests measure, I am certain that, over time, we will end up valuing what we test. This seems to be inevitable. The ethical issue is for us to make sure that we do not lose sight of those qualities and attitudes in students that we value but cannot easily test (p. 9).

He goes on to identify some of those qualities as "growth and refinement of students' sensibilities, the development of independence of mind, personal integrity, and moral autonomy" (p. 9) and to suggest that, while these cannot be measured in the traditional sense of the word, we should nevertheless be diligent in pursuing a way to assess or evaluate them.

Pat Hutchings (1987), Director of the American Association for Higher Education Assessment Forum, raises the question of how assessment can deal with "the slippery but (most would agree) all-important outcomes, like self-esteem, creativity, empathy, and moral judgment" (p. 13). Although acknowledging that these are difficult to assess, she goes on to stress the importance of finding a way to do so.

Such examples could be multiplied. Their common thread is that while affective learning is critical both to the purpose of the

institutions and to the needs of the individual, it is nevertheless difficult to assess, especially with traditional measures.

Developmental literature suggests that both cognitive and affective learning are important to assess and that there is a relationship between the two. For instance, the central claim of Loevinger's (1976) work is that "many diverse aspects of thought, interpersonal relations, impulse control, and character grow at once, in some more or less coherent way" (p. ix). That is, cognitive and affective growth take place at the same time; growth in one arena is related to growth in the other.

Another developmentalist, Kegan (1982) has offered an explanation of the close relationship between the two. He posits something he calls "evolutionary activity" as the prior (or grounding) phenomena in personality and says that its purpose is establishing "an equilibrium in the world, between the progressively individuated self and the bigger life field," which is "a process of adaptation shaped by the tension between assimilation of new experience to the old 'grammar' and the accommodation of the old grammar to the new experience" (pp. 43-44). He goes on to say why this is significant for the relationship between cognitive and affective growth:

In arguing for evolutionary activity as the fundamental ground in personality, constructive-developmental theory is not choosing between "affect" or "cognition" as the master of development . . . but is putting forth a candidate for a ground of consideration prior to, and generative of, cognition and affect (p. 81).

That is, cognitive and affective growth are related because each is related to something prior, namely evolutionary activity, which activity involves the individual's assimilation of and accommodation to new experience.

In fact, Kegan goes on to say,

. . . evolutionary activity is intrinsically cognitive, but it is no less affective; we are this activity and we experience it. Affect is essentially phenomenological, the felt experience of a motion (hence, "e-motion"). In identifying evolutionary activity as the fundamental ground of personality I am suggesting that the source of our emotions is the phenomenological experience of evolving - of defending, surrendering, and reconstructing a center (pp. 81-82).

Although this last passage is embedded in a chapter on the development of the young child, Kegan believes that the process of evolution is a life-long one. Certainly the statement about "defending, surrendering, and reconstructing a center" could be used to describe what happens to adults in an educational program.

Kegan's thesis has implication not only for understanding but also for assessing adult learning. If cognitive and affective learning are closely related and are the purposes of educational programs, both must be considered in any thorough outcomes assessment; looking at either alone will not give a realistic picture of what has happened. Moreover, if both learnings are rooted in the kind of fundamental assimilation of and accommodation to new experience which Kegan calls evolutionary activity, then new cognitive learning will inevitably have an affective component; classroom learning will influence values, attitudes, and feelings.

The two will be inextricably mingled in learners' minds and students will be able to see connections between the two. Identifying those connections will be an important part of assessment.

In summary, writers on assessment see the importance of assessing affective outcomes as well as cognitive ones, though they recognize the difficulties in doing so. Developmentalists point to the close relationship between the two kinds of learning and suggest that both must be included to make assessment complete. Kegan's work further suggests that there will be connections between the two which will be important for learners to identify in a thorough self-assessment process of their educational outcomes.

Allows Time for Reflection and Integration

Time is an important factor in traditional outcomes assessment procedures but in most of them it is the shortness of time that is stressed. For instance, in a brochure advertising its Student Outcomes Information Service, the National Center for Higher Education Management Systems writes of its five questionnaires, "All questionnaires are short (most students complete them in less than 20 minutes)." The Educational Testing Service Program Assessment Questionnaires - both the one for undergraduates and the one for alumni - state, "It should not take longer than 30 minutes to complete this questionnaire." The College Student Experiences questionnaire of the Higher Education Research Institute at UCLA says that it can be done "in less than an hour and perhaps only 30-45 minutes." Even the Program Completion Questionnaire, used with

adult learners at Empire State College after they have completed their degree, states that "It should take no longer than 15-30 minutes" to complete a questionnaire that "will help focus your thinking about your learning experiences at the College."

The rationale behind such brevity is clear. Participation in the assessment process is voluntary and respondents will not participate if they believe that it will take too much of their time. Moreover, participation is clearly a favor to the institution wanting the information, since it offers no apparent benefits to the learners, and thus it is not appropriate to ask for much student time. Finally, the data so gathered must be brief and manageable. To encourage lengthier response would defeat the institutional purpose to get manageable data.

When looked at from a developmental and a self-assessment perspective, however, such brevity in assessing the outcomes of education seems short-sighted. If we accept Chickering's (1977) statement that developmental change is a major outcome of education, then we can assume that the results of an educational process will be changes on many levels. Since this change has taken time to develop and since it has involved both the cognitive and affective domains as has been shown above, it will take time to understand and therefore time to assess fully. Moreover, this is especially true of adult learners, since they have to integrate the new learnings into their already complex lives.

Piaget's ideas (as discussed in Kegan [1982]) of assimilation and accommodation are helpful here. Up to a point, according to Piaget, individuals are able to assimilate new experience and learning into old thought structures, but when the saturation point has been reached, accommodation of the old has to take place, which means the building of new structures and ways of looking at existence.

A self-assessment process can encourage such assimilation at the end of an educational program so that adult learners can go beyond factual recall and "make meaning," as Kegan (1982) puts it. Without time to reflect, learners answer evaluative questions in a superficial, haphazard, or mechanical way, giving back only what they have received, or perhaps even less. With time, they can both assimilate and accommodate; the new branch can be grafted onto the old tree so that the whole is changed and new fruit can be produced.

Daloz (1986) suggests the need for time in his discussion of the ending process for adult learners who are completing their degree. Speaking both of this process and of how mentors and teachers can assist in it, he writes:

Because it is building time, students must attend to the "how" of things. This is the time that we can help students gain a sharper perspective of the process of their own development, to construct a platform from which they can see their own thought in a way they could not before. . . . More broadly, it means helping them to develop a new vision of themselves based on their own experience rather than the images they absorbed from others. For we do not simply hone minds, we help people to name their wholeness. The words heal and whole share a common root. This is a time for healing (p. 152).

Daloz here indicates the reasons behind the need for taking time to do assessment well. First, educational growth is a process which learners need to become aware of as such; it is not just the amassing of facts and so both the original process and becoming aware of it take time. Second, the learners need to develop a point of view from which to look at themselves, as Daloz says, "to construct a platform from which they can see their own thought in a way they could not before"; such construction, like any building project, also takes time. Third, the learners have to develop a "new vision of themselves based on their own experience rather than images they have absorbed from others"; the new learning has to be reshaped in terms of the learners' own past experience and ways of looking at things. They cannot simply return it as it was originally given but must take time to integrate the new with the old. Daloz's concepts of "naming their wholeness" and thereby coming to healing are revealing expressions of a time-extended process.

In fact, as Daloz implies in the quotation above, assessment at the end of an educational process can itself be a developmental process, if appropriate time is given to it. It can mark development but it can also create it. This is the implication of his statement, "This is a time for healing." An appropriate self-assessment process for adult learners needs time because it is not just the summation of a learning process; it is part of that learning process.

Is Accomplished in a Supportive Group of Peers

Many writers about adult learning speak about the importance of group process in any learning experience. Speaking of the possibilities and advantages of individualized education in the context of a group, Clark (1981) writes:

The individuals who make up the group also bring diverse perspectives, values, experience. This diversity is particularly apparent when the group is made up of older "non-traditional" college students. When carefully orchestrated, this diversity can enliven and enrich the learning process for all. Furthermore, members of the group, when properly motivated, can offer psychological support to each other, engage in mutual criticism, and participate in formative and summative evaluation of each other's work. Thus the group can in many ways make the individual educational experience more comprehensive than that obtained in one to one encounter (p. 593).

Some indication of why a group process for assessment is particularly well suited to adult learners is suggested by Torbert (1981). He argues that one role of higher education is to enable students to grow into "interpersonal competence," which Torbert describes as "a matter of creating a social climate of inquiry, which aids in clarifying both personal and communal purposes and relationships as well as accomplishing specific tasks" (p. 179). Group assessment is one such task, one not only where adult interpersonal competence may be beneficial for the accomplishment of the task, but also where it may be further developed.

Belenky et al. (1986) point to the importance of group dialogue at the higher stages of development. At what they call the "constructivist" position, "real talk" (as opposed to "didactic talk") "requires careful listening; it implies a mutually shared

agreement that together you are creating the optimal setting so that half-baked or emergent ideas can grow" (p. 144). This picture of the group's role in furthering understanding suggests that all of the learning which takes place around a self-assessment process could optimally be done in a group context.

Developmental theorists also contribute to an understanding of the importance of the group in any growth process. As Weathersby and Tarule (1980) state:

Each structural-developmental theorist looks at what provides the conditions for development in his or her scheme . . . it is apparent that there are some general conditions that probably aid and support development: a supportive community, a chance to try out new behaviors and new ways of thinking in a non-judgmental environment; an opportunity to explore alternatives; and a sense that risk-taking is a valued activity, including the chance to explore various commitments and to reshape their meaning. In addition, an individual who has just completed the transition can provide a specific and sensitive support as a peer, colleague, or mentor (p. 38).

Particularly in the final sentence the writers give some indication of why a supportive group of peers may be of such importance to an assessment process dealing with educational outcomes; having recently gone through the same educational experience themselves, peers are in the best position to help others understand their own outcomes.

The nature of the environment in which growth best takes place has been the particular focus of Kegan's (1982) work. Movement from one stage to the next in his developmental scheme requires what he calls a "holding environment." Such an environment has three functions: confirmation (holding on), contradiction (letting go),

and continuity (staying put for reintegration). Too much emphasis on holding on would mean that the individual would stay at a lower stage, whereas too early letting go with no continuity provided for the change would lead to confusion and possibly disintegration. Individuals move through a succession of holding environments throughout their lives (pp. 115ff).

Moreover, Kegan claims that whereas the individual develops along a certain path, that is only one side of what he calls "the person." He continues,

. . . "person" refers to the fundamental motion of evolution itself, and is as much about that side of the self embedded in the life surround as that which is individuated from it. The person is an "individual" and an "embeddual." There is never just a you; and at this very moment your own buoyancy or lack of it, your own sense of wholeness or lack of it, is in large part a function of how your own current embeddedness culture is holding you (p. 116).

Such an understanding of human development has implications for an educational setting and for assessment. If individuals have to be seen in context in order to be fully understood and if the environment in which they are embedded at any given time is an important part of who they are and who they are becoming, then the meaning they have made of an educational process is best understood within the context of a group. The group both enables the meaning to be more fully understood and also supports the individual in the process. In this way the group takes on the nature of a holding environment, in which the conditions are right for the fullest possible assessment of educational outcomes to take place.

Although it does not reject the idea, the literature on assessment does not directly discuss group or peer collaboration in assessment. The Alverno model (1984) involves a good deal of performance by individuals in front of a group of peers but not group involvement with the same task. Astin (1985) promotes the idea of student involvement in assessment as a way of "talent development" (p. 168) but stops short of speaking of group involvement. Parker (1987) speaks of the need to build community in academia, particularly in the classroom, but he does not mention community in assessment. It may be that this lack of focus on group assessment is more a commentary on individualism in higher education or on the way in which assessment is considered a private and secret matter than it is a judgment of how assessment might best be carried out. Consideration by adult learners of their educational outcomes in a group context might help to correct that individualistic pattern and go a small distance toward building community in academia, for which both Palmer and Astin are advocates.

Serves Learner

Aside from the pioneering assessment work at Alverno College, which clearly focuses on the subject, service to the learner is not a primary concern in the current literature in the assessment field. However, the success of this approach at Alverno and the fact that it has made that college into a leader in this field indicates that this is a respected characteristic of good assessment design.

Loacker, Cromwell, and O'Brien (1985), leaders in the assessment work at Alverno, make clear their own estimate of the current goals of assessment in other institutions, while making a plea for a major shift in focus to serving the learner, in the following statement prepared for the First National Conference on Assessment in Higher Education in 1985:

Assessment seems to be loitering expectantly in the corridors of higher education, thereby reinforcing the hope that it will soon enter the classroom to serve the learner. Recent national reports on higher education encourage assessment. Administrators call for it. Researchers see it as a potential for prediction and evaluation. Legislators look to it for assurance of accountability. But many of these intents overlook the power of assessment for teaching and learning. So that teachers might take a more serious look at assessment, we propose in this paper to set it at the heart of learning and to clarify it as a major strategy to be used by both instructor and student (p. 47).

Their approach to assessment is based on the following three assumptions about learning:

- 1) Learning involves making an action out of knowledge - using knowledge to think, judge, decide, discover, interact, create . . .
- 2) An educator's best means of judging how well a learner has developed expected abilities is to look at corresponding behavior . . .
- 3) Learning increases, even in its serendipitous aspects, when learners have a sense of what they are setting out to learn, a statement of explicit standards they must meet, and a way of seeing what they have learned (p. 47).

Such an approach emphasizes "the active development of the learner."

The Alverno process makes this happen by "eliciting samples of varied expressions of an ability, judging those samples against criteria for performance, and providing as full a picture as possible of that ability as possessed by that learner" (p. 48).

This ongoing feedback, comparing the individual to explicit standards, is what they mean by assessment "to serve the learner."

There are eight identified abilities and four "general" developmental levels in each ability, with two further "specialized" levels required as appropriate for the major area of study. This competency "grid" has evolved over years of trial and error and is both developed and agreed to by all faculty members, who make it an integral part of their teaching and planning in every course. Moreover, learners accept the system when they enroll at Alverno (Ewell, 1984).

With this degree of explicitness, it is a logical step for learners to participate in their own assessment; self-assessment is stressed in the Alverno program. However, even in their ability to assess themselves, learners are expected to go through a developmental sequence. First the learner "internalizes the learning process, realizing that it is not 'outside' her and realizing what she is doing and why." Then she "integrates her several competencies into a unified profile of her abilities and her approach to learning," and "generalizes abilities she has developed in one context into other realms of application." Finally, "by her final semester, she operates as a self-directing learner, planning appropriate learning experiences and helping to design techniques for assessing her performance" (Alverno College Faculty, 1979, p. 37).

Thus the Alverno approach provides service to the learner by setting up clearly defined standards of achievement in certain

specific competencies, by teaching learners how to assess themselves according to these standards and competencies through a developmental sequence, and by ultimately encouraging them to become the arbiters of their own achievement. Judging from video tapes of Alverno students in action, presented at the 1987 AAHE National Conference, the results are impressive.

It should be noted, however, that both the criteria for assessment and the definition of service to the learner are predetermined by the Alverno faculty. It is not clear what would happen if the learners had goals different from those chosen for them. In response to a question about that at the AAHE conference, the Alverno faculty presenter stated that she was sure all learner goals could be subsumed under the eight identified competencies. This may be true for the relatively homogeneous student population at Alverno, which is made up of women of traditional college age, but it may not be as true for adult learners, with their diverse ages, interests, needs, and experience.

Knowles (1970) stresses the need for adult learners to define their own goals; evaluation in this case means that "the teacher devotes his energy to helping adults get evidence for themselves about the progress they are making toward their educational goals" (p. 43). Since Knowles sees the initial definition of goals by the learner as being a "diagnosis of (her) learning needs," he believes that evaluation at the end of a learning experience should actually become a "rediagnosis" of those needs, leading on to a new cycle of

learning and "reinforcing the notion that learning is a continuing process" (p. 43). Thus the purpose of an evaluation process would be to enable learners to discover the next steps in their own learning process.

Whether the faculty defines learning goals, as at Alverno, or learners define them, as in Knowles' approach, the emphasis in both cases is on service to the learner. Both would agree that whatever other purposes as assessment process may have, its primary goal must be to serve the learner. The fact that the Alverno model is cited in nearly every contemporary overview on assessment (i.e., Ewell, 1984; Bok, 1986; Marchese, 1987), indicates that there is much respect for this approach. At a time when pressure for greater accountability in higher education is mounting from state and national government, as well as from accrediting associations, the Alverno faculty continues to make service to the learner central to their assessment processes and to urge other institutions to do the same. From this, it seems clear that an important and appropriate characteristic of a self-assessment process for adult learners is that the learners themselves, as differentiated from external groups demanding accountability, be served by the process.

Serves Institution

In a review of the recent history of assessment in higher education, Marchese (1987) writes:

Assessment per se guarantees nothing by way of improvement, no more than a thermometer cures fever. Only when used in combination with good instruction (that evokes involvement, in coherent curricula, etc.), in a program of improvement, can the device strengthen education (p. 8).

The implication here is that whatever assessment instrument is tried, the results must be used to serve the institution in which it is used. Moreover, Marchese understands that serving the institution means providing usable feedback to the appropriate people so that they can make curricular and programmatic change and thereby improve the quality of teaching and learning.

Although the need for any assessment process to serve its institution may seem like a truism, many statements like that of Marchese appear in contemporary literature on assessment. One reason for this is that, as the assessment movement has developed, states have insisted on institutional accountability through the assessment process. For instance, Donald Stewart, president of the College Board, speaking to the Second Annual AAHE Assessment Forum (and thus to many of the country's top assessment leaders), contrasts the "internal" impetus for assessment "arising from a genuine concern to know, and thereby monitor and improve, the quality of our institutions through the programs and services" with the "external" impetus, which comes from "possibly an accrediting board, a governmental agency, or a legislative body" (p. 7).

Moreover, Spengehl tells assessment leaders not to "put the means - assessment - before the end, the strengthening of a common shared institutional focus and purpose." Further, he continues, "Serious assessment is nothing less than the institutionalizing of self-awareness and constant change" (p. 36).

Adelman offers similar advice in his conclusion to the papers prepared for the First National Conference on Assessment (1985):

First, it is time for some serious study of assessment in American higher education by college faculty and administrators themselves. The intention of such study would not be to learn about assessment as an end in itself, rather it would be to learn how to use assessment to improve curriculum and instruction . . . (p. 80).

Claxton et al. (1986) summarize their advice about assessment to governing boards of institutions of higher education as follows:

It is imperative that trustees constantly bear in mind the purpose of the institution, for that is what is fundamental. Procedures concerning what data to gather and how to analyze it are derivative issues which flow from the institution's mission. Only institutions which hew closely to their purpose and develop outcomes measures consistent with that will be effective in ensuring quality curricular practices and meaningful, significant educational practices for students (p. 8).

Such statements are merely samples of many more which urge academia to use assessment as a means of self-reflection and subsequent change. One of the fullest treatments of this subject is made by Ewell (1984) in his book, The Self-Regarding Institution: Information for Excellence. The central theme of this book is that "to achieve excellence in the diverse activities currently comprising post-secondary education we must create explicit, institution-specific mechanisms for regularly assessing the degree to which we are in fact attaining our collective goals" (p. 5).

Ewell sees the need for systematic and explicit means of data collection about educational outcomes in order to discover the linkages between curriculum, the students, and those outcomes.

Moreover, he implies that this will not be easy in post-secondary education; in fact, "institutional incentives" will need to be used.

As he writes:

To achieve excellence in the fragmented, organizationally conservative setting of the college or university, we must also know how to induce institutions to build the necessary kinds of institutional commitments and make the kinds of structural changes required (p. 8).

In addition, Ewell believes that all assessment efforts must be linked to active, on-going self-definition on the part of the institution undertaking them. In order to assess excellence, each institution needs to define what its own view of excellence actually is and then proceed to clarify its mission accordingly. This is what he means by the "self-regarding institution" and he sees appropriate outcomes assessment as playing a critical role in moving toward this idea.

In summary, many writers see an important link between assessment and service to the institution. Assessment, especially outcomes assessment, provides the necessary link between curriculum and its results and thus becomes the basis for informed dialogue on how practices and policies may be improved or strengthened. This means that to be effective an assessment measure must be designed not only to serve the needs of each specific institution but also to become part of a feedback structure in which results will get to those in a position to make change. Assessment does not stop at data collection; it leads to institutional change. This is why an important characteristic of any assessment instrument, and therefore

of one for adult learners, is that it be designed to serve the institution in which it takes place.

To summarize, the literature on adult development theory and assessment then provides support for six characteristics of a self-assessment process for adult learners. They are as follows:

- 1) Uses open-ended questions.
- 2) Explores connections between cognitive and affective growth.
- 3) Allows time for reflection and integration.
- 4) Is accomplished in a supportive group of peers.
- 5) Serves learner.
- 6) Serves institution.

This study further examines these characteristics through their use in an exercise with adult undergraduates in the University Without Walls of the University of Massachusetts at Amherst.

C H A P T E R I V

THE CHARACTERISTICS OF A SELF-ASSESSMENT PROCESS FOR ADULT LEARNERS

Introduction

This chapter presents findings related to the first research question: What are the characteristics of an appropriate self-assessment process for adult learners? The literature suggests that such a process should have the following characteristics:

- 1) Uses open-ended questions.
- 2) Assesses connections between cognitive and affective growth.
- 3) Allows time for reflection and integration.
- 4) Is accomplished in a supportive group of peers.
- 5) Serves the learner.
- 6) Serves the institution.

This study tested these characteristics in a self-assessment process with a group of adult learners. The purpose of this chapter is to present the findings that relate to the six characteristics; each characteristic will be taken in turn. The materials to be used for this purpose include: 1) oral answers to the questions on Instrument 1, the basic assessment questionnaire, as they were

recorded in the classroom; 2) written answers to the same questions; 3) class notes recorded after the class by the researcher; 4) written answers to the questions on Instrument 2, the post-assessment questionnaire. Hereafter, this combination of materials will be called "the data." The presentation of data relevant to each characteristic will be followed by an analysis of the characteristic as part of an appropriate self-assessment process for adult learners. At the end of the review of the characteristics, there will be a summary discussion of all of them, in which they will be considered as a complete "package," and in which the implications of the data for other characteristics will be discussed.

The procedure to be used in reporting materials will be as follows: Learners' names will be identified by their substitute names, as given in Chapter II. When the age, sex, or racial background of a student seems relevant to the comment, that information will be given. Learners' written comments will be copied exactly as originally written, except that the spelling and punctuation errors will sometime be corrected when they would otherwise be distracting or leave meaning unclear. Any editorial comments necessary for clarifying what has happened or who is speaking will be placed in parentheses.

An Appropriate Self-Assessment Process for Adult Learners Uses Open-Ended Questions

Open-ended means that the learners are encouraged to choose their own categories of response rather than either having the

categories themselves spelled out in advance or the possible levels of response predetermined. As Patton (1980) says, an open-ended question "does not presuppose which dimensions of feeling, analysis, or thought will be salient for the interviewee . . . it allows the person being interviewed to select from that person's full repertoire of possible responses" (p. 212). An appropriate self-assessment process for adult learners uses open-ended questions because this gives the learners maximum freedom to speak their minds openly and thus to reveal what is important to them about their educational experience.

Instrument 1, the basic self-assessment questionnaire in this study, used open-ended questions. There were no prescribed levels of response and the respondents were also free to choose the subject matter of their responses within the generalized structure of the questions. Of the six questions, the first one is the most completely open-ended; it asks, "What stands out for you as you think back over your college education? What surprised you about it?" Answers to this question could range over the widest possible territory. The other five questions give at least a partial direction; the form of the questions gives some shape (albeit minimal) to the answer. Thus the data to be reviewed for characteristic 1 will be drawn primarily from oral and written answers to Question 1, the most open-ended question. It is important to quote extensively from the learners' written or spoken answers in order to get a full sense of how they responded to this open-ended question.

The answers to this question ranged over every part of the program but tended to focus on the learners' pre-program worries, on their initial return to school, and on early discoveries. Most comments followed this pattern: early or pre-program concerns, such as fears, worries, feelings of inadequacy, pre-occupation with age, confusion, and shock; followed by discoveries, such as that one really could do college work, that others were in the same boat, that advisors were helpful, that fellow students were supportive; followed by changes in behavior, attitudes, values and/or a sense of meaning and hope for the future. But discoveries were also about realities: one's own academic and personal limitations, the limitations imposed by family and by time, inadequate professors, non-caring students, poorly planned courses. In some cases these led to on-going concerns and questions about the ultimate viability or importance of the educational endeavor, particularly among the three youngest learners. However, the overall valence of the answers to Question 1 was positive, positive about one's accomplishments and positive about what was offered.

Pre-program fears and concerns were expressed in the following ways:

Rob: As I think back on my college education, I recall all the reservations that went through my mind before I got started. I found myself asking questions, such as, can I handle college academically? What if I fail? And, what will be thought of me if I do fail?

Eve: The beginning was "scary"; I felt intimidated by everything and everyone. To defend myself from possible embarrassment by asking "dumb" questions I decided to

listen and say nothing. Being so uptight often times I didn't hear what was being said. When people talked about core requirements, I.P., the modes, etc., I would put on this false impression of understanding and smile, no comment.

Joan: What stands out is the fear I had as a returning older student and having to respond to administrative red tape and the general classroom setting. With this in mind, adjustment would be a key word in my personal learning experience. From the beginning of my general education I had to adjust to a demanding time schedule along with deadlines and time related class requirements.

Mary: I think it had been twelve years since I was in school and I remember I always did terribly in science courses. I was terrified. When I did well in my courses I was surprised. At the beginning I studied a lot but as the semesters progressed I didn't study that much and I still did well. I think I was terrified of the exams and when I did well in them I was surprised.

Some early discoveries came in the form of disappointment and shock. Here, Sandy expresses both:

Looking back over my college education, I find that for the most part, in the beginning, the whole process failed to live up to my expectations. I am dealing with a 25-year time lapse and even now it amazed me how rude the students are, and how little control some faculty members have over them.

When I went to high school, back when dresses were the only allowable clothing for a young lady to wear, I responded to bells and clickers. I never left class before being dismissed, and god forbid that I ever came into one late. Food and drink were definitely not allowed. I guess even after all this time I still thought the education system was the same. When I took my first Latin class I was the only one sitting when everyone else was either on their feet or out the door at the end of the prescribed 55 minutes.

Fatima from Africa expressed her early shock in the following way:

When I came to this country, everything looked different because I came from a different country where the tradition and culture are not quite the same as here. But what stands out for me was my first day in "Perspectives

on Learning." When I first came to the class, I sat away from the rest of the students because they were white. My reason for doing that was because I did not know what their reactions would have been if I sat near them. All that time I was feeling uncomfortable and at the same time getting anxious to see somebody of my race. But it came out that I was the only black and from a different country for that matter. What worried me most was that every corner I turned to, I could see white faces and all eyes looking at me as if they had never seen a black person before. It was a terrible experience. It was really hard for me to concentrate for the first three weeks of that class. I was never before in my life surrounded by so many white faces, green, blue eyes. Secondly, those colors of hair - blonde, they were beautiful, but so unreal and unnatural to me. All these things made me feel unsure. I longed to see a familiar face, a black and sunny skin.

But not all initial surprises were unpleasant. Some were mixed, as in the case of Sara:

I was surprised at how simple it was to do my school work. I was surprised at how some of my peers considered their education so unimportant.

Many surprises and discoveries were positive in a general way:

Geneva: I don't see many surprises. I knew I could do good work because I was eager and ready to finally explore. I was surprised to learn that even if there were younger people in the class that they did not have a monopoly on brains or good results.

Joan: The most important discovery that stands out for me when I look back on my college education is the simple fact that I now enjoy school. I had an extreme dislike of the educational system when I was in high school and for years afterwards. Now I have realized that I still like to learn even though I still have problems with the institution of education. I have been able to put aside, for now, my dislike of the system in order to achieve personal growth and learning.

After the initial shock and fears had worn off, a number of positive discoveries were made, some as a result of contacts with other adult students:

Eve: As classes commenced at Montague House, I was surprised to find the presentation of material by UWW staff quite painless. I was immediately surrounded by people of all ages, with a common ground. We were all in the same boat. It was somewhat reassuring to know they harbored the same fears, apprehensions and had the same questions that had been so overpowering to me. . . . In spite of my paranoia, the days went by and almost without realizing it I was integrated into the class structure. I found myself exchanging ideas, notes, asking questions. I was contributing to the class, I was accepted by the class as nothing more or less than another class member.

Other discoveries were made with the help of an advisor:

Fatima: (Despite) the educational system, which is quite different from the one I underwent, I was able to do well in the first semester. But without the encouragement from my advisor, things would have turned differently. Thanks to my advisor.

Still others through contact with faculty members:

Sara: As for what stood out in a positive way, I must mention the joy I experience whenever I find myself in a classroom situation with a teacher who is truly good at what he or she does. I have been fortunate to have had several excellent teachers in various subjects, and it is because of this fact that I have never lost my love of academic learning.

Many talked about a combination of factors: a certain faculty member, a particular approach to the material, class interaction, input from classmates - all leading up to important insights about learning and about the self. This came frequently in the form of vividly told stories, of which the following from Sandy is typical.

I've come out of my Shakespeare class with some pretty good feelings a time or two. One night in particular I and a very attractive young man had to read a long portion from Antony and Cleopatra. As it had been 24 years since I had done any serious reading I was a tad nervous. That I was more nervous than I even knew became readily apparent to me as the reading went on. My face got hot and very red, my hands were perspiring, and my legs were

shaking; fortunately I was sitting down. In spite of all this I found myself falling back into reading the way I had so many years ago. The young man read well and the scene went on without too many mistakes. Upon completion of that particular scene though, the Professor gave us another to read. By then I was on a roll, even though one part of me was constantly critiquing as I went along. When the class finished for the night the people next to me said, "You read so well," "I wish I could do that." That night I walked out of there four feet off the floor and stayed there all the next day.

Not all classroom experiences were pleasant, however. Here is a particularly painful one, told by Eve.

As weeks went by I found myself sitting in large lecture halls with as many as 200 students in the classes. Many students were younger than my own college children. The feeling of intimidation was creeping back. This time I found myself sneaking into a class. I would try to choose a seat where I would be least visible. I would have no regard for whether or not I could hear the lecturer or see the screen if slides were shown. I would sit and not look right or left just straight ahead. Once, I remember plunking down into a left-handed desk in the lecture hall. Being right handed this was an awkward position. An understanding student recognizing my predicament offered me another seat. Immediately I refused the offer pretending my choice of seats was intentional. In the process of writing notes in my lap on top of books I nervously dropped everything on the floor. Just thinking of that situation embarrasses me today.

Two themes stand out in this story which were prevalent in many answers to Question 1. One is the pre-occupation with age (and the sense of being out of place because of age), and the other is the feeling of working with a handicap, largely because one has been out of school so long. Moreover, the frankness and honesty, even in talking about one's limitations, is an example of how open-ended questions can reveal troublesome and difficult experiences as well

as pleasant ones. Here are some other evidences of the latter, the first in the class discussion of Question 1.

Rob: (after discussing a course with which many of the class had had difficulty). The overall average for the class was a C and most of the class were elderly people.

Class: Watch that!

Rob: Let's say they were older. They'd been out of school a long while.

Sandy reported this incident, "I was sitting in a classroom when an 18-year-old came in. She said, 'Is this class just for old people?'"

Carla, who was taking many required university courses with younger students, said, "I didn't feel bad with younger people at the beginning; now I do." Eve put her concerns this way:

The students for the most part were quite impressive. They appeared so knowledgeable, so smart. I just knew they were looking at me wondering why I was there.

Sandy associated her age with her inability to concentrate:

I found it (studying) really difficult. It forced me to get rid of the stuff I'd been carrying around in my head for a long time - the junk in my mind. I kept reading and rereading and wondering why it wouldn't come.

Rob linked age with his lack of basic skills:

I had a problem with the basics. I was out of school for a long time and coming into this course (a science course) I was lost. (Q: What basics?) I guess I lacked the high school basics, the building blocks to where you get up to that course.

To which Martha added, "It was the vocabulary. We lacked the vocabulary." Eve also reported on her lack of writing skills:

Dear Lord, how I have agonized over paper requirements. I have accepted or rejected courses on the basis of how many papers were required. It is still a problem for me today. Looking back over the past work I now come to the conclusion I have done some pretty bad papers, on the

other hand I've done some good ones, too. The really important thing is, good or bad, I learned from each paper.

These age-related comments were confined primarily to the "older tier" members of the class, those 45 and older, which group made up exactly half of the class. The "younger tier" members, whose ages ranged from 23-33, were more likely to mention personal or relationship problems as handicaps to their study. For instance, Sara, who is 24, wrote:

Emotionally I experienced some incredible lessons while living in a dorm and interacting with my peers for almost the first time in my life. Not all the time was enjoyable, however, and it became increasingly clear to me as the semesters progressed that some of my own personal problems were making my academic progress difficult at best. I realized during my time at college just how cyclical my pos./neg. times are and how overwhelming they could be.

Mary, who is 33, stated:

Many things stand out about my recent college education, such as the hard work, the intense pressure, the lack of time for anything besides schoolwork and also the ability to do well in the required work. I appreciated the freedom to choose what I wanted to study through UWW, but I also felt somewhat isolated from the rest of my student friends. . . . The late night writing papers and studying for finals were hard to integrate into my busy life and eventually I developed resentment for my lack of free time.

Carla, a Puerto Rican student, had a unique handicap not directly related either to her age or to her personal life. Her struggle with the English language was mentioned in answer to Question 1 and became a theme throughout the self-assessment process, both in class discussions and in her written work.

With some difficulties, many times doing poorly and sometimes doing better, I keep trying to survive as a regular UMass student. (She was fulfilling the requirements for a Hotel/Restaurant/Travel major while at the same time being a UWW student.) Part of my difficulties I blamed on the language because English is my second language; therefore, I need more time than native students to put things together. What I mean is that no matter how well I learn the English language my thinking is in Spanish; for this reason I need to concentrate twice, first in Spanish and second in English. This is a complicated discipline which is not easy to follow and takes a lot of time and effort of the person interested enough to do it. Besides, I don't even have a good Spanish educational foundation to support my anxiety for improvement. (She rewrote this, and most of her other papers, twice.)

Moreover, she had another cultural handicap in that she felt obliged to continue the same elaborate cooking for her family. She said, "I have no time. I can't cook light meals, sandwiches. I have to cook heavy meals for my family."

Geneva also mentioned her family situation as a handicap. At times she blamed her lack of concentration on school work on the breakup of her marriage; at times she wondered if the breakup of her marriage occurred because she had become a student.

If I had not started UWW would my husband still be living here? Was he jealous of the fact that I got a letter inviting me to study in Europe? Did he want to be the smartest family member? Was he afraid of losing control over me? Did he ever really have control over me, or did I just let him think so?

However, despite these handicaps of age, lack of skills, lack of time, other encroachments on student life, family demands, cultural differences, and family crises, the learners are mostly positive in answer to Question 1. This is particularly significant, considering the open-ended nature of the question, since what stands

out for a student may be negative experience as easily as positive. In fact, in answer to the question about what stands out as you think back over your college education and to the question linked with it, namely what surprised you about it, they recorded many welcome (to them) changes in attitudes, values, intellectual concerns, behaviors, and self concept.

Changes in attitudes ran the full gamut. Here is what Kate writes:

What stands out for me in my general education is the developmental learning process of myself as an older full time student. Part of this ongoing process is the change in my attitude toward what I can do, rather than focusing on my weaknesses as an individual. . . . When I reflect on my general education I am surprised at my change in attitude toward learning and society in itself. Prior to attending the university I had a negative attitude toward "college students." And now here I am. When I look back on my general education I'm surprised at the support and friendships I have established at the university. During the past years I'm surprised that I have survived the many complications that arose. I'm surprised at how frustrated I was in different circumstances which I blew way out of proportion in reality to the original position.

Eve put it this way:

I'll summarize by saying, my General Education has been exciting and I love it. I didn't realize what I was missing out on until I "took the plunge" and came back to school. Every day I appreciate a little more how much there is to learn and I look forward to learning it. . . . The biggest surprise to me is the realization that at any age and in spite of the fact it is said we lose 100 grey cells a day we still have the wonderful capacity to learn. For that I am most grateful.

Sandy puts her change of attitude in a broad, future perspective:

For me an education had opened doors I hadn't realized were closed. My viewpoint, perspectives, attitudes and outlook had broadened in a way that made me much less

critical and far more objective than I would have been just working 9 - 5. My initial reason for a degree was financial, get the bucks. Now I just want to find a nice quiet "dig" somewhere away from the mainstream, where I can look through the past, and write about it. Maybe I'll look for Atlantis.

Some changes in values/attitudes made Sara more critical of what she found in her educational experience.

There were some surprises to be dealt with as well. For one thing, I found that not all teachers deserved my respect. I had come to college with an automatic respect that bordered on veneration for anyone who held the title of teacher. It was a shock to discover that some of the men and women being paid to teach could be petty, childish or incompetent.

Many learners spoke of broadened intellectual interests:

Martha: My big surprise came in a class that I expected to be boring but ended up enjoying thoroughly, Physical Anthropology, taught by a graduate student, (name). Science is distant from my natural inclinations, yet he made it come alive for me.

Martha; Another part of this Humanities course which is still valuable to me is the suggestion that we should look at old familiar things in new ways. I remember writing that this could be a valuable tool in my desire to write for children. I can assure you, this is proving to be a valuable tool, indeed.

There were also changes in behaviors, in the way learners went about things:

Eve: I fought hard to keep up with the class (Women's History 1640-1860). Since I had no previous history classes other than Art History, I found analytical reading difficult. The class taught me not only discipline but it made me question more the material I read. Who wrote it? What was the mood of the country at the time of writing? Was the writing a self evaluation of a situation or was it indeed factual? The more you know about a subject the more educated your objective reading will be.

Rob: The idea of conditioning myself to accept and/or develop new study habits and a class schedule which I would be required to fit into my personal life led me to streamline my activities to enable me to fill additional activities within a 24 hour period. This maximum time management was an offshoot of the UWW in giving me a keener insight of effective utilization of time.

Finally, there were changes in self concept. Carla wrote:

What surprised me about my education was that I had just discovered a new me. Three years ago and before I started to study I was more interested in having material things such as a nice home, a good car, etc. Today I have multiple dreams about all the things I can be able to do when I finish my college education.

Sandy stated:

Things were beginning to come together. I was no longer stagnant nor more importantly out of sync. A lot of negativism that I had carried with me throughout the previous semesters was disappearing. I had been given a change to become myself without the restrictions that had always been placed upon me, and I found it was much easier to deal with life and school and anything else that came along.

Mary related: "As each semester ended, behind me for good, I felt my strengths as a good student developing more and more." Joan said:

I began to enjoy school when I realized how my education was contributing to my growing self awareness. I became aware through my educational experience of my interests, my capabilities, my intellect, my ability to learn and my potential. . . . My knowledge, understanding, and view of the world has broadened immensely. I have a clearer understanding of social issues and problems and my place among these. Also, this new awareness has opened up possibilities for life after school that I hadn't known existed. I feel much happier now about myself and my existence and my future than when I first began my education.

Finally, Geneva reported:

I think I was probably on the way to being quite confident and happy about myself when my husband left. Then the self esteem was stripped away and the confidence in myself

as a human being, as well as a student, fell apart. I fell into a hole and am just beginning to find the first few rungs of the ladder that will get me out. I am determined to get out of the hole and feel that the University will not only be good therapy for me but will also as an end result be my savior - my very own ladder to help me climb higher whenever I am ready.

The answers to Question 1 can be summarized as follows: What stands out for these participants as they think back over their college education is early fears of returning to school; some shock at what they found when they returned; surprise that things went as well as they did; pleasure at the thought of support from other students and advisors; feelings of being out of place; and preoccupations with age, lack of basic skills, and handicaps because of lack of time and family constraints. But despite the latter, the respondents also mention a variety of positive changes for themselves, changes in values, attitudes, intellectual concerns and self concept.

It seems clear that the open-ended nature of Question 1 was particularly important to a full understanding of these adult learners, in a number of ways. First, Question 1 yielded an abundance of varied and lively data. There were poignant stories told in a moving way; these stories were apparently fresh in the minds of the students, even after many years. Judging from the volume of material and from the learners' willingness, it seemed important for the students to tell them, even when they provided negative information about themselves.

Second, the open-ended, and therefore uncontrolled, nature of the opening question provides a unique insight into the struggles of older learners, particularly the problems they have to overcome in order to succeed. The continuing preoccupation with their age, the on-going feeling of being out of place, the sense of handicap because of the long lapse in schooling, the sense of shock because of the difference between the forms of education today and those they experienced many years ago - these are important reminders of the realities of the returning adult learner. Comments about these realities are unlikely to appear even on the more enlightened (e.g., Denny, 1987) questionnaires about adult learners' satisfaction with a program, partly because one doesn't think to ask for them and partly because a certain climate or encouragement of open-endedness has to be established before they are given.

Third, the open-ended nature of the question produced what appear to be quite honest results. Learners were honest about their own fears, shortcomings, and failures. They were also honest about programmatic shortcomings; this comes out even more clearly in answers to later open-ended questions. The straightforward nature of these answers suggests that the learners can be trusted to be telling the truth as they see it; they are not trying to please anyone, nor are they falling into some kind of unthinking questionnaire-answering response. This honesty pervades both their written and spoken answers to later questions, suggesting the reliability of their assessment.

Fourth, the open-ended nature of the questions allowed the learners to talk freely of their own successes. Some, in fact many, seemed genuinely surprised and pleased that, in spite of the difficulties encountered, they had nevertheless not only survived but also had actually done well. In fact, this recounting of success may have opened the way for continued openness in answering subsequent questions; several learners said later (in evaluating the questions) that the first three questions "built on each other."

Thus, there are many advantages to the use of open-ended questions in a self-assessment process for adult learners. At the same time, it is important to guard against producing excessive and unmanageable data, about the possibility of which Claxton et al. (1986) have warned us; open-ended questions could easily produce this. However, this was successfully managed in this exercise. Learners were asked to restrict their written answers to two pages in length for each question. Class discussion of answers was limited to about an hour per question, and this proved adequate to allow everyone to participate. Limiting the total number of questions to six and the total number of participants to 12 also provided parameters for the amount of material collected. Although the questions were open-ended, the results were not unmanageable.

Thus, a process with open-ended questions has many advantages and its potential disadvantages can be modified. Such questions allow the students themselves to choose what is important. Because of this freedom of choice, open-ended questions provide an

opportunity for insight into the unique experience of older learners. Open-endedness encourages honesty in response because it does not put restrictions on the subject matter or feeling tone of the answers. And it enables learners to talk openly about their successes as well as their failures in ways that apparently provide building blocks for further assessment. Thus, the use of open-ended questions is an appropriate characteristic of a self-assessment process for adult learners.

An Appropriate Self-Assessment Process for Adult Learners Assesses Connections Between Cognitive and Affective Growth

The literature suggests that, since the purposes of higher education are to promote both cognitive and affective growth (affective meaning values, feelings, beliefs, attitudes), any self-assessment process should concern itself with these two domains. Constructive-developmentalists such as Loevinger (1976) and Kegan (1982) argue that it is the whole "structure" of the ego or person that actually changes, not just individual parts. That is, when there is cognitive growth there will also be affective growth, and vice versa. In fact, Kegan argues that the intermingling of affective and cognitive growth is inevitable, since both are grounded in what he calls "evolutionary activity," or the growth of the individual as s/he both relates to and differentiates from the environment. This material is covered more fully in Chapter III of this work, but perhaps some of Kegan's words will be helpful to repeat here.

In arguing for evolutionary activity as the fundamental ground in personality, constructive-developmental theory is not choosing between "affect" or "cognition" as the master of development . . . but it is putting forth a candidate for a ground of consideration prior to, and generative of, cognition and affect . . . evolutionary activity is intrinsically cognitive, but it is no less affective; we are this activity and we experience it (pp. 81-82).

The findings in this study are consistent with the work of Loevinger and Kegan. Much of the data presented so far in response to an open-ended question revealed that the cognitive and affective domains are inextricably mingled for adult learners. It is clear that learners move easily from the cognitive to the affective domain; once they mention a cognitive gain from college experience, they talk about its affective consequences. It is almost as if, for these adult learners, the former is not complete or fully understood without the latter.

Kegan's emphasis on the close relationship between the affective and the cognitive is illustrated again and again in the data collected from the learners in answer to Questions 1, 2, and 3 in Instrument 1 of the case study. The written and oral answers to these questions will provide the basis for examining Characteristic 2, the contention that an appropriate self-assessment process for adult learners should assess the connections between affective and cognitive growth.

Question 1 states, "What stands out for you as you think back on your college education? What surprised you about it?" Question 2 asks, "What changes do you notice in yourself as a result of your

educational experience? What changes do you notice in relation to your job? Your family? Your future plans? Your ability to think and to communicate?" Question 3 queries, "What particular learnings or experiences in IWW/UWW were most important in creating these changes? Describe in some detail at least one experience and its affect on you."

Two themes frequently repeated in response to the question, "What changes do you notice in yourself as a result of your educational experience?" were: 1) being happier (sometimes expressed as more content, more joyous, having more fun), and 2) having greater self-confidence.

Rob, the lone male in the group, who said at one point, "I guess men don't have feelings," nevertheless spoke laconically about his joy in school in this way:

I feel like going through school is like going through life. I spent 10 years in school in Boston. I was a high school dropout so I had to finish high school and that took me two years. So then I thought maybe I should have a degree because everyone else I worked with had a degree. So this is why I'm back to school. I've almost finished my degree requirements and I'm looking ahead and saying an M.B.A. isn't that far away. But earlier I said after I get my B.S. I'm going to enjoy life. But this is enjoying life and I wasn't aware of that until recently.

Joan summed up the feelings of many, in speaking of the changes noticed in herself:

I'm happier. I guess I like being in school which I never would have thought of before. When I was in high school I hated it. I took five years off. But now I think back and it was pretty miserable, the job I was doing, pretty unhappy when I came to school. At first it was a shock and I had to get adjusted to it. But looking back over

the last five years, I'm a lot happier now than I was then. It's a wholistic thing. The whole idea of education has affected me in all aspects of my life, my self-esteem, or interest, or understanding the world, or more directions, out of that crazy job I was doing. Things like that.

Eve said, "I describe it, I guess not as much happiness as contentment. Contentment seems to be, like to like yourself."

Geneva added,

Pretty much for me, like similar to other people. A little more confidence and a little bit happier. When I'm on campus or when I'm in the bookstore I just feel like there's a lot there I want to know and I'm happy for the opportunity to pursue the things that are of interest to me.

In response to the question about changes, Martha was at first unable to identify any in herself but after seeing them through the eyes of others she mentioned her own excitement:

I don't know of any real changes that have happened to me, but almost everyone I work with says they see a lot of changes and of course whenever I'm writing a paper I get so excited about it that I bubble all over the place and they all want to read my papers.

Sara, an Inquiry Program student and one who had lived in the dorms, credited her greater enjoyment of life to personal contacts at the university:

I'm with so many different people here at UMass. It's just that some of them I really respect and some of them I don't and I just don't have such high expectation of myself any more. I just do what I can do. And it's just so much nicer. I'm enjoying my life a lot more than when I first came. So that's a big change.

She said this during the class discussion. Later on in her written answer to the same question she added the following comment:

It (coming to college) was a matter of experiencing the joy of being part of a whole and the pain of making some embarrassing mistakes. . . . All in all, my perception of the world around me and of the mysterious inner terrain has grown more profound and yet more clear. Learning to be less judgmental has opened up whole realms which were once dismissed and has made this adventure a lot more fun.

Others also used the word "fun" to describe their college experiences. Mary states:

Just the fact that I even went for the first semester and got all A's -- those were night classes actually -- I thought, "This is fun, I like it," even though it was a lot of work and study. I was very interested in everything, absorbing all that I could. Now I see myself as being a sponge, trying to learn -- particularly from the Botany Department -- all that I want to learn.

Eve says:

And I've found that since I've gone back to school it's really great because oftentimes I see the kids (her patients at a college health facility) with books that I'm reading and it's fun to have something to talk about and get their opinions.

Equal in frequency to the themes of greater happiness, enjoyment, and fun, the participants mentioned greater self confidence as an outcome of their learning experience. Kate recounts:

I would say for myself that I have great confidence in a group situation and just being able to get up in the morning and dealing with a time schedule and go to class and do my assignment because for a long time I didn't have any kind of schedule. But basically probably greater confidence in a group setting or a classroom setting.

In a written answer to the same question about changes in herself, Carla wrote:

I have noticed beneficial changes in me because those changes have provided me the foundation to fulfill my

personal growth not only with educational experiences, but also with the strength for clearing all the obstacles I have faced, in my specific case, introducing myself in a new world with a new me (underlining hers). This new world includes new life style, different language, new environment, new people, and new family adjustments. In general it has been a real challenge for me.

Eve says:

For me I find myself being more productive with my time rather than wasting my time thinking about what I'm not doing and it has definitely given me greater self confidence.

Martha adds:

Well, I think I've noticed that I'm able to offer my opinion more often and I find I'm better able to ask questions if I don't know what's happening in a group, which happens very often, and I find now that when I meet new people in a group even, I very often now will make the first overture, whereas before I wouldn't.

Sandy makes the same point in another way:

Between that (her divorce) and the classes, it has taught me that there is nothing out there that is bad. There is really not much out there to be afraid of. I can trust myself.

When asked what going to school had to do with this she replied:

I guess it's expanding my awareness of things. People can tell you over and over again that it will get better, that it will change, but it doesn't work. When you see that you have gone past something, you say "Oh yeah, I went through it and I didn't fall apart; it's okay, I learned something here."

Rachel's response to the group's general feelings of greater happiness and self confidence as a result of being in school reflected her usual youthful way of expressing herself:

I was just listening to everybody and hearing them say feeling self confident or having more self esteem or just being happier. It makes me think about the people, I mean

what does that mean, why is it because we are doing things that interest us, every single day, and we're mixing with so many different people who also have something in common and I was thinking about the folks who don't get an education or who can't, who are poor, and don't have anything to interest them day in and day out. No wonder they're miserable, some of them, not everybody I'm sure.

Stated directly in Sandy's last comment, and implied in Rachel's, is the growth in awareness frequently mentioned by the learners in answers to Questions 1, 2, and 3. In fact, after increased happiness and self confidence, greater awareness is the next most frequently mentioned descriptor used by the respondents to describe the changes in themselves as a result of their academic experience. Interestingly enough, the word aware has both cognitive and affective implications. Webster's Dictionary (1959) defines the adjective aware as follows: "1) Watchful, vigilant, on one's guard; 2) Apprised, informed, cognizant, conscious," implying a relationship between the feeling state of watchfulness and the cognitive state of being better informed.

The learners reflected the close relationship between the intellectual learning and the feeling component of the world aware in such statements as the following:

Geneva: When I was young I was aware of the underdogs and the poor and the not-so-bright kids at school. Now I am aware of lots of things that bother me, but after reading an assignment for I.W.W. and learning that there are people who are also aware of our social structure I am now more hopeful.

Joan: I became more aware and that's kind of general, but more aware of myself, my interests, but also social issues, social problems. That's what my major is too so it might be part of it, but it just explained a lot of why

I would feel uncomfortable in the world, or my place in the world and what's going on around me. It doesn't make me feel any better about the things I see as wrong, but the understanding helps a lot. That was the best thing.

Not all awareness led to pleasant feelings, as can be seen in the entry above, and in the ones following from Martha and Eve:

My oral communication is improving. While I have discovered that many of my thoughts and ideas are every bit as good as other people's, my desire to speak out still gets caught in my throat around some people. I still have this innate fear even though I know many of my ideas have been tested in the educational frame and have held up well.

I think the thing most shocking to me is how comfortable we are with our ignorance. As long as you're unaware, you don't let yourself find out things, you feel comfortable. Life is pretty good. But then when you start realizing what horrible things are done then you don't like yourself as much. It's hard to deal with.

Two other feelings states which were mentioned by at least two learners in answer to the question about changes in themselves as a result of their educational experiences were a sense of belonging and a sense of purpose:

Kate: I think there's a sense of belonging, too. That you belong to the community. When you're in a bookstore you know why you're there.

Mary: I think I got in the head space that it was too late to go back to school (she is 33) even though I felt I was missing out by not having gone back to school -- that I should have done that. So when I did finally push myself and struggle to change my life dramatically so that I could enable myself to go to school -- which was basically leaving my relationship with a very wealthy person and moving back to this area specifically to go to the university. And then, when I got back and saw the UWW program, which I didn't even know existed before, I feel like it gave me a sense of purpose.

It should be mentioned that this entry mentions two themes which we have also encountered in answers to Question 1, namely, pre-program struggles and fears and the preoccupation with age. In other entries, too, there were similarities between the answers given to the open-ended Question 1 and the questions about more specific changes in Questions 2 and 3. What distinguishes the latter two from the former, however, is the level and the frequency of the specifics: changes which came as a result of particular learning experiences, and changes which made particular differences on the job, within the family and community, in relation to the future, in their ability to think and communicate. However, even in their specificity, these entries maintained the pattern of close interrelationship between affective and cognitive components.

For instance, Kate wrote:

One particular learning experience included the goal contracts or learning contracts. These contracts gave me the opportunity to translate learning needs into learning objectives and also the freedom to select effective strategies for using learning resources. Through greater confidence I feel that I can handle the academic challenges although there are sometimes problems adapting to the dual roles of adult and student.

Mary wrote:

The whole school process taught me how to finish projects once started or else I would not get the necessary grade. The independent study option at UMass enabled me to enjoy myself in the woods and get credit for it. I collected over 100 plants over the summer and fall and pressed them to create a wild plant collection. I then researched the medicinal values of each one, if any, and discovered many interesting facts about some plants that I had never known. I enjoyed researching the information using my own large collection of herb books.

Carla said:

For example, I think that the most helpful opportunity I have received is the Inquiry UWW seminars. These seminars are giving me the freedom and support to express my feelings and share educational subjects with my instructors and classmates. Besides that, the seminars are the fundamental base to mold our structural education development.

Not only does each of these show an intermingling of the affective and the cognitive in a way that Kegan (1982) believes we should expect, but also the last entry, with its mention of "structural education development," sounds as if the reader were quoting Kegan!

This intermingling also holds when the learners are talking about changes they notice in relation to their jobs, families, communities, futures, and ability to think and communicate. In addition, we find an ability to, and sometimes almost a need to, relate the educational experience to life outside school. For instance, Rachel says:

At Inquiry Mode of a social science class I had brought up the question of classes and classism, and I'm not in that job now but I used to work in Amherst in a little bagel shop and I noticed people's attitudes toward someone who is serving them and they don't know me from anyone but their entire attitude changes when they see somebody behind the counter. I'm really keyed into that now. . . . I'm just becoming more aware of that and very sensitive if I'm in that position of serving. In fact, I don't want to be a waitress any more, or a bagel person any more, because of that. I don't ever want to put myself in a position of being servile. If I do, I know who I am so their attitude doesn't bother me at all. Rather than to run away.

Rob spoke about how education had made him more sensitive to the people he supervises. In the comment below he also stresses his own increased awareness, implying the need to relate academic learnings to the workplace.

In relation to my educational experience, I guess it's motivating people and learning how to give feedback to different people, like making the person feel important in their job. I've learned this in the classroom, in Personnel Management. I never realized such small things were important. And I can relate to a lot of other things now because I'm more aware of it now, been made more aware of it. . . . So you get people involved and (help them) become a real part of the job. Give them some of the decision making. Let them be part of the decision-making process. They feel important, and they feel that they have a say in the decision-making process.

Not all learners reported positive changes in relation to their jobs; Geneva writes:

I have noticed no change in my job as a result of my education so far at IWW, probably because my present job as a clerk-typist has nothing to do with gerontology even though I work in a nursing home. It has not given me personal confidence or made me feel good at the work place. In fact, many times I feel as though I should be apologizing for going to school. Most people do not take me seriously.

It should be added here, however, that this was written at a low point in a difficult semester for Geneva, that she was underemployed in relation to her skills, having taken the job to maintain herself during a divorce.

Comments on changes in relationships within the family were many and dramatic. However, the following two written answers stand out and seem to typify many of the others. Martha wrote:

Changes within the family are very interesting. My son, who is a special needs student (pre-natal brain damage in the area of hearing, speech, and behavior) at Crotched Mountain Rehabilitation Center in Greenfield, New Hampshire, had become discouraged with education about the same time I enrolled in IWW/UWW. One day, when I talked about going to school and doing homework, he remarked, "You and I are both trying to get smart, right Momma?" From that point on he became more interested in learning and has confined his temper tantrums to the after school dormitory hours and at home. His teachers experience very little adverse behavior.

Carla, who comes from Puerto Rico, writes dramatically about her changed role in the family:

My personal life has also changed a great deal. Before I started to college I had different ideas about my responsibilities; in fact I seldom delegated house duties to my family. Nowadays I demand cooperation from each member of my family, so I can look forward, after my personal growth through my educational formation, to leaving behind the many years' docile image of a dedicated mom and wife, to become another student. This was a real drastic change for me and the most notable thing is that I don't even feel guilty for the changes. In addition, now I'm able to look at men as my equal, not as my superior. I no longer accept from a man to tell me, "That's women's work!" I will give my reply right back. I'm proud to say that in my house commonly are no sex duties distinction any more. These changes are the result of my college education heritage acquisition, (Carla's) liberation. Finally, my voice has been heard.

Her syntax may be a little awkward, but there is no mistaking her meaning, nor the strength of her feeling. Hers was certainly the most dramatic change in her relationship to her family, but other learners reflected similar sentiments.

Moving to changes in relation to one's community, this part of Question 2 led to the fewest responses, both in class discussion and in written answers. Perhaps this was because at least three members

of the group, as full time students, did not have an established community. Perhaps it was because, as Sandy stated, "I've had to cut myself off from my community to be a student." And perhaps it was because the concept of community was not defined. For whatever reasons, there were few answers to that question.

However, Eve, who is probably the most community-embedded or community-minded of the entire group, made the following comments in response:

I have been on a Board of Trustees for as many years as you people have lived probably, 20 years, (of a local community organization). . . . I've loved it but was terrified and careful not to make too many contributions. Now all of a sudden I find they want me to work with them for our 100 year celebration. They want me to chair the committee which I never. . . . five years ago I would have said no. But I'm really looking forward to it. . . . I think I feel better about myself, because it certainly hasn't been their fault. At committee meetings, I've been included, but I have held back and not contributed as much as I could have. Because I think the bottom line is a feeling of inferiority because whether you know something that they know or not the bottom line is you don't have a degree. And you see all these high formal educators that you feel that they know everything when in fact they don't; you have something to contribute also. You just have to let yourself go and contribute. But I think I never would have done it five years ago. I would have found an excuse that I was too busy or something. Now I'm thinking about working this with my women's studies and thinking this is going to be great.

Her last sentence provides an illustration of several of the earlier themes: increased self confidence, joyous expectation of the endeavor, integration of her affective and cognitive growth, and ability to relate academic learning to her life tasks outside school.

Moving to the section of Question 2 having to do with the future, there was considerable response to this query. Kate, one of the quieter members of the group, put it dramatically for the whole group to hear:

I know for myself prior to coming to UWW I didn't really think too much about the future at all. I thought about working but didn't have a structure. But now that I've been going to school and have a structure, graduate work is maybe a possibility, studio work is maybe a possibility; there's just so much possibility now that I couldn't see before.

Martha reflects this sense of new possibilities in her written answer to this question:

When I started with IWW/UWW I stated my future plans to be able to create and publish a children's book while still under the umbrella of IWW/UWW and on into retirement. Over twenty years ago, I had started to write a few short children's stories and even published a couple in religious newspapers.

I had to stop writing when we adopted (our son) about nineteen years ago. I wanted desperately to be able to pick up where I left off and write for children again. But, a strange thing had happened to me. I was convinced that never again would this ability be mine. I remember going into an Independent Study shared with another student under the guidance of (faculty name). I pushed my fingers into my sides to keep them from shaking; I primed my mind with stories written long ago; I felt dry, inadequate, unable to meet the challenge until the last two or three weeks of the study. (Instructor) told me to describe a child, her personality, her surroundings. I tossed and turned with thoughts slipping in and out of my brain for several nights. One morning I woke up with words flowing out so fast, my shorthand had to be pressed into service. My character was born. Two more semesters of hard work have watched her grow, relate to family and friends, to her surroundings and background. Sometimes every word or thought was a test of my ability. . . . I wonder if I have digressed from the question, yet my goal at the beginning and now has remained constant. The only real change is my greater level of confidence that I can attain my goal.

Joan summed up her general thoughts about her education and her future as follows:

My knowledge, understanding and view of the world have broadened immensely. I have a clearer understanding of social issues and problems and my place among these. Also, this new awareness has opened up possibilities for life after school that I hadn't known existed. I feel much happier now about myself and my existence and my future than when I first began my education.

In addition to new possibilities for the future, Joan's comments here also reflect the two earlier themes of increased awareness and greater happiness as a result of her educational experiences.

The question about the future brought at least one learner to question whether or not she wanted to continue her education. Mary wrote:

My future plans changed particularly in this last fall semester when I slowly realized I did not have the same sort of compelling drive to study, attend classes and write papers. My interests in developing my own careers in healing and midwifery seemed so much more important than sitting in classrooms and doing work for other people for the sake of a letter grade. I really questioned why I was in school if my interests were changing so. I struggled to finish the semester and decided to take only one or two courses in the future. The degree was and is no longer important for me in my career as it was when I first began school in 1984.

Similar questions about the value of completing one's formal education were raised by the two youngest members of the group, by Sara in answer to Question 1 (already quoted) and by Rachel during the class discussion of Question 2. However, Rachel's written comments below (written after the class discussion) suggest the positive role of her education in her thoughts about the future.

Here she is responding to both the question about the future and to the final question, about changes in one's ability to think and communicate:

My education has had a very deep influence on my ability to communicate and it has fashioned a particular way of thinking that has become very much my own. I've noticed in myself lately a relaxed and unhurried air that I never would have recognized three or four years ago. When I am speaking to one person or a group of people, I focus on this feeling within myself and words and ideas flow all the better. I am realizing that communication is who you are, how you come across to others, and that's what I'm all about - making my thoughts as accessible as possible in order to develop a well working relationship with the person I'm speaking with, even if the conversation lasts only five minutes. . . .

My more relaxed feelings with people reflect perfectly my thoughts on the future. Sometimes I'm overwhelmed with the idea of how much I can do, and sometimes I feel scared thinking there isn't anything I am able to do, but generally I think these extremes will eventually fuse together to form a moderate plan of action for the future. Most importantly, I have learned that the mind was made to change and that it's okay not to have a definite road paved in front of oneself. Eventually, I'm sure it might make one's life easier - but having no plan should not cause panic or insecurity. I have confidence in myself because of my schooling, and for now I shall make this confidence be my future. It is this very confidence that gives me a sense of security for today and tomorrow. I do not mean to sound as if my head is as big as a house and that I have no fears; I am simply saying that feeling secure is what makes me want to get up in the morning, and right now I am happy.

In its vacillation between fear and hope, this statement seems to reflect in an almost classic way the state of mind of a 23-year-old. It also recalls the two earlier often repeated themes of happiness and confidence.

Moreover, it introduces the theme of one's uniqueness, reflected also in Martha's comments about the changes in her ability to communicate in answer to the last segment of Question 2:

I find that I still communicate better on paper than I do on my feet. But, even so, I know I have to develop my writing techniques more so I can direct my writing to target populations without sacrificing the voice that distinguishes me from other authors. I am quite convinced my ability to think and communicate has improved and will improve even more.

In answer to the same question about communication, Fatima says:

. . . what I learned in some of the classes really changed me, because now I can sit down and communicate with people effectively, where at first I am always shy to sit with people and view out my ideas to them.

One other answer to the question about changes in the ability to think and to communicate comes from Mary:

I think in a way that school supported me in making me realize that I can think and communicate appropriately in any situation that I meet. I think I also learned how to fit in in a way. Say, for instance, being an older student and being in class with the younger people, you have to integrate yourself into that without being too nervous. I had no problem whatsoever in being involved with groups like that. That kind of carries you out into the world, because once you can be secure in any situation and still make your peace and say what you want to say, it did help me to be able to think and communicate effectively. I never really had fear of speaking and communicating, but it gives you a place to do that in the classroom situation, and with some really intelligent professors. You can communicate with them on their level, even if they don't know how old you are. So I think it has become an integral part of my way of thinking.

This comment not only ends the last segment of Question 2 about the various changes which learners noticed in themselves as a result of their educational experiences, in this case the ability to think and to communicate, but it also brings up a theme which dominated the answers to Question 1, namely the pre-occupation with age. Here the ability of the learner to integrate herself into the class

despite her age seems to have become a positive force for her life in the larger world.

On this note ends the presentation of data from Question 2, as it relates to the issue of cognitive and affective change. We will now consider briefly some data from the answers to Question 3. The question was "What particular learnings or experiences in IWW/UWW were important in creating these changes? Describe in some detail at least one experience and its affect on you." The reasons for the brevity of presentation of data from Question 3 are: 1) The pattern of the intermingling of cognitive and affective growth, our major focus in presenting the above data, is merely amplified in the answers to Question 3; to repeat it would be redundant; and 2) the answers to Question 3 elicited long and often diffuse stories from the learners, stories which are interesting but do not significantly add insight to the consideration of Characteristic 2 of an appropriate self-assessment process for adult learners. Two stories will suffice to illustrate the nature of them all, each told by one of the quieter and therefore less often represented members of the group and each also told in relation to courses or learnings not a part of the IWW/UWW curriculum and therefore possibly more representative of learning experiences in the university as a whole. The second story was also chosen because it was told by the member of the group who least often made claims for either affective or cognitive growth.

In answer to Question 3 about particular learnings which were most important in creating changes in her, Kate wrote:

One of my professors suggested that we, as students, should utilize what we learn. My art professor told the class that we could go to an art museum and study color, form, space, technique, and the paintings as a whole. But if we went home after the museum and watched mindless T.V., essentially we would be back where we started from, because we did not utilize what we had observed. For myself, this was a learning experience because as with art, ideas must be utilized to enable the artist to express her personal objectives. For some reason I always knew this, but to hear an authoritative figure vocalize his thoughts so well, brought a memorable response from me. Now when I'm in a class or learning situation, I try to utilize my learning experience, with my art and on a day to day level.

Although the feeling content of her response is perhaps not as strong as in some of the examples above, it is nevertheless clearly present, as is also the integration of her learning with the rest of her life, also a repeated theme in the answers to Question 2.

The second example, written by Sandy in answer to Question 3 about specific experiences which had created changes in herself, suggests some shifts in her own thinking during the assessment process, as well as the integration of cognitive and affective responses. Starting on a cynical note, as was typical of many of both her oral and written comments, she moves into a more positive tone.

On first considering these questions (both 2 and 3), my reaction was to say not a damn thing (had changed). The family is the same, 4 teenagers squabbling, the job still stinks, only now more so, I'm never out in the community and for my future and ability to communicate I still think I'm a fraud, so I couldn't think how I could describe one change in detail.

But on closer reflection, and nudged by my favorite friend, T.V., I got a little more insight into just how much I have learned without knowing it. My knowledge will never move mountains but it works for me. I was watching Dr. Who last Saturday, something I do religiously. This one started out with a nightmare with flashes of volcanic eruptions, double headed axes, birds, and ceramic figures of women in long dresses and wearing heavy eye make-up. "Good Lord," I thought, "It's Thera, and the ancient Greek civilization." Sure enough, when the good doctor awoke, he immediately asked for news of any volcanic eruptions, and right on the first page of the paper was the latest eruption of the volcano on the island of Sardinia, or Thera as it was originally known.

(After explaining who Dr. Who is, she continues.) But I digress. The fact that I recognized something from a class taken a couple of semesters ago really excited me and I dutifully watched waiting for more, and of course to pick up on any mistakes made by the Cretans. I am now, of course, an expert, based solely on one Greek Civ. class, and the corresponding Humanities Mode. (She then describes her observations of historically incorrect and correct details in the show.)

So what does this have to do with #3 or even #2? My degree plan is to put Archaeology and History in Story so that they are more easily understood. For some reason this particular Dr. Who hit the chord that said, Yes, it can be done in film as well as in novels. . . . Whatever it was, the effect was that on the following Monday, I put my (C.E) committee together. Strangely, I had just gotten my sponsor late Friday afternoon, the same professor who taught the Greek Civ. class. Perhaps it was a case of "deus ex machina."

This colorful and amusing piece puts together a number of the themes we have examined above. There is, of course, the joy of discovery and the pleasure in observing that one has not only learned something but can also be an informed critic. There is also the immediate application of learning to a life situation, not only as critic of the show but also as an active student who is empowered to accomplish program tasks. In these ways the story gives us a good example of the interweaving of the cognitive and affective in

the learners' educational experience and the importance of capturing both of these in an assessment process.

In summary, there are several implications of this data for what has been suggested as Characteristic 2 of an appropriate self-assessment process for adult learners, identified as the need to assess the connections between affective and cognitive learning. The first implication is that, since both cognitive and affective growth are so closely bound together in the experience of adults, assessment should encourage the expression of both dimensions. Second, adult learners find both kinds of learning equally meaningful and important. This suggests that any assessment that is to be meaningful to the learners will allow for description of both kinds of outcomes.

Third, although there may be many ways to get at this dual kind of assessment, one which is apparently successful, at least according to the evidence above, is a question that focuses on changes which have been perceived by the learners. The words changes or change were used repeatedly by them in both their oral and written answers. Apparently the concept of change stimulated thought and may have enabled learners to see more clearly the difference between what was and what is.

Fourth, the data from learners appear to indicate the importance of the emotions in the whole process of learning. This was demonstrated both in the strength of the emotions expressed in class and the way in which emotional responses were repeatedly

linked to learning experiences in both oral and written comments. Since this linking spanned the age range of the class, from 23-year-old Rachel to 62-year-old Martha, and since it covered learning experiences in large regular university classes as well as in the more intimate small-group IWW/UWW seminars, there is indication that such affective response may be widespread in higher education. This factor, too, has implications for the assessment of learning outcomes.

Thus, it appears that an appropriate self-assessment process for adults assesses the connections between cognitive and affective growth. This study shows that both cognitive and affective growth are closely linked in the minds of the learners, and that both seem important to them. Any comprehensive understanding of what happens to adult learners will include the connections between both kinds of learning.

An Appropriate Self-Assessment Process for Adult Learners Allows Time for Reflection and Integration

A third characteristic of an appropriate self-assessment process for adult learners is that the process allows time for reflection and integration. Students need time to sort through their learning experiences, to discover what has been important for them, and to integrate new learnings in their already complex lives.

The data will be examined on the subject of time in a number of ways. After a brief description of the time span of the process in the case study, there will be a consideration of the outcome and

value of that amount of time, based on the class notes, the learners' written answers to the question about time on Instrument 2, and based on their in-class discussion of this subject. Then, there will be a presentation of the learners' own general comments about time, made in the course of class sessions and written answers. Finally, there will be a summary, including the implications of the learners' general attitudes toward time for the specific use of time in the self-assessment process, especially one which is designed for the use of adult learners.

The self-assessment process was designed to take a considerable amount of time. Overall, six class sessions of approximately one hour a week, spread over six weeks, were allowed for this process. Moreover, some time was allotted for explaining the procedure, for reading aloud answers in class, and for a final evaluation of the entire process. In addition, the learners' assignment time for the six sessions was taken up in thinking about and writing answers to the questions. Thus, the expenditure of time was considerable.

Two related questions arise: What did the use of this amount of time accomplish? Is time an important characteristic of an appropriate self-assessment process for adult learners?

Some indications of what the amount of time may have accomplished are given in the class notes, as follows:

(2/19/87) They seemed more comfortable with silence tonight. Silence leads to second thoughts. Some people spoke a second time on what seemed to be a deeper level.

(2/19/87) Quieter members come forward when the group is smaller and they have more space. (Kate) and (Rob) made several noteworthy contributions tonight.

(2/27/87) I tend to think of silence as boredom or vacuity, when it may simply be thought. I need to remind myself and the class that silence is okay. I have developed a strategy of not interrupting the silence in any way until the flow seems to have run out.

(3/6/87) I am glad I gave them time to talk with each other in pairs at the beginning of class tonight.

These entries suggest that time was needed for thoughts to develop. One learner reflected this idea in her answer to the question about time on Instrument 2; the question was: "Was there enough time to think about the issues? Too much?" The respondent wrote:

More time would not have been all that helpful and less time would have put too much pressure on me to produce an answer without enough careful thought.

Another echoed this point in the final written evaluation of the course at the end of the semester:

It (the course) seemed to be moving slow at first but as the semester went on I began to really think about the questions and issues around education.

A third person made the same point about the time needed for thought, especially for channeled or directed thought, during the class evaluation of the process on 4/2/87:

At first I found them (the questions) very confusing. As I started to work on them it started to open up. It then started to channel things in a direction. It was kind of like I was floating; I knew what the end result would be but I wasn't too sure how to get there.

Her comments also point to an additional value of time, namely, opening up new insights, and are reflected in this entry, written on

Instrument 2 in answer to Question 3 about the value of the group process:

I was amazed at how helpful a little "food for thought" from a fellow student could bring information out of my own thought process. This information, often times discussed at length, would clarify a point or two for me and help me.

This learner also wrote about the connection between group input, length of time, and new insights in the answer to Question 2 on Instrument 2, the time question:

With all the class input we needed to spend as much time as we did on each question. I learned from every point that was presented and discussed.

She also suggested an integrative function for the whole process, and thus for its length of time, in her entry to Question 1 on the same instrument:

The questions set the stage for me to make me think about what I have and have not done in general education. It brought all my efforts of study together. It made me realize that I have learned quite a bit and I feel ready now to go on with my area of concentration with more confidence.

The learner recalls here some of the earlier themes of this study: integration of cognitive and affective growth and the development of greater self confidence.

On a similar note, another learner wrote about the ability of the process to "strengthen convictions," implying the role of time in accomplishing this. Her comments come in answer to Question 4 of Instrument 2, which asked if the learner would recommend this process to another group of students. She wrote:

Yes, for all the reasons above. Despite the fact that one might think he/she would answer if any of those questions were posed, often one's thoughts are vague, underdeveloped, and inherently untrue. The process of expressing them helps to strengthen the real convictions and to weed out or change those which are poorly developed.

The relationship between time and the strengthening of convictions is echoed in another answer to Question 2, the time question, on Instrument 2:

I found there was enough time to think about the issues. More important, there was time to share issues, discuss them in a relaxed, accepting atmosphere, and recreate and firm up some of my ideas.

This entry also introduces the idea of the "recreation" of ideas, a thought that was also captured by another person in an informal conversation on the last day of class, "This evaluation gave us a chance to see patterns in a new way."

Finally, the organic nature of the process and its ability to grow over time is suggested in this comments, made informally between class sessions by Martha:

This thing (the written evaluation) has expanded and expanded. It's now 12 pages. In fact, as I was going along I was answering all your questions and it just grew and grew.

In summary, the use of considerable time for the self-assessment seems to have had the following benefits: it helped to develop thought, to allow thought to be better channeled, to open up insights, to integrate learnings, to strengthen convictions, to recreate ideas, to see new patterns, and to give an organic, expanding quality to the self-assessment. To what extent all of the time allotted to the process was necessary to achieve these goals

will be discussed further under the second research question: "Can a procedure be developed that embodies these characteristics and is feasible within the confines of an adult degree program?" At that point we will discuss further the individual questions in both Instruments 1 and 2, as well as the time and timing of their use. Suffice it to say here that the learners saw several benefits to a time-extended process and that their comments point to the appropriateness of Characteristic 3, "allows time for reflection and integration," for a self-assessment process for adult learners.

It is also important to examine the learners' general attitudes toward time, as expressed in answers to the questions in Instrument 1. This will put their comments above into a larger context, will help to demonstrate the significance of their support for giving time to the process, and will give insight into how adult learners deal with time in general.

The data is gathered from answers, both written and oral, to all six questions in Instrument 1. In these materials, time as a subject was mentioned very frequently by the group. They talked of having little time, now that they were students, of lack of control over their time, of adult learners taking and needing more time, of managing time, of not wasting time, and of anger if they felt their school time was "wasted." Below are just a few of the many comments on time, which, after age, was one of their most frequent concerns.

First of all, they spoke of the lack of free time, and the overall lack of time, since becoming students:

Mary: Many things stand out about my recent college education, such as the hard work, the intense pressure, the lack of free time for anything besides schoolwork and also the ability to do well in required work.

Carla: I have no (extra) time. I can't cook light meals for my family, sandwiches. I have to cook heavy meals.

Eve: I don't want to let go of a lot of things I enjoy doing for them (her family) but I really don't have the time now.

They spoke about a lack of control over their time:

Kate: (answering the question about what she would change about her program) If at all possible I would change my status as a self-supporting single parent. At times I envy other students, because it seems they have so much independence in utilizing their time. If I wasn't a parent, for instance, I could go to campus during the evening and work or study. I would be able to attend more workshops or attend lectures which are mostly in the evening. As a single parent I feel I'm missing half the given opportunities. No matter how much time I have on a project or paper, there never seems to be enough time, which produces mediocre results.

They spoke about the time it takes adult learners to get adjusted to school in the first place. In answer to the same question about what she would change about her program, Sandy said:

(I would) put more effort into it. I don't think I fully understood what I was getting into, so therefore it seemed like it was going to be easier than it was. As you get older your mind doesn't seem to work as well as it did. You seem to have these spots where your mind goes blind and nothing comes in. I suppose that's the difference between being a child learner and an adult learner. Your head is so cluttered with other stuff. (So you needed to make some space for it?) Yes, and it has taken me a while to do it.

Also answering the same question, Rob said that he would take more basic writing courses in order to shorten his writing time, comparing himself with younger students in this skill:

Every paper I write, I have to really work hard at it for it to come out halfway decent. The average student may have to spend an hour on a paper, where I would have to spend four hours on a paper to make things come out the same way. I write one page, and maybe I'll change my mind about the whole thing three or four times before I finally am satisfied with that paper. I stayed up till midnight last night writing a paper, and got up this morning and thought, "This is garbage," and threw it away. I rewrote it again and it came out all right. So if I had to do it again I'd start with a good basic education.

Also, (in this context), comparing herself with younger students,

Eve stated:

I think that's why we don't get things done as fast as other people. There's so many people we're trying to make happy. It's hard to come through with time for yourself.

Many spoke of the vast amount of time it took them to accomplish assigned tasks in their educational program. One spoke of spending "hours and hours and hours" memorizing slides in an art history course, another about "staying up til 3 a.m. memorizing facts for a biology course," another about spending a week on a paper, only to have a professor say that it was not done correctly, and then spending another week on it.

Carla has a particular problem related to time; she wrote, in answer to the question, "What stands out as you think back over your college education?":

Part of my difficulties I blamed on the language, because English is my second language; therefore I need more time than native students to put things together. What I mean is that no matter how well I learn the English language my thinking is in Spanish; for this reason I need to concentrate twice, first in Spanish and second in English. This is a complicated discipline which is not easy to follow and takes a lot of time and effort of the person interested enough to do it.

Many learners spoke of the need to utilize better time management skills in order to accomplish more, in view of the many demands on their time; some were actually succeeding in managing time better. Rob wrote:

Attending college and focusing on such things as family responsibilities and job, it's amazing how much I can accomplish when I have to. It's a simple fact that whether it's with my family, school, or job, I accomplish more when I work under some sort of pressure. Going back to school has disciplined me in time management; before if I gave myself all day to do something, it would take all day.

But other learners were resentful of the amount of time they were spending in school and on school work, especially if they felt that their time was being wasted. Sandy said (about an anthropology course of which she had been critical):

I don't know why I was so upset about that course, but I was furious. I was so disappointed in it. I just felt like it was a waste of time. And I don't feel that at my age I have a hell of a lot of time to waste. I have a lot of time to make up for. I figure I'm 25 years short of things. And I don't want to fool around with things that don't mean anything.

In this comment we come full circle, back to the pre-occupation with age which was discussed in the section on Characteristic 1 (open-ended) and which has been a constant theme throughout the answers to all of the questions. It also serves to put the time dimension into full perspective, since it shows the urgency of this adult learner to make this educational experience work, to make the most of her precious time.

In summary, then an appropriate self-assessment process for adult learners needs time in order to work, especially for adult

learners for whom time is a critical factor. These learners did not think of the assessment process as a waste of their limited time; instead, they saw it as needing to take time to be of maximum value to them. Moreover, the data also suggest why this is so: there are many dimensions of living and many years of life to be integrated with new learning. Values, beliefs, ways of thinking, feelings, and attitudes have developed over the years, and they need to be reassessed as part of the college learning experience.

Belenky et al. (1986) say that "constructed knowledge," the highest level in their scheme of epistemological development, (begins) "as an effort to reclaim the self by attempting to integrate knowledge that they (the learners) felt intuitively was personally important with knowledge they had learned from others" (p. 134). They also suggest that it takes time.

Thus, an important characteristic of an appropriate self-assessment process for adult learners is that it allows time for reflection and integration. Time produced important results in the case study and the learners themselves acknowledge its value.

An Appropriate Self-Assessment Process for Adult Learners is Accomplished in a Supportive Group of Peers

Characteristic 4 of an appropriate self-assessment process for adult learners is that it is accomplished in a supportive group of peers. The data pertaining to the group experience will be examined in several ways. First, there will be a description of the development of the class as a group, drawn primarily from class

notes. Second, there will be an examination of the learners' comments on the group, drawn from their written statements on Instrument 2 (the post-assessment questionnaire), and from oral comments. Finally, there will be evidence of group process in action, drawn from the flow of answers in oral discussion, from the class notes, and from observation of the specific ways in which group members supported each other throughout the assessment process.

The members of the class took some time at the beginning to form into a working group. Class notes, written after the first session on 2/5/87, state the following:

This spring's class is going to be very different from last year's (a reference to a smaller and much more homogeneous class from the previous year). If the assessment process will work with this group, it will work with anyone. Why? Because I have (at least at first glance) a quiet, inward group, I have a very varied group . . . and I have a larger group: 12 as opposed to 5. Also, whereas last year we met in my office in a small, intimate group, with comfortable chairs, we are now in a fairly large, bare classroom. We are separated from each other by space and by chairs with arms. I am obviously the teacher, rather than one of the group. Two of the students do not have English as their first language; one is from Africa, one is from Puerto Rico.

This present group has people who have never been in any classes together and may never have seen anyone else in the class before. There are two very young women from the Inquiry Program. One has been out of school a year and has gone in therapy. No doubt she will have an interesting contribution to make, but she has been away from school for a while and I wonder if it will be fresh in her mind. The age group is very various - 23-60+ - there is also one lone man in the group.

The combination of factors listed above made the development of a group process look difficult at best. After the first session,

the class notes express this researcher's doubts and questions about the group as follows:

I need to be careful that my first impressions don't affect the way I deal with the class. I need to trust the process. I need to believe that something has happened to them and that they will be able to understand it. I need to believe that with people of ordinary abilities there is some change, that the program makes some difference. I also need to believe that the structures I have put into place will ultimately work. I need to have patience that what I believe about people will produce results, namely, that if you give them enough freedom their imaginations will soar and that if you give them enough structure this imagination will find a way to express itself.

These doubts were at least in part a result of an assumption about the group's heterogeneity, namely, that it would make the development of a working group more difficult. In the end, this proved to be an unwarranted assumption; however, in the beginning, the great variety within the group looked like an obstacle. For instance, in addition to the variations listed above, the learners varied greatly in age, with ages spread widely between 23 and 62 and no two people of the same age; they varied greatly in socioeconomic background, with four from working class backgrounds, all first generation to go to college; they varied in ethnic background, including one Puerto Rican, one Black from Africa, and one full-blooded Native American; they varied in the duration of time spent in the program, from eight semesters to four semesters; and they varied in the length of time since they had completed the general educational program which they were assessing. There were 11 women and one man.

Despite the instructor's initial doubts and the class's heterogeneity, the learners described above developed into a working group fairly quickly. Class notes for 2/12/87, after the second session, when the class answered Question 1, "What stands out for you as you think back over your general education?" read as follows:

Class felt more comfortable tonight and I in it. It was a good idea to have the two graduate/visitors; they provided a calming influence and reassured everyone. I made the circle smaller so that we could be close to each other and I closed it, instead of making it a semi-circle with me up front. . . .

Also, there were many powerful feelings expressed: fear at the beginning of the IWW program (Eve), surprise that they could do it (Mary), anger (Carla) about not being able (as a Hispanic student) to have more time to answer the questions on her exams (since she knew the material and just took more time because she had to translate), frustration about the science course (Rob, Sandy, Martha), joy at success (several), pain at having a confused mind (Sandy). The feelings are close to the surface; they don't need much encouragement to come forth.

The two IP students are in a different ball park - though they certainly speak up and have something to say. (Sara) has come to the point where education isn't so important to her - she's not sure she'll even get a degree. (Joan) is engaged and engaging, giving advice to (Carla) about where to get help with her problems.

(Sandy) is as angry as when I first met her - talks a lot. (Rob) and (Eve) are also talkers. (Mary) led off, (Martha) is eager and willing; (Carla) is full of ideas when directly questioned. (Sara) and (Joan) are quiet but thoughtful. (Fatima) needs to be drawn out. She forgot twice what she was going to say. (Rachel) and (Kate) weren't there. (Geneva) hadn't found a partner and didn't think she could speak.

This lengthy entry is presented in its entirety because it seems to illustrate a number of things about the development of the group. First is the importance of specific group building procedures, such as the arrangement of the room, the presence of two

of last year's participants who reassured the group about the nature of the process, the self-selection of the group into peer pairs (already such a norm in Geneva's mind that she felt she couldn't participate without one), and the observing of the group norms which had been set up the previous week, namely, honesty, willingness to express feelings, and non-judgment of others.

Second, the class note entry suggests the value of Question 1, which will be remembered as the most open-ended question, in providing an open atmosphere in which frank opinions and emotions could be expressed. Third, there is the noteworthy dynamic of the successful entrance of the two IP students, who knew none of the others and thus might have remained less integrated into the group. After an initial period of silent observation, each participated in a unique way, Sara by questioning the value of formal education and Joan by giving advice to someone 20 years her senior.

As a group building strategy, the peer-pair arrangement, mentioned in the class notes above, appeared to work well for the first few sessions. Class members were asked to pair off by self selection and then to take notes while the other member of the pair was speaking; the notes were to be exchanged at the end of the class session and to become the basis for the written answer to the question which had been discussed in class. This pairing up immediately put each participant in close contact with one other and apparently helped build a sense of community. However, the peer-pair note taking started to break down in the second session, when

the members of the group got so interested in what was being said that they had to be reminded to take notes, and was abandoned altogether in the fourth session, at the learners' request; they said they found it distracting. By this time, however, it has apparently fulfilled whatever group building purposes it was able to accomplish, and the group was well established.

Of course the ultimate reasons for the rapid coming together of the group cannot be fully known. No doubt many of them are intangible; the final class note written on 2/12/87 speculates about what they may be:

I need not have worried about talking and participating. The program has prepared them well - even the most reluctant students. They know they are supposed to participate and they are not afraid. They know each other in some cases - have been together in classes before. Even the two younger students are verbal - and ready to go. Is it the program? the age? the format? me?

For whatever complex series of reasons, the group continued to develop a sense of togetherness and common purpose. Some indications that the participants also noted and appreciated the value of the group in accomplishing the task are reflected in later class notes. For instance, Sandy, who missed the class on 2/19/87 because of a schedule conflict, came the next day to be interviewed by this researcher about her answers to Question 2. In the course of the questions it became apparent that she had been greatly helped the previous evening by the discussion of Question 3. A class note made after that interview reads as follows:

(She made an) interesting comment about how she didn't think anything had changed about her ability to think and to communicate "until the class last night." Then she realized that it had. "You know, as you said, a light goes on."

In fact, she mentioned the benefit of the class twice, once before we had begun recording. I wish I had pursued this with her - could do it at the beginning of the class. In other words, I need to test the waters now. My discouragement of last night may be unwarranted - may have been late night fever!

Moreover, class notes written after the session on 3/6/87 state:

The class apparently is more exciting and helpful than I initially thought. (Martha) stayed after class to tell me that she is so wound up when she gets home that she has to talk to her husband until midnight. Then she also said, "Everybody loves this class; they're getting so much out of it." Also, (Sandy) actually volunteered to read (the answer to the next question), saying, "If it rolls out as easy as this did, I'll be glad to." Since she is the class cynic, this is some sort of victory.

These comments appear to indicate that the learners not only enjoyed the sessions but also were being enabled by the group process to complete the task.

Some indication that the group process not only may have helped accomplish the task of self-assessment but also may have enabled certain class members to become more assertive is given in this final class note entry, made on 4/2/87. On that day, an oral evaluation of the whole assessment process took place and was tape-recorded, including a discussion of Question 6, the purpose of a college education. The class note continues:

However, the most interesting discussion came after the tape recorder was turned off. (Rob) raised the question of why he was going to school, in view of all the things he needed to do at home - how he wanted to be with his son, a senior in high school, and yet how he knew he would

finish. Why was he making himself do this? Others expressed similar views, especially Sara and Rachel. Rob asked me why I do it! The only thought I had was that it's biological, goes back to our evolutionary origins (i.e., what brought the creatures out of the sea and ooze and into the sun? and trees? We have the urge to learn, to know. It keeps capturing us, even when we put it down). This was a lively conversation. We talked about the urge coming in waves or cycles. At one point, Rob said, "Don't be surprised if you don't see anybody in class next week!"

But then Fatima burst out (the first time she said anything voluntarily in class) and talked vehemently about how she just couldn't understand what people said. In her country (name), education is what everyone wants; lack of it is what is holding her people back. "I just can't understand what you are saying," she repeated. (Without saying it directly, it was clear from her tone of voice that she was critical of what they were saying; the class understood this.) Some of the group suggested we might be spoiled about education; we get to take it for granted. It was an interesting and lively end to our discussion.

Here we see Rob challenging the instructor and the system, while normally shy Fatima challenges the whole class!

Such class notes and observations are obviously subjective, however, and need to be corroborated or corrected by other data. One piece of evidence of the importance of group participation and the ability of group members to build on each other's experience is provided in the flow of one comment to the next in the transcribed tapes of class discussions. For instance, during the answers to Question 3 on Instrument 1 (the question about specific experiences that led to changes), Geneva says, "One more thing that came to mind when (Mary) was talking about power . . .", and then proceeded to talk about an incident in which she had learned about the relationship between money and power, after which Sara recommended her taking an economics course with a certain professor who could

clarify this issue for her. At this point, Mary was "reminded of a course on Meso-America I took at Smith," which discussed the relationship between money and power issues past and present in that part of the world. Such connection-making was frequent throughout the self-assessment process.

Nor did everyone's perspectives agree. After Rachel's long description (in answer to the same question about learning experiences), of her disappointment with herself for not going ahead with civil disobedience during a student demonstration about divestment of stocks of corporations doing business in South Africa, Martha is reminded of getting a paper in late ("which I never did") because of being too moved to complete the work by a book on big corporations' take over of smaller companies and another one about the dangers of nuclear annihilation. However, the next comment is Sandy's lengthy criticism of and statement of anger toward her anthropology professor for showing slides about civil disobedience against nuclear armaments at Greenham Common, concluding with the comment:

I just don't believe in that stuff. I'm a hawk not a dove. I don't really believe in protesting. I just don't believe it should have brought into the class.

It seems as if she felt free enough in the group to make statements clearly different from the opinions of most of its members. The connection between Sandy's comment and the two preceding ones is both similarity of content (though different conclusions) and the strength of her feeling reaction to a learning experience.

Other evidence of the importance of the group to the learners and to the self-assessment process is provided by comments made by the members of the group themselves. Those comments occur primarily in their written answers to question 3 on Instrument 2, the post-assessment questionnaire, which asks, "Was the group process valuable? In what ways?"

The answers to this question corroborate the class notes in the following ways:

- 1) Group members felt comfortable with each other, gained support from each other, felt "close" to each other.
- 2) Group participation stimulated thought, helped clarify thought, helped people dig deeper, get new ideas.
- 3) The presence of representatives from two different programs not only did not detract from the process but was actually considered an asset.
- 4) Diversity in backgrounds of group members was considered a positive factor.
- 5) Sharing of experiences was a learning experience. Perhaps the lengthy stories, sometimes seen by the facilitator as distracting, were necessary parts of the process.
- 6) The support, stimulation, clarification, diversity, and sharing of experiences of the group seem to have provided help in the self-assessment process.

Sandy uses imagery to capture something of what is said above about the benefits of group process in self-assessment in the

following statement, made in an interview in answer to a question about changes in her ability to think and communicate:

I was going to say none, until last night (in class). (What happened last night?) Just listening. Sometimes it's like a light went on or a door opened; you aren't aware of it until somebody says something. I'm not consciously aware of a change but there is one. It's hard to explain.

It is clear that the learners felt that the participation in the group played an important role in their ability to accomplish the self-assessment task; for some, it may even have made completing the task possible where it would otherwise have been difficult or impossible. Sandy indicated that she wouldn't have realized how her ability to think and to communicate had changed had it not been for the stimulation of the group. Fatima and Rob were jolted into greater assertiveness by means of the group process. Group members were reminded of forgotten but important learnings by hearing the contributions of others and by building connections with them. In written comments, students stated that group participation not only stimulated but also clarified the thinking process involved in assessment. Others found that the group enabled them to "dig up more," to "come up with new ideas," and to "bring information out of the thought process." Still others found that hearing others' answers enabled them to formulate their own. This indicates that the answers to questions would have been less thorough and perhaps less honest without the group process.

In addition, hearing others' experiences continued and amplified the learning process which the learners were evaluating.

They gained perspective from hearing others' talk, they came to appreciate the diversity in age and fields of study, they got a better understanding of reasons people react differently to a given situation. Thus the evaluation process was not simply artificially added onto the end of their educational process (and therefore possibly to be dismissed or taken lightly); it was an integral part of their education.

Finally, since adults see themselves as a minority group and out of place because of their age in the university setting, it may be necessary for them to share the evaluation process with their peers. Such sharing affirms their experience and makes it more accessible to assessment. Many of the learners' oral and written comments suggest this; many spoke of having their best learning experiences in small groups of peers. If assessment is also a learning experience, as the data above suggest, it will be done to greatest advantage in a group.

It is clear from this study, then, that a fourth characteristic of an appropriate self-assessment process for adult learners is that it is accomplished in a supportive group of peers. The group makes the assessment task possible, it enhances the task, and it creates new learning.

An Appropriate Self-Assessment Process for Adult Learners Serves the Learner

Most assessment in higher education is done to serve the institution's needs for classifying, placing, and graduating

learners, as well as for its purposes of evaluating programs and faculty, changing curriculum, promoting its accomplishments, making good public relations, and satisfying trustees and state boards that they are doing a good job. All of these are necessary functions, but they tend to obscure the other important function of assessment, namely, to serve the learner, as the pioneering work and writings from Alverno College (1979, 1985) remind us.

Even this present study fulfilled other functions than serving the learner. For one thing, it enabled this researcher to obtain valuable data for a dissertation. For another, it provided the program and the university with feedback, as the next section will show. But did it really serve the learner? Could the learners recognize benefits to themselves and what were those benefits?

To examine these questions, first we will look at the tangible results of the process, what specifically usable products came out of it for the learner. Next we will examine the answers to two questions on Instrument 2, the post-assessment questionnaire. Finally, we will look at other comments made both in and out of class after the self-assessment process was completed.

The self-assessment process in this study was embedded in a course which netted the participants four credits. Writing the answers to the six questions in Instrument 1 was a major requirement for completing the course and all 12 members of the group completed this assignment. Participants made their written answers to these questions the basis of their "self and program evaluation," a

required part of the Celebration Evaluation portfolio, which was both part of the course requirement and a necessary preparation for the Celebration Evaluation event, marking the formal end of their general education. Although these benefits are specific to the program in which the group participated, they no doubt provided at least part of the incentive for the completion of the process. In fact, embedding the self-assessment process both in a course and in a larger academic program assures that the process will serve the learner through fulfilling program requirements, at the very least.

However, the learners also identified other benefits to themselves in the written answers to Question 1 on Instrument 2, the post-assessment questionnaire. This questionnaire was given on 3/19/87, the day the last question was asked. Students did not sign this questionnaire, so the material cannot be provided by name.

Question 1 reads, "Did this self-assessment process help you? How?" In answer, for three students the benefit to them was an instrumental one; that is, the process enabled them to answer the questions and to do their assignments. If they saw any additional value to themselves beyond this, they didn't mention it. Another suggested some additional learning beyond the mere completion of the questions, but didn't say what it was. Three answers indicated that the writers discovered some changes in themselves: one in terms of goals, one in terms of attitudes, and one in terms of feelings about education. Three learners described discoveries about themselves in more detail: one thought that the process had enabled her to

integrate general education and therefore to proceed with confidence into the area of concentration. Another found stimulation, was "force(d) . . . to think and consider other people's ideas in the decision making process" and discover how actions relate to educational goals. Another stated three specific outcomes, two related to the process itself and the other related to material in the answers to the questions.

One respondent seemed to have been the least served by the process. Because this answer is so like comments she made in class, it may be safe to assume that this was written by Rachel, at 23 the youngest member of the class. For instance, in the oral evaluation of the process on 4/2/87, in answer to the question about whether the self-assessment process was helpful, she said:

The whole process is good. But I'm still in the midst of changing. It's hard for me to say what I've learned. I'm too close to it. In five years I'll be out of school and it will be easier. I think it's a good think but it didn't always work for me. I was frustrated. For me the mold hasn't set yet.

It is possible to interpret her negative response to the question as being solely related to her age, as she herself suggests. On the other hand, Sara, who is just one year older, indicated a more positive benefit. In her written answer to Question 6 on Instrument 1, in answer to the question about the purpose of a college education, Sara wrote:

I will always consider my college education an important part of my development. However, since I am still immersed in this adventure, it will be a long time before I can assess the full value of my education here at college.

It may be significant that none of the older learners made statements of this kind; we will return to the relationship between age and the ability to evaluate in the answer to research question 2.

In addition, there is another source of information about the learners' assessment of the process and its benefits to them. It comes in the answer to Question 4 on Instrument 2, which asks, "Would you recommend this process to the next group of students? Why or why not?" Assuming that a recommendation for the process to be used for others indicates, at least in part, one's assessment of the value to oneself, there were eight affirmatives, one affirmative with a time qualification, one qualified affirmative, and one negative.

In addition, learners cited added benefits of the process: fun and instructive, open-minded, and clarifying. Moreover, one learner suggested that the process helps students cultivate respect for their peers, another commended the active, as opposed to passive, participation, and a third thought that all students should take part in such a process.

Some of these themes were repeated in the oral evaluation of the process which took place in class on 4/2/87; in addition, some new insights about the benefit, or lack of benefit, to the learners were added. For instance, in answer to a question about the usefulness of the individual questions, Rob said of Question 6:

I'm torn about why I'm going to college; I don't need it for my job, would rather be home with the kids, spending time with my family. Why am I doing this? For the piece of paper? For self esteem? I get upset with myself

because I don't know the answer to that question. I don't want it to be for the piece of paper. I'm in a corner now, can't throw everything away. The system has me pressured to finish; if I don't, I'd be throwing all that away. I don't even want to talk about it, let alone write about it.

At this point, Rob apparently doesn't see the answering of that question as beneficial to him, as yet it has brought him face to face with his reasons for attending and finishing college. Even though the process is painful, clarifying that question for himself may have long-term benefits for him. It is also noteworthy that his criticism is closely related to his life circumstances at the time, as is typical of adult learners.

Other criticisms of parts or aspects of the process were also given on that same day. We have noted above how both Mary and Kate thought that the process was too long and how Rachel felt that it didn't always work for her because she was too close to her education to evaluate it. Everyone criticized the peer-pair note-taking for being too distracting and several found Questions 4 (about changes in IWW/UWW and the university) and 5 (about changes in one's own program) either difficult or irrelevant. Sara said:

All are valuable questions but personally I had trouble with 4 and 5 for reasons (Rachel) was talking about. I don't know what I'd change - I can't change the past anyway - I always try to do the best I can. It goes against my philosophy because I don't wish the past was different. I just take what is given. But the questions are valuable; some people might have constructive criticisms which would be helpful.

She did not find that part of the process helpful for herself, but did not conclude that it could not be beneficial for others.

Other criticisms of individual questions were also given that day; these will be discussed further in the section which considers the second research question. Suffice it to say here that although parts or aspects of the self-assessment process were questioned, no one stated that it had no benefits to them at all.

In fact, the majority of comments were about its benefits. Rachel said, referring to the practice of talking about a question before writing:

To me, it was like stretching out my body. I have to go through a series of limbering up exercises before I feel really supple. It's the same thing as talking about it ahead of time.

Carla noted:

I really liked Question 2 very much. In general, it included everything. I found out I have a lot to say.

Sandy said:

At first I found them (the questions) very confusing. As I started to work on them, it started to open up. It started to channel things in a direction. It was kinda like I was floating. I knew what the end result would be but I didn't know how to get there.

Eve gave this opinion:

I thought the whole thing was good. You did reflect on the questions during the week. When you get here and talk about it, it makes you think about things you wouldn't have thought about. I had gotten so involved in my classes that I really forgot about the degree.

Later she said, about Question 6 (about the purpose of college);

We have to deal with the question of the purpose of education, have to think about it and answer it for ourselves. It's different for everyone - very private and individualized. Thinking about it makes a difference to your self esteem. It's wonderful for your self esteem - gives you self confidence.

Martha stated with enthusiasm:

This self and program evaluation is one of the most fascinating things I've done in my whole life . . . I kept finding myself all the way through this self evaluation, kept finding new dimensions in myself. It reminded me of Paolo Friere's book about methods of teaching adults. They kept sending them in ahead of time to find out where they were at, not only to teach them to read but to find themselves in the community, the state, and the country. As they learned to read, they learned to apply. I discovered that general education follows the same lines; the university creates the atmosphere where this takes place on a higher level. When I saw in the syllabus that the C.E. marks the end of one's formal general education, I didn't want it to end.

It may be significant that the last two speakers, consistently the most enthusiastic about the process, are respectively the second oldest and oldest members of the group.

Two weeks after this, during a class discussion, Sandy, another of the older members of the group made the following comment:

I had a job interview. In fact, they called me back for a second interview, so I must have done pretty well. In fact, I think I did great. I could never have made it without this class. It taught me how to sell myself.

Sandy's comments and those of others above indicate that the learners saw in the exercise some direct benefits to themselves. They found that the questions stretched their imaginations, focused their thinking, opened new avenues of thought, gave them increased self esteem, enabled them to find new dimensions in themselves, and, at least in Sandy's case, made her more able to sell herself at a job interview. In all these ways, they felt served by the exercise as a whole, even though some might have had questions about some of its parts.

Mary's critique of the process was probably the most sustained of anyone's in the group, not only at the final class evaluation but also through her written answers to questions on Instruments 1 and 2 (the latter recognized by its similarity in wording and themes to class comments), and in the informal conversation on the last day of class. At that point, Mary was still critical, saying "I wanted to learn something new in the class." She considered evaluating the past pretty much a waste of her time, even though she learned some things about herself from it. At the end of her written answer to Question 6 on Instrument 1, she wrote:

As mentioned previously in reply to one of the other questions, I feel it (a college education) is no longer an important aspect of my life. The degree was the original reason I returned to school because I felt the lack of monetary stability in my life could be changed if I had the proper degree. Since the work I am doing now is in the healing field and does not require a degree, my reason for continuing my education at UMass is under serious scrutiny by me. Especially since doing the school work detracted from my ability to improve my healing skills and (failed to) provide me with the necessary time for rejuvenation that is so important in working as a healer in this demanding world.

I may continue with school but certainly at my leisure, free from pressures of deadlines and finals. I have also recently become a foster mother of a very dynamic year-old boy who not only takes up all my free time but teaches me so much about life, love, and the learning process.

In this honest statement, Mary appears to have worked herself through the process enough to have realized what her priorities about completing her degree really were. Although not exactly an expected result of the self-assessment process, it is nevertheless a

real possibility for adult learners, all of whom have many other responsibilities in their lives. In this way, even though Mary was critical of the process, it may have been of some service to her.

In summary, then, the data about whether the process serves the learners appears to indicate mixed results. In written answers to a question about the value of the process to themselves, some participants felt that it helped them in an instrumental way, that is, to accomplish a prescribed task. Others indicated that they had discovered some changes in themselves in terms of new perspectives on their goals, their attitudes, their feelings about education. One was stimulated by the process and encouraged to "think and consider others in the decision-making process"; another discovered improved communicative and interpersonal skills, while another found help in integrating general education and felt ready to proceed with confidence into the area of concentration.

Others, however, were not so positive. One student found it hard to write anything definitive about whether the process had because she felt that she was changing so rapidly. Her thoughts were echoed by another younger member who found it hard to step back and evaluate an experience in which she was still so immersed.

In class oral evaluation, members of the group criticized certain aspects of the process, such as the peer-pairs, the length, and certain questions, but most talked about the benefits to themselves. One found the process "stretching," another "channeling," a third "wonderful for the self esteem" and a fourth,

"one of the most wonderful fascinating things I've done in my whole life." The most consistent critic of the process, who said on the last day of class that she had wanted to learn something new and not just go over the past, also explained that her life's circumstances had changes to the point where the educational program in general was of less importance to her.

From this mixed data, it may nevertheless be fair to say that all participants benefited in some way, while others benefited greatly. It appears that the amount of benefit varied according to age, with older members gaining more than younger or at least being more able to participate conclusively in the process. There is also some indication that the benefits varied according to life circumstance, with those who were shifting priorities at school, home, and work finding the process more difficult or less valuable.

Moreover, the consistency of class attendance, the generally high quality of the written answers to the questions, and the fact that all participants answered all of the questions in writing may provide other indications that the learners felt well served by the process. It is difficult to imagine adults giving thoughtful consideration and sustained time to a self-assessment process from which they see no benefit to themselves.

Thus, although the data here are mixed, it may safely be said that a self-assessment process has the capacity to serve learners in a variety of ways and that Characteristic 5 (serves learner) is both a potential and an appropriate characteristic of a self-assessment process for adult learners.

An Appropriate Self-Assessment Process for Adult Learners Serves
the Institution

Although it is important for a self-assessment process to meet the needs of those learners who participate in it, it is equally important for such an assessment to meet the needs of the institution where it is being performed. It must provide information useful to faculty members, academic planners, and administrators in their work, and this information needs to be categorized and presented in such a way that it reaches the appropriate decision makers.

As Marchese (1987) points out:

Assessment looks constantly to raise questions and evoke evidence. It is a formative process - on-going and integral, not one-time or summative - an engine for self awareness and change.

The assessor's key tool for promoting student, instructor, program, or institutional improvement is feedback. Indeed, more than a tool, feedback becomes imperative: in choosing a method or instrument, an assessor asks, what quality of information will be realized from it? For whom can that information be useful? Can it enable improvement? (p. 7)

Marchese's statement applies to any institution. The question here is whether the self-assessment process, as envisaged and used in this study, has the potential to provide the quality of information which, when referred to the appropriate people, will have the capacity to enable improvement.

The data reviewed in this study so far provides many hints of the possibilities for institutional feedback of the results of this kind of self-assessment process for adult learners. For instance,

the responses to Question 1 give important information to program advisors about the feelings of adult learners as they return to school, particularly their preoccupation with age, with lack of skills, and with feeling out of place. Statements in response to Questions 1, 2, and 3 about what personal qualities learners value in their educational outcomes - such qualities as increased self esteem, confidence, joy, feeling of competence, larger awareness - could be of importance to program planners as they set their goals for a given program and as they describe their mission to the public. The way in which these respondents saw the connections between cognitive and affective learning could be valuable to faculty members in their teaching and curriculum planning. Faculty and administrators could benefit from looking at what they are actually achieving from the perspective of a mature group of learners themselves, in the categories which the latter have freely chosen.

However, there is no way to predict absolutely that a given assessment program will serve the institution which undertakes it. It is up to faculty members, advisors, and program planners to decide how the results of assessment will be used. All that a given assessment tool can reasonably promise is that it will provide the quality of material which can be of value. In this study, the claim is that the self-assessment process described here has the ability to produce the quality of feedback of potential service to the institution and that its capacity to do so is an important characteristic of an appropriate self-assessment process for adult learners.

With this proviso, some of the answers to the three remaining questions on Instrument 1 will be examined. In these questions the participants were asked what they would change about the program in which they had participated and about the university as a whole, what they would change about their own program, and their thoughts about the purpose of a college education. It seems important to state their answers in some detail, even though they are specific to this situation, so that the maturity, flavor, and level of critique may be noted. Moreover, it is important to see what adult learners choose to focus on when allowed to make that choice freely.

The first part of Question 4 asks, "What would you change about IWW/UWW if you could?" By far the most frequently requested change was greater clarity about the program and its requirements; Sandy wrote:

Clarification is probably the biggest change I would like to see in IWW/UWW. Too many things have been made muddy by rambling answers to questions when a simple statement would have done.

Every learner repeated the request for greater clarity in one way or another and most had suggestions about how it should be done.

Mary stated in a class discussion:

The degree planning workshop should also be nearer to the beginning. Because I kept getting confused as to which ones would count, which courses were considered math or science. . . . I just did what you did and took whatever I wanted to and just hoped that when I graduated I would have what I needed.

When asked if she would have known enough to plan her degree in the first semester, in view of the fact that she had had little previous college experience, she replied:

Well, maybe very young people wouldn't know. But most of us who are going into this program know what we want out of school and what we want to take and what we come in with. A great majority of us anyway. And we could make better decisions based on that information.

Kate made the same suggestion about earlier degree planning and gave some further suggestions of her own.

If I had a chance to change IWW/UWW, I would make the degree development mandatory before all of the modes. I would schedule orientations once a month for all IWW/UWW to make sure where the students are and how well they are doing with their educational objectives. I would display a course requirement for all IWW/UWW students and it would be nice to have a potluck together once in a while. I think IWW is great for students who have not been in school for a long while but during the second semester I would make sure that the student really knows what the IWW/UWW program was.

It should be remembered that these learners had had very little, if any, college education before this experience, and in most cases no general education at all, which is why they had been placed in the IWW subset of UWW; the "modes" they mention are special "modes of inquiry" courses in the fields of humanities, social science, and science, designed to introduce the learners to these areas of learning and partially to fulfill their general education requirements. Despite (or because of) their lack of previous college and/or general education experience, however, these learners indicate by the comments above that they wanted more clarity about the whole degree set out before them at the beginning of the program. At least one of them points out that as older learners they were ready for, and in need of, a more complete understanding of what was required of them and what their options

were; the implication here is that they do not need, or in any case do not want, the kind of free-flowing exploration of fields and courses which the average 18- or 19-year-old might have in the first two years of college.

This same desire for greater clarity appeared in the second most frequently mentioned area the learners wanted to change, namely, the way in which their prior experiential learning was handled. Although prior learning credit is usually awarded in the area of concentration, upon which the learners usually focus after they have completed their general education, and although they also knew that the emphasis of this self-assessment was on general education, not area of concentration, they nevertheless wanted a clearer understanding earlier of "where they stood" on this matter.

Other learners, however, had other criticisms/suggestions in addition to those about greater program clarity. Many centered around the "modes of inquiry" courses mentioned above, three required courses in the IWW program which helped to fill general education requirements. Martha wrote:

If I had the power to change IWW/UWW, my first action would be to limit class size to fifteen. I have found that the interaction within these small classes, the dynamics by which we teach each other, suffers when the class size gets beyond this point. This interaction is one of the particularly good points in IWW/UWW.

Some professors have tried to create an atmosphere of interaction by breaking a larger class into smaller groups for discussion. While it does help somewhat, it does not produce a feeling of ownership for the group. Rather, it seems to create a feeling of we and they; it does not create the feeling of a whole-hearted we. The sharing, the closeness, is gone.

Her comments here are reminiscent of the emphasis on the importance of learning from the group in the discussion of Characteristic 4.

Many answers to this question also recall the pre-occupation with age which we found in the learners answers to Question 1 of Instrument 1, considered under Characteristic 1 (open-ended); in fact, this pre-occupation continued throughout all the questions and was repeated here in the discussion of the modes. When asked what she thought of the presence of younger students in the modes classes, Martha said:

I love it, except if I'm the only one. I like a good balance of older and younger. It doesn't really matter what the balance is. In a small group it doesn't have to be 50/50. This is a great combination right here, as long as there is a sample of each group, and as long as the group size is small.

In any case, there were strong feelings on the matter of older/younger dynamics and class logistics, as well as a clear sense of identity as an "older" student, even on the part of 24-year-old Sara.

Logistics aside, there were also criticisms of the subject matter and teaching methods of some of the modes courses. For instance, speaking of the mode of inquiry in the sciences course, Eve wrote:

Being a Registered Nurse, the area of science was not totally unfamiliar to me. The thought of dealing with formulas and the exactness of the science discipline was not appealing to me at this period of my life. It was a required mode so I plunged into it. The book we used, in my opinion, was perhaps not the best choice for the class. The pictures were beautiful, the graphs were very detailed, but the book was extremely "wordy." The assignments were difficult for everyone, especially those who had no exposure to scientific linguistics.

Her comments repeat those that she and others made about that science course in answer to Question 1 (what stands out) on the first day of the self-assessment process. At that time, Rob also said, of the same course:

There was way too much theory. If we'd had a lot more lab, could do the practical work with the theory, it would have gone much easier. We had one day of lab and I learned more in that one day than I did in the whole period of time. We identified different cells of the plant. We were given a chance to actually see it.

The most sweeping criticism of the required modes courses comes from Mary, who wrote:

I'm not so sure the Modes were very helpful for me as I reflect back. The ideas were well planned but the execution of the course work, in particular (name)'s class, was rather fragmented, crowded, and hard to follow. I kept asking myself why I was studying this class and resented having to go. The modes were actually a waste of my precious time, as I got very little out of them and only did the work because I had to.

Here the time theme emerges again. It will also be remembered that, of all the participants, Mary was the most critical of the self-assessment process in general and was considering dropping out of, or lowering her time commitment to, the program because it did not leave her enough time for her work as a healer. This reminder is given, not to dismiss her remarks but to put them into a larger context.

The other part of this larger context is the recollection that the comments above were made in answer to the question, "What would you change about IWW/UWW if you could?" In answers to other questions in the self-assessment process, many positive comments

were made about the same modes course just discussed. In fact, in answer to Question 3 (helpful learning experiences), Eve praised other aspects of the same science course she had criticized above.

She said:

One thing about (science course instructor) that I appreciated was his enthusiasm and excitement. He got me excited about (science); he'd look at something and he'd love life so much that he just wanted to share it with us. That's what an artist does; they want to express these wonderful feelings that they have and let other people enjoy them. And I saw beautiful things under that microscope. When we went out and we looked at a plant and he took it apart and he looked at the leaf and he saw those intricate little parts, it was just like an artist talking. His perception was outstanding. He made you more aware.

That she could criticize certain aspects of the course did not prevent her from appreciating others. In her comment above, we also see an integration of the cognitive and affective aspects of learning, discussed in the section on Characteristic 2.

The learners also made a number of specific suggestions for change. Several centered around basic writing skills. Rob said:

. . . if UWW is going to have a program like this, then they should have a writing program to go along with it. Many adults who have been out of school for 15-20 years and are coming back to college have forgotten all about our writing skills and everything else. We need a good refresher. If UWW had their own English 111 and 112 (basic remedial and college writing courses offered by the university) to start us off with before we get thrown into these modes, we would be much better off and would be much better writers.

Sandy and Eve seconded that thought. Sandy added:

Writing about something you know is a much easier way to adjust to the writing system (as opposed to assigned topics). . . . Also, this is one course that should be

restricted to the IWW/UWW traditional group (older). When you are starting out you don't need a group of 18- or 19-year-olds' influence.

Explaining why the latter was necessary, Sandy described her experience in a regular university writing course:

One question we had in (English) 112 was about freedom. For most of us over 30 freedom meant pretty much the same thing. A free country, the ability to move around as we please, the four freedoms and a few others. But from the kiddy group, it was totally different, and almost ended up in a brangle. They felt, as all kids their age feel, that they should be able to drink at 18, smoke where they want, use drugs if they want. Their idea of freedom seemed to stress the personal. Their horizons hadn't expanded yet, there was so much of the world they hadn't experienced.

Here, being "older" is a positive factor, one demanding a particular kind of curricular approach, an approach different from that used with 18-year-olds.

Other suggestions were quite specific to this program and therefore not important to consider here. What is important, however, is the frankness and openness of the comments and the way in which the open-ended nature of the process apparently encouraged the learners to choose their own topics. Because they were not asked questions about specific aspects of the program, such as the advising, the curriculum, the orientation, the requirements, and so on, as is typical with most program evaluations, they were free to choose those aspects of the program that concerned them the most. Their comments have a spontaneity about them that makes them not only revealing but also helpful to the institution in which the learners participated; one senses that they are saying what they want to say, rather than what they are expected by the questioner or

by the institution to say. In this way, the self-assessment process has the potential to serve at least one major institutional need, the need for honest feedback about the specific program and curriculum in which the learners are involved.

Some of the students' suggestions, like the one about the need for more structure, could be put into immediate effect. Others would have to be considered in the light of long-term planning, for instance, the need for more basic writing courses and even for particular kinds of writing assignments. But many, if not all, of these suggestions have the potential to be useful to the program. They have the advantage of having been freely offered by the people most concerned: the learners who have just completed the program.

The second part of Question 4 asks, "What would you change about the university?" Here, the answers cannot be so easily catalogued, for the reality being queried about is much more complex. On the other hand, because of this very complexity, the topics chosen by the learners take on a certain importance because they are selected out of many possibilities.

As might be expected among a group of adult learners, the topic mentioned most frequently was the need for more courses in the evening to meet the needs of those who work. Martha wrote:

If I had the power to effect changes within the university itself, I would take a long hard look at evening offerings. Older students who have to work during the day suffer because of the slim pickings during the evenings. Daytime students whose thinking is at variance from their peers lack a forum on which to test their ideas. All departments should have at least one and preferably two choices after six p.m. These classes would allow day

workers access to classes which they could enjoy and would stretch their horizon. It would also allow for more combining of youth and age in an educational setting which has proved to be both beneficial and healthy in IWW.

Here again, the youth/age issue presents itself, but this time in slightly different form. Martha is asking for evening courses, not just to meet the needs of older students but also to benefit younger ones. She thinks the combination will have advantages for both.

Another topic mentioned by at least three learners is class size. Rachel wrote, in her earnest, if somewhat naive, style:

Another thought that has occurred to me on how to change the university has to do with class size. Simply, I would like to do away with all classes of such large proportions as do exist in most universities today. There is a factory-like resemblance to many university classes and I'm sure there are many who go through the door unsatisfied. Students need to play an active part in their own education by having the opportunity to engage in constructive dialogue with professors and/or their peers. This is next to impossible in a class size of two hundred. I realize it is perhaps more economical to pack in as many students as possible per one tiny professor, however, in the long run we are wasting valuable resources. The mind must be attended to from not so far away, it is a garden and therefore needs to be cared for most closely and carefully.

Here she relates class size to a theme we have seen earlier: the importance of learning from peers. Martha takes up this theme and states, "Even if I didn't learn anything from the professor, I always learned something from the other students."

Faculty members were criticized in a variety of ways in answer to the question about what learners would change about the university. One of the most outspoken was Carla; in fact she made the same comment on the first day of class and on the last, as well as in her written answer to the question:

I believe that when English is many students' second language they (instructors) should give those students some extra consideration, for example, some extra time taking their exams. They should not measure the grades equally as a native student.

Last week in marketing class I saw a new word. I asked one Salvadorean boy, "Do you know the meaning of this word?" and he said to me, "No, I don't know the meaning." (She repeated the question to a Puerto Rican student and got the same reply.) I finally asked a native student and he explained to me what it means. I pointed out this example to show that there exists a latent language barrier and that English as a second language disadvantage is a reality not only for myself but also for all those foreign students at UMass or any other university.

In my opinion the lack of cooperation from the instructors is not fair for us because we are at a disadvantage among the natives. Once I talked to some of my previous instructors about this matter and they said that wasn't fair for native students to give extra help to foreign students. Then I reply, "Just to say that is not fair from your side, there exists a language barrier; therefore, (it) means that you are unfair to us." . . . It seems that the instructors don't want to see the language disadvantage because they are not the affected ones.

Faculty members' attitudes come under criticism again in other comments made in class in answer to the question about changes in the university. Sara states:

I'd rather have older people in the class because if the teacher has a tendency to treat the class like children, they won't do it if there are older people in the class. Because a lot of teachers have this attitude, when they go in front of younger kids they take this paternal, nauseous attitude; they talk down to the kids, like they are telling them what to do: "I know you kids aren't going to turn your papers in on time, and I know I'm going to have to get on you . . ." But when there are older people in the class, they don't do that, because they won't treat older people like that.

Here she criticizes both attitudes and double standards; she also finds the presence of adult learners an advantage.

One situation in which the participation of an older, and in this case a more knowledgeable, learner might have been helpful but was not encouraged by the instructor was discussed by Fatima. In a discussion about a class showing of the film, Out of Africa, which she found full of errors and racist, she said:

I was listening to the comments other people were making, thinking that since I was from Africa I would be able to maybe say something to them that would change their perceptions about Africa.

But neither her classmates nor the professor were open to her insights, or even to her opinion.

Several participants were critical of faculty response to their papers. Sandy said:

I got a comment back that it (a paper) was full of errors but none of them were pointed out. How are you supposed to change something or know where the errors are if it's not told?

In addition to these specific criticisms, Carla was more sweeping in her description of unwelcome faculty attitudes and behavior:

About the university in general I can say that I have a few reasonable complaints about the lack of many instructors' cooperation and their poor behavior among students. I certainly know that each person is different; nevertheless, some instructors are not flexible and demand too much in a short time. For example, they give long exams in a regular class period. Others are very rude in their comments. In my opinion certain departments need some systems' revisions and improve them to have a better communication between faculty and students. I heard many students complain but they don't take the initiative to go directly to the faculty to demand their rights.

One senses in her remarks, and in those of the others above, an urgency about their education which makes the foibles of faculty members and of fellow students difficult to accept, possibly more difficult than for younger students.

Yet, when questioned about what could be done about their criticisms, the learners were not hopeful that anything would happen without structural change. Mary said:

It's a question of power. Part of the problem is because as a student you don't have any power here. You are faced with 4 years of not being about to assert yourself here, of fear of reprisal, not getting the right grade, whatever it becomes, so it's hard for you to stand up for yourself. (What do you think could be done about it?) Faculty members should be supportive of students when they do try to change things. And give them the right and the ability to criticize. Maybe give them a room or an organization where they can do that, rather . . . (than be) just lost in a maze.

Sandy reflected the ideas of several participants in her written answer to the question about university change.

No one should suffer from unqualified teachers, and there are a few in all areas. They occasionally need to be pulled back into line. It is very difficult with tenured faculty, but perhaps if enough complaints were brought by a registered group then maybe someone with authority would listen. There are good people on this campus who are here to teach and help. Perhaps they should be sought out and their input and ideas used to best advantage.

Sandy's views were informed by her being both a student and an administrative assistant to a university academic department. Her last remark reflects the wider context of these comments; there were, of course, many positive evaluations of the faculty in answers to other questions in the self-assessment process. But the concern reflected in these three suggested systems changes demonstrates both

the seriousness with which these adult learners take their education and the possibility that they are a potential source of insight for looking at needed change.

Moving from faculty attitudes and performance to related issues, three participants criticized the emphasis on what Sandy called "the publish or perish business"; she added, "Teaching should be made the major focus, and you shouldn't be penalized if you don't publish." Rachel asked for more female and minority faculty "role models," saying that she had rarely had a woman professor. Eve asked for breaks in a three-hour lecture class, saying that without this "the last half hour is counterproductive." Mary stated that final exams are not "true indicators of one's ability to know the course work"; she also advocated the removal of "teachers who are uninspiring and egotripping." Kate wrote that the "general population" of students "should have more counseling periods and more access to faculty."

These, then, were the major changes suggested by the group and they all center around academic issues. Aside from two requests for better parking arrangements, obviously an administrative issue, the attention of these learners is on the classroom. Student support services, extra-curricular activities, administrative policies, athletics, governance, dorm and social life are outside of their experience of the university, at least for the most part, and thus are not mentioned as realms needing to be changes. This places their attention on teaching and learning and gives their comments

a focus that might be lacking from younger students, whose experience of the university covers so many different realms.

This focus of adult learners on academics and faculty issues could be a resource to any institution in which they participate. The critical importance to these learners of their time spent in the classroom appears to heighten both their positive response to what they are learning, as reflected in the earlier discussion of changes in themselves, and their critical reaction, as reflected in the comments above. Perhaps it is not so much the individual comments that need to be heeded as it is the general trend of the comments or the aggregate of them over time; these could point to the areas that need attention. Some will be valuable to faculty; other comments will be more important to program planners and administrators as they seek to be more responsive to the needs of adult learners. However, what is uniquely offered here is a fresh look at the responses that a mature group of adults made to what was offered them, described in their own freely chosen categories. Whether the institution listens to what they have to say is ultimately up to that institution, but there is a potentiality in the self-assessment process for honest feedback that serves the institution.

Question 5 asked, "What would you change in your educational program? What would you have done differently?" This question was the one of the six which was least liked by the participants; it was also the one to which they gave the shortest responses in their written answers. Nevertheless, the answers provided some information of potential value as feedback to the institutions involved.

The written answers to this question produced the greatest contrast between the responses of the three younger (IP) members of the group and their older classmates. The former put a great deal of emphasis on their personal search and exploration of learning areas in the quest for a major and on wondering if they had used their time efficiently and well; the latter, on the other hand, emphasize practical matters, such as not working full time, taking a writing class earlier, finding a faculty sponsor sooner. Both the content and the tone of the comments are strikingly different between the two age groups.

For instance, Rachel, 23, the youngest member, wrote:

I am quite sure I would not be in school today if (it were) not for the particular program I am engaged in. It allows me to choose what I do, and then freedom to do it when I choose. I am afraid, however, that I may have misused that extra space provided for me. Of course, I should be careful in saying "misused," for I'm not sure any way of spending time is completely wrong. But I have found that suddenly I am a second semester Junior and in so realizing this have declared myself even more suddenly an English major. I am happy with this choice, at the same time I am feeling a little rushed and hurried. I wish I had put more planning into my program from the beginning so as to be prepared for now. . . . On one hand, I welcome this structure as it rids me of this wandering feeling, on the other hand it feels a little abrupt. I need to find a happy medium between being so obsessed with my future that my present life is miserable and being so lazy that I never give a thought to tomorrow one way or the other. There is not much I can think of to change my program, I only need to learn to use it better.

Sara, 24, reflects some of the same feelings but comes to a different conclusion:

For myself, it would be difficult to say just how I would have done things differently because the actual process of learning that went on in my first five semesters at college was essential to my maturation as a student and as

a human being. I could say that if I had been more organized, more focused and less haphazard about my course choices that I would have avoided "wasting" time in spreading my attention over so broad an area. However, it was precisely this activity of spreading myself thin that brought me to the understanding of myself and my interests that I have today, and made it possible for me to be more focused.

If I had not had the opportunity to explore the areas that I did, I would not feel that my decision about my area of concentration had been based on solid knowledge of the options open to me. I would not have had the personal learning experiences that come from working through confusion and making decisions based on one's limits. I accept how my life has evolved so far as part of a pattern in which I am intimately involved while knowing that the full significance of this pattern and the events of my life will not come clear for a long time to come. So I guess what I'm trying to say is that I would not change one single thing.

Finally, Joan, 27, stated in her written answer:

As I look back it is easy to wish I had done some things differently. For example, I am glad that I took time off between high school and college yet I wish I had returned a few years sooner. I also wish that I had realized that social issues and problems were of such deep concern and interest to me. And had I realized that STPEC (Social Thought and Political Economy, a major) was a way to group all these issues and concerns under one major, I would have applied earlier in my academic career. I feel that I wasted the first two years of my college experience by hopping all over the university trying to find my career interest. If I had joined STPEC earlier, I would have concentrated in one or two areas -- i.e., women's studies or Afro-Am. This way I would feel that I was graduating with a good grip on a specific area of knowledge. Also, I might have had time to do a year abroad. But, as someone wisely pointed out to me, if I hadn't taken the route that I had I might now be wishing I had experimented more, or worse, wondering if I have made the right choice. Whereas now, I'm certain that I have made the right choice.

These three entries from the youngest members of the group are given in their entirety because they have different quality to them than the comments of the older members. Issues of exploration,

confusion, and identity formation predominate in a way that Sheehy (1974) says is typical of that age group, an age she calls the "Trying Twenties." Moreover, there is a marked similarity between the three, despite the fact that there was a difference in timing in their college careers: Rachel and Sara had gone to college right out of high school, then dropped out for a while. Joan had waited five years before beginning; however, she was still in her twenties during the class process and this apparently affected her answer to the question about how she would change her program.

These issues are not even mentioned by the other learners; their comments are almost entirely practical and instrumental. For instance, Eve wrote:

If I was starting the UWW program today I would have dealt with my situation realistically. To begin with I would sit down on a one-to-one basis with my advisor and explain my situation in more detail. I would be more open. I would present her with what I had to offer and would tell her what I hoped to gain from my education; then I would ask for direction.

The next thing I would do I would enroll immediately in an intensive writing course. Writing for most of the non-traditional students I've talked to seems to be a problem. If in the beginning the tools for writing skills were sharpened much of the frustration and anxiety of writing papers would be avoided. With a few of these wrinkles ironed out I would now be able to talk class schedule with my advisor. Together we could decide what courses I should take and I would also decide how I would gauge myself to fulfill the required modes of the program.

Martha's answer was also a practical one. Explaining that her advisor had advised her against choosing her faculty sponsor too early, she wrote:

There is one change in my program that I would make. I would choose my sponsor immediately. . . . I knew from the beginning that I wanted to write for children. I knew from the beginning I wanted (name) as my sponsor. My own lack of confidence, boldness, aggressiveness made it easy to follow his (her advisor's) suggestion. But it's not too late; I can still benefit from her counsel.

Kate's comments likewise combine practical suggestions and attitude changes:

What I would change in my educational program would be to learn and practice autonomy in the form of self-direction and more independence in my learning. . . . One (other) factor I would have done differently would be to utilize my time in a more constructive manner. Many times I have resorted to old habits which is procrastinating. Instead of waiting for the last minute to respond to a given assignment, I would tackle the work immediately instead of pulling out half of my hair. I would have taken more varied subjects such as women's studies or astronomy or so many different courses which I'm still interested in. I would also try to get to know the people in my classroom better and try to socialize and be friendlier.

Mary's statement was almost entirely instrumental. After saying that she didn't "think I would have chosen the Modes course work," if she'd had the complete freedom to choose, she said:

I would also not have worked full-time outside of school in the beginning two semesters because the work load in both school and my jobs was far too intense for me to have dealt with properly and been relaxed at the same time.

In all of the comments of these older students, we see an emphasis on getting the job done, on making the most of one's time, on planning better, on having more time for school. It may be that, having waited so long to attend college, they feel that they don't have the time for exploration and the search for identify. But it may also be that they are simply in a different stage in their

lives, a stage in which the preoccupations of the 20's are not as pressing.

In any case, the difference between the two groups is noteworthy. Among other things, it appears to corroborate the insights of developmentalists like Daloz (1986), who say that a knowledge of adult developmental stages is important to teachers and mentors in higher education because students at different stages need different kinds of assistance. Thus, this information provides the kind of insight which could be of value to any institution, whether in advising, in curriculum and program planning, or in orientation of new students. It appears that the open-ended nature of Question 5 in the self-assessment process, having revealed this difference between older and younger students as they reflect back on how they would change their educational programs, is a potentially valuable way to meet certain institutional needs for more information about student development.

Question 6 asks the following question: "What do you think is the purpose of a college education? Have you changed your views on this since entering the program?" As the most general and philosophical of the six questions on Instrument 1, it produced answers which are difficult to categorize. And yet, even here there were some recognizable patterns.

The most frequently repeated pattern was that, whereas the learners had entered college with the thought of "just getting the degree," usually in order to get a (better) job, now they look at

higher education as an avenue to personal growth. Joan's written answer to the question was typical:

Through this journey I have changed my view on what I believe is the purpose of a college education. Before I attended this university I thought that school could only offer me a degree. Now, I realize that the purpose of an education is personal growth. There are other purposes and other gains, but this is the main reason for attaining a college education. Personal growth is achieved in the form of self-awareness, self-esteem, self-expansion, and is achieved from a broadening of one's view of society.

Rachel said almost the same thing in the class discussion of Question 6:

When I first started, my only aim was to get a degree. But now that I have been in school 3 years, I have become more self-sufficient, because I am more sure of myself. The world looks much different to me now, because of things that I have learned. It's helping me to grow as an individual who knows who she is.

These voices are of two of the youngest members of the group.

But the same ideas were reflected in the comments of two of the oldest. Sandy wrote:

For me an education had opened doors I hadn't realized were closed. My viewpoint, perspectives, attitude, and outlook had broadened in a way that made me less critical and far more objective than I would have been just working 9-5. . . . My initial reason for a degree was financial, get the bucks. Now I just want to find a nice quiet "dig" somewhere away from the mainstream, where I can look through the past, and write about it. Maybe I'll look for Atlantis.

Eve stated in her written answer:

Today I do not feel the drive to get the diploma I felt when I first entered but rather I am enjoying just being in college. . . . Learning is good medicine. It leaves little time for boredom or loneliness. . . . For me it has been an enrichment venture. Although it has improved my working skills in communication with my college patients, I am not career oriented as the more traditional student.

. . . To deny the importance of ultimately getting the diploma would be falsehood on my part. But for the present my concentration is on learning and that is of the utmost importance to me now.

Later in the same answer she noted:

The reasons for returning to school for each individual may differ. But these differences may depend on when they return to school, their age, or their job orientation.

Here she suggests some reasons for the variability in the answers to this question. These factors did have a bearing on the answers but not always in a predictable way. For instance, Martha, 62:

Generally speaking, my views about a college education have been that it is an activity which leads to growth, awareness, career training, and entrance into a better life style. My own personal reason is much more selfish, much closer to home; my longing to write, write, write must be satisfied.

While my general beliefs are still with me, I must add besides these things, a college education offers an opportunity to learn to appreciate yourself. This is one of the greatest feelings in the world. My personal reason is still valid, although I must say IWW/UWW is filling this gap in my life very nicely.

After many years as a minister's wife, mother of a special needs child, church worker, and secretary, Martha is, as she indicates here, obsessed with the desire to write professionally for children, and that colors her view of the purpose of a college education, at least for herself.

The same switch to a career focus from earlier broader views is reflected in the thinking of Sara, one of the youngest participants.

She writes:

My views on the purpose of a college education have undergone some evolution as well. I have the same basic feelings (as when she entered) about the importance of the

environment college provides, but with time I have also come to see a college education in a more practical light as well. Rather than seeing the experience and the lessons learned as belonging only to the realm of academic life, I now believe that it is best used as a bridge to cross from a life defined by the choices open to a non-college graduate, to a life with many options to choose from. In other words, a college education is valuable in preparing one for a career. Such a practical notion would have been rejected by my radical mind-set when I first began college because I would have seen it as a debasement of ideals which I felt were above the superficial level of having to worry about making money with my knowledge.

Carla's views about the purpose of a college education are similarly career-oriented and do not seem to have changed during her college career; they also add the dimension of service to society.

She wrote:

I believe that the purpose of the college education is to prepare qualified professionals to improve theirs and their community's quality of life. It is a worldwide need to have higher educated people in order to satisfy human needs, goals, and community progress. The level of progress of a country is directly related and measured by the level of education of its population.

Her perspective may reflect the fact that she comes originally from Puerto Rico and has lived for many years in Costa Rica. This "Third World" perspective is captured in Fatima's comments, made in class in answer to the question about the purpose of a college education:

First I came to get the degree and secondly to help the people back home (in West Africa). In the country I come from we have about 40-45% illiteracy rate, and illiteracy is one of the reasons we are an underdeveloped country. That's where that interest comes in. Since I was in school, I was trying to help and seeing people who are oppressed. And when I am done with school, I say to myself I will try to find ways to help these oppressed people so that they can be a part of society and know what is happening in their day-to-day activities and what the government is doing. That's one of the motives why I left my family to go and study.

On the other hand, Fatima's motives were not simply career and service oriented. In her written answer to the question, she stated:

I think the purpose of a college education is not only getting a degree, job oriented, making a living, or a status symbol, where society recognizes and respects your achievement. Education broadens and deepens one's interest so that he will continue his education long after he obtains a degree or after he has ended his formal school training.

It may be significant that this was written after the class discussion on the subject, in which such a broad range of views was presented.

A similarly mixed view, with both career and personally broadening elements, was expressed by Rob in his class comments:

I think that college makes you more aware, more conscious of the things that are around you as it improves your level of knowledge. It prepares you better for the work force. My job is managing people, and I deal with people every week, negotiating, etc. I need to know the information in the field, but I also need to know how to communicate. College helps with both.

Rob is 51, Fatima is 30; since the similarity of their views does not come from closeness in age, it may have to do with sociological factors. Fatima is from a developing country; Rob is from a working class background, the first person in his family to go to college. Both apparently began college with very practical motives and developed broader views along the way.

Geneva, from a background similar to Rob's and also the first in her family to go to college, has similarly mixed motives. She said in the class discussion:

At first I thought it was going to be pretty much a paper (degree). But now here I am. I am pretty much as smart as the next guy. . . . Before I thought it would put me in a class of college graduates and all that wonderful stuff. But now that I'm here, I guess I've always been the kind of person who wants to know lots of things, and here I can do that. And the bonus at the end will be the piece of paper and the better paying job, but while I'm here I am thinking, I'm not sure I want this to end, because there are lots of things I don't know yet and I want to keep going until I've satisfied the urge to explore.

This same interest in continuing her education, this time even beyond college, is reflected by Kate. Although differing in age from Geneva (Kate is 32, Geneva, 50), and also in socioeconomic background (Kate was born in a low income Native American family but raised by middle class whites), Kate's thoughts seem similar to Geneva's, at least in their long-term approach;

College education is an opportunity and a challenge. The purpose of general education learning can be an opportunity to question the values and principles we live by. A college education is part of a continuation of a life-long learning process. A college education provides a constant challenge by questioning differing cultures, values, and world views.

For these last several years, I have been trying to develop myself as a creative individual and also to develop technical skills as an artist. I believe the purpose of a college education is to broaden my thinking and critical skills while learning how people know what they know. Through my general education, I have been able to relate to other people by building a sense of community and by being able to choose what I believe in and what is important to me as a life-long learner.

Here is a statement to gladden the heart of any program director.

Kate's statement also brings to an end a review of the data collected from Question 6. Although patterns have been seen, there is no clear predictability either by age, by career orientation, or by cultural or socioeconomic background. Many learners seemed to

have moved from a more instrumental view of higher education through a personal growth view and even onto a view which sees education as intrinsically valuable. In this way they appear to reflect Weathersby's (1981) and Loevinger's (1976) concepts of the change in attitudes toward education as one moves up the developmental scale. On the other hand, other learners appear to maintain both the career orientation and the personal growth/intrinsic views, whatever their age or apparent developmental stage. Moreover, many opinions had changed or were changing. Clearly, no easy generalizations can be made from this material.

However, such statements as those above are testimonies to what is actually happening to learners; they could act as reinforcement for and encouragement of particular learning programs. They can be used by institutions as a way of checking to see that their goals are being met or as a way of understanding from the learners' perspective what goals they think are important; the latter may lead to a clarification of goals for specific programs. Such statements can also be used in mission statements and in public relations efforts. They can be used to justify a program's existence to its advisory board and to funding sources. Whatever the outcome, the data collected by asking the question about the purpose of college could be an important way to meet various institutional needs.

In summary, Questions 4, 5, and 6 provided data of potential value to both the specific program in which the assessment process took place and to the larger institution of which the program was

a part. To the program, the data provided immediate feedback on such things as the amount of structure needed by adult learners, especially at the beginning of their program, and some suggestions about how that structure could be obtained. It also provided specific comments about curriculum, teaching methods, and student learning needs. It provided insights into what learners of different ages expect from an academic program and how goals may change over time. Such insights could serve an individual program in its curriculum planning, in teaching strategies, in advising, in clarification of its mission, and in public relations.

For the larger institution, the data could be used to understand better the expectations of adult learners and how those expectations are being met by a given program. The data could be used for program evaluation, for clarifying or modifying the institution's mission to adult learners and for making the needs of adult learners more widely understood by faculty and administrators. Thus it is clear that a self-assessment process for adult learners has the potential to serve its institution and that this is an important characteristic of such a process.

Summary

This study has identified six characteristics of an appropriate self-assessment process for adult learners. Each of the characteristics makes a unique contribution to the comprehensiveness of the self-assessment process. Use of open-ended questions (Characteristic 1) provides an unstructured opportunity for learners to

express in their own terms their early fears of returning to education, their pre-occupation with their status as "older" students, and their sense of change in attitudes, behavior, feelings, and self concept. Exploring the connections between cognitive and affective growth (Characteristic 2) makes it possible for students to express a range of educational outcomes, not just cognitive learnings, and to indicate how what they have gained relates directly to their everyday lives.

Allowing time for reflection and integration (Characteristic 3) makes possible a clarification and deepening of thoughts and ideas, while conducting the exercise in a supportive group of peers (Characteristic 4) provides an environment in which participants learn from each other. The self-assessment exercise serves the learner (Characteristic 5) and the institution (Characteristic 6) by providing opportunity for sustained reflection and feedback about goals, purposes, teaching, and curriculum

Each of the six characteristics is important, and it is difficult to imagine that any could be eliminated without somehow undermining the process. Of all of them, serving the learner seems to be the most central; if one starts with the premise that a self-assessment process for adult learners should above all serve them, then the other characteristics will be seen in that context. Open-ended questions provide an important way for learners to talk freely about what has been important to them and thus for them to discover for themselves what the educational process has meant to them.

Exploring connections between cognitive and affective learning has been shown by the data to be a pattern which comes naturally to adult learners and is one which they apparently enjoy and from which they benefit. Such a process takes time, as the learners in the study stated, in order for them to get its full benefit. The group process supports the exploration and even made possible new learning for the participants in the assessment experience. The institution is served not only with feedback but also because its learners are served.

The study did not reveal the need for further characteristics to be added to the process. Six characteristics were enough to provide adequate structure but not too complicated to be useful. Moreover, they provide a framework within which an institution or program can devise a questionnaire and a process which will meet its own particular needs.

C H A P T E R V

FEASIBILITY OF SELF-ASSESSMENT PROCESS

Introduction

Chapter IV demonstrated that there are six appropriate characteristics of a self-assessment process for adult learners. This chapter focuses on the feasibility of an exercise with these characteristics and answers the following research question: "Can a procedure be developed that embodies these characteristics and is feasible within the confines of an adult degree program?" To answer this question, the main sources of data are the class notes, the answers to the questions on Instrument 2, and the class discussion on the process which occurred after the main self-assessment process was complete.

According to Webster's New International Dictionary (1959), there are three meanings of the word "feasible," as follows: 1) Capable of being done; possible of realization; 2) Capable of being managed; 3) Likely, probable, reasonable. The major focus here will be on the possibility of accomplishment of the self-assessment process, but the manageability and probability of the process will also be considered.

The first section will deal in a general way with the feasibility of the self-assessment process outlined in the case study. The second section will consider the appropriateness of each of the instruments used in the case study and the manageability of other specific aspects of the process.

Feasibility of the Process as a Whole and of Each Instrument

The Process as a Whole

Based on the data presented in Chapter IV, an immediate answer to research question 2 is that a procedure embodying these characteristics has already been developed and implemented. There were some special circumstances which may have made this process work as well as it did. However, although these vary in their importance to the outcome, none of them seems so critical that the process could not be duplicated elsewhere. These circumstances will be analyzed in turn.

Participants were members of a special program. In fact, learners were members of two different academic programs, the University Without Walls and the Inquiry Program. Each of these differs from the other in requirements and population. Even within a given program, the educational experience had varied greatly for individuals, depending on their available time, their work schedules, and their academic choices. The major experiences which group members had had in common when the assessment process began consisted of participating in four general education seminars and

working with an individual advisor. Many of the students' educational experiences consisted of regular university courses. In fact, some of their most memorable experiences were in those classes, as has been recounted above. In many ways, their educational experience was like that of regular university undergraduates, since they had not yet got to the point of assessing their prior experiential learning or completing an individually designed area of concentration, the two major ways in which regular UWW students are distinguished from other undergraduates.

Although participation in the required general education seminars was a common starting point for the group in some parts of the self-assessment procedure, not all had shared the same seminars at the same time. The experience which all learners did have completely in common was the self-assessment exercise itself. Although many participants were strangers to each other when the process began, the group coalesced around the common task of assessment. Moreover, group participation was important to the completion of the self-assessment procedure, as the discussion of Characteristic 4 (group) has pointed out; this was made particularly clear in the participants' answers to Question 3 on Instrument 2 about the value of the group process to them in doing the self-assessment. It appears to have been this group experience in the classroom, rather than membership in any particular program, which made the self-assessment process successful.

Participants were adult learners. The study was planned with the assumption that participants would all be adult learners - over the age of 25, according to the definition used in this study. It happened that two were slightly younger, one 23, the other 24. Although there were differences in response to certain questions between the younger and the older learners, particularly in answer to the question about what they would change about their academic programs, as has been shown above, the younger ones participated equally in the entire process.

The design of the self-assessment process was aimed at the needs and characteristics of adult learners, but younger learners had no difficulty answering the questions. This may have been because the questions centered on educational experience and resulting personal change, about which everyone was able to speak, at whatever age they were. Or it may have been because the group support offered learners of various ages a chance to speak freely about their educational outcomes. Whatever the reason, the process appears to be appropriate not only for adults but also for mixed ages. It may be that, by the time a learner completes an educational program, he or she is ready, under the proper guidance and with the proper structure, effectively to assess his or her own educational outcomes.

There was a gender imbalance among the participants. The group consisted of 11 females and one male; this imbalance is even more skewed than in UWW in general, which is usually about two-thirds

women, one-third men. Gilligan (1982) speaks of women having different values than men; if there had been more men in the group, perhaps they would have seen things differently or would have approached the task in a different way.

Rob, the lone male in the group, participated freely in answering all the questions, though somewhat less often than others in the class discussion of Question 2 (self changes), a question which brought strong emotional reactions from the women members. He may have offered an explanation of this response during the class discussion of Question 5, when he said, "I guess men don't have feelings." This comment, however, may have been a result of his age (51) or his working class background, and in any case it can't be considered representative of all men. Moreover, on other occasions he expressed a wide range of feelings.

It is difficult to speculate on what ways the process might have been different if there had been a different gender balance. However, although the specific dynamics of the group might have been different with a different balance, there is nothing in the results to suggest that gender ought to be a consideration in the design and implementation of a self-assessment process.

The self-assessment process had an informed leader. The leader of the process in the study was this present researcher. As the process began, she had some theoretical knowledge of assessment in higher education and of adult development theory. She was also committed to, and experienced in the use of, the group process in

teaching. It was the latter skill, rather than the former knowledge, which informed the day-to-day operation of the self-assessment process. This skill is common to many educators in institutions of higher education.

This process also fits into the category of what K. Patricia Cross (1986) calls "classroom assessment," since it was situation-specific and aimed at discovering in the immediate situation just what the students had learned (p. 65). Cross believes not only that faculty members can learn the skills of what she generally calls "classroom research" but also that doing this kind of research in the classroom will lead to the improvement of teaching and the enhancement of learning (pp. 67-68).

The facilitator/researcher in this study did have knowledge of adult development theory and assessment theory in higher education as she pursued the classroom assessment, but these were not necessary to the process. The focus was on the learners and on finding out in as open-ended a way as possible just what meaning they had made of their previous general education. Any facilitator with group process skills could have produced similar results.

In summary, there were some circumstances surrounding this particular case study which may have influenced its outcome in some minor ways, but they do not cast doubts on the feasibility of the process as a whole. Given the six characteristics as outlined, the self-assessment process was accomplished with the results described above; the assumption from these outcomes is that the process is

feasible within the confines of an adult degree program. Furthermore, the process may also be feasible with mixed ages and with students who have completed "regular" undergraduate programs; while adult learners and a special program are important features in this study, it does not appear that the process was dependent on either.

Each aspect of the process will now be considered in turn, to determine from the data which of these was effective in making the process feasible and which might be changed to make it more so. We will consider the following: Instrument 1, the primary self-assessment questionnaire; Instrument 2, the post-assessment questionnaire; the time dimension of the process; the group aspect of the process; and leadership. A summary will follow.

Instrument 1

First, there will be a consideration of Instrument 1 as a whole; this will be followed by participants' comments on specific questions. The six questions on Instrument 1 were as follows:

- 1) What stands out for you as you think back on your college education? What surprised you about it?
- 2) What changes do you notice in yourself as a result of your educational experience? What changes do you notice in relation to your job? Your family? Your community? Your future plans? Your ability to think and to communicate?
- 3) What particular learnings or experiences in IWW/UWW were important in creating these changes? Describe in detail one experience and its effect on you.

- 4) What would you change about IWW/UWW if you could? What would you change about the university?
- 5) What would you change in your educational program? What would you have done differently? Why?
- 6) What do you think is the purpose of a college education? Have you changed your views on this since entering the program?

Judging from the participants' answers to these questions, from the answers to Instrument 2, and from the class notes, the use of Instrument 1 yielded a number of positive benefits for the participants. First, it enabled them to bring diverse parts of their general education together and to look at it as an integrated whole. Before the self-assessment exercise they had had a series of learning experiences but no way to look at them all together. Asking them what stood out as they thought back over their total experience enabled them to consider the many separate courses and seminars as one unity, from which they needed to select one or more salient features.

Second, the questionnaire was open-ended enough to provide for a variety of responses and yet structured enough to encourage serious thought. Too much structure would have stifled creativity, but not enough would have made them feel lost, confused and without direction. For instance, the second question asked not only what changes they had noticed in themselves as a result of the experience but also proceeded to describe the arenas in which change might have

been observed, i.e., in relation to job, family, community, future, and ability to think and to communicate. Those who had said little in response to the first part of the question were able to think more specifically when asked to focus on certain particular aspects of their lives.

Third, the questionnaire enabled them to become reflective about their experience and to make connections they had not made before. For example, they were asked what particular learnings were important in creating the changes they had noticed and even to describe one experience in detail. This enabled them to step back from the experience and then both to make a value judgment about importance to themselves and a connection between external cause and internal effect. In these ways, they were doing what Kegan (1982) describes in his theory of "subject-object relations," that is, they were becoming objects to themselves in order to grow developmentally (pp. 76ff.).

Fourth, it gave them a chance to develop and use their own evaluative skills. First, they were asked what they would like to change about the program in which they were a part and about the university in general; then, they were asked what they would change about their own program, about the way they had engaged the opportunities presented. This meant that they had to look over the entire experience to see what, in their opinion, could be improved. There was no lack of suggestions in their answers, even though some of them remarked that they personally did not have the power to make

the changes. In any case, they were obliged to use whatever evaluative abilities they had and to listen to others doing the same. As Bloom (1969) points out, evaluation as a skill is at the top of the list of educational objectives.

In summary, Instrument 1 as a whole seems to have had a number of positive outcomes for the participants, including the integration of learning experiences, the creativity of answers within a supportive structure, the possibility of reflection on learning and its meaning to them, and the sharpening of evaluative skills. On the whole, it served the self-assessment process well, as the variety and scope of answers given in Chapter IV has indicated.

Logistically, too, Instrument 1 as a whole proved to be workable. Six questions were not too many to cause lack of interest; the interest level was maintained throughout the process. Each question asked seemed necessary to the whole, although Question 3 needs a better focus and although the learners found some questions more valuable than others, as will be seen below.

One potential logistical matter, however, is caused by the large amount of data collected from this process; tape recordings of class discussions of Instrument 1 were six and one half hours in length and written answers to the questions came to about 150 pages. Though not a problem to this research because she had plenty of time to analyze the material and was conducting the research as part of her graduate study, it could present a problem for regular classroom

instructors. As Claxton et al. (1986) maintain, data from assessment must be manageable in order to be fully useful.

There are several ways in which the process could be modified to provide more manageable data. One would be to have the classroom discussion of the entire questionnaire but not to tape record it; learners would have all the benefits of the group process in clarifying and deepening their answers but the amount of data would be cut greatly. Something of the spontaneity of the classroom answers would be lost that way but, since many learners in their written responses either repeated or built on what they said in class, the gist of the responses would be maintained.

Another method would be to limit the written responses to one page per question. This is not a foolproof method, since some respondents did not limit certain answers even to two pages, but it would have some positive effect. A third method would be to eliminate one of the questions, in which case Question 3 might be a good candidate, since answers to it tended to be long and unfocused. Since the focus in the self-assessment process is on certain characteristics, rather than on certain questions, the questions on Instrument 1 could be rearranged or modified, as long as the six characteristics were maintained.

In summary, Instrument 1 as a whole seems to have had a number of beneficial results. These results would be maintained even if the process were modified in certain ways to control the amount of data, provided the characteristics of the whole procedure were adhered to carefully.

Having said this about Instrument 1 as a whole, it is necessary to look at specific questions as well. First, the learners' own evaluation of the questions will be examined.

In the oral evaluation of the process, which took place on 4/2/87, the participants were in general agreement that the first three questions were valuable, the second three less so. Sandy said:

The first three questions are relevant; the last three less so. Mainly the first three, because they open things up.

Martha expanded on that theme:

I think the first three questions are tied in so closely that it's almost impossible to pull them out. 1 leads to 2, and 2 leads immediately to 3; they're almost inseparable. The next three aren't to me quite so important, maybe because I can't see myself making changes in IWW or the university, although I'd like to.

Sara came to the same conclusion about questions 4 and 5, but for different reasons:

All are valuable questions but personally I had trouble with 4 and 5 because of the same things (Rachel) was talking about. I don't feel capable at this point of giving a really good answer to those two because I don't know what I'd change - I can't change the past anyway - I always try to do the best I can. It goes against my philosophy; I don't believe that you should wish the past was different. I just take what is given. But the questions are valuable; some people might have constructive criticisms which would be helpful.

Although she had problems with 4 and 5 herself, she didn't dismiss them outright.

Question 5 took up the least amount of time in class discussion and was also the question given the least amount of space in written

answers. Some indication of the reasons for this were given in the discussion in Chapter IV of Question 5 under Characteristic 6 (serves institution), where all of the younger learners said that there was really nothing they would like to change about their program.

Question 4, on the other hand, was given the third highest amount of time in class discussion and the third highest amount of space in written answers; this may have been because learners here had to deal with two separate sub-questions, one about changes in IWW/UWW and one about changes in the university. Perhaps there would have been even more response if, as Martha indicates above about herself, the learners had felt that they had real power to change anything about either institution; statements by other participants about their lack of power to make change were included in the discussion of Question 4, under the section on Characteristic 6 (serves institution).

Question 6 (college purpose) was given a mixed evaluation. During that same class evaluation on 4/2/87, Sally said, when asked which question was the most difficult:

I was trying to figure out what the purpose of Question 6 was. I'm still not sure. When I first came to this area I wanted to keep a journal but I couldn't do it. I couldn't put it down on paper; it was too difficult - too many painful things had happened. Perhaps there's a hangover here from that. There are some things you don't need to know.

Rob was even more definite; he said he would eliminate Question 6.

Explaining why, he said:

I'm torn about why I'm going to college; I don't need it for my job, would rather be home with the kids, spending time with my family. Why am I doing this? For the piece of paper? For self esteem? I get so upset with myself because I don't know the answer to that question. I don't want it to be for the piece of paper. . . . I don't even want to talk about it, let alone write about it.

On the other hand, in that same discussion Eve defended Question 6, explaining:

Question 6 is something you have to deal with; you have to make yourself deal with the purpose of education. What is the purpose of education? It's different for everyone. . . . It's such an individual thing that you have to answer it. What's right for you isn't right for someone else. But one thing everyone in college has. It's wonderful for the self esteem.

From the data, then, we have evidence that the learners found Questions 1, 2, and 3 "relevant," possibly indicating that with them they could talk directly about their own experience. Question 4 brought an ample response but some found it less relevant or meaningful because they didn't feel they had the power to change anything about the institutions of which they were a part. Question 5 produced the least response, possibly for a variety of reasons, but including the answer that there was nothing the younger members wanted to change about their programs. And Question 6 was criticized by some because of mixed feelings around the answer, but it was praised by others as being thought-provoking.

Although there is no conclusive evidence here, it may be safe to say that there is enough to indicate that there was no one question which all the learners agreed should be abolished. Judging from their answers, which have been presented under research

question 1, all of the questions stimulated a wide variety of responses. The first three questions were particularly helpful and appreciated. Even though the questions which dealt less directly with their own experience were less popular with the learners, they did not refuse to answer them. Moreover, those last three questions (#4, about changes in the institutions. #5, about changes in their own programs, and #6, about the purpose of college), produced information of value to the institutions involved and, for that reason, should be included in the basic questionnaire (Instrument 1).

Of all the questions, Question 3 seemed to this researcher to be the least useful and the most cumbersome. ("What particular learnings or experiences in IWW/UWW were important in creating these changes? Describe in detail one experience and its effect on you.") In an attempt to answer the second part of the question, participants went into great detail about events and then had a hard time focusing on their actual importance; the three youngest participants described events connected with dorm or personal life, not events in the classroom. In order to maintain the value of the question in making connections between classroom learning and personal change, it would be best to reword it as follows: "Briefly describe one classroom experience which was particularly important in creating some of these changes." This change would have the further benefit of removing the program-specific reference from the question as originally stated. This reference should also be

removed from Question 4, which read "What would you change about IWW/UWW if you could?"

In general, as has been stated previously, the precise wording of individual questions can be changed to serve the needs of specific programs and populations, provided the six characteristics of an appropriate self-assessment process for adult learners are maintained. This is one of the benefits of outlining the characteristics, as opposed to the specifics, of the process.

However, provided the small changes are made in Questions 3 and 4, the six questions used in the case study provide a workable structure for a self-assessment process, fulfill the six characteristics, and produce a manageable amount of data. In these ways, Instrument 1 can be considered feasible for use within an adult degree program.

Instrument 2

Instrument was the post-assessment questionnaire; it was given out in the form of a written questionnaire on the final day of the oral self-assessment process. It asked the following questions:

- 1) Did this self-assessment process help you? How?
- 2) Was there enough time to think about the issues? Too much?
- 3) Was the group process valuable? In what ways?
- 4) Would you recommend this process to the next group of students? Why or why not?

The answers to these questions are summarized in the Chapter IV discussion of Characteristics 3 (time), 4 (group), and 5 (serves learner). On the time question, there were differences of opinion on whether or not the amount of time was excessive but general agreement that the process demanded time and that a length of time was necessary in order to make it work. About the group process, the learners said that it enhanced the assessment task because the comments of others reminded them of their own learning and deepened their insights, while the supportive presence of others made new levels of understanding and integration possible. About the value of the process to themselves and potentially to others, some stressed its ability to help them accomplish a task, while others talked of new perspectives on goals, on attitudes, and on feelings about education. In general, their responses to the questions on Instrument 2 played an important part in affirming several of the characteristics of an appropriate self-assessment process for adult learners. It gave a valuable perspective on the whole process from the point of view of the participants.

On the other hand, while it was important to this research, Instrument 2 is not an essential part of a self-assessment process. Its goal of getting the learners' perspective on the process could be accomplished in a short oral evaluation at the end or in informal questions along the way. Or it might be ignored altogether, with the thought that enough evaluation is already going on and that adding an additional evaluative questionnaire would detract from the focus of the main self-assessment process.

In summary, Instrument 2 was usable and adequate as an instrument in this case study. It produced data that was important to the research questions under investigation in this study. It would not, however, be necessary to other self-assessment exercises with adult learners. Dropping this would make the entire process less time-consuming and ease the data management problems discussed previously.

The Time Dimension

As has been stated in Chapter IV, considerable time was allotted for the self-assessment process. The question arises about whether the amount of time spent was either not enough or too much. Some insight into this question will be gained from examining the participants' answers to Question 2 on Instrument 2.

The second question on Instrument 2 reads as follows: "Was there enough time to think about the issues? Too much?" The overwhelming response of the learners to the first part of the question was "Yes"; only one person wrote, "There never seems to be enough time for anything." Others mentioned the importance of plenty of class time in order to get input from everyone; to think about all the issues; to share issues; to discuss them in a relaxed, accepting atmosphere; and to "recreate and firm up some of my ideas." One respondent specifically mentioned the importance of having a week between questions because ". . . less (time) would have put too much pressure on me without enough careful thought."

Some class notes, made by this researcher immediately following the class sessions, seem relevant to the question about the amount of time:

(3/6/87) I asked the group if they liked the question method and they all said yes. I also asked if it were taking too long or too short a time, and the answer seemed to be: just about right.

However, despite the information above, there was evidence that some members of the group thought that too much time was given to the process. For instance, Question 4 on Instrument 2, the same instrument referred to above, asked, "Would you recommend this process to the next group of students?" One learner wrote in answer to that question:

Definitely, but in a shorter amount of time and to focus more on the future in relation to your general education.

Another wrote, in answer to the same question:

No. I'm not sure of the value in going backwards to review our early work here at U.Mass. . . . This class time did not really teach me anything new. In my busy life, I sacrificed my time to come here to learn and be challenged. The time spent here for this C.E. process stretched on and on. Perhaps spending one half the semester for this process and then moving on to something else (would have been helpful).

Moreover, in the oral evaluation of the whole process on 4/2/87, similar sentiments were offered. One person said, in answer to a question about the length of the process:

We spent too much time on it. We were not talking about the present, what everyone is doing now. We could have spent a shorter amount of time on it and brought the perspective into the future and where we go from here.

Another said, "I thought it was way too long."

Such comments are important to consider. On the other hand, these voices were in the minority. Another individual, in response to the same question, during the same oral evaluation, said:

A week for a question was okay. We were supposed to be going over the past and bringing it to the present. I think you have to spend time on it.

In answer to a question at that same evaluation, on the value of thinking about questions in advance, another said:

Having the questions asked so you could think about them during the week was helpful. I think just sitting here couldn't do it; I wouldn't have come up with things. I'm the type of person who has to let things sink in.

In summary, then, there were differences of opinion on whether the amount of time was excessive, but general agreement that the process demanded time and that a length of time was necessary in order to make it work.

This mixed opinion was also reflected in the class notes. At times they say that periods of silence, lengthening the time span, were important for thoughts to develop and should not be interrupted. At other times, they say that the time span was "just about right." But on 4/2/87, the final day of the process, the note reads, "Generally, I think the evaluation process went on too long."

The process should certainly be shortened in a variety of ways. Questions 4 and 5 should be combined and Question 6 might be eliminated altogether. Question 3 could be better focused to provide shorter answers. The time between each question could be shortened from a week to a few days. If there were no alternative, the process could even be done in a weekend or all-day workshop.

The main consideration needs to be that participants have the time it takes them to reflect on their educational experience, to share it with others in some meaningful way, and to write about it in a way that serves them as well as the institution of which they are a part. That is to say, the amount of time for the process needs to be seen not only in relation to the particular time constraints of the program for which it is designed, but also, and more importantly, in relation to the other characteristics of an appropriate self-assessment process for adult learners.

The Group Setting

The feasibility of the group setting will be examined from the perspective of the learners, using their answers to Question 3 on Instrument 2, and from the perspective of the observations made immediately after the class sessions. Some general comments will follow.

Question 3 asked, "Was the group process valuable? In what ways?" The clear response of all participants was affirmative, for the following reasons: 1) Group members felt comfortable with each other, gained support from each other, felt "close" to each other. 2) Group participation stimulated thought, helped clarify thought, helped people dig deeper and get new ideas. 3) Diversity in backgrounds of group members was considered a positive factor. 4) Sharing different experiences was a learning experience. 5) This support, stimulation, clarification, diversity, and sharing provided valuable help in the self-assessment process.

One respondent summed up the value of the group process in the following way:

I was amazed at how helpful a little "food for thought" from a fellow student could bring information out of my own thought process. This information, often discussed at length, would clarify a point or two for me and help me.

The class notes, made immediately after the class sessions, corroborate the learners' opinions. Although the note made on 2/5/87 expresses doubt about whether the group would come together enough to have a positive effect on the self-assessment process, largely because of the diversity of age and background of its members and their apparent reluctance to speak, the note made the following week is more positive. It states:

Class felt more comfortable tonight and I in it. . . . I made the circle smaller so that we could be closer to each other and I closed it, instead of making it a semi-circle with me up front. . . . I need not have worried about talking and participating. . . . They know they are supposed to participate and they are not afraid.

Other class notes mention the importance of logistics in strengthening the group process, for instance, the benefits of being in a smaller classroom on two occasions because of a schedule change and the importance of having a conference microphone so that comments from all parts of the room could be recorded accurately. One class note speaks of the break in the flow of conversation when on one occasion a portable microphone had to be passed around from speaker to speaker.

The class notes also mention the importance in the beginning of the "peer pair" arrangement in building the group process. On the first day of the self-assessment process, participants were asked to pair up with a classmate and take notes while that person spoke. At the end of the session, the notes were to be exchanged in order to provide a starting place for the written answer to the self-assessment question from that session. The notes remark that this helped to build the group by putting each member in collaborative contact with one other member. However, by 3/6/87, the fourth session, the notes say that the participants found this practice "distracting" and asked to have it discontinued, saying that they wanted to be free to listen. Whatever value it had as a group-building strategy had apparently been accomplished by that time; it is certainly not necessary to the whole process.

It is clear, then, both from the learners' written answers to Question 3 on Instrument 2 and from the class notes, as well as from the material on Characteristic 4 discussed in Chapter IV, that the group came together quickly around the self-assessment task and that participants and facilitator found that the group process was important in accomplishing the self-assessment task. The group process enhanced the self-assessment task in the setting described in the study partly because it was embedded in a regularly scheduled semester course. The course structure provided an incentive for regular attendance and for prompt submission of written answers to the self-assessment questionnaire. The learners understood that

class participation and answering the questions at home were part of the requirements of the course. Coming prepared to discuss the next question meant that group participation was lively and comments were stimulating to others' thinking.

However, the self-assessment process took only about one quarter of the total class time allotted to the course. It fitted in well with the overall goals of the course but it could have been accomplished within the framework of any course or seminar designed to be part of the ending process of an educational program. It could even be accomplished within the framework of a weekend or short-term residency for adult learners completing a program, provided attention were paid to group building, provided enough time were allowed for thoughtful reflection on the questions both within the group and outside of it, and provided the size of the group were kept to a workable number for effective group process; groups larger than 20 would probably have to be divided into sub-groups.

To summarize, the group setting enhances the self-assessment process in a number of ways. Placing the process within the framework of a semester or term course gives structure and continuity but is not a requirement for success. Other structures may be equally useful, provided the six characteristics of an appropriate self-assessment process for adult learners, as described in this study are fulfilled.

The Leadership of the Facilitator

The facilitator for the self-assessment process was this researcher. Since the participants in the study were not asked on Instrument 2 to evaluate her work as facilitator of the process, material for analyzing her role comes from the class notes.

This researcher has been a teacher of adults for a number of years and has had experience in group process. She has also read widely in adult development theory and assessment literature. However, the skills needed to make the self-assessment process in the study work well proved to be relatively simple ones. They included: the ability to be clear about the goals and structure of the process, the ability to listen carefully with a minimum of interruption and then only for clarification of students' comments, the ability to keep the discussion on track, the ability to use recording equipment unobtrusively, the ability to draw quieter members into the discussion, and the ability to know when to end a given session. These competencies are widely shared by many faculty members, teachers, and group leaders.

Cross (1986) encourages faculty members to try what she calls "classroom assessment," by which she means getting "involved as individuals in getting feedback from students on what they are learning in that classroom during that semester" (p. 65). What is described in this study is similar in concept, except that the facilitator is trying to find out from learners what they have

gained for themselves from an entire educational program. The emphasis in the self-assessment process is on discovering what meaning the participants have made of what they have learned, rather than just on the learning itself. But in other ways the facilitator in the self-assessment process can be compared to the faculty member in a classroom assessment project. In addition to the group process skills outlined above, the facilitator must also be informed about the goals of the program in order to facilitate the process well, just as the faculty member must have a clear idea of the goals of her course in order to ask appropriate questions.

With these qualifications in mind, however, many individuals may be able to play the role of facilitator of the kind of self-assessment process described and used in this study. Faculty members, program advisors and mentors, program administrators, and perhaps even adult learners who have been through the process themselves could perform the role of facilitator. The benefit to all of them would be a fresh look at what learners are actually gaining from the educational programs of which they are a part.

In summary, after examining the feasibility of the process as a whole, of the instruments, of the time dimension, of the group setting, and of the leadership, it can be said that a self-assessment process embodying the characteristics outlined in Chapter I is feasible within the confines of an adult degree program. It can also be said that such a process may be usable with students of mixed ages who have completed regular university programs.

C H A P T E R VI

CONCLUSIONS

The study demonstrates that there are six desirable characteristics of a self-assessment process for adult learners and that a process with these characteristics is feasible within an adult degree program. It is also possible that such a process may be usable with students of mixed ages who have completed "regular" university programs. There are also a number of other conclusions which can be drawn from this study.

First, it is important for adult learners to be able to assess their educational outcomes in their own terms. Whatever other means are used to ascertain whether they have gained something from their college experience, a self-assessment process of the kind implemented in the study is a crucial part of the completion of an academic program. The final judge both of what has been learned and of the meaning for the individual of what has been learned ultimately rests with the learner herself. The kind of process envisaged here, with its open-ended questions and its time for reflection and integration, allows that judgment to be made.

Second, a group setting provides an important dimension to thorough self-assessment. Whereas much assessment is designed to be private and individualized, involving the person's silent responses to a test or questionnaire, self-assessment can be enhanced by the group process, as the learners indicated in the study. Hearing what others said helped them understand their own educational experience better.

Third, the study shows that a classroom can be an ideal setting for such group self-assessment. The instructor/facilitator can structure the experience in such a way that everybody gains: the instructor gets immediate feedback on what has been learned and on the meaning the students have made of their learning, and the students are able to reflect on what the new learning has meant to them and how they have integrated it into their lives. Student self-assessment can become an on-going part of a course structure, without added expense or complicated logistics.

Fourth, self-assessment by adult learners may be as valid a way as any to find out what lasting changes an educational program has made. When the learners in the study were asked an open-ended question about what stood out for them about their educational experience, they described without hesitation changes in their beliefs, self-concept, values, and attitudes. When asked questions about identified areas of change, the respondents were able to be specific about changes in relation to self, family, job, community and in the ability to think and to communicate. This means that in

such learning areas elaborate pre- and post-tests were not needed to identify increments or "value-added" from the education, since the adults questioned were well aware of those changes and were also well able to articulate them.

Fifth, the kind of self-assessment process implemented in the study does not specifically answer the question of what cognitive gains were made by the learners. Although cognitive gains were mentioned in the answers to the questions, they were not the main focus of the learners' remarks. In fact, the participants frequently moved from cognitive learning to affective learning, showing how the former had led to the latter. Other procedures than the one described in the study will be needed to ascertain cognitive gains. Although this may be a limitation of the self-assessment process, measuring cognitive gains is not its purpose.

Sixth, the actual procedures used in answering the questions were effective ones and may have wider implications and possibilities for use. Thinking about a question for a week, then discussing it in a group, and then writing the answer to it, as the learners did in the case study, apparently made possible more thoughtful answers than those normally given to a written questionnaire. The learners stated that they did profit from the chance to think about the questions in advance and that their insights deepened as they listened to others. These procedures helped to preclude the kind of hurried written answers which are often given to various evaluations at the end of a semester course or at the completion of an academic program.

Seven, taking time to think through such an assessment of learning can be a learning experience itself. The participants in the study used a number of images to describe the process, such as "a light went on" and "things started opening up." In this way they could see immediately the value of the self-assessment process to themselves; the process fulfilled its function of serving the learner.

Eight, going forth from an educational experience with a clear sense of what they have learned and that they have learned is an empowering experience for students. One learner in the study said of the process that it was the best thing she had ever done for herself. Ending an educational program with a firmer grasp on what it has meant also means that the learner is likely to continue to want to learn.

Nine, the case study describes a process which is easily adaptable to a variety of non-traditional adult programs, such as the one which was the setting of the study; it may also be adaptable to regular college and university programs for traditional age learners. Giving a set of characteristics for such a process, rather than rigid rules or instruments, allows the program to adapt the procedure to its own particular set of needs and requirements.

Recommendations for further study include the following:

- 1) The self-assessment process could be used within a special program (such as an "honors" program) for traditional age students to see how well this age group responds to the process.

2) The process could be tried with an adult degree program quite different from the one which was the setting for the study, for instance, one which has a short-term residency of one or two weeks at the end of its program. The effects of the shortened amount of time could be studied.

3) The self-assessment process could be tried with a group of adult learners which has a more even balance between men and women. The effects of the gender balance on the development of the group and the emphasis on affective learning could be studied.

4) The process could be used with a group of learners of mixed ages, both adults and traditional age, who have studied the same major field. Interactions between the ages, different perceptions according to age groups, and the ability of a diverse group to coalesce around the self-assessment task could be examined.

These are just a few of the possibilities for further study. What they have in common is an emphasis on learner self-assessment within a group setting at the completion of an educational program. Many combinations can be tried, as long as this focus is kept in mind.

On a different level, and arising more from general reading than from the findings of the study, it appears to this researcher that much assessment literature and perhaps the assessment movement as a whole is in need of a critique from a feminist perspective. With the exception of works by the women writers at Alverno College, the writing in the field tends to be dominated by

male authors (Astin, Ewell, Pace, etc.) and by what appear to be male-oriented concepts, such as accountability, quantification, judgment by an external standard, and the like. This thinking needs to be examined from the perspective of such ideas as the importance of relationships in learning, as suggested by feminist writers like Gilligan (1982), and of the ethic of caring and the centrality of "connected knowing," as described by Belenky et al. (1986). The kind of self-assessment described in the study fits in well with such a feminist perspective and may be an important complement to more male-oriented models.

In summary, according to Marchese (1987), one of the goals of all efforts at assessment should be to teach learners to be better assessors of themselves. Having learned the abilities of self-assessment through a process such as the one described in this study, people of any age should be better equipped to undertake the problems that lie before them after they have completed an educational program.

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