INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.

2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.

4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

University Microfilms International
300 North Zeeb Road
Ann Arbor, Michigan 48106 USA
St. John's Road, Tyler's Green
High Wycombe, Bucks, England HP10 8HR

77-11,619

BETTINSON, Charles Harry, 1944-
AN ANALYSIS OF PRIOR LEARNING ASSESSMENT SYSTEMS IN MICHIGAN'S PUBLIC COMMUNITY AND JUNIOR COLLEGES.

Michigan State University, Ph.D., 1976
Education, community colleges

Xerox University Microfilms, Ann Arbor, Michigan 48106

© Copyright by

CHARLES HARRY BETTINSON

1976

AN ANALYSIS OF PRIOR LEARNING ASSESSMENT SYSTEMS IN MICHIGAN'S PUBLIC COMMUNITY AND JUNIOR COLLEGES

By

Charles Harry Bettinson

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Administration and Higher Education

1976

ABSTRACT

AN ANALYSIS OF PRIOR LEARNING ASSESSMENT SYSTEMS IN MICHIGAN'S PUBLIC COMMUNITY AND JUNIOR COLLEGES

By

Charles Harry Bettinson

An increasing interest in expanded access and educational diversity has led many colleges to consider granting academic credit for learning acquired prior to college enrollment. The purpose of this study was to identify and study the processes used by Michigan's public community and junior colleges in awarding credit for learning which was gained through prior experience.

Answers were sought to two major questions: (1) Which of Michigan's twenty-nine public community and junior colleges have developed systems for granting credit for prior learning? and (2) At colleges where systems have been developed, what kinds of options, processes, and procedures have been designed to implement credit for prior learning assessment systems?

The procedures of the study involved two specific stages. The first stage was accomplished by the use of a ten-item telephone survey of each of the twenty-nine community and junior colleges in Michigan. This stage focused upon the present practices used by these colleges in the general areas of credit by examination and credit for prior learning. Based on the degree of development, eleven of

Michigan's community and junior colleges were chosen for in-depth study. The second stage of the study consisted of on-site interviews at those community colleges which had available: (1) an institutional credit by examination program; (2) a possible credit award for certificates, work experiences, or life experiences; and (3) a clearly stated assessment procedure.

In the second stage of the study, a representative of each of the eleven community and junior colleges participated in a structured interview designed to identify organizational procedures, sources of prior learning, prior learning credit availability, and the assessment methods in use. The data gathered during Stages I and II were depicted and analyzed through a series of tables and discussion.

The data from the first stage of the study indicated that all twenty-nine of the public community and junior colleges in Michigan offer one or more nontraditional educational options which can be used to gain credit for prior learning.

The in-depth interviews identified the most widely accepted source of prior learning as armed services training, followed by business and industrial training, and apprenticeship training. The source of prior learning which was least often cited was community service experiences. The three assessment methods most often used to measure and evaluate prior learning were written examinations, faculty interviews, and documentation. The disciplines which most

often accepted credit for prior learning were the applied technologies and physical education. The eleven colleges visited did not apply prior learning credit in biology, chemistry, and other sciences. None of the colleges provided structured guidance in portfolio development to the students who were undergoing the assessment process.

The results further indicated that the responsibility for carrying out assessment resides with the faculty, who receive special remuneration for this role at two of the eleven colleges. The operational responsibility for administering the assessment process is most often located in the student services office of the college. Two of the colleges had created special publicity for their credit for prior learning options. None of the colleges employed staff whose major role was to administer the assessment system.

On the basis of the findings and the review of the literature, a ten-step model was developed to unify present practices, to address prior learning assessment problems identified in the study, and to incorporate assessment concepts identified in the literature. The ten steps in the model include: (1) identify an initial contact office; (2) offer a portfolio development seminar; (3) require an assessment application; (4) submit a portfolio; (5) employ an administrative review; (6) engage an assessment team review; (7) administer an assessment device; (8) notify the student; (9) request student evaluation; and (10) transcribe the credit.

To my wife, Gloria, whose unlimited love,
assistance, and sacrifice
made this work possible

ACKNOWLEDGEMENTS

I would like to express my sincere thanks to the members of my committee for the guidance and support they provided in the completion of this study. The assistance provided by Dr. Max Raines, Dr. Norman Bell, and Dr. Stanley Bryan was deeply appreciated. Gratitude is also extended to Dr. Van Johnson for his help during the final stages of the study.

I particularly would like to thank my committee chairman, Dr. James Nelson, for the outstanding support, guidance, and encouragement he has provided, both in my career and in the development of this research. Without his willingness to give freely of his time, as well as his commitment to his students, this study would not have been completed.

Special appreciation is also offered to Gene Packwood, Don Laughner, and many others at Delta College who provided support and direction as the study was developed.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

THE PROBLEM

In the past several years, there has been a growth of interest in nontraditional education, which is defined by the Commission on Nontraditional Study as "new forms, new structures, new means and new opportunities for higher education."[1] Nontraditional educational experiences and alternatives have existed for many years. However, with the increase in higher education enrollments and the diversification of higher education's student group, there has recently been substantial development of nontraditional delivery systems. These systems are based on new or unconventional forms of education, free of the time or place limitations of traditional classroom instruction, and are grounded on the assumption that learning can and does occur outside of traditional educational models.

In keeping with this assumption, many colleges have begun to grant credit for learning which resulted when an individual learned independently--most often during a period

---

[1]Carnegie Corporation of New York, "There's More Than One Way to Earn a College Degree," Carnegie Quarterly 23 (Fall 1975): 1.

of non-enrollment. In such cases, the credit is granted after the experience has occurred. Since it is frequently impossible to evaluate the learning through the traditional examination process, the person's experience is usually assessed in some other way to determine its academic credit value.

The assessment process is critical because it is obvious that all experiences do not produce learning which is equivalent to that received in college. Moreover, the knowledge which has been acquired in some nontraditional fashion may not fit neatly into a college course or discipline. Therefore, the determination concerning the college level knowledge or skill within an experience depends upon the quality of the college's assessment of that experience. If the assessment is faulty in some way, a student may lose credits he deserves or receive credits which are not deserved. For these reasons, valid and reliable assessment is crucial in any system which grants credit for experiential learning.

Statement of the Problem

The purpose of this research is to identify and study the processes used by Michigan's twenty-nine publicly supported community and junior colleges in assessing an individual's life experiences and awarding academic credit for the college level learning which has occurred as a result of those experiences. Recent informal surveys by

registrars and admissions officers show that most Michigan community colleges utilize such national credit by examination programs as the College Entrance Examination Board's College Level Examination Program (CLEP) and Advanced Placement (AP).[2] However, this study will concentrate on the processes which have been developed by individual community colleges to assess experiences and then provide academic credit to students based on the learning which has resulted from those experiences.

In its attempt to focus specifically upon the assessment components of a system for crediting prior learning, this study attempts to identify those Michigan community and junior colleges which presently have the basic elements of a system for assessing prior learning. Second, this study seeks to determine specifically which methodologies are used in the assessment process, and identify patterns of usage which are common to certain methodologies.

On the basis of the factors identified in the literature and in the research, a third purpose of the study is to develop a model which embodies the most important elements of a community college credit for prior learning assessment system. This model will address the problems experienced by the existing prior learning assessment systems and will identify the stages a community or junior college should

---

[2] Richard Drenovsky et al., "Advanced Placement Policies and Practices of Higher Educational Institutions in Michigan," Report of the MACRAO Articulation Committee, June 1976. (Mimeographed.)

include in a system which attempts to grant credit to an individual on the basis of that person's prior learning.

It is important to point out that this study will not focus on credit by examination options such as CLEP, as it is used in Michigan's community and junior colleges. Rather than a limited focus on the written examinations used by some colleges as a measurement component in their credit for prior learning system, this study will concentrate on the total system of processes and procedures which has been developed to assess prior learning.

Importance of the Study

Research concerning the prior learning assessment processes used in Michigan's community and junior colleges is important for several reasons. A review of the literature has shown that up to this time, there has been no organized study of the processes used specifically by community colleges in the granting of academic credit for prior learning. In fact, community colleges have been under-represented in both a national survey conducted for the Commission on Nontraditional Study by Ruyle and Geiselman, and a survey conducted by the Cooperative Assessment of Experiential Learning (CAEL) consortium.

Because of this, information about the methods used by community colleges to handle requests for credit on the basis of a student's experience is not available. By collecting, arranging and analyzing this information, this

study raises the level of awareness about existing credit for prior learning processes in Michigan's community and junior colleges. Consequently, a major reason for the importance of such a study is the substantial lack of knowledge available about such programs, both in Michigan's community colleges and in community colleges nationally.

A second reason for the significance of this study is the continually increasing number of older, part-time, and employed students who are heavily represented in community college courses. These students often enroll for the purpose of upgrading job skills or for certification which could mean a raise or a promotion. Older students who are full-time employees, or who have other obligations, are eager to take advantage of any credit which can be generated from learning which they already possess.

Another reason this study is important is related to growing public pressures for community colleges to develop such credit for prior learning options. For example, a national secretary's organization which certifies public secretaries has been suggesting that its members contact their local community college and request credit for the knowledge represented by the Certified Public Secretary's certificate. Local businesses and industries are also often interested in obtaining college credit for their employees who have completed a training program offered by that business or industry. Community interests such as

these, along with numerous individual requests, create a substantial amount of pressure.

This study is also valuable because it represents a means of identifying processes which can be used to reach a great many future students who may presently possess some credit potential. Since formal education is not the only source of knowledge, community colleges have the possibility of continuing the education of a large number of adults who may have never been enrolled in a college class. These individuals might have learned in a variety of ways. As a result of the identification of such processes, these individuals could be encouraged to return to school if it was possible for them to build upon credits gained from prior learning.

Finally, this study is important because it attempts to specify processes which can be used by community colleges to eliminate the unnecessary duplication of learning. The frustrating experience of being forced to pay for and complete a course which covers already well-known subject matter can be eliminated when students are given a prior learning assessment option. This study attempts to identify such options, and also provides a model which may be used in further program development.

Assumptions of the Study

This study makes three assumptions about the assessment of experiential learning in Michigan's publicly

supported community and junior colleges. First, it assumes that development of prior learning assessment systems in Michigan's community colleges has not been significantly different from such development in other statewide groups of publicly supported community and junior colleges. Nationally, community college involvement in credit for prior learning assessment systems is not widespread. For example, as of June 1976, approximately thirty of CAEL's 200 member institutions were community colleges. Of the twelve CAEL institutions which are developing operational assessment models, only two are community colleges. Therefore, it is assumed that the state of the art concerning the development of assessment systems for prior learning in Michigan's community colleges is similar to that of community colleges in other states.

Secondly, this study further assumes that the issues and problems which relate to assessment will not be substantially different from one college to another, regardless of location. In determining the amount of credit to be awarded for a person's experiential learning, any college, whether two- or four-year, is faced with a number of problems. For example, some prominent concerns are: On what basis should credit be awarded? How can the institution maintain the integrity of its credit? How can the assessment process be controlled to insure reliability and validity from one individual to another? As a result, the steps taken by community colleges in Michigan to deal with

assessment problems should not be dissimilar from steps which have been or could be taken by other community colleges.

Thirdly, this study assumes that those community college students who request an assessment of their prior learning will not be particularly different from institution to institution. It is likely that requests for credit will be concentrated in similar categories of experiences, regardless of the college's location. Such similarity further supports the assumption that assessment issues and problems will not be substantially different from one institution to another.

Definition of Terms

The following key terms have been defined to provide a common basis for understanding throughout the study:

1. Experiential learning - learning which results from experiences which take place outside the formal classroom. Experiential learning encompasses both of the following:
   a. Sponsored experiential learning - learning which takes place outside the classroom as a result of experiences which are in some way created, directed, guided or controlled by an educational institution (the sponsor).

b. Prior experiential learning - learning which has occurred outside the classroom before an individual has matriculated in an institution of higher education.

2. Credit by examination - a process which grants a student a specified amount of credit based solely upon that student's performance on an examination. The concept of credit by examination includes the following:
   a. Challenge examinations - an institutional process in which a student is allowed to "challenge" a course. The student takes only the exam for a course and receives credit for that course if the exam score meets the instructor's, the department's, or the college's pre-established level.
   b. Standardized examinations - examinations which are developed, field tested, and normed by academicians for a specific course. Such examination programs are available nationally (College Level Examination Program - CLEP), on a state-sponsored basis (New York's College Proficiency Examination Program - CPEP), and institutionally.

3. Competency based evaluation - the process of determining whether an individual possesses the skills and proficiencies equivalent to the competencies developed or required for the successful completion of an academic

course. It often implies the ability to perform and/or apply knowledge in practical situations.

4. Assessment of prior learning - the process of determining the verifiable learning outcomes of experience, and translating those outcomes into an academic credit equivalency. This process is often not standardized from institution to institution or from student to student.

5. Portfolio development - the construction of a record of an individual's experiences, with emphasis upon those experiences whose outcomes may equate to college credit. Such a portfolio usually includes documentation of experiences and a statement of the individual's educational goals.

6. Product assessment - the process of determining the college credit equivalency of an individual's prior learning by evaluating a product, such as an art work, a composition, or a machine tool, produced by the individual as a result of that learning.

7. External degree - as defined by Houle, a degree awarded to an individual on the basis of some program of preparation which is not centered on traditional patterns of residential collegiate or university study.[3]

---

[3]Cyril O. Houle, The External Degree (San Francisco: Jossey-Bass Publishers, 1973), p. 14.

Limitations of the Study

This study is limited by the fact that the sample is limited to a single statewide community college system. Therefore, the study reflects only those credit for prior learning processes now in use in the twenty-nine community and junior colleges in the state of Michigan. The study is also limited in that the sample includes only publicly supported community and junior colleges in Michigan.

Another limitation is the lack of common understanding of both the terminology and processes used in the field of the assessment of prior learning. The abilities of the researcher to develop interview instruments which effectively overcome this barrier were also a limiting factor.

Overview

Chapter II of this study includes a general review and discussion of the research relevant to this investigation. Population, procedures, instrumentation, and data collection and analysis are considered in Chapter III. In Chapter IV the descriptive findings of the study are presented and discussed. Chapter V includes the conclusions of this study and a presentation of the implications.

CHAPTER II

REVIEW OF RELATED LITERATURE

This review of related literature has been structured to provide the context within which assessment of prior learning systems have evolved. The four categories in the review are : (1) nontraditional education; (2) external degrees; (3) credit by examination; and (4) the assessment of prior learning. The first category reviews those works which are basic to an understanding of the growth of nontraditional education over the past fifteen years. The second category focuses upon external degrees, which are a direct outgrowth of the interest in nontraditional education. Category three reviews the growth and development of one of the most traditional means of assessing prior learning--credit by examination. The last category concentrates upon prior learning assessment processes as they function apart from such assessment devices as credit by examination.

Nontraditional Education

It is often difficult to determine where traditional education ends and where nontraditional education begins.

This difficulty occurs because the innovations which often result from nontraditional education are sometimes quickly absorbed into the traditional educational fabric. However, even though specific options are absorbed, it is possible to identify some basic concepts which clearly stand out in nontraditional education as it has developed in the past decade. Three of these concepts are: (1) increased educational flexibility; (2) increased access; and (3) lifelong learning. Each of these concepts has a crucial role in the philosophy which underlies the assessment of prior learning.

Increased Flexibility

Increased flexibility has been a major element in nontraditional education. In Less Time, More Options: Education Beyond the High School, the Carnegie Commission on Higher Education takes the stance that periods of higher education should be alternated with a person's work and should be available throughout a person's lifetime. The report advocates less time in undergraduate education, new degrees, more opportunity to "stop out," and an opportunity to return to college when necessary.[1]

Another Carnegie Commission on Higher Education report, New Students and New Places: Policies for the

---

[1]Carnegie Commission on Higher Education, Less Time, More Options: Beyond the High School (New York: McGraw-Hill, 1971), p. 1.

Future Growth and Development of American Higher Education, recommends future investments in programs to handle those students who "stop out" and those who are part-time. This includes those adults who are served by traditional higher education only when such education in convenient.[2]

Further emphasis on nontraditional education has been created by the Commission on Nontraditional Study, a joint endeavor sponsored by the College Entrance Examination Board and the Educational Testing Service. Diversity by Design, the Commission's final report, directs a number of recommendations toward greater flexibility in higher education. The Commission recommends new devices and technologies to measure outcomes, an emphasis on serving the learner, and the creation of diverse programs through cooperation and collaboration among institutions.[3] The Commission also points out that in a national survey, 47 per cent of the responding institutions had some form of nontraditional educational program.[4]

Other works under the sponsorship of the Commission on Nontraditional Study also address the question of

---

[2]Carnegie Commission on Higher Education, New Students and New Places: Policies for the Future Growth and Development of American Higher Education (New York: McGraw-Hill, 1971), p. 111.

[3]Commission on Nontraditional Study, Diversity by Design (San Francisco: Jossey-Bass Publishers, 1973), p. 126.

[4]Ibid., p. 46.

educational flexibility. According to Gould, flexibility is one of the four major patterns which characterize the growth of nontraditional education. This new flexibility loosens rigidities of residence and continual study, makes it possible for work experience to be an educational component, and recognizes the value of life experiences.[5]

Hartnett identifies five ways in which the system can be made more flexible. These are: (1) recognition of the benefits of non-school experience; (2) a more facilitative transfer of credits; (3) credit by examination; (4)community based education centers; and (5) provision for counseling and information centers.[6]

Marien stresses that the emphasis on flexibility presented by the Carnegie Commission (New Students and New Places) is representative of society's movement from a linear industrial society of sharp definitions, to a society of flexible/multiple variables and overlapping time and space utilizations.[7] Marien questions whether education in the future will be vertically organized around credit,

---

[5]Samuel B. Gould, "Prospects for Non-Traditional Study," in Explorations in Nontraditional Study, ed. Samuel B. Gould and K. Patricia Cross (San Francisco: Jossey-Bass Publishers, 1972), p. 5.

[6]Rodney T. Hartnett, "Non-Traditional Study--An Overview," in Explorations in Nontraditional Study, ed. Samuel B. Gould and K. Patricia Cross (San Francisco: Jossey-Bass Publishers, 1972), pp. 21-26.

[7]Michael Marien, Beyond the Carnegie Commission: A Policy Study Guide to Space/Time/Credit Preference Higher Learning (Syracuse, New York: Educational Policy Research Center, 1972), p. 7.

credentials, and institutions, or whether it will be horizontally organized around lifelong learners.[8]

Dumke points out the need to open avenues and resources which will permit students to reach their goals more rapidly. Such options should include field experience learning, challenge examinations, lab demonstrations, and independent study or library research as substitutes for class enrollment.[9]

An example of how the educational system has been made more flexible is demonstrated by Rickleffs. Special programs serving the specific interests of groups of adults are prevalent. Part-time enrollments are high and are often made higher by week-end colleges, off-campus programs, and employee tuition reimbursement policies, which are all designed to meet the needs of the adult learner.[10] This flexibility can also be seen in Reports from the Presidential Committee on New Market Students. The principles underlying this program include the option of credit or no credit courses, home study, televised study, radio courses, cassettes, video tapes, programmed learning units,

---

[8]Ibid., p. 11.

[9]Glenn S. Dumke, "Innovation: Priority of the '70's," in The 1,000 Mile Campus, ed. Charles Davis (Los Angeles: California State Universities and Colleges, 1972), p. 5.

[10]Roger Rickleffs, "Wooing the Adult Student," Change 6 (March 1974): 23.

independent study, liberalized instruction, and special counseling. In addition, the student plays a major role in creating and directing the program of study.[11]

Expanded Access

The objective of expanded access as a route to equality of educational opportunity is a major factor in the field of nontraditional higher education. Trivett indicates that the access concept has developed in three historical stages: (1) equality of access through expansion; (2) equality of access through openness; and (3) equality of access through diversity. The third step in the access process has prompted the development of numerous alternative forms for postsecondary education.[12]

Cross and Jones examine some of the barriers which have restricted access to traditional higher education. Narrow definitions of education and barriers of scheduling, transportation, and distance, along with financial restrictions and the problems involved with accumulating credits,

---

[11] Reports from the Presidential Committee on New Market Students (Madison, Wisconsin: University of Wisconsin, 1973), p. 12.

[12] David A. Trivett, Goals for Higher Education: Definitions and Directions. ERIC/Higher Education Research Report No. 6 (Washington, D.C.: American Association for Higher Education, 1973), p. 54.

all hamper access.[13] These authors also point out that by 1976, the number of people engaged in educational activities in the periphery of the educational system will exceed the number of students in preschool, elementary, secondary and postsecondary education combined.[14] Cross and Jones point out that the boom in adult education predicted by Johnstone and Rivera (1965) can be seen in the number of under-educated high school graduates presently swelling community college enrollments.[15] Houle also forecast that expanded access would be the result of three major trends. He predicted that education would become more secular, with a more complex curriculum to serve a much larger student body.[16]

However, this curricular complexity, an essential element of both diversity and expanded access, does have some inherent problems. Gould identifies some of the dangers involved. The sacrifice of quality by lowering standards to

---

[13]K. Patricia Cross and Quentin J. Jones, "Problems of Access," in Explorations in Nontraditional Study, ed. Samuel B. Gould and K. Patricia Cross (San Francisco: Jossey-Bass Publishers, 1972), p. 47.

[14]Ibid., p. 41.

[15]Ibid., p. 50.

[16]Cyril O. Houle, Major Trends in Higher Adult Education (Chicago: Center for the Study of Liberal Education for Adults, 1959), p. 3.

increase access is one danger; others include increasing false hopes in students, isolating students, and threatening the existence of private colleges which had been a basic force for diversity.[17] Ultimately such dangers could complicate the educational picture to the point where confusion overcomes the intended advantages.

Lifelong Learning

A third element which undergirds nontraditional education is lifelong learning. In contrast to a pattern of education in which individuals learned, earned, and then enjoyed, modern technology now demands frequent training and upgrading. The concept of lifelong learning applies to more than technological knowledge. Both Less Time, More Options, and New Students and New Places identify lifelong learning as a major direction for higher education in the future. To implement this philosophy, special programs have been developed and adjustments have been made in existing programs across the country.

Some of the forces underlying this increased demand for lifelong learning are identified in The Lifelong University: A Report to the President. The knowledge explosion, technological advances, rising personal expectations, new life styles, a public awareness of the

---

[17]Samuel B. Gould, "New Arrangements for Learning," in Higher Education: Myths, Realities and Possibilities, ed. Winfred L. Godwin and Peter B. Mann (Atlanta, Georgia: Southern Regional Educational Board, 1972), p. 94.

economically and educationally disadvantaged, and an increased amount of leisure time all provide pressure for an expanded availability of educational services throughout a person's lifetime.[18]

The increase in the number of adults involved in education can be seen in adult educational enrollment figures. In 1947, 6,500,000 adults were enrolled; in 1972, 25,000,000 were enrolled.[19] Boyer notes that in the forty-four State University of New York two-year colleges, one-half of the students are part-time. In combination with the Carnegie Commission's finding in The Open Door Colleges that one-half of the students in these colleges are from twenty-two to seventy years old,[20] it can be seen that lifelong learning is already an established fact.

Business and industry has also reacted to the increased interest in lifelong learning. Culbertson indicates that three of the largest corporations in the United States now offer bachelor's degrees to their employees.[21]

---

[18]The Lifelong University: A Report to the President. Task Force on Lifelong Education. (East Lansing, Michigan: Michigan State University, 1973), p. 1.

[19]Ernest L. Boyer, "Neither Transfer nor Terminal: The Next Step for Two Year Colleges," Intellect 101 (November 1972): 111.

[20]Ibid.

[21]David J. Culbertson, "Corporate Role in Lifelong Learning," in Lifelong Learners--A New Clientele for Higher Education, ed. Dyckman W. Vermilye (San Francisco: Jossey-Bass Publishers, 1974), p. 30.

he response of leading corporations to the need for retraining and upgrading has resulted in continuing education, in-service training, and educational released time being woven into employment programs.

If expanded access, increased flexibility, and lifelong learning are to remain viable factors in higher education, it will be necessary to take a much broader view of higher education. Valentine questions how colleges will change to provide the necessary options. He identifies the need for access structures, learning structures, and assessment and certification structures.[22] To provide these structures, Valentine believes it will be necessary to alter the present space bound, time bound, and custom bound educational environment. Further work is needed in extension programs, evening and correspondence courses, and special degree programs in order for nontraditional education to break free.[23]

External Degrees

The surge of interest in nontraditional education has been accompanied by a desire to develop new structures

---

[22]John A. Valentine, "England and the United States: An Excursion in Non-Traditional Study," in The 1,000 Mile Campus, ed. Charles Davis (Los Angeles: California State Universities and Colleges, 1972), p. 5.

[23]Ibid., p. 7.

and new formats for providing educational services. One of the most notable of these developments has been the external degree. The concepts behind the external degree are not new; in fact, an external degree has been available at the University of London for nearly one hundred years.[24]

The implementation of external degrees in this country, along with the development of the Open University in England, has greatly increased the awareness of the educational community toward many of the processes and devices used by external degree programs. Integral to a functioning external degree program is the acceptance of learning from a variety of sources. As a result, assessment of prior learning, especially through credit by examination, has become a key component of many external degree programs. Therefore, this review of related literature on the external degree is organized around the forms, the philosophical basis, and the educational options which make up the external degree.

Philosophical Basis

Cross points out that "central to the concept of the external degree is the notion that learning must be defined as a quality which resides within the student, rather than

---

[24]Bernadette Doran, "The External Degree Program: Credits Without Classes," College and University Business 51 (October 1971): 58.

an offering within the college catalog."[25] Therefore, the external degree generally places more interest on what has been learned rather than on what has been taught. As such, those programs which offer external degrees are usually strongly student-centered, with little or no emphasis on the campus or residency as the center of a student's learning experience.

As defined by Houle, the external degree is "one awarded to an individual on the basis of some program of preparation (devised by himself or by an educational institution), which is not centered in the traditional patterns of residential study."[26] According to Houle, most college degrees include five basic procedures. These are: (1) enforcement of admission; (2) provision of instruction; (3) evaluation of competence in content; (4) award of certificate or degree; and (5) licensure to practice a profession.[27] However, from the relatively standard historical degree patterns of either a course of studies leading to a degree or an elective system requiring a specified number of credit hours, a whole new set of degree

---

[25]K. Patricia Cross, "The External Degree," in Exploring the External Degree - Conference Report (Washington State Council on Higher Education, May 1973), p. 35.

[26]Cyril O. Houle, The External Degree (San Francisco: Jossey-Bass Publishers, 1973), p. 14.

[27]Ibid., p. 19.

patterns has emerged to meet adult requirements. In place of a rigid structure, facilitative elements now exist to alter these conditions. Open admissions, a variety of instructional delivery systems, development of credit by examination and the assignment of credit equivalencies have all worked to provide an environment which exists to serve those people who missed or were denied education earlier in their life.

Valley notes that Houle's definition of the external degree, in its broadest sense, would include extension degrees, special degree programs for adults, and adult evening college degrees. Between 1970 and 1973, Valley points out that approximately twenty-five state systems had planned some type of external degree program, or had established groups to see to their planning.[28]

Valley believes that five factors are closely related to the development of external degrees. The first factor is the extension of degree granting authority to institutions whose primary mission is not teaching. State education agencies such as those in New Jersey, New York and Illinois, as well as corporations such as Arthur D. Little and the Rand Corporation, now either have degree

---

[28]John R. Valley, "Promising Program Ventures: A Review of Recent Developments Regarding the External Degree," paper presented at the Regional Meeting of the American Association for Higher Education, Memphis, Tennessee, 18 October 1973.

granting authority or actually offer degrees.[29] A second factor in the growth of external degrees is the geographic extension of institutional operations. Place is no longer a restriction on student learning. For example, Northern Colorado University offers its Bachelor of Arts and Master of Arts degree in sixteen locations in ten states.[30]

A third factor in the development of the external degree is the growth in the use of the community as an educational resource. The student does not have to follow the traditional classroom route; instead, he learns through and in the resources available within the community.[31] A fourth factor is that the external degree has stimulated the development of facilitative and supportive services. Widely distributed newspaper courses and the nationally available College Level Examination Program are two examples cited by Valley as nationwide opportunities for nonresidential learning.[32] Finally, a fifth factor in the growth of the external degree is the amount of publicity which has been circulated concerning the wide variety of external degrees available. The publicity about existing programs has been accompanied by the reports of a number of national

---

[29] Ibid., p. 4.

[30] Ibid., p. 5.

[31] Ibid., p. 6.

[32] Ibid., p. 8.

commissions, thereby providing material for the debate.[33]

The development of external degrees has not been without debate. Gould provides a "balance sheet" on the external degree. On the positive side, there is new strength and meaning to individualized learning, great flexibility of forms, diversification of program structures and styles of learning, plus the possibility that the external degree will positively influence the internal degree.[34] On the negative side, however, Gould cites the danger of lowered standards, the further proliferation of degrees and the possibility of academic isolation of the external student.[35]

Some of these same problems are recognized by Bailey. He sees academic shoddiness and technique overcoming purpose. This shoddiness is accompanied by publicity which makes learning appear to be more simple than it actually is. Further concerns discussed by Bailey are related to the fiscal naivete of external degree planners,

---

[33]Ibid., p. 9.

[34]Samuel B. Gould, "Less Talk, More Action," in The Expanded Campus, ed. Dyckman W. Vermilye (San Francisco: Jossey-Bass Publishers, 1972), p. 184.

[35]Ibid., p. 181.

as well as the belief in projected technical miracles which may turn out to be only imagination.[36]

Nelson indicates that the time for the external degree may have passed. He identifies several issues which raise doubts in his mind regarding the success of the external degree. To Nelson, assessment separate from education and learning weakens both processes. Further concerns include a threat to institutional autonomy by the accrediting associations, difficulty in determining whether an innovation is a reform or a rip-off, the increasing lack of distinction between academic competencies and life experiences, and the leveling off of both student enrollments and institutional budgets.[37]

In what is claimed to be faculty point of view, Mayhew also raises concerns about the validity of external degrees. He questions whether access to learning or retention of learning should be the central issue in developing the external degree. Mayhew also notes that credentials do not really open doors, especially if the credential is a new one. Although the demand may exist, the need for such

---

[36]Stephen K. Bailey, "Flexible Time-Space Programs: A Plea for Caution," in The Expanded Campus, ed. Dyckman W. Vermilye (San Francisco: Jossey-Bass Publishers, 1972), p. 174.

[37]Fred A. Nelson, "Has The Time Gone for An External Degree?" Journal of Higher Education 45 (March 1974): 176.

a program may not; he doubts that professors and the established educational institutions will change.[38]

Forms of the External Degree

Although there has been a considerable amount of debate about the external degree, the debate has not held back the introduction and implementation of such degree programs across the country. At the present time, there are probably over two hundred different external degree programs. With such a large number in existence, it would be impossible to review them all. Therefore, the review of the related literature on the forms of the external degree will focus on the general types of degrees which are available, along with an analysis of notable external degree programs.

The earliest concept of the external degree can be seen in British models. It is from these models, and specifically from the Open University, a British external degree institution which opened in 1971, that most American external degree programs have grown. Valentine (1972), Doran (1971) and Maclure (1971) each sketch out the background of the external degree in England. Valentine

---

[38]Lewis B. Mayhew, "External Degrees - The Views of a Skeptic," in The 1,000 Mile Campus, ed. Charles Davis (Los Angeles: California State Universities and Colleges, 1972), p. 41.

identifies the University of London as the first external degree institution.[39] Doran further reports that the University of London model was adopted and implemented in India, Australia, and South Africa.[40]

However, the most significant British external degree program is the Open University. Perry indicates that the Open University was created by Harold Wilson's government to provide a thrust against elitism in England's higher education.[41] To accomplish this, the Open University has minimal entrance requirements, is organized around a regional structure and uses interdisciplinary media-based courses and study materials delivered by the British Broadcasting Corporation and the British Post Office.[42] No classroom instruction is provided, although each geographic region operates several study centers with tutors, specialized study materials, and counseling.[43] This model, with its external delivery system, decentralized structure, minimal entrance requirements, and heavy emphasis on modern educational technology, has had a major impact upon American external degrees.

---

[39]Valentine, "England and the United States. . .," p. 18.

[40]Doran, p. 58.

[41]Walter Perry, "Britain's Open University," in Higher Education: Myths, Realities and Possibilities, ed. Winfred L. Godwin and Peter B. Mann (Atlanta, Georgia: Southern Regional Educational Board, 1972), p. 97.

[42]Ibid., p. 101.

[43]Ibid., p. 102.

Valley identifies six major models for external degree programs. The six models are:

1. The administrative facilitative model - most commonly the evening college degree in which an instructional component is scheduled to serve a specific client. Examples include correspondence degrees and the Television College of the Chicago Junior College System.[44]

2. The modes of learning model - a degree pattern which attempts to meet the needs of a new clientele. Examples are Oklahoma's Bachelor of Liberal Studies and the British Open University.[45]

3. Examination model - an examination based model in which a candidate may earn a degree totally on the basis of examination performance. The Regent's Baccalaureate Degree in New York and the University of London degrees are examples.[46]

4. Validation model - an institution or agency validates learning, not necessarily on an examination basis. There are no examples in the United States.[47]

---

[44]John R. Valley, "External Degree Programs," in Explorations in Nontraditional Study, ed. Samuel B. Gould and K. Patricia Cross (San Francisco: Jossey-Bass Publishers, 1972), p. 97.

[45]Ibid., p. 100.

[46]Ibid., p. 110.

[47]Ibid., p. 113.

5. Credits model - a non-instructional agency awards credits and degrees by setting standards and accrediting other "educational" programming. Learning from any source could be "cashed in" through this model.[48]

6. Complex systems model - a combination of elements from all the other forms. Empire State, sponsored by the State University of New York system, represents this model.[49]

Although the number of external degree models seems confusing, Shulman highlights two key concerns which can be applied to any external degree program. Since external degree programs are generally designed to meet the needs of the adult working student who finds residency requirements a barrier, the external degree program should be first accessible, and secondly, it should have no residency requirements.[50]

Houle has identified three generations of the external degree in America. The first generation is the extension degree, which usually consisted of modifications in time and

---

[48]Ibid., p. 117.

[49]Ibid., p. 120.

[50]Carol Herrnstadt Shulman, A Look at External Degree Structures (Washington, D.C.: ERIC Clearinghouse on Higher Education, 1972), p. 1.

place but very few modifications of the established curricula. The second generation external degree is the adult degree, which was developed in the 1960's and directed specifically at adult interests and adult students. A third generation of external degrees consists of what Houle calls the assessment degree. This group of external degrees makes the greatest use of the prior learning held by its students.[51]

An examination of specific degree programs reflects a reliance on experiential learning, competency or performance based learning, and the assessment of prior learning. External degree programs such as those offered by the New York Regents, Thomas A. Edison College, Empire State University, and the University Without Walls all utilize the assessment of prior learning as one of the basic means for granting students credit toward a degree.

However, complications and confusion can occur because each of the institutions assesses in quite a different fashion. For example, the Regents assessment process may use experts, interviews, or CPEP examinations to validate learning and grant credit; the University Without Walls often uses an interview and a student paper. Empire State may use interviews, examinations, papers, or may require formal coursework for review; Edison will only procede on

---

[51]Houle, The External Degree, p. 88.

the basis of a student-developed portfolio. The variety of assessment approaches used by external degree programs reflects the confusion such assessment can produce.

Although the field of assessment of prior learning is sometimes confusing when used in external degree programs, it is essential to emphasize that the development of the external degree has had a major impact in broadening the acceptance of credit for prior learning. As the external degree has grown as a nontraditional delivery system, it has increased the availability of educational opportunities and broadened access.

Credit by Examination and the College Level Examination Program

The external degree is the result of a philosophical stance which assumes that learning from sources other than the academic classroom can be validated as equivalent to the learning which is provided through a traditional delivery system. One of the basic devices used in the validation of learning is credit by examination. The credit by examination option is present in every external degree program and in a large number of institutions which are solidly traditional.

Since credit by examination offers one of the most formal and traditional means of determining an individual's prior learning, credit by examination is often included as

an option in prior learning assessment systems. However, most credit by examination is in subject matter fields which closely match regular college courses. Because of this focus on traditional learning, most credit by examination programs such as the College Level Examination Program (CLEP) and the College Proficiency Examination Program (CPEP) do not mesh well with experiential learning. Therefore, such normative examination programs have limited use in the assessment of prior learning.

This section of the review of related literature will examine the scope and problems involved with credit by examination, and will briefly review literature on the CLEP program, the largest and most successful credit by examination program in the United States. Both facets of the review are intended to provide a background and context within which can be seen the variety of options in a comprehensive credit for prior learning assessment system.

Scope and Problems

Martinko has identified a number of credit by examination options, although she points out that institutions are often reluctant to recognize study outside their own program. Some of the credit by examination options identified are: the College Level Examination Program, the College Proficiency Examination Program, General Educational Development Tests, and the United States Armed Forces

Institute tests. Also included are the University of London examinations, the Thomas A. Edison examination program, and the Council for National Academic Awards Examinations, which are drawn up by colleges and industries in Great Britain.[52]

The extent of the institutional involvement in credit by examination programs can be seen in the results of a national study carried out for the Commission on Non-traditional Study by Ruyle and Geiselman. They reported that two-thirds of the colleges responding (1,185 responded out of 2,670 surveyed) provided some form of credit by examination option, although the amount of publicity and encouragement for such options varied substantially.[53]

Kreplin identifies five categories of credit by examination. The first and one of the oldest forms is what Kreplin calls "anticipatory examinations." In the United States, the best example of this is the College Board's Advanced Placement Program, an examination program available to college-bound high school seniors.[54] A second category

---

[52]Agnes Martinko, "Nontraditional Innovations in Higher Education Classified by Mode of Operation" (Harrisburg,Pennsylvania: Pennsylvania State Department of Education, 1972), p. 5.

[53]Janet Ruyle and Lucy Ann Geiselman, "Nontraditional Opportunities and Programs," in Planning Non-Traditional Programs, ed. K. Patricia Cross and John R. Valley and associates (San Francisco: Jossey-Bass Publishers, 1974), p. 62.

[54]Hannah Kreplin, Credit by Examination: A Review and Analysis of the Literature (Berkeley: University of California, 1971), p. 15.

includes those examinations which are used to waive prerequisites. These examinations have placement, not credit, as their major purpose.[55]

A third category identified by Kreplin are examinations in lieu of courses, such as the College Proficiency Examination Program (CPEP) and the subject matter CLEP examinations. Most colleges possess this option, although Kreplin notes that it is usually "little more than a hypothetical category, even though the catalog may have a rosy statement."[56] A fourth category of credit by examination includes those examination programs developed specifically for nontraditional students. Examinations in this category include those developed by the Commission on the Accreditation of Service Experiences (CASE) and the United States Armed Forces Institute (USAFI). Also included are the College Level Examination Program's General Examinations.[57]

The fifth category includes those credit by examination programs which are equivalent to more than one course. The oldest program is that offered by the University of London. Comprehensive examination programs at the undergraduate level also existed during the 1950's at the University of Chicago and in the Basic College at Michigan

---

[55]Ibid., p. 20.

[56]Ibid., p. 24.

[57]Ibid., p. 30.

State University. Such programs used year-end or term-end examinations to allow students to accelerate their class standing.[58]

Although the present array of credit by examination choices is quite widely used, a number of problems still exist. One problem is that institutions often expect credit by examination students to gain higher scores than enrolled students. Hedrick reflects the need colleges feel for "safeguards" to prevent students from gaining "easy credit."[59] The belief that credit earned by examination should be of greater difficulty than that earned in regular courses is now infrequently stated. However, other more subtle tactics such as requiring unrealistically high scores for credit, or confusing maze-like credit by examination procedures still limit access and diversity.

These same issues are identified by Burnett in his discussion of the need for clearly stated policy and procedures when credit by examination is available.[60] Without answers to basic questions on the number of hours allowed, costs, scoring, and transcripting and transferability, such

---

[58] Ibid., p. 36.

[59] James A. Hedrick, "College Credit by Examination," Journal of Higher Education 31 (April 1960): 213.

[60] Richard R. Burnette, "Here's How: Developing and Implementing Credit by Exam," College Board Review 81 (Fall 1971): 26.

programs have the potential to fulfill Kreplin's description of credit by examination as no more than a rosy statement in the catalog.

Clearly, however, some of the weaknesses of credit by examination are related to the weaknesses within the credit hour system. Heffernan points out that a credit is a unit of time and not a unit which measures competence.[61] The lack of standardized credit equivalencies often causes problems from department to department within the institution. These problems are compounded when an attempt is made to develop an examination over subject matter which is equated to a certain number of credit hours.

This problem is further complicated as one moves away from normed examinations based on course outlines to the individualized assessment of a student's learning, especially when that learning has occurred in a nonacademic framework. It often appears impossible to identify and equate such learning to college credit. However, as Christ-Janer points out, one attempt to equate this learning to college credit can be seen in the College Level Examination Program, which was initially developed to serve non-traditional students.[62]

---

[61] James M. Heffernan, "The Credibility of the Credit Hour: The History, Use and Shortcomings of the Credit System," Journal of Higher Education 44 (January 1973): 67.

[62] Arland F. Christ-Janer, "Credit by Examination," in Current Issues in Higher Education 27 (1972): 164.

College Level Examination Program

Presently one of the most widely used credit by examination options is a program developed by the College Entrance Examination Board, with over three million dollars of financial backing by the Carnegie Corporation over a ten year period. This corporation indicates that the College Level Examination Program, which began with four students in October of 1967 at two centers, has grown at an amazing rate. In 1974, 99,000 people took one or more CLEP examinations.[63]

In its initial stages, CLEP was intended to provide a bridge between nontraditional students and traditional higher education. To fulfill this function, as the Carnegie Quarterly points out, CLEP developers used traditional education to set the standards for determining what levels of knowledge a student should have to gain credit. CLEP examinations are developed by groups of professors, field tested and normed. When the reliability and validity of the test are established, it is made available nationally.[64]

At the present time, CLEP examinations are available in two forms: CLEP General Examinations and CLEP Subject Examinations. The five examinations which make up the

---

[63]Carnegie Corporation of New York, "There's More Than One Way to Earn a College Degree," Carnegie Quarterly 23 (Fall 1975): 3.

[64]Ibid., p. 2.

general examinations are intended to identify knowledge which is equivalent to that gained in the first two years of college. The Subject Examinations, of which there are forty, have been designed to correspond to specific academic courses. Together, the CLEP General and Subject Examinations make up the most comprehensive and widely used credit by examination program in the country.[65]

Goldman, in reporting a survey of CLEP usage practices in California college, states that CLEP is "the potentially most significant exam program in implementing the external degree."[66] However, Goldman's results illustrate a number of the problems which have surrounded CLEP. Although most public California colleges and universities grant CLEP credit, the amount granted for the General Examinations varies widely from college to college. This variation occurs because the colleges establish their own levels for the acceptance of CLEP scores for credit.

This variation in acceptable scores is also shown in a survey of CLEP usage in Michigan colleges which was carried out in 1974 by Drenovsky et al.[67] Both Goldman and

---

[65]Ibid., p. 3.

[66]Phyllis A. Goldman, CLEP--Is it Alive, Well and Living in California? A Survey of CLEP Acceptance and Use in California Colleges (San Pablo, California: Contra Costa College, 1974), p. 1.

[67]Drenovsky et al.

Drenovsky reflect the difficulty community colleges have with CLEP, since community college CLEP policies must be compatible with CLEP policies of those institutions to which community college students may transfer.

Two examples of the access role CLEP is intended to fulfill for nontraditional students can be seen in Fagin and in Reich. Both authors focus upon CLEP as a nontraditional pathway into higher education. Fagin reports that the St. Louis Extension Division of the University of Missouri uses CLEP as a women's outreach device to help mature women qualify for college credit.[68] Reich examines CLEP as it is delivered through the Dallas, Texas public library system and Southern Methodist University.[69]

Although CLEP began with the purpose of serving adult nontraditional students, Nelson points out that CLEP now serves a candidates group of which 40 per cent is under nineteen years of age.[70] While the total number of those involved with CLEP has grown, the percentage of older students who participate has declined. An analysis of CLEP usage at the University of Iowa supports Nelson's contention that CLEP no longer serves the nontraditional student.

---

[68]Margaret C. Fagin, "CLEP Credit Encourages Adults to Seek Degrees," College Board Review 81 (Fall 1971): 18.

[69]David L. Reich, "A Public Library Becomes a CLEP Learning Center," College Board Review 81 (Fall 1971): 29.

[70]Nelson, p. 181.

Enger and Whitney found that those students using CLEP at the University of Iowa were well-prepared before they came into the university. They graduated from college earlier, not because of CLEP but because they had greater ability, as reflected in their grade point averages at Iowa, their high school class ranks, and ACT composite scores.[71]

Further questions are raised by Caldwell who claims that CLEP General Examinations measure a mixture of high school and college subject matter. Caldwell requests that colleges carefully consider the norms they establish in order to grant CLEP credit.[72] Whitaker shows the effect that the norms can have upon CLEP success or failure. In 1971, the Fall term freshman class at San Francisco State College experimented with the CLEP General Examinations. CLEP was made available, free, to each first-time freshman student. Ninety-four per cent of those who took the five General Examinations received at least three hours of San Francisco State College credit; thirty-eight per cent received credit on all five examinations and were made instant sophomores. In the experiment, the cut-off percentile was 25 per cent. If the cut-off percentile was

---

[71]John M. Enger and Douglas R. Whitney, "CLEP Credit and Graduation: A Four-Year Study of the University of Iowa," College and University 49 (Spring 1974): 240.

[72]Edward Caldwell, "Analysis of an Innovation," Journal of Higher Education 44 (December 1973): 698.

changed to 50 per cent, only 7 per cent of the test takers would have been instant sophomores. Whitaker concludes that the integration of an essay component would increase the test's reliability and acceptability.[73]

Although problems are evident, Christ-Janer views credit by examination as an integral element in a coordinated, efficient, and diversified system of postsecondary education. Since credit by examination is a step away from a formal institutional program based upon class attendance and the accumulation of course credits, Christ-Janer believes that credit by examination options, such as Advanced Placement and the College Level Examination Program provide a means of servicing the changing needs of individuals and society.[74]

Because of the basically traditional academic focus of credit by examination programs, the experiences of a substantial number of individuals are not encompassed. Even though credit by examination programs can be used as a component, other elements are necessary in order to provide a full scope of assessment options. This need for other

---

[73]Urban Whitaker, "Credit by Examination ac San Francisco State College," College Board Review 83 (Spring 1972): 13.

[74]Christ-Janer, p. 170.

means of identifying and validating prior learning must be served by different methods of assessing prior learning.

Assessment of Prior Learning

The development of processes to grant credit for prior learning is a natural outgrowth of the movement toward nontraditional education. In fact, innovations such as the external degree utilize, to a great extent, an individual's prior experience as a foundation for further learning. Although existing credit by examination systems provide some methodology for identifying prior learning and granting credit for that learning, present systems of credit by examination do not cover all subject areas. More important, however, is the fact that the credit by examination methodology may not be the most effective or efficient means of identifying and assessing learning. Other means of assessment may determine more effectively the amount of college level learning which has resulted from an individual's life experiences.

The methods used to identify and assess a student's prior learning are often not the traditional classroom methods. Even though the College Level Examination Program can be considered as one means of assessing prior learning, this program is based on a strongly traditional approach. The same traditional approach is found in institutionally operated credit by examination or challenge examination

systems. However, assessment of prior learning processes are often used to assess learning which cannot be conveniently segregated into specific courses. If the learning is not encompassed by a traditional assessment mechanism, then the institution must either refuse to assess that particular prior learning, or it must seek some other means of assessment.

As the review has shown, the growth of nontraditional education has placed major emphasis on access and flexibility. In response to the need for access and flexibility, the educational delivery system has provided external degrees and credit by examination options. However, the prior learning assessment processes which will be examined in this study are neither centered on credit by examination nor external degrees. Consequently, this section of the review of related literature will examine the difficulties of the prior learning assessment process, as well as examine some of the most probable sources of assessable learning. This section will also review the work being developed nationally by the Cooperative Assessment of Experiential Learning (CAEL), which is the most significant prior learning assessment organization in the United States.

The Difficulty of Assessment

Trivett reports that very little is known about the extent to which academic credit is granted for prior learning. He points out that "the literature available on the assessing and crediting of prior experiential learning is sparse."[75]

This lack of knowledge about assessment is crucial, since the assessment of prior learning is one of the major problems faced by institutions which desire to grant credit for learning which has resulted from prior experiences. Ruyle and Geiselman identify seventeen problem areas in nontraditional education. The two problem areas noted most often are: (1) lack of money; and (2) difficulty in assessing non-classroom learning.[76]

One reason for the difficulty in developing or discussing the assessment of prior learning is the number of levels at which credit may be granted. Meyer identifies four levels. Credit may be granted for: (1) the life experience itself; (2) the knowledge, competence, or skill gained from the experience; (3) the analysis of the

---

[75]David A. Trivett, Academic Credit for Off Campus Learning (Washington, D.C.: American Association for Higher Education, 1975), p. 45.

[76]Ruyle and Geiselman, p. 87.

learning gained; and (4) the analysis or synthesis of discrete bodies of knowledge gained from the same or different experiences.[77]

Each of these levels requires a different type of assessment. Since there may be confusion concerning exactly what within an experience is being credited, faculty may justifiably fear the danger of such a practice. Warren notes that this apprehension includes fear of error in the measurement process, fear of fraudulent claims of competence, and fear of the possible ambiguities which may arise in the purpose and procedures of such a process.[78]

Warren also points out that many problems in developing valid and reliable methods of assessing prior learning are related to the inconsistencies inherent in the credit hour concept. The credit hour, which is a relatively recent outgrowth of the elective system, was developed for use as an accounting tool. Warren notes that credits often bear little resemblance to learning or

---

[77]Peter Meyer, Awarding College Credit for Non-College Learning (San Francisco: Jossey-Bass Publishers, 1975), p. 22.

[78]Jonathan R. Warren, "Awarding Credit," in Planning Non-Traditional Programs, ed. K. Patricia Cross and John R. Valley (San Francisco: Jossey-Bass Publishers, 1974), p. 128.

to levels of performance, since the credit award is not related to the letter or numerical grades received for a course.[79] Keeton agrees in stating that most grading and crediting "rests on poorly defined or unstated objectives and on measures that have poor reliability and validity."[80]

A further important distinction is drawn by Kimmel who differentiates between recognition and evaluation. Recognition is the process and form of certifying past achievement, while evaluation refers to the variety of processes used to determine the levels of knowledge or understanding that have been achieved in a particular field.[81] From this distinction, it is clear that four credits in a course is not the evaluation in that course. Theoretically the evaluation of the learning should lead to the credit. In practice, however, grades, credit and degrees mean different things to different people.

In order to maintain the validity of an institution's credit, and in an attempt to allay faculty fears

---

[79]Jonathan R. Warren, "External Degrees: Coping with the Problems of Credit," Journal of Higher Education 44 (June 1973): 466.

[80]Morris Keeton, "Dilemmas in Accrediting Off Campus Learning," in The Expanded Campus, ed. Dyckman W. Vermilye (San Francisco: Jossey-Bass Publishers, 1972), p. 140.

[81]Ernest W. Kimmel, "Problems of Recognition," in Explorations in Nontraditional Study, ed. Samuel B. Gould and K. Patricia Cross (San Francisco: Jossey-Bass Publishers, 1972), p. 66.

about the assessment of prior learning, most institutions do not give credit for the life experience itself. Instead the majority of institutions take a stance similar to that taken by Thomas A. Edison College. Edison College, in its "General Instructions for Application for Individual Assessment" states, "The college's policy is to award academic credit for demonstrated college-level knowledge or competency, regardless of how it has been acquired."[82] This position insures that time spent in an experience is not the sole criterion necessary for receipt of credit.

Although Minnesota Metropolitan State College, Alverno College and others have attempted to alter their curriculum from credits and grades to competencies, Miller points out that if nontraditional education is to survive, it must survive in an educational world which uses the credit hour. The credit hour concept cannot be abandoned, since it is the most widely circulated unit of educational currency.[83]

Clearly, the credit hour and the problems associated with it will remain as the basis of higher education's recognition system. Therefore, assessment of prior learning

---

[82]Thomas A. Edison College, "General Instructions for Application for Individual Assessment," materials prepared for the CAEL Assembly Meeting, Philadelphia, Pennsylvania, 3 October 1975. (Mimeographed)

[83]Jerry W. Miller, "Credit for Nontraditional Education: A Conceptual Framework for Recognition," Educational Record 55 (Summer 1974): 189.

systems will be forced to deal with the difficulties of the credit hour. This does not, however, preclude both assessed credit and institutionally earned credit from becoming much more closely related to clearly established objectives and outcomes.

Three other issues are often cited in a discussion of the problems associated with the assessment of prior learning. The first is the issue of academic standards, assessed credits and accrediting agencies. External accrediting agencies can be used as a reason for an institution to avoid involvement in nontraditional educational programs. However, Ganzemiller, in a survey of 365 midwestern four-year colleges, found that very few had been contacted by their accrediting agencies about their special or innovative programs.[84]

The accreditation issue is further discussed by Hefferlin who indicates that the regional accrediting agencies would be much less a problem than accrediting agencies for specialized programs. The regional associations have taken the stance that accrediting

---

[84] Jack A. Ganzemiller, An Investigation of Various Methods Used in Awarding Academic Credit for Non-Traditional Learning Experiences (Menominee, Wisconsin: University of Wisconsin-Stout, 1973), p. 23.

standards do not preclude innovation, as long as that innovation is consistent with the institution's purposes and objectives.[85]

A second issue which is often raised in relation to the assessment of prior learning is the question of campus residency. Bowen presents the traditional arguments when he contends that residence on campus is a means of making sure that values are incorporated in a degree. Residence is also seen as a means towards development of the systematic mastery required in academic learning. Bowen also believes that the shortened programs which have resulted from nontraditional education may mean a lowering of standards and may often harm students with limited backgrounds who would benefit from interaction with others from varied backgrounds.[86]

There is certainly some merit to these arguments. However, if one applies these arguments to a student body whose average age is growing older, which is heavily part-time, with the majority employed, it can be seen that lengthy periods of college residence are not feasible.

---

[85] J. B. Lon Hefferlin, "Avoiding Cut Rate Credits and Discount Degrees," in Planning Non-Traditional Programs, ed. K. Patricia Cross and John R. Valley (San Francisco: Jossey-Bass Publishers, 1974), p. 158.

[86] Howard R. Bowen, "Time, Informal Learning, and Efficiency in Higher Education," Educational Record 54 (Fall 1973): 277.

Such a case is particularly true with the community college student body.

A third issue, faculty attitude, is probably one of the most significant problems in developing assessment of prior learning options. Surprisingly, this issue is not widely discussed, although faculty involvement in the development of assessment tools and in the assessment process itself is essential. Meyer cites the four major faculty resistances as: (1) If you haven't learned "it" (usually a set of values) in my classroom, you haven't learned it; (2) The process is too subjective; (3) Faculty are not credentialers, they're teachers; and (4) The accrediting associations won't let us. Meyer also emphasizes that faculty involvement in and commitment to the assessment of prior learning should be accompanied by the proper forms of recognition, compensation, and faculty load assignments.[87]

To facilitate assessment, Meyer advocates the development of a faculty based assessment model. Such a model would involve faculty in the assessment process in roles as counselors, developers of assessment instruments, and as expert assessors. The present role of faculty as the sustainers of the curriculum would not be violated by Meyer's proposal.[88]

---

[87] Meyer, p. 18.

[88] Ibid., p. 11.

In the assessment of prior learning, the existence of the wide variety of issues causes a number of problems. Confusion over the awards of credits, the value of residential education, and the role of the faculty are all integrally related to the assessment of prior learning.

Sources of Prior Learning

There are numerous non-academic delivery systems that provide individuals with learning which may be equated to academic credit. As Sharon notes, individuals do educate themselves apart from institutions whose main purpose is education. Involvement in correspondence courses, television courses, business and industry sponsored educational programs, military education, church classes, and an individual's self-directed independent learning can all be included in an inventory of sources of learning.[89] However, since most of the above are not operated with college credit as a major objective, determining the amount of college level learning which has occurred is difficult.

MacKenzie et al. point out that one of the most prominent sources of correspondence education is the United States Armed Forces. In 1965, the Armed Forces enrolled

---

[89] Amiel T. Sharon, College Credit for Off-Campus Study, Report No. 8 (Washington, D.C.: ERIC Clearinghouse on Higher Education, 1971), p. 5.

60 per cent of all correspondence school participants.[90] Servicemen are encouraged to enroll since they are mobile, the fee is either low or paid by the service, and the credit enhances their career.[91]

Sharon also notes that to make possible a closer articulation between military learning and college credit, the United States Armed Forces Institute (USAFI), now the Defense Activity for Nontraditional Education Support (DANTES), supports examination programs similar to CLEP. DANTES also provides information on independent and non-traditional study in civilian educational institutions.[92]

A second organization which facilitates college credit for learning gained in the Armed Forces is the Commission on the Accreditation of Service Experience (CASE), an operation of the American Council on Education. Trivett relates that a publication developed by CASE, known as Turner's Guide, or the Guide, reviews military service courses and recommends their credit equivalency. In 1973,

---

[90]Ossian MacKenzie, Edward L. Christiansen, and Paul H. Rigby, Correspondence Instruction in the United States (New York: McGraw-Hill, 1968), p. 7.

[91]Sharon, College Credit for Off-Campus Study, p. 6.

[92]Ibid., p. 11.

CASE was replaced by the Commission on Educational Credit (CEC) which will continue to carry out CASE operations.[93]

Further efforts in the field of assessing prior learning can be seen in A Guide to Educational Programs in Noncollegiate Organizations, which is published by the University of the State of New York. This guide contains descriptions and credit recommendations for 629 courses conducted by thirty-eight organizations in the state of New York. Included are the courses offered by such organizations as AT&T, the American Institute of Banking, Sperry Division of Sperry Rand, the United States Internal Revenue Service and Xerox. This guide, as well as the CASE Guide suggests academic credit equivalencies for noncollegiate courses. These recommendations, often accompanied by a specific course title, can be accepted or rejected by a college. Consequently, a college may accept the guide's recommendations, but may also decide to administer some form of evaluative instrument before awarding credit.[94]

Equating learning which results from business or industrial experiences can also be handled on a college to college, program to program basis. An example of this

---

[93] David A. Trivett, Academic Credit for Off Campus Learning (Washington, D.C.: American Association for Higher Education, 1975), p. 36.

[94] A Guide to Educational Programs in Noncollegiate Organizations (Albany, New York: Office on Noncollegiate Sponsored Instruction, The University of the State of New York, 1976), p. 4.

process can be seen in the Delta College "Articulation Agreement Between the Dow Chemical Corporation and Delta College." In this instance, Delta College examined a specific industrial training program for foremen, and equated that program to college credit in Industrial Supervision. Credit is then awarded to those who enroll at Delta College following successful completion of the program.[95]

Delivery systems such as those briefly noted above will continue to produce individuals with prior learning which does not mesh identically with the courses or programs offered by institutions of higher education. As a result, when it is not possible to assess this learning, the individual may be forced to endure again the presentation of familiar material, the duplication of learning experiences, and the loss of proper recognition for knowledge which has already been acquired.

The Cooperative Assessment of Experiential Learning (CAEL)

The most substantial work in the field of assessment of prior learning is presently being carried out by the Cooperative Assessment of Experiential Learning consortium.

---

[95] Delta College, "Articulation Agreement Between Dow Chemical Corporation and Delta College." (University Center, Michigan: Delta College, 1975). (Mimeographed.)

This consortium was the result of a recommendation of the Commission on Nontraditional Study.[96] The Commission recommended the establishment of a special agency to analyze the practice of evaluating work or service experience by agencies which are not a part of formal education. Because of its recent formation, its institutional membership of over 250 colleges, substantial foundation support, plus the technical assistance of the Educational Testing Service, the work of CAEL presently represents the foremost thrust in the field of prior learning assessment. As Trivett points out, "CAEL currently dominates the field of assessment of experiential learning."[97]

One of the first steps taken by CAEL was an inventory of practices in the assessment of prior learning at approximately 3,000 institutions. From the responses and fifty on-site visits, CAEL was able to collect information on experiential learning programs in 266 institutions.[98] Of these 266 institutions, only forty gained credit for one or more types of prior learning. Results of the inventory, issues for future study, student

---

[96] Diversity by Design, p. xviii.

[97] Trivett, Academic Credit for Off-Campus Learning, p. 46.

[98] W. Willingham, R. Burns, and T. Donlon, Current Practices in the Assessment of Experiential Learning, CAEL Working Paper No. 1 (Princeton, New Jersey: Educational Testing Service, 1974), p. 4.

assessment steps, and the stages in most existing assessment processes are identified by Willingham et al. in Current Practices in the Assessment of Experiential Learning.

The most valuable contribution of Current Practices is the identification of six stages of assessment which are typically necessary in determining whether academic credit should be given for prior learning. By using these six basic steps, most institutions could develop an assessment system which would successfully identify, document, and evaluate prior learning.

The six steps in assessment, as identified by CAEL, are: (1) identify the learning or competencies acquired through life experience; (2) articulate such learning to the educational goal or academic degree of the student; (3) document the fact that the student has participated in such learning experience; (4) measure the extent and character of the knowledge or skill acquired; (5) evaluate whether the knowledge or skill meets an acceptable standard and how much credit and/or recognition is awarded; and (6) transcript the credit or other appropriate description of the learning and its assessment.[99]

---

[99]Ibid., p. 41.

These six steps are used as the basis for a number of different assessment approaches. Sharon, in A Task Based Model for Assessing Work Experience, presents an assessment model which functions upon the basis of occupational competencies required in the performance of a certain job. To facilitate this type of assessment process, an eight-step assessment model was developed. Integral to this model is the identification of tasks within an occupation and the subsequent relation of those tasks to competencies and then to curricular program requirements. To be successful, this procedure assumes that course objectives and required student skills can be defined operationally.[100]

It is clear that this approach can be applied to an occupational program whose learning outcomes are stated in specific behavioral terms. Where such statements of outcomes exist, the relationship between the formal curriculum and work experience is easily seen. Where learning outcomes are not stated, as is often the case in liberal arts programs, the possibility for articulation between the prior learning and the curriculum is weakened.

In addition to task based models, another widely used means of identifying and documenting student learning is the portfolio. In portfolio development, the student

---

[100]Amiel T. Sharon, A Task Based Model for Assessing Work Experience, CAEL Working Paper No. 8 (Princeton, New Jersey: Educational Testing Service, 1975), p. 21.

identifies learnings, skills, and competencies that appear to be creditable. Verification or documentation of the experience is solicited by the student. A portfolio is then assembled which usually contains the specific request for credit, an explanation of the competencies acquired, and the collection of documentary evidence.

Under the sponsorship of CAEL, two guides have been developed to assist in portfolio development, A Guide to Assessment of Prior Experience Through Portfolios and A Student Handbook on Preparing a Portfolio for the Assessment of Prior Learning. In a narrow sense, the portfolio is a file on a student's prior experiences; however, in a much broader sense, the development of a portfolio can represent a learning experience which enables a student to identify the value of past experiences and then relate those experiences to future educational goals. Therefore, through the portfolio development process, the student participates in the assessment process by assuming the major responsibility of identifying the learning to be assessed.[101]

Portfolio development is cited by Meyer as one of three initial stages which should be accomplished in any assessment. Meyer points out that before any assessment of prior learning occurs, the college should first develop the necessary forms and records for the assessment process,

---

[101] Aubrey Forrest, A Student Handbook on Preparing a Portfolio for the Assessment of Prior Experiential Learning, CAEL Working Paper No. 7 (Princeton, New Jersey: Educational Testing Service, 1975), p. 2.

internal record keeping transcripts, and applications for admission and assessment.[102] The second step should encompass the development of counseling services with a pro-student stance for those students seeking assessment.[103] Finally, the third phase of an assessment system should provide structured sessions to assist students in the development of portfolios.[104] Since the personal investment in the development of a portfolio is extensive, skills in communication may need to be developed. Because of the self-understanding and communication skills which result from portfolio development, many institutions use this process as a credit generating course, required for all those who wish assessment.

Once the portfolio is completed, the institution must then carry the burden of determining whether the learning reflected in the portfolio can be equated to college level learning. Some institutions may grant credit based totally upon the information in the portfolio. Other institutions may wish to use a variety of measurement and evaluation techniques in addition to the portfolio. Standardized tests such as CLEP, or institutional examinations developed by a faculty member, a department or

---

[102]Meyer, p. 38.

[103]Ibid., p. 75.

[104]Ibid., p. 89.

the college may be applied to measure and evaluate the learning which has been identified.

However, because the measurement and evaluation techniques traditionally used in higher education are often inappropriate, other measurement tools developed in psychology, business, industry, and the military may be used. In A Compendium of Assessment Techniques, CAEL has listed the following measurement tools which may be used in the assessment of prior learning as: work samples, performance tests, structured interviews, oral examinations, oral trade tests, panels, simulations and situation tests such as in-basket and case study exercises, role playing, and essay and objective tests.[105]

If learning outcomes cannot be satisfactorily measured and evaluated with the tools identified in A Compendium, the assistance of experts in the field is recommended. Reilly has identified a variety of assessment situations and explained how experts could be used to carry out assessment in each situation. Product assessment, performance assessment, and free response written

---

[105] A Compendium of Assessment Techniques, CAEL Working Paper No. 2 (Princeton, New Jersey: Cooperative Assessment of Experiential Learning, 1974), p. 2.

material are the three asssessment techniques most commonly used by experts.[106]

There are obviously many difficulties in determining the amount of credit to be awarded to an individual on the basis of that person's prior learning. These difficulties may be compounded in the future as sources of prior learning continue to increase, and as more people seek recognition for the learning they possess. However, the work presently being produced under the sponsorship of CAEL provides one means of developing strategies and tools to deal with the assessment of prior learning.

Summary

It can be seen from the review of related literature that assessment of prior learning is a concept which has evolved from developments in nontraditional education. The external degree and credit by examination are two elements which resulted from a need and a demand for increased access and flexibility. Integral to these two elements is the belief that learning can and does occur outside of established educational delivery systems. To identify this learning and determine its academic credit

---

[106] Richard Reilly, The Use of Expert Judgment in the Assessment of Experiential Learning, CAEL Working Paper No. 10 (Princeton, New Jersey: Educational Testing Service, 1975), p. 5.

equivalency, assessment of prior learning systems are essential. As Miller states, "Without assessment, the concept of educational credit loses its reason for being."[107]

---

[107]Jerry W. Miller, "Credit for Nontraditional Education: A Conceptual Framework for Recognition," Educational Record 55 (Summer 1974): 190.

CHAPTER III

TECHNIQUES AND PROCEDURES

In this chapter, the design of the study and information relevant to sample selection and characteristics, implementation procedures, instrumentation and data collection, and data analysis techniques will be discussed.

Sample Selection and Characteristics

The population of this study included all twenty-nine public community and junior colleges in the state of Michigan. These colleges date from the establishment of Grand Rapids Junior College in 1914 to the creation of Wayne County Community College in 1971. The colleges in this population, which enroll over 197,000 students, represent 45 per cent of the total public higher education enrollment in Michigan.[1]

---

[1] "Enrollments of Michigan's Colleges and Universities," (Lansing, Michigan: Higher Education Management Services, Michigan Department of Education, 1975). (Mimeographed.)

The Michigan community and junior colleges as a group are not incorporated into a statewide community college system, such as those systems in Florida, Minnesota, and California. Since they are controlled by locally elected Boards of Trustees, each of the Michigan community and junior colleges possesses a substantial degree of institutional autonomy. Twenty-six of the twenty-nine institutions are now distinct community college districts with locally elected governing boards and property tax levying privileges. Three of the colleges have remained under the control of K-14 school district systems.

Because of their local autonomy, the colleges strive to serve the unique needs of their local community. This response to meet community needs can be seen in special programs which have been developed by many of the community and junior colleges. For example, Alpena Community College, which is located in a community with a large cement industry, has developed a series of programs in concrete technology. Another example of a program which meets local resort needs is Gogebic Community College's ski area management program. A third program is Northwestern Michigan College's Maritime Academy, which provides certified ship's officers for the Great Lakes shipping industry.

In addition to these characteristics, the community and junior colleges in this population reflect a great

range in enrollment and organizational structure. This range can be seen, for example, in the enrollment differences between the smallest college, West Shore Community College which enrolls approximately 950 students, and Macomb County Community College which enrolls approximately 25,000 students. The population's organizational diversity can be seen in the multi-campus Oakland and Macomb districts. This diversity can be further seen in the geographic location of the colleges. Several of the smallest colleges are located in the sparsely populated northern two-thirds of the state, while others are large urban institutions located in the southern third of the state.

The sample selected for the study was composed of eleven of the twenty-nine Michigan community and junior colleges. The colleges which made up the sample reflect the geographical and enrollment diversity of the community college population in Michigan.[2] The smallest in enrollment was Mid Michigan Community College, with approximately 1,200 head count enrollment, while the largest was Lansing Community College, with a head count enrollment of approximately 15,500. A few of the colleges (Alpena, Gogebic, Mid Michigan) are located in the northern rural and resort areas of the state, while many others (Lansing, Henry Ford, Delta) are located in the urbanized Southern one-third of

---

[2]See Appendix A., p. 162.

Michigan. Overall, the total enrollment of the colleges included in the sample is 72,733 or 37 per cent of the total state community college enrollment.

Research Design and Procedures

The conception of this study was the result of a project entitled "Expanded Access Through Credit for Prior Learning," which was carried out by this researcher for Delta College. In the development of the Delta project, numerous questions were raised about the design and use of credit for prior learning options in community colleges. These questions led to the formulation of this research study.

The purpose of this study was to examine the ways in which Michigan's public community and junior colleges assess an individual's experiences and then grant credit for the learning which has resulted from those experiences. In order to identify those colleges with credit for prior learning systems, the procedures of the present study involved two specific stages.

The first stage of the procedures focused upon the present practices used by Michigan's community and junior colleges in the general area of credit by examination and credit for prior learning. To identify present practices, a brief telephone survey was administered to representatives of each college. The ten-item survey was conducted by this

researcher over a five-day period in July 1976. The time consumed by the telephone survey was approximately ten minutes.

In order to carry out the second stage of the procedures, the twenty-nine colleges were screened into two groups. Those colleges identified in Stage I as having elements of a credit for prior learning system which offered more than standardized and challenge examinations were selected for study in Stage II. Those institutions selected for further study were visited and an institutional representative was interviewed in depth.

Each interview was conducted by this researcher and had a duration of approximately one hour. The interviews were completed over a three-week interval in July and August 1976.

Instrumentation and Data Collection

Stage I. Telephone Survey

The survey instrument used in the first stage of the data collection process was developed by this researcher to determine the extent of a community college's involvement with a wide variety of credit for prior learning options.[3] To determine this involvement, institutional representatives

---

[3] See Appendix B, p. 163.

were questioned about their institution's usage of credit by examination options, such as the College Level Examination Program (CLEP) and Advanced Placement (AP), the two most well-known national credit by examination programs.

The ten-item survey instrument was also designed to determine a college's use of institutionally developed challenge and proficiency examinations. More importantly, in an attempt to identify possible institutional innovations, the survey also included a series of questions to determine the existence of specific institutional credit for prior learning options. The instrument's two final questions focused upon the degree of institutional commitment to credit for prior learning, as evidenced in institutional policy and clearly stated institutional responsibility for the operation of such credit options. On the basis of the answers to these questions, the researcher was able to determine the variety and depth of an institution's involvement in the awarding of credit for prior learning.

The first stage of the data collection process was accomplished through the use of this ten-item survey instrument. The registrar of each institution was chosen as the initial contact person. Since registrars usually have the responsibility for recording the credit awarded by the institution, it was assumed that the registrar would be aware of any institutional variations in credit awards.

To carry out the data collection, the registrar of each institution was telephoned by this researcher. When it was not possible to speak to the registrar, the purpose of the study was explained to the registrar's secretary, who was requested to suggest an alternative resource person within the institution. When the secretary was unable to refer the call, the registrar was called at another time.

When telephone contact was made, the interviewer explained the purpose and structure of the present study to the registrar or to the alternative institutional representative before the survey was administered. Following this introduction, the registrar was asked to provide brief answers to ten questions about his institution's practices in the awarding of credit by examination and credit for prior learning. Each question requested a "yes" or "no" answer; however, allowance was made for discussion, probing, and clarification on the part of both the researcher and the respondent. The instrument also provided an opportunity for the researcher to make note of the comments made by the respondents to each question.

When the formal survey was completed, the researcher attempted to identify the most opportune time for a follow-up, on-campus visit. The researcher further explored whether there was another individual other than the registrar who would be more knowledgeable about the in-depth operations of the college's credit for prior

learning options. Consequently, the final step in the telephone survey identified the most suitable contact person for a possible future interview.

On the basis of the answers to the ten-item telephone survey, the twenty-nine colleges were screened into two groups. The screening criteria were based on the degree of development of the elements necessary for a prior learning assessment system. The most important factors in determining an institution's eligibility for inclusion in the group of colleges selected for Stage II study were the following: (1) the existence of an institutional credit by examination program; and (2) the possibility of a credit award for: (a) earned certificates; (b) life experiences; and (c) work experiences. The existence of a clearly stated assessment procedure was also considered to be of far greater weight than the college's acceptance of either the CLEP or AP programs.

Based on these criteria, those institutions with assessment programs which consisted mainly of standardized examinations and challenge examinations made up one group. These institutions were not included in Stage II of the data collection process. A second group consisted of those colleges with elements of a credit for prior learning system which went beyond standardized and challenge examinations. The eleven colleges in this group were then administered the second stage of the data collection process.

Stage II. On-Site Visit

Following the screening procedures, the eleven colleges included in the group for further study were contacted and an on-campus interview with the registrar or other representative was arranged. In preparation for this interview, each representative was sent a letter of verification of the interview.[4] Along with this correspondence, pertinent terminology and a statement of the study's objectives was included.[5]

To gather the information during each interview, the researcher developed a structured interview instrument.[6] Based on a review of the literature, the interview instrument was designed to determine if six categories of learning experiences were assessed for credit at that specific institution. The instrument was further structured to identify the departments within the college and the assessment methods used whenever credit was granted for prior learning. The interview instrument also contained a section designed to identify institutional procedures in those areas which were pointed out in the literature as crucial to the success of a credit for prior learning system.

---

[4] See Appendix C, p. 165.

[5] See Appendix D, p. 166.

[6] See Appendix E, p. 167.

Interview guide sheets were used to collect the data and to organize and direct the interview. The interview instrument was structured to provide for branching during the collection of data on the types of experiences which could be assessed at the institution. A positive answer in the sources of learning category led to answers in each of the next two categories: location of assessed credit and assessment methods. Each time a source of learning which was eligible for assessment was identified, it was followed by an answer in the next two categories.

In addition to the use of interview guide sheets, with the consent of those interviewed, a tape recording was made of each interview for back-up and validation purposes.

A brief outline of the items which made up the substance of the interview instrument is presented below.

I. Organizational Procedures

The first category provided information on how the assessment and credit award processes operated within the institution. Questions in this category determined how the assessment credit is transcripted, whether a special office makes all such credit awards, whether there are limits on the size of the credit awards possible, and whether there are special costs for the assessment process. This section

also included data on the student and faculty role in the assessment process.[7]

II. Sources of Learning

The second category identified those experiences which, if assessed, might be a source of learning which is equivalent to college credit. There were six subcategories in this category: (1) work experience; (2) community service; (3) military experience; (4) business and industrial training; (5) experiences in proprietary or other profit making educational organizations; and (6) other. Each of these subcategories was introduced with at least three examples as "leaders" to make sure the institutional representative was not missing possible sources of credit awards.

III. Location of Credit Availability

The third category identified the program areas within the college which granted credit for prior learning. From this category, it was possible to determine whether certain types of courses or programs are more commonly inclined to offer credit for prior learning options.

IV. Assessment Methods

The identification of methods used in the assessment

[7] See Appendix F, p. 170.

process was based on a list compiled from Meyer[8] and from the questionnaire presented in Willingham et al.[9] In order to provide a comprehensive range of assessment methods, a checklist of fifteen possible assessment methods was developed.[10]

Data Analysis

The data analysis of the study is descriptive in nature. The data obtained from Stage I of the data collection process have been developed into a table to provide an overall profile of present assessment practices in Michigan's twenty-nine public community and junior colleges.

The main body of the data analysis consists of the data collected during Stage II of the data gathering process. A series of tables, accompanied by discussion, are used to depict the data. Analysis has been made of each college's sources of learning which may be assessed, the program areas which allow credit for prior learning, and the various methods used in assessment.

The organizational procedures involved in the assessment process also are identified. Further analysis

---

[8]Meyer, p. 98.

[9]W. Willingham, R. Burns, and T. Donlon, Current Practices in the Assessment of Experiential Learning, CAEL Working Paper No. 1 (Princeton, New Jersey: Educational Testing Service, 1974), Appendix Part III.

[10]See Appendix G, p. 172.

deals with the role and responsibility assumed by students, faculty, and administrators in carrying out the assessment process.

Summary

This chapter contained a description of the sample selection and procedures of the study. Attention was also given to instrumentation, data collection and data analysis.

CHAPTER IV

REPORT OF FINDINGS

The presented findings consist of analyses of the results of both Stage I and Stage II of the data collection process. An overall analysis of the credit for prior learning options which exist in the twenty-nine Michigan public community and junior colleges is included. In-depth analyses have been made concerning the assessable sources of learning, the program locations for assessed credit, and the methods which are used for assessing credit as they exist in the eleven community colleges included in the sample.

Also included in this chapter is a charting of the organizational procedures related to the prior learning assessment systems in the eleven colleges. Finally, the roles and responsibilities of students and faculty in the assessment process have also been analyzed.

Presentation and Discussion of Findings

Stage I Analysis

In summary form, Table 1 presents the current practices of all of Michigan's public community and junior

TABLE 1

CREDIT FOR PRIOR LEARNING OPTIONS IN

MICHIGAN'S COMMUNITY AND JUNIOR COLLEGES

	CLEP Subject	CLEP General	Advanced Placement	Challenge Exams	Certificates	Unaccredited but Formal Education	Work Experience	Life Experience	Formal Assessment Process	Statement of Assessment Policy	Assignment of Responsibility
*Alpena Community College	x	x		x	x	x	x	x	x	x	x
Bay de Noc Community College				x	x		x				
C. S. Mott Community College				x							
*Delta College	x	x	x	x	x	x	x				x
Glen Oaks Community College	x	x		x	x				x		
*Gogebic Community College	x	x	x	x		x	x	x	x		x
Grand Rapids Junior College	x										
*Henry Ford Community College				x	x	x	x		x	x	
Highland Park Community College				x	x	x					
*Jackson Community College	x	x		x	x	x	x	x	x	x	x
*Kalamazoo Valley Community College	x	x	x	x		x	x				
*Kellogg Community College	x	x	x	x		x	x	x	x	x	x
Kirtland Community College				x		x					x
Lake Michigan College	x			x	x	x					
*Lansing Community College	x	x	x	x	x	x	x	x	x	x	x
Macomb County Community College	x	x	x	x		x					x
*Mid Michigan Community College	x	x	x	x	x	x	x		x		x
*Monroe County Community College		x		x	x	x		x	x		x
Montcalm Community College	x										
Muskegon Community College	x	x		x		x					
North Central Michigan College	x	x	x	x		x					
Northwestern Michigan College	x					x					
Oakland Community College	x	x	x	x							x
St. Clair County Community College	x	x	x	x		x	x				
*Schoolcraft College	x	x	x	x	x	x	x	x	x	x	x
Southwestern Michigan College	x	x				x			x		x
Washtenaw Community College	x			x							
Wayne County Community College	x	x	x	x		x					
West Shore Community College	x	x		x							x

*Follow-up visit

colleges in the area of credit for prior learning options. An analysis of the results of the data which were collected during Stage I indicates that all of the colleges offer at least one or more methods which allow a student to gain credit for prior learning. Among the twenty-nine colleges, the range of options is extensive. Two of the colleges utilize all of the nontraditional credit options, while two others make use of only one. Those colleges which limit themselves to one option rely on the College Level Examination Program's Subject Examinations. It can also be observed that the CLEP Subject Examinations were more widely accepted by the colleges than were the General Examinations.

The results of the Stage I survey also point out that the most commonly used option in granting credit for prior learning is the institutionally developed challenge examination. The least common option is credit which is granted for life experience. It is also interesting to note that many of the community colleges in the state have informally identified an office as having the responsibility to handle nontraditional credit options. However, very few of the colleges have developed an official policy which encompasses the award of such credit.

Since the purpose of this study was to identify the assessment options which are available to a student who is interested in receiving credit for prior learning experiences, it is important to point out that the analysis of

data collected during Stage II reflects what has taken place at the colleges which were visited. The data analysis also identifies what could take place in the way of a credit award for prior learning. In other words, many of the systems for assessing prior learning have procedures available and are prepared to deal with specific prior learning experiences which may not yet have been requested. Therefore, in the on-site interviews, institutional representatives identified sources, locations, methods, and procedures which have been designed to deal with any request for credit for prior learning. As a result, the data portrayed in Tables 2 - 6 reflect both prior learning options which have been used and prior learning options which have been developed for use.

Stage II Analysis

It can be seen in Table 2 that in regard to armed services, every college included in the study sample grants prior learning credit for learning which has occurred in United States Armed Forces Institute (USAFI) programs and in military education programs. USAFI courses are optional educational experiences which are available to active duty servicemen at low or no cost, whereas military education programs are job training courses for servicemen. Therefore, the data indicate that the eleven colleges credit a variety of educational and training experiences offered by

the armed services to develop the educational background and the job effectiveness of military personnel.

In addition to USAFI and military education programs, seven of the eleven colleges give some form of credit to veterans for having completed basic training or active duty. Furthermore, one of the colleges has established an agreement to grant credit to students for their participation in the active duty phase of National Guard Summer Camp.

The data included in Table 2 also show that three of the colleges are affiliated with the Community College of the Air Force. Affiliation with the Community College of the Air Force designates that civilian colleges will accept Community College of the Air Force credits in the same manner as they accept credits from other accredited community and junior colleges. Four of the eleven colleges are affiliated with the Serviceman's Opportunity College. A college which participates in the Serviceman's Opportunity College waives residency degree requirements for active duty servicemen. In addition, the Serviceman's Opportunity College serves as a clearinghouse for all college credits earned while the serviceman is on active duty. Two of the Michigan colleges are affiliated with both the Serviceman's Opportunity College and the Community College of the Air Force. Both of these colleges have served a large Air Force base in their service area.

TABLE 2

ASSESSABLE SOURCES OF PRIOR LEARNING

	Armed Services	Proprietary and Correspondence Schools	Business and Industrial	Work Experience	Community Service	Other
Alpena C.C.	USAFI Military ed. prog. Basic training Serviceman's Opportunity College C.C. of Air Force	Accredited Business Colleges Correspondence Schools	Apprenticeships Amer. Inst. of Banking	Police Academy Emergency Med. Training		Recreation
Delta College	USAFI Military ed. prog. Serviceman's Opportunity College C.C. of Air Force	Accredited Business Colleges	Apprenticeships Amer. Inst. of Banking Amer. Ins. Inst. Special agreement: Dow Industrial Supervision Training Program	Industrial Foreman		
Gogebic C.C.	USAFI Military ed. prog. Serviceman's Opportunity College	Accredited Business Colleges		Conservation Officers, DNR Construction Secretarial		
Henry Ford C.C.	USAFI Military ed. prog. Basic Training	Business Schools Computer Schools Data Processing Schools	Apprenticeships Business Training Programs	Secretarial		

TABLE 2 (cont'd)

	Armed Services	Proprietary and Correspondence Schools	Business and Industrial	Work Experience	Community Service	Other
Jackson C.C.	USAFI Military ed. prog. Basic training	Business schools	Apprenticeships Business training programs Amer. Inst. of Banking	Law Enforcement Correctional officers Secretarial (CPS) Nursing Self-employment		
Kalamazoo Valley	USAFI Military ed. prog. Basic training National Guard	Accred. inst. Special articulation: Detroit Bus. College, Parson's Bus. College	Apprenticeships Business training programs	Secretarial	Volunteer work Social work	Articulation agreement: Calhoun Int. School Dist.
Kellogg C.C.	USAFI Military ed. prog. Basic training	Accred. inst.	Apprenticeships Business training programs	Law Enforcement Secretarial Health fields	Volunteer work	Articulation agreement: State Rehab. Center
Lansing C.C.	USAFI Military ed. prog. Serviceman's Opportunity College	Accred. inst. Unaccred. inst. with dept. approval	Apprenticeships Post Office: Electronics, Management, Acctg. Amer. Inst. of Banking	Law Enforcement Office and Secretarial Management and Marketing Engineering Tech. Applied Tech.	Certificated experiences	

TABLE 2 (cont'd)

	Armed Services	Proprietary and Correspondence Schools	Business and Industrial	Work Experience	Community Service	Other
Mid Michigan C.C.	USAFI Military ed. prog. Basic training	Business colleges	Business training programs	Police Academy Law Enforcement Secretarial Forestry, DNR Contracting, Welding Insurance Self-employment		
Monroe Co.C.C.	USAFI Military ed. prog. Basic training	Accred. and Unaccred. inst. Correspondence Schools	Apprenticeships Business training programs Amer. Inst. of Banking	Law Enforcement Secretarial		
Schoolcraft C.C.	USAFI Military ed. prog. C.C. of Air Force	Business schools Data processing schools Electronics schools Detroit Business Institute	Apprenticeships Data Processing training	Law Enforcement Secretarial Self-employment Real estate		

An examination of proprietary and correspondence schools as a source of prior learning shows an emphasis on acceptance of learning from these sources only if the learning has occurred at an accredited institution. In addition, the data in Table 2 reflect an especially heavy emphasis on business-related proprietary schools. Two of the institutions indicated that they would grant credit based on learning which occurred at unaccreditated institutions; however, one of these indicated such credit would be awarded only with departmental approval. Profit making correspondence schools are not frequently used as sources of prior learning.

As Table 2 shows, one college has taken steps to develop articulation agreements with business colleges located in their service area. The agreements with these two business colleges enable students to transfer courses from the business colleges to the community college without loss of credit. Since proprietary school costs are high and programs are short, the agreement provides an educational ladder for students who may wish to transfer.

The community college emphasis on job oriented educational programs is reflected in the data on prior learning from business and industrial sources. As specifically exemplified in Table 2, the related training component of apprenticeship training was accepted as a creditable source of prior learning by nine of the eleven colleges. Also widely accepted was prior learning from

business related training programs. The most often cited business related prior learning source was the series of courses sponsored by the American Institute of Banking. Five institutions grant credit for these courses which are related to a series of certificates established and recognized by the banking industry.

Although the community colleges in this sample grant credit for learning which has occurred in business and industry, only one institution has established a specific agreement to accept and grant credit for learning delivered by a local corporation to its employees. The agreement, unique among the colleges in the sample, provides credit in industrial supervision for those individuals who have completed the Dow Chemical Corporation's Foreman's Academy.

A source of learning which is closely related to business and industrial learning is work experience. It is interesting to note that the data in this category of Table 2 reflect two community college programs which have been established at most of the community colleges in Michigan: secretarial science and law enforcement. The data analysis shows that secretarial work experience is the most prominently cited source of credit in the work experience category. Nine of the eleven institutions consider for prior learning credit the learning gained in secretarial work experience. One college in the sample grants credit to those secretaries who hold the nationally recognized

Certified Professional Secretary's certificate, while three colleges grant credit to self-employed businessmen. Seven of the eleven colleges offer credit for law enforcement related prior learning, including such sources as first aid training, police academy completion, and specialized law enforcement seminars.

A third source of work experience prior learning which corresponds to numerous community college programs is work in health related fields. However, only three colleges recognize any form of health field work experience as a possible source of credit for prior learning.

Community college practices in the area of credit for work related prior learning are especially indicative of the colleges' service to the local community. This fact is reflected in the work experience credit which is available at Jackson Community College for those individuals who are correctional officers at Southern Michigan Prison in Jackson. The colleges' service to their community can also be seen in the credit for conservation and forestry work experience which is available to Department of Natural Resources employees at two of the rural community colleges which were included in the study sample.

The data in Table 2 signify a great difference between the first four categories of sources of prior learning and the last two categories. The table clearly shows that the greatest number of prior learning sources originate with the armed services, proprietary and

correspondence schools, business and industrial educational programs, and work experience. In fact, only one of the eleven colleges fails to give credit in one of the first four categories. In this instance, business and industry is an unlikely source due to the college's location in a remote rural area of the state where there is little industry. Community service and other experiences are distinctly less significant as sources of prior learning at all of the colleges studied.

Of the three colleges which do register sources of prior learning in categories other than the first four, two will consider community volunteer work as a possible source of credit. The third college, however, requires certification of the experience before credit can be considered.

Lastly, the data in Table 2 indicate that two of the colleges have established special articulation agreements with other state agencies. In one agreement, the college has made credit available to high school graduates who have gained prior learning through the Intermediate School District's Area Career Center. The second college has established an articulation agreement which covers individuals who have completed training at the branch of the state-sponsored vocational rehabilitation agency located in the college's service area. Apart from these two special agreements, the only other credit source in this category

is recreational activities, which is considered a possible source by one of the colleges located in a northern resort area of the lower peninsula of Michigan.

The results of Table 3 imply that there are two subject matter disciplines where credit based on armed services prior learning is most often located. Since credit is often awarded for basic training or active duty, over half of the colleges locate some armed services credits in the area of physical education. Equally cited as a predominant subject matter location is electronics, which is most likely suggestive of the specialized military education programs taken by servicemen. The specialized programs are further emphasized in the location of credits in the technologies in five of the eleven colleges. The learning created by USAFI, which provides opportunities for servicemen to further their education, can be seen in the identification of a number of general studies credit locations, such as English, history, social studies, and psychology.

Table 3 shows that armed services prior learning is not credited to the hard sciences, such as mathematics, physics, chemistry, or biology. An analysis of the table shows that these disciplines are not identified by any college in any of the prior learning sources cited as locations for credit granted through prior learning.

TABLE 3

PROGRAM LOCATIONS FOR ASSESSED CREDIT

	Armed Services	Proprietary and Correspondence Schools	Business and Industrial	Work Experience	Community Service	Other
Alpena C.C.	Physical Ed. Soc. Sciences: Eng., History, Literature	Business Electronics	Finance Accounting Technical	Law Enforcement Allied Health		Phys. Ed.
Delta College	Mechanical Tech. Electronics Law Enforcement	Business	Ind. Supervision Mechanical Tech. Business	Ind. Supervision		
Gogebic C.C.	General Ed.: Eng., History, Social Sciences	Data Processing		Building Trades Forestry Business		
Henry Ford C.C.	Physical Ed. Business Industrial Allied Health	Data Processing Business	Business Industrial Tech. Management Apprenticeship Training	Business Industrial Tech. Secretarial Science		

TABLE 3 (cont'd)

	Armed Services	Proprietary and Correspondence Schools	Business and Industrial	Work Experience	Community Service	Other
Jackson C.C.	Physical Ed. Voc/Tech. Electronics	Typing Shorthand Beginning Eng. Data Processing	Voc/Tech. Machine Tool Management Accounting Finance General Studies	Law Enforcement Allied Health Secretarial General Studies		
Kalamazoo Valley	Physical Ed. Management and Marketing Electronics	Business	Applied Tech. Business	Business	Social Ass't. Program	Business Auto Tech. Machine Tool Tech. Drafting
Kellogg C.C.	Political Sci. Eng., Lit. Gen. Studies	Data Processing Gen. Studies	Business Applied Tech. Data Processing Electronics	Law Enforcement Business Applied Tech.	Soc. Services	Tech. programs
Lansing C.C.	Physical Ed. Management and Marketing Electronics Applied Tech.	Business Applied Tech.	Applied Tech.	Law Enforcement Business Applied Tech.		

TABLE 3 (cont'd)

	Armed Services	Proprietary and Correspondence Schools	Business and Industrial	Work Experience	Community Service	Other
Mid Michigan C.C.	Physical Ed. Technical Health Typing Electronics Construction	Business	Management	Law Enforcement Health, First Aid Typing Office Procedures Building Trades Ind. Tech. Conservation		
Monroe Co. C.C.	English Psychology Bonus Cr. (2 hrs.)	Business Electronics	Business All apprentice-ship areas	Law Enforcement Business Secretarial		
Schoolcraft C.C.	Business Technical Electronics	Business Technical Electronics Data Processing Secretarial	Data Processing Voc/Tech.	Law Enforcement Business Vocational/Tech. Secretarial Sci. Marketing Real Estate		

Distinct from any others, one college gives servicemen who have completed active duty an automatic two-credit military services credit bonus. This credit may be applied to physical education or any of the other electives within a student's program.

Proprietary and correspondence sources are predominantly located in the discipline of business related studies. As exhibited in Table 3, business or business related subjects, such as data processing and management, are cited as locations at all eleven of the colleges. The only departures from business, data processing, and secretarial courses can be seen in the mention by two colleges of General Studies and Beginning English as locations for proprietary or correspondence learning.

The predominant locations for prior learning credit in the category of business and industrial training are the technical and business areas. Table 3 points out that nine of the colleges apply credit from business and industrial sources to the technical curricula. It is likely that this emphasis on the applied technologies is in part a result of widespread acceptance of the related training component of an apprenticeship program. In addition, the emphasis is an indication of the wide variety and availability of technical as well as business programs.

Work related prior learning is most often accepted into the business and law enforcement areas. Business is

cited as a location in nine of the eleven colleges, while law enforcement is cited by seven. Allied health programs are also noted as possible locations for prior learning credit at three colleges. Although technical programs are often cited as locations for business and industry related learning, the area of applied technology is cited by less than half of the colleges as a location for work related prior learning. Table 3 also indicates that one particular college places a considerable amount of emphasis on work related prior learning.

As in Table 2, Table 3 shows little development in community service and other locations in terms of accepting prior learning. It can be seen that two institutions do apply volunteer work programs in the curriculum area of social services. In the "other" category, the listing of technical programs is the result of the special articulation agreements discussed earlier.

Table 4 indicates that a wide variety of assessment methods are used to measure and evaluate prior learning. The methods range from the highly traditional subject matter examinations developed by the CLEP program to a unique form of assessment which uses advanced standing and a retroactive credit award. A comparison of the presently used methods to the Checklist of Assessment Methods (Appendix G) shows that self-assessment and external source - expert judgment are not used by any of the eleven

TABLE 4

METHODS OF PRIOR LEARNING ASSESSMENT

	Armed Services	Proprietary and Correspondence Schools	Business and Industrial	Work Experience	Community Service	Other
Alpena C.C.	Documentation Dept/Div. Assessment Team Admin. Assess.	Documentation Objective Test Essay Test Admin. Assess.	Documentation Admin. Assess.	Documentation Dept/Div. Assessment Team		Documentation
Delta College	Documentation Fac. Interview Dept/Div. Assessment Team	Documentation Objective Test Essay Test Fac. Interview CLEP	Portfolio Objective Test Essay Test Fac. Interview CLEP	Documentation Objective Test Essay Test Fac. Interview CLEP		
Gogebic C.C.	Documentation Objective Test Essay Test Oral Exam	Documentation Objective Test Essay Test Oral Exam		Documentation Objective Test Essay Test Oral Exam		
Henry Ford C.C.	Documentation Objective Test Essay Test Admin. Assess.	Documentation Fac. Interview Simulation Product Assess. Performance Assessment	Documentation Fac. Interview Simulation Product Assess. Performance Assessement	Objective Test Product Assess. Performance Assessment		

TABLE 4 (cont'd)

	Armed Services	Proprietary and Correspondence Schools	Business and Industrial	Work Experience	Community Service	Other
Jackson C.C.	Documentation Objective Test Essay Test Oral Exam CLEP Advanced Placement with Retroactive credit award	Documentation Objective Test Essay Test Oral Exam CLEP Advanced Placement with Retroactive credit award	Documentation Objective Test Essay Test Oral Exam CLEP Advanced Placement with Retroactive credit award	Documentation Objective Test Essay Test Oral Exam CLEP Advanced Placement with Retroactive credit award		
Kalamazoo Valley	Documentation Fac. Interview	Documentation Fac. Interview Objective Test Essay Test	Documentation Fac. Interview Objective Test Essay Test	Documentation Faculty Interview Objective Test Essay Test	Documentation Fac. Interview	Documentation
Kellogg C.C.	Documentation Oral Exam Objective Test Product Assess. Performance Assessment Supervisory Assessment	Documentation Oral Exam Objective Test Product Assess. Performance Assessment Supervisory Assessment	Documentation Oral Exam Objective Test Product Assess. Performance Assessment Supervisory Assessment	Documentation Oral Exam Objective Test Product Assess. Performance Assessment Supervisory Assessment	Documentation Oral Exam Objective Test Product Assess. Performance Assessment Supervisory Assessment	Documentation
Lansing C.C.	Documentation Fac. Interview Proficiency Exam	Objective Test Essay Test Proficiency Exam	Documentation Fac. Interview Dept/Div. Assessment Team	Documentation Fac. Interview Objective Test Essay Test Proficiency Exam	Documentation Fac. Interview	

TABLE 4 (cont'd)

	Armed Services	Proprietary and Correspondence Schools	Business and Industrial	Work Experience	Community Service	Other
Mid Michigan C.C.	Documentation Admin. Assess.	Documentation Admin. Assess.	Documentation Admin. Assess.	Documentation Admin. Assess. Performance Assessment Product Assess.		
Monroe Co. C.C.	Documentation Objective Test Essay Test	Documentation Objective Test Essay Test	Documentation	Documentation Objective Test Essay Test Dept/Div. Assessment Team		
Schoolcraft C.C.	Documentation Objective Test Proficiency Exam	Documentation Objective Test Essay Test Fac. Interview Dept/Div. Assessment Team	Documentation Objective Test Essay Test Fac. Interview Dept/Div. Assessment Team	Documentation Objective Test Fac. Interview Dept/Div. Assessment Team		

colleges. Of the remaining methods on the checklist, simulation and portfolio development were the least cited methods.

Although portfolio development was not often used, Table 4 clearly shows that the method most commonly used by all eleven colleges was documentation. It is necessary to note that there are major differences between portfolio-based assessment and documentation-based assessment. An assessment based on portfolio development utilizes documentation as an essential factor. However, in addition to documentation, the portfolio also requires the student to develop a statement of educational goals and to identify what the student feels are some of his basic prior learning competencies. The result is a package which combines material from student sources, as well as from external sources.

In contrast to a portfolio, an assessment which is based on documentation relies heavily upon external material which can be used to verify a student's experience or learning. Therefore, documentation, which often comes from sources external to the student, may include certificates, proof of attendance or completion, and letters from former employers. Consequently, the major difference between documentation and portfolio development is the student involvement in the final product. Although an assessment can be carried out by both methods, the development of a

portfolio demands more from the student than the collection of documentation.

Following documentation, the assessment methods used most often by the colleges are essay and objective tests, in a credit by examination fashion, and faculty interviews. Three of the eleven colleges use product or performance assessment to determine possible credit for prior learning.

Because two of the colleges have developed assessment systems which utilize a strong administrative role in place of faculty assessment, administrative assessment is used almost exclusively at these two colleges. In these situations, the faculty serve in a consultant role, while the administrative office conducts the assessment. Four of the eleven colleges employ departmental/divisional assessment teams. In other methods identified, the assessment device is usually developed, administered, and evaluated by one person.

One assessment method is used which is not included on the assessment methods checklist. This method, advanced placement with a retroactive credit award, is used after a student's documentation has determined that student's advanced standing. Under this assessment method, the student attends and completes an advanced course. If the student successfully completes the course, credit is retroactively granted for the prerequisite courses which were waived.

Table 5 presents the organizational procedures used by the colleges in their prior learning assessment systems. As the table shows, there is little consistency in organizational procedures among the eleven colleges. Analysis indicates that the limits placed upon credit by examination range from a no limit basis to a restriction of fifteen semester hours. Four colleges place no limits on the amount of credits which can be gained as a result of an examination process. With the exception of one institution, credit limits remain the same for assessment as they do for credit by examination.

The same variation can be seen in an investigation of the fees charged for assessment. Seven of the colleges do not charge for assessment. Of the four which do charge an assessment fee, the fees range from $5.00 to $20.00 per course. The fee picture is complicated by credit by examination fees which may be involved if an assessment examination is needed. When the credit by examination option is used, seven of the eleven colleges require the student to pay tuition. Two colleges charge an examination fee in addition to the tuition.

As Table 5 shows, assessed credit which is earned at ten of the eleven colleges is applicable to the college degree requirements. However, at one college, the assessed credit may be applied toward a major but does not count in the total degree requirements. If a student wishes the

TABLE 5

ORGANIZATIONAL PROCEDURES RELATED TO THE ASSESSMENT OF PRIOR LEARNING

	CREDIT LIMITS		COST		STUDENTS PER YEAR		CREDITS TOWARD DEGREE		METHOD OF TRANSCRIPTION	FINAL RESPONSIBILITY	PUBLIC RELATIONS	
	Credit by Exam	Assess-ment	Credit by Exam	Assess-ment	Credit by Exam*	Assess-ment*	Yes	No			Yes	No
Alpena C.C.	30 sem.	30 sem.	$10 + tuition	None	10	250	X		Inst. cred. equiv. with notation	Inst. Research and Records		X
Delta College	None	None	Tuition	None	15	5	X		Inst. cred. equiv. with notation	Registrar		X
Gogebic C.C.	30 sem.	30 sem.	$15 per exam	$15 per assess.	0	2	X		Inst. cred. equiv. with notation	Dean of Students		X
Henry Ford C.C.	None	None	Tuition	Tuition + $20/ assess.	20	20	X		Inst. cred.- no notation	Registrar		X
Jackson C.C.		None		None		100	X		Inst. cred. equiv. with notation	Registrar		X
Kalamazoo Valley	30 sem.	30 sem.	Tuition	None	25	50-75	X		Inst. credit- no notation	Dean of Students		X

*Estimated by institutional representative

TABLE 5 (cont'd)

	CREDIT LIMITS		COST		STUDENTS PER YEAR		CREDITS TOWARD DEGREE		METHOD OF TRANSCRIPTION	FINAL RESPONSIBILITY	PUBLIC RELATIONS	
	Credit by Exam	Assessment	Credit by Exam	Assessment	Credit by Exam*	Assessment*	Yes	No			Yes	No
Kellogg C.C.	36 sem.	36 sem.	$5 per course + tuition	$5 per course	40	10		X	Inst. credit equiv. with notation	Admissions		X
Lansing C.C.	60 term	60 term	Tuition	None	150	150	X		Transfer Cr. and Inst. Cr. equiv. with notation	Academic Department		X
Mid Michigan C.C.	None	None	Tuition	None	15	50	X		Attached source document	Dean of Student	X	
Monroe Co. C.C.	None	None	$20 per Course	None	50	20	X		Inst. credit equiv. with notation	Registrar	X	
Schoolcraft C.C.	15 sem.	30 sem.	$5/cr. hr.	$5/cr. hr.	15	10	X		Inst. credit- no notation and inst. credit equiv. with notation	Academic Dean		X

*Estimated by institutional representative

credit to apply to a degree, the credit must be validated through the college's credit by examination process.

It is important to point out that the data on the number of students who have used credit by examination and the assessment of prior learning are estimates furnished by the institutional representatives. As such, they are probable and approximate. As Table 5 clearly shows, the estimated number of students who undergo either assessment or credit by examination varies substantially. It can be seen that far more students undergo assessment than credit by examination.

An analysis of the means used by colleges to transcript the credit which is awarded for prior learning indicates that one college attaches additional material to the transcript to explain the credit awarded for prior learning. The remaining colleges use three different methods of transcribing prior learning credit. Of the methods used, six of the colleges have chosen to translate the credit into institutional course equivalencies and then identify the credit as prior learning credit through the use of a special notation. Two of the colleges list prior learning credit as institutional credit, with no special notation. Both of the remaining colleges use a combination of methods: one indicates the credit as either transfer credit or institutional equivalency. The other lists the credit as either institutional credit or institutional equivalency credit.

The point of final responsibility for an institution's credit for prior learning assessment system is also identified in Table 5. As an analysis indicates, the final authority in credit hour awards is an administrative one at nine of the eleven colleges. At two colleges, the final responsibility rests with the faculty. In the nine colleges which retain control at an administrative level, the credit for prior learning function is located within either Student Personnel Services or within the record keeping functions of the college. Although the final credit decision rests with administrators at nine of the eleven colleges, it is misleading to assume that faculty involvement is nonexistent at those colleges. As the next table, Table 6, points out, the faculty role in assessment is substantial.

In addition to information on fees, student numbers, and assessment responsibility, Table 5 provides valuable insight into the degree of public awareness created by the colleges regarding the assessment of prior learning as a credit gaining option. Two of the colleges have generated publicity beyond statements traditionally found in the catalog. At one college, the prior learning option is explained in detail in high school secretarial and business classes, with the intention of creating interest in and recruiting high school students who may be able to gain credit for typing and shorthand abilities. At the second college, a special brochure designed to attract an increased

veteran's enrollment was developed. This brochure emphasized the possibility of credits for armed services prior learning. In place of the brochure, this college is now developing a letter to be included in the veterans' admission packet. This letter will stress the possibility of credit for armed services prior learning, and will request veterans to present documentation which may be used in the assessment of this learning.

The final table, Table 6, displays the responsibilities which are carried out during the assessment process by faculty and students. As can be clearly seen, the responsibility of collecting the necessary documentation in order for the assessment of prior learning to occur belongs to the student. One of the eleven colleges assists the student in the collection of documentation. Once the documentation has been collected, one college requires its students to develop a portfolio, including a statement of educational objectives and the identification of probable prior learning competencies.

Table 6 also points out that three colleges require their students to determine which course or courses offered at the community college most likely match the student's prior learning. In this equating process, the student is assisted by access to a guide to course content, which contains syllabi, course objectives, and probable course outcomes.

TABLE 6

STUDENT AND FACULTY RESPONSIBILITIES IN THE ASSESSMENT OF PRIOR LEARNING

	STUDENT RESPONSIBILITIES				FACULTY RESPONSIBILITIES				
	Obtain prior approval from fac. or adm.	Collect and provide documentation	Develop formal portfolio	Determine probable course equiva-lency	Conduct pre-assessment counseling	Review documentation or portfolio	Develop and administer device	Determine final credit award	Receive remuneration
Alpena C.C.		X		X					
Delta College	X	X	X		X	X	X	X	X
Gogebic C.C.	X	X			X	X	X		
Henry Ford C.C.	X	X			X	X	X		X
Jackson C.C.		X				X	X		
Kalamazoo Valley		X		X		X	X		
Kellogg C.C.	X	X*		X		X	X	X*	
Lansing C.C.	X	X			X	X	X	X	
Mid Michigan C.C.		X							
Monroe Co. C.C.		X				X	X		
Schoolcraft C.C.	X	X			X	X	X		

*Shared responsibilities with administrators

Of particular interest is the notation that six colleges request the student to seek faculty or administrative approval prior to initiating a request for assessment. In addition, five of these six colleges also require preassessment interviews between the student and the faculty.

Even though there are two institutions where the faculty do not take part in reviewing documentation or constructing assessment devices, the faculty in the remaining nine institutions are responsible for the review of documentation and for the development of measurement and evaluation assessment devices when needed. At the two colleges where faculty are not the primary assessment agents, they instead serve in a consulting role to the office responsible for the assessment. Therefore, when faculty expertise is needed, it is on a consultation basis, either through an assessment team or individually.

Table 6 indicates that the faculty review documentation and conduct assessment at nine of the eleven colleges. At many of the nine faculty-oriented colleges, the degree of faculty involvement in the review of documentation and in the assessment was a variable which depended upon such factors as the subject matter in question, the department or division involved, and the size of the possible credit award.

One procedure which is not common among the eleven colleges is faculty remuneration for their role in the assessment process. Only two institutions reimburse faculty for this responsibility. The remaining colleges may utilize their faculty to review documentation and develop, administer and evaluate assessment devices without additional reimbursement or released time of any kind. At one of the eleven colleges, the credit award decision is shared. At two of the remaining ten, the decision is made by faculty. Eight of the eleven institutions establish final responsibility for the credit award with an administrator in the assessment office.

Summary

In summarizing the data analysis of the study, it can be seen that there are numerous armed services experiences which can be assessed, that these assessed credits are generally applied in physical education and the technologies, and that the assessment method most often used was documentation. Proprietary and correspondence school experience is usually accepted from accredited institutions, applied in the business area, and assessed by means of documentation and credit by examination. Likewise, apprenticeship and business training experiences are related to business and technical disciplines, and are assessed as a result of faculty interviews and documentation.

Among the eleven colleges, there are many diverse work experiences which can be equated to credits. Therefore, these credits are applicable to numerous subject areas and are gained as a result of examinations, interviews, and documentation. Very few community service experiences are creditable in the eleven colleges. However, in two community colleges, volunteer work and social work are creditable in the social service disciplines on the basis of documentation and faculty interviews.

Organizationally, the colleges studied vary greatly in the area of credit limits, fees charged for credit by examination and assessment of prior learning, and the number of students who are assessed. A majority of the colleges use faculty as subject matter experts in the assessment process, although only two provide faculty with additional remuneration. In the assessment process itself, at ten of the eleven colleges, the responsibility of gathering documentation belongs solely to the student. Among the colleges studied, the final credit decision is made predominantly by administrators. Very few of the colleges have taken any steps to publicize their credit for prior learning options.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

The purpose of this investigation was to identify and examine the processes used by Michigan's twenty-nine publicly supported community and junior colleges in assessing an individual's life experiences and awarding academic credit for the college-level learning which has occurred as a result of those experiences. Answers to two major questions were sought: (1) Which of Michigan's twenty-nine public community and junior colleges have developed systems for granting credit for prior learning? (2) At colleges where systems have been established, what kinds of options, processes, and procedures have been developed as part of the system of granting academic credit based on learning which took place as a result of previous life experiences?

For the study sample, eleven of the twenty-nine colleges were chosen, based on the presence and degree of development of the elements necessary for a prior learning assessment system.

The procedures of the study involved two specific stages. The first stage, accomplished by the use of a

ten-item telephone survey to each of the twenty-nine community colleges, focused upon the present practices used by these colleges in the general areas of credit by examination and credit for prior learning. The second stage consisted of on-site visits to those community colleges whose credit for prior learning systems went beyond standardized and challenge examinations.

Implementation and data collection took place over a three-week period during July and August 1976. The data were analyzed by a series of tables accompanied by discussion.

Conclusions of the Study

On the basis of the data gathered from the total population of Michigan's public community and junior colleges, it can be concluded that all of the twenty-nine colleges offer one or more nontraditional educational options which can be used to gain credit for prior learning. The options which are most frequently cited rely heavily upon the credit by examination concept. The practice of institutional challenge examinations was the most predominant process, followed in frequency of use by CLEP subject matter examinations.

One reason for the reliance upon these two options may be that both of these processes provide a relatively uncomplicated and traditional means by which a student can

complete an examination and thereby receive credit. In most cases, administering challenge examinations and CLEP examinations does not require additional staff, special assessment methods, or the collection and evaluation of documentation. Challenge examinations often utilize an already existing final course examination and are administered by the department or the faculty member involved. Likewise, CLEP provides a nationally normed examination with results which can be accepted for credit at any level which the college chooses. Consequently, both of these options provide the institution with a great deal of flexibility.

Another nontraditional option which is used by more than half of the twenty-nine colleges is the granting of credit for unaccredited but formal education. The sources for the credit award within this option encompassed examples such as proprietary school experiences, military experiences and apprenticeships. Like CLEP and challenge examinations, the great variety of these experiences provides an institution with a broad array of choices. Given the variety of choices and the variety of programs, it was logical that the majority of colleges would grant credit for at least one of these experiences.

Overall, it can be concluded that the population of community and junior colleges in Michigan reflects a great diversity in range of options and degree of development of credit for prior learning assessment systems.

On the basis of the on-site visits to the eleven colleges included in the study sample, it can be concluded that a number of positive forces are at work in the field of prior learning assessment in Michigan's community colleges. Particularly positive is the fact that more than one-third of the colleges in the state have developed, at least to some degree, the elements of a credit for prior learning system. In addition, without exception, the individuals interviewed indicated that the systems for the assessment of prior learning presently in operation have been developed as the result of a great deal of thought, interest and enthusiasm by the individuals involved. Furthermore, the existing systems all reflect a strong student advocacy position. The enthusiasm and student advocacy of these institutional representatives interviewed was combined with an awareness of the potential and benefits for students who participated in the assessment of prior learning system.

However, the interest, enthusiasm, and student advocacy found in each institution studied has not led to the development of similar systems for the assessment of prior learning. In fact, based upon the data gathered from the sample of eleven Michigan community colleges, it can be concluded that there is substantial variation in prior learning assessment practices from institution to institution. As Meyer and Willingham et al. pointed out,

uniform assessment systems do not exist.[1] Rather, those systems which do exist are the result of each individual institution's development of processes and options to fit their particular structure and philosophy. Because of the lack of uniformity, it is possible, for example, that a student may receive far more credit for prior learning at one institution than at another. Depending on the college, the awarding of credit may be accomplished with or without the payment of a special fee and with or without the completion of an examination.

Although there is a great deal of diversity among existing programs, there are a number of important similarities as well. As a group, the eleven colleges are extremely interested in maintaining the integrity of their credit and their degrees. Therefore, there is a strong emphasis on assuring that the credit which is awarded for prior learning is substantiated by either documentation which identifies the prior learning, or by demonstrated competencies which can be related to specific college courses.

To maintain the integrity of their credit, it can be concluded that the colleges which do grant credit for prior learning do so very carefully. For example, large block awards of credit for work experience were not found at any of the institutions. Instead, what was found was a

---

[1] See Meyer, p. 175; and W. Willingham et al., Current Practices in the Assessment of Experiential Learning (Princeton, New Jersey: Educational Testing Service, 1974), p. 46.

strong interest in making sure the credit to be awarded could be matched with experiences of equivalent value. At no institution could one conclude that it was easy to obtain credit for life or work experience. If any conclusion in this regard can be made, it is that credit for prior learning was often too difficult to receive. In essence, the stance taken by a number of colleges was that credit awarded for learning which has resulted from prior experience must be based upon at least as much knowledge, if not more knowledge, than is required for credit in a regular class.

Sources of Prior Learning and Locations Which Accept Prior Learning

It is clear that Michigan's public community and junior colleges grant credit for learning from a wide variety of sources. However, it is also evident that the availability of credit for prior learning is not uniform from institution to institution. Furthermore, within institutions, credit for prior learning may be more readily available in certain disciplines and from certain sources than others. One must conclude that the option of gaining credit for prior learning is unevenly distributed among the eleven colleges.

Of all of the possible sources of prior learning, the source which is most widely accepted by Michigan's community and junior colleges is armed services training.

This is assumed to be a result of the relatively comprehensive evaluative mechanisms which exist to facilitate the assessment of armed services educational experiences. The guidelines developed to translate military experience into academic credit include publications sponsored by the United States Armed Forces Institute (USAFI, now known as DANTES) and by the American Council on Education's Council on Educational Credit.

By using these guidelines and the certificates held by those who have completed the training, colleges are able to identify and equate an individual's learning which has taken place in the military to specific college courses. When awarded, USAFI credit is most frequently applied toward a student's general education degree requirements. Credit gained through military education programs other than USAFI is most often applied in the technical areas, and specifically in electronics. Consequently, it is concluded that armed services training is a widely accepted source of prior learning among those community colleges in Michigan which possess the basic elements of a credit for prior learning system.

Although such convenient national assessment agencies and guidelines are not widely available for other sources of prior learning, another prominent source of prior learning credit is business and industrial training. One reason for this may be that colleges are inclined to grant credit for learning which is closely related to the college's programs.

Since most comprehensive community colleges offer business and technical programs, prior learning which has occurred as a result of an individual's experiences in business and industry is a major source of assessment credit.

Another factor which causes business and industry-related prior learning to be widely accepted for assessment may be the emphasis placed on job competencies, on-the-job training, and job upgrading by industries. This emphasis on job competencies is compatible with the community college emphasis on work-related skills and the educational outcomes needed to do a job. For example, the management and supervisory experience gained by an employee in a large industry is often applied to college programs in mid-management training or industrial supervision.

Another example of the emphasis on job competencies can be seen in the acceptance of the related training component of apprenticeship training which is most often applied to programs in the applied technologies. It is concluded that this strong interrelationship between the college programs and business and industry makes learning which has occurred in business and industry one of the most widely credited prior learning sources.

Specific disciplines which do not widely accept credit for prior learning are those in the liberal arts and the sciences. These disciplines, which are usually associated with the college's transfer function, are almost

completely absent as locations which accept prior learning. On the other hand, those disciplines, such as business and applied technology, which reflect that element of community college mission related to education for the world of work, are firmly established as more accepting of learning which has occurred in sources outside of formal education. This obvious dichotomy between work related and transfer related education may be a consequence of the continual discussion over whether the primary objective of the community college is to provide transfer education for the baccalaureate-bound students or to provide job related education and training for those individuals interested in entering the labor market.

Although the issue of accrediting agency disapproval was cited by Meyer and Ganzemiller as a prominent reason colleges avoid assessment options,[2] this issue was raised only in relation to the acceptance of prior learning which would be applied to allied health programs. In certain allied health programs, national accrediting agencies, in addition to state regulatory agencies, mandate specific blocks of time in certain courses. Because of these external clock hour requirements, allied health faculty are often reluctant to allow credit for prior learning, since assessed credit might affect the status of the program. One can

---

[2] See Meyer, p. 13; and Ganzemiller, p. 23.

conclude that this may be the major reason for the relatively small number of health occupation credit sources and credit locations.

The community college's respect for accrediting agencies is also shown in the stance which was often taken concerning prior learning which may have occurred through the student's contact with a proprietary school. Many of the colleges indicated that they would accept credit from proprietary institutions if the institution was accredited. Prior learning held by students who may have attended unaccredited business colleges was often subjected to a formal assessment device before the credit was awarded.

Another conclusion that one may make concerning sources and locations of credit awards is that credit is not often awarded for the completion of a certain number of years of work experience. When work related credit was granted, the credit was usually tied to identifiable competencies which had been gained as a result of the work experience. When available, the source of such credit was usually a public service profession such as law enforcement or a business-related work experience such as shop management or secretarial work. Each of these work areas corresponds to academic programs which have been strongly associated with community college education in the past fifteen years. However, even though the areas of work are closely related to the community college's program areas, prior learning

credit was not granted simply for learning which was assumed to have occurred as a result of a number of years of service.

Surprisingly absent as a source of prior learning credit are the activities students may be involved in within their community. It is concluded that most community colleges have not been able to develop a means of assessing prior learning which has occurred as a result of community service, such as volunteer work on fund drives, participation in civic organizations, or involvement in political campaigns. Since this work is usually non-structured, the possession of certificates and the development of course descriptions is rare.

A further limiting factor in awarding credit for community service experiences may be that there are relatively few degree or certificate programs at community colleges which could accept learning from these experiences. Community college programs in the human services which produce assistant social workers, day care aides, or urban affairs assistants are not as widely developed as programs in secretarial science, accounting, and machine tool design.

More significantly, a number of colleges have difficulty granting academic credit for activities they sponsor under the label of community services. Where community services have been separated from academic programs, some institutions find themselves unable to grant academic credit for programs which are conducted by their own faculty in the community service division. An example is the

American Institute of Banking courses which may be provided by the college as a community service. In contrast, other colleges have expanded their role to offer these courses as their own, thereby eliminating the need to assess a learning experience which is constructed and usually delivered at the request of local banking institutions.

Overall, both community service and avocational interests were the least mentioned sources of prior learning. It is concluded that the greatest interest and acceptance of prior learning occurs when learning results from sources which are closely related to jobs, skills, and specific educational outcomes. These sources can often be readily assessed and equated to academic credit for job-related courses offered by the institution.

Methods of Assessment

A major conclusion that one may make concerning assessment methods is that many colleges fail to differentiate between"credit by examination" as an assessment method and "credit for prior learning" as a program which provides a variety of avenues to identify and evaluate learning which has resulted from experience. As a result of this failure to differentiate, the assessment methods used to measure and evaluate prior learning are often those highly traditional methods associated with institutional credit by examination programs. This traditional approach

is visible in the colleges' reliance on three major assessment methods: examination, faculty interview and documentation. One must conclude that these assessment methodologies, along with the absence of organized approaches to portfolio development, reflect a traditional and somewhat cautious approach to the process of awarding credit for prior learning.

For many colleges, completion of a course challenge examination was the predominant assessment device used to measure and evaluate prior learning. In some instances, the subject matter College Level Examination Program examinations were used in lieu of an institutional examination. This approach could be effective if CLEP examinations or challenge examinations were available for each course offered by the college. However, in most institutions, examinations are not available for all courses. As a result, it may be difficult or impossible for a student to either find a CLEP examination or to find a faculty member who would be willing to develop an institutional challenge examination. Further difficulties may also exist since the CLEP examination or the institutional challenge examination may not equate to the subject matter for which prior learning credit has been requested.

Additional difficulties in measurement and evaluation of prior learning result from a heavy emphasis on the interview as an assessment method. Most often, the interview

was not referred to as an oral examination. Rather, it appeared to be an unstructured discussion between a faculty person and a student about the student's background and experiences and the student's knowledge in the subject matter area to be assessed. Although an unstructured interview may have a content basis, reliability and validity are not easily controlled. Interviewer/candidate interactions, abilities to verbalize, and personality characteristics are all factors which can influence such an interview.

One must conclude that the measurement of a student's knowledge may be inaccurate as a consequence of either an interview or a credit by examination option such as CLEP and challenge examinations. Measurement is particularly hindered by the credit by examination method when the examination is or has been constructed to reflect a textbook or a series of lectures which may be only tangentially related to the catalog course description. In situations such as this, the student whose prior learning is to be assessed may have little or no chance of passing the examination.

In addition, the assessment methods of credit by examination and the interview inject a considerable amount of subjective judgment into the assessment process. At most colleges, the student who was required to complete an examination as the assessment method was first required to undergo a preassessment interview with a faculty member. At its

best, such a control system can save faculty energy, student time (and money if there was an examination fee), and administrative paperwork by sifting out those students who obviously will not pass the examination. At its worst, however, such a system can create barriers for qualified students on the basis of prejudices, faculty unwillingness to create an examination, and lack of institutional commitment to the system.

Even though there may be institutional policies and procedures which provide for an examination as the assessment device, it is possible for the process to be halted by a refusal to develop a particular examination. Specific steps have been taken to eliminate this possibility at two of the colleges included in the study. At one institution, presidential mandate has stated that there will be a challenge examination for every course. At another institution, faculty members are considered to be consultants and not assessors, in order to insure that the assessment process functions effectively.

Along with credit by examination and the interview, a third widely used assessment method is documentation of experience. It seems that the emphasis on documentation in the assessment process grows from the widespread use of the guidebooks to military experience. The guidebooks make it possible for institutions to locate a detailed description of the subject matter represented in most military education

certificates. The guidebook description usually includes a higher education credit equivalency and a recommended credit award which the college may accept or reject. As a result of this documentation, the content within a certificate can be clearly identified. Although such clearly defined content is often unavailable for other prior learning experiences, the collection of documentation often provides a formal content basis for the assessment process.

Most often the documentation required to assess prior learning involves certificates, course outlines, or a formal description of an experience. Since this form of documentation emphasizes material which is not developed by the student, it can be concluded that a student stands a far better chance of receiving credit if the prior learning experience in question resulted in the award of a certificate of some kind. If a certificate, course outline, description of the experience, or some other form of documentation is not held by the student, or is not available upon the student's request, it is unlikely that the credit will be granted.

Integral to documentation as an assessment method is the practice of portfolio development. Without portfolio development, emphasis on formal documentation may make the assessment of prior learning little more than a paper collecting exercise. Although the student is required to assemble the documentation, few institutions provided a

structured opportunity for the student to identify prior educational outcomes or to provide a statement of educational objectives. As a consequence, the student role in assessment is most often limited to collecting documentation.

Portfolio development is cited as a major step in the assessement of prior learning by both CAEL literature and by Meyer.[3] However, it can be concluded that an emphasis on this practice is absent in the community colleges in Michigan. Presently none of the colleges provide structured or guided experiences which would assist a student in the identification and documentation of what might constitute assessable prior learning. This lack of guidance hampers those students who are unable to effectively identify their learning, relate it to existing college courses, and present it to an expert in the disciplines so that their request will receive necessary consideration.

Although there is a considerable amount of prior learning assessment taking place, the data gathered in this study indicates that much of the assessment now occurring does not reflect the literature related to the assessment of prior learning. Meyer, in Awarding College Credit for Non-College Learning, has identified four possible levels of prior learning for which credit may be granted. These levels are: credit for the life experience itself, credit

---

[3]Meyer, p. 179.

for the skills or competencies developed through the experience, credit for the analysis of the learning gained through the experience, and credit for the analysis or synthesis of discrete bodies of knowledge gained from the same or different experiences.[4] At the present time, none of the colleges studied are awarding credit for prior learning beyond Meyer's second level--skills or competencies developed through the experience. When this factor is considered, along with the lack of portfolio development and the emphasis on credit by examination, documentation and faculty interviews as the major assessment methods, one must conclude that present assessment practices are not particularly unique or innovative.

Student, Faculty, and Administrative Responsibilities

A number of conclusions may be drawn concerning the particular roles of students, faculty members, and administrators in the assessment processes now in operation in Michigan's community and junior colleges.

In relation to student roles, it can be concluded that it is possible for a student, if qualified, to gain up to one-half of the credits needed for an associate degree at most of the colleges which offer an assessment for prior learning option. This credit may be gained inexpensively,

---

[4] Ibid., p. 22.

since few institutions charge both an assessment fee and an examination fee. In fact, some institutions make the option available at no cost. Therefore, for any qualified student, credit for prior learning is definitely available at a low cost.

Although assessment may be inexpensive, students generally bear the major portion of the responsibility for their assessment. In most cases, students are requested by the office in charge of assessment to collect the documentation needed to verify their experiences. Their guidance in this documentation collection process is only what they receive in interviews with the assessment office or a faculty member. In a number of cases, it is also the student's responsibility to identify the courses which most suitably match their prior learning. The eleven community colleges studied neither require the student to participate in an organized portfolio development process nor do they make such an experience available. As a consequence, the package of information for a student's assessment is generally based on the information which the student is able to collect and provide.

Another conclusion which may be drawn is that students usually have to convince a number of people that they are eligible for the assessment process. To accomplish this, at most institutions the student is required to participate in a series of preassessment interviews with faculty

and administrators. If it is necessary for a faculty member to construct a method of measuring and evaluating the student's prior learning, the method used will most likely be an examination which is equivalent to a course or series of courses offered by the college.

For those students who may be interested in using their associate degree as a basis for transfer to a baccalaureate institution, one must conclude that credits gained at a community college as a result of credit for prior learning may be liable for a second assessment by the institution to which the student transfers. Such a conclusion does not mean that the community college credit does not reflect learning which is equivalent to that offered in the regular community college courses. It does mean, however, that the credit accepting institution has the right to reject credits. Since credit for prior learning credit is transcribed at the majority of community colleges with a special notation, one must conclude that this credit will be carefully examined. It is possible that this credit will not be accepted.

A number of conclusions may also be drawn about the faculty role in Michigan's community college prior learning assessment systems. The first conclusion is that the faculty have an integral role in the decision making regarding the amount of prior learning credit to be awarded. This major role for faculty is compatible with their function as subject matter experts. Because of their expertise,

faculty members are usually responsible for measuring and evaluating prior learning. Although the final decision on the amount of credit to be awarded is an administrative one, it is basically the faculty member in a role as subject matter expert who is able to resolve questions which are beyond the knowledge of the administrator who initially reviews the documentation. The study clearly shows that no credit for prior learning system now in effect in Michigan's community colleges could function effectively without the faculty.

A second conclusion is that faculty members are expected to carry out their role as assessors of prior learning with no special remuneration. Only two colleges pay faculty for their work in the assessment of prior learning; the others consider such work to be a faculty obligation. Generally, therefore, faculty are expected to counsel students, conduct preassessment interviews, review documentation, and develop and evaluate assessment devices as their regular duties. Although a system which requests additional work from faculty because of their subject matter expertise, yet provides no additional recognition, saves both the student and the college money, it may not generate the type of commitment and advocacy necessary to make the assessment of prior learning system function effectively.

A major conclusion which can be drawn about the roles played by administrators in prior learning assessment systems is that they serve, for the most part, as facilitators

in the assessment process. At most institutions, an initial administrative interview, plus a review of documentation, determines whether or not a student will either receive credit or be considered for a credit award. When an administrative office is unable to reach a conclusion regarding a possible credit award, the documentation is referred to a faculty member in the particular subject area. The same pattern is widely followed when an assessment is required to measure and evaluate prior learning. Basically, one must conclude that those situations which are beyond the capabilities of the administrator are referred to a faculty member.

One must also note that the degree to which administrators make administrative decisions in the award of credit for prior learning varies greatly among institutions. This variation is a direct result of the role played by faculty in the curriculum development process at each institution. For example, at those institutions where faculty have an active role, very little prior learning credit is given without faculty approval. At other institutions, the administrator with the responsibility for the credit for prior learning assessment system has the flexibility to make all credit awards. At these institutions, faculty assistance is utilized in areas where specific subject matter expertise is needed.

Ultimately, however, one must conclude that the overall role of the administrator in a credit for prior

learning assessment system is to concentrate on maintaining a very careful balance between the issue of student advocacy and the issue of maintaining the integrity of the institution's credit. The majority of the administrators who were interviewed embodied a strong student advocacy position. Yet at the same time, they were aware that the credit for prior learning system could function effectively only with credit which maintained its integrity. In addition, the need for balance is further intensified in that administrators are often the initial contact point for a student seeking credit for prior learning; however, the administrator may be unable to make a decision without the necessary faculty expertise to carry out assessment. Consequently the need for balance is further emphasized.

Organizational Procedures

Several conclusions can be drawn concerning the way in which Michigan's community colleges have organized and staffed the option of credit for prior learning. These conclusions are based upon the institutional publicity concerning prior learning, the staffing patterns followed in implementing assessment systems and the institutional location of assessment of prior learning systems.

Initially, one may conclude that the absence of publicity concerning credit for prior learning reflects a reluctance to become involved with the granting of credit

for prior learning on any large scale basis. During the interviews, a number of colleges indicated that the option of credit for prior learning had existed long before procedures were developed to make the option functional. From this, one could assume that some colleges believe that credit for prior learning is another of the many options a comprehensive community college should include in its catalog.

A second conclusion one may draw is that the organizational structures of the credit for prior learning systems studied are unable to handle large numbers of students who may indicate an interest in assessment for academic credit. The process of granting credit for prior learning demands personal contact in the form of preassessment interviews, review and validation of documentation, and actual assessment interviews or examinations. Therefore, an increase in the number of people who request assessment would create additional work loads, and perhaps the need for additional staff at a time when budget uncertainties predominate.

Although assessment of prior learning makes great demands on time, none of the institutions in the sample have hired additional staff or established a special office to deal with credit for prior learning. Most often the credit for prior learning assessment process is an additional responsibility under the direct control of the registrar.

As such, credit for prior learning is one of many responsibilities of the registrar's office. The same pattern of additional assigned responsibility is generally true in relation to faculty involvement in the assessment process. In most cases, faculty are requested to assess an individual, either through interview, documentation, or written examination, as part of their faculty duties.

Establishing the assessment process as an additional responsibility, without further remuneration for faculty or the expense of extra staff, clearly enables an institution to reduce the costs of what could be a very expensive program. However, eliminating any direct costs does not mean the program will operate free of charge. It may be that an institution's costs in lost or wasted time, and in reduced efficiency in the primary job will outweigh the possible costs of assigning an individual this responsibility, with either released time or additional resources to do the job. None of the institutions were able to provide cost information on the assessment of prior learning option, although several indicated they covered the cost of the paper work involved.

In addition to being an added responsibility, the majority of prior learning systems now in effect in Michigan are operated as a student services function rather than a function of academic affairs. Consequently, the prior learning assessment systems may become entangled in the discussion and debate surrounding the need for counselors,

student activities, and student government. If credit for prior learning is organizationally viewed as a student services program, academic area support may not be substantial.

The fact that relatively few students have utilized the prior learning assessment systems now in existence does not appear to be an issue of great concern to the colleges. In fact, one may conclude that this lack of concern about the numbers of people involved is reflected in credit for prior learning record keeping procedures. Most of the colleges do not maintain cumulative records which tabulate the number of people assessed, the assessment method used, or the size of the credit award. As a result, this information is not always readily available.

A final conclusion which may be drawn is that the size and location of a college is not a factor in the organizational structure of a college's assessment of prior learning system. The institutions in the sample include a cross section of large urban and small rural institutions. Although there is a great range in the size, diversity, and location of the colleges visited, these factors do not appear to have affected the amount of publicity, staff or resources given to a program. It must be concluded that institutional size and location do not affect the organizational patterns used to implement systems for the assessment of prior learning.

Since the assessment of prior learning is usually an added responsibility, with no additional staff, no remuneration for the faculty's role in the process, little publicity, and small numbers of participants, it can be concluded that the effectiveness of such systems is organizationally hindered in the colleges in this study. These factors combine to create a circle which assures credit for prior learning a position of low priority. Clearly publicity should generate interest; however, present systems are not prepared to handle large numbers. As long as the system remains as an additional responsibility, it will not have the capability to handle large numbers, publicity will be unwarranted, and the enrollment will remain small. The small enrollment will justify maintaining the system in its present state and the circle will be continued.

Implications of the Study

Although there is a considerable amount of variation among institutions, the prior learning assessment systems presently in effect in Michigan's public community and junior colleges embody a number of effective assessment developments. Unfortunately, there has been little communication between colleges concerning the development, structure, or operating procedures of their respective systems. In addition, the colleges rarely employ some of the significant assessment factors which are identified in

the literature as crucial to the success of an assessment system.

On the basis of these conclusions, the major implication of this study of community college assessment systems is that there is a need for an assessment of prior learning model which incorporates the literature, unifies present practices, and addresses the problems experienced by existing prior learning assessment systems. Therefore, the foundation for the proposed model is the data which have been gathered in the study, in combination with the concepts identified in the literature concerning the assessment of prior learning.

This assessment of prior learning model is intended to identify those minimum stages which a community college should make available or include in any system which proposes to grant credit by assessing an individual's prior learning. As shown in Figure 1, incorporated in the model are ten basic stages:

(1) Identify an initial contact office
(2) Offer a portfolio development seminar
(3) Require an assessment application
(4) Submit a portfolio
(5) Employ an administrative review
(6) Engage an assessment team review
(7) Administer an assessment device
(8) Notify the student
(9) Request student evaluation
(10) Transcribe the credit

Each of the elements which are included in the model are presented with an accompanying rationale for each element. In essence, the ten components have been included because of their value to the institution in strengthening a certain segment of the assessment process, and because of their value to the student in clarifying student obligations and responsibilities as the assessment process takes place. A participant would not need to complete all of the stages in lockstep fashion, since three of the stages may not be required. However, the model has been designed to provide as comprehensive an approach to the granting of credit for prior learning as possible.

Model for the Assessment of Prior Learning

Initial Contact Office. The study has disclosed a surprisingly low level of publicity regarding credit for prior learning assessment options. Regardless of how an institution may choose to publicize its prior learning credit options, and regardless of how it may choose to assess prior learning, it is necessary for an institution to identify one office as responsible for the assessment process. This office should be accessible to students and should be utilized as the formal contact point for information, application forms, and initial preassessment counseling interviews.

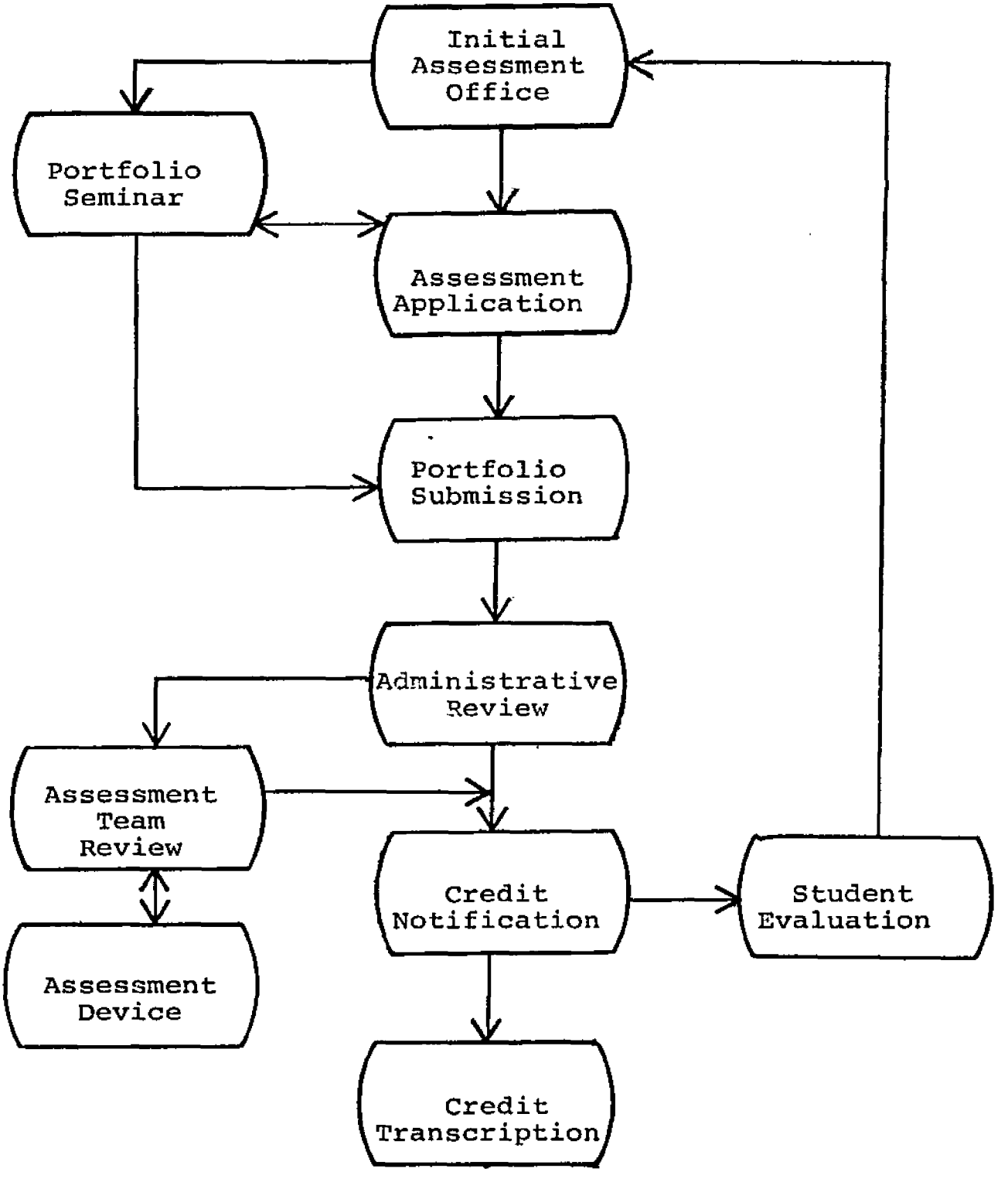


FIGURE 1

A MODEL FOR THE ASSESSMENT OF PRIOR LEARNING

In contrast to a centralized office concept, the assessment systems at the colleges in the study are presently the responsibility of a number of different offices, depending upon the history and institutional structure underlying each program. The individual office most often in direct control of the prior learning assessment system is the registrar's office. However, at some institutions the student may gather information and make an application for assessment through a faculty member or a counselor. Some institutions also require the student to have the approval of a faculty member before requesting assessment.

As a result, there are a number of reasons why it is essential that the institution utilize one specific formal contact point in the operation of its credit for prior learning system. Without a contact point which is recognized college-wide, it is possible that inquiries regarding credit for prior learning will be referred from person to person and from office to office. It is also possible for information from unofficial sources to mislead individuals interested in the assessment of their prior learning. The correct information is particularly important in view of the minimal amount of publicity which is made available about credit for prior learning and assessment options. The information which is provided should be consistent. This consistency is far more possible through a centralized rather than a decentralized contact point.

Through this first step in the model, the college will identify a specific office and a person or persons within the office as the contact points for prior learning assessment information. This step centralizes access to the system, and enables an institution to move toward uniformity of information about what is involved in assessment.

Portfolio Development Seminar. Participation in a portfolio development seminar is not a mandatory step for each individual seeking the assessment of prior learning. Rather, it is an optional process which each institution should provide in order to assist students to identify prior learning and to structure the materials to be used in the assessment of prior learning. Some individuals may choose to bypass such an option, especially if they have a well-developed awareness of those experiences which may have created college level learning. This is particularly true for career military people who usually have had the opportunity to participate in courses, credit examinations, and other learning experiences in the armed services. It may not be true, however, for the small businessman who has had a limited educational background.

Presently none of the colleges in the study sample utilize any form of student-oriented, structured portfolio development experience. Therefore, within an institution, it is quite possible for students to receive different messages regarding what should or should not be included in an assessment portfolio. Although there are certainly some

items, such as educational certificates, which every individual should include in assessment portfolios, there are other items which may be related specifically to the nature of the learning to be assessed. The need for a more effective means of identifying that learning which may be academically creditable was cited by a number of the institutional representatives who were interviewed during the on-site visits. The portfolio development seminar should be structured to develop the material considered most essential for each college's assessment process.

Meyer, in Awarding College Credit for Non-College Learning, and Knapp, in A Guide for Assessing Prior Experience Through Portfolios, stress that the process of portfolio development can be of educational value to the student, since identifying areas where college level learning may exist requires analysis and self-awareness.[5] Such a process also requires the student to organize experiences, gather documentation, and effectively communicate the learning which may be involved. Because of the educational benefits of seminars in portfolio development, some colleges in the United States operate the seminar as a regular course. Through this means, course credit is awarded, the tuition serves as the assessment fee, and the outcome of the course is substance

---

[5]See Meyer, p. 179; and Joan Knapp, A Guide for Assessing Prior Experiences Through Portfolios (Princeton, New Jersey: Educational Testing Service, 1975), p. 20.

for the assessment which is to take place.

In this model, which is designed specifically to meet the needs of prior learning assessment systems in community colleges, a portfolio development option is particularly important. Since most community college students work and live away from campus, they may not have the opportunity to benefit from interaction with other students who are also requesting an assessment of their prior learning. In addition they may not have the time to search out the most effective portfolio contents. Therefore, the option to participate in an organized experience which discusses means of identifying, documenting, and presenting prior learning can be especially advantageous to students in the assessment process.

Assessment Application. Once an office has been administratively established, a student who wishes to have prior learning assessed to determine its academic credit value will be required to officially initiate the assessment process through the completion of an application for assessment. The application will be obtained from and submitted to the specific assessment office as identified in the first step of the model. If an assessment fee is required by the institution, the fee will be rendered at this point.

The present practices of the eleven Michigan colleges in the study sample vary greatly in the use of an assessment

application or an assessment request form. Although only a few colleges charge an assessment fee, several colleges have developed multi-carbon forms which provide a record of the student's name, the request, and the result of the assessment. Other colleges ask the student to develop a letter requesting the assessment of prior learning. Still others do not require an initial assessment application. Instead they meet their record keeping needs through a form which presents the results of the assessment. The forms examined in the study function simply as request forms or record keeping instruments. They do not provide vital information for the student about the documentation which may be required and the assessment devices which may be used.

The model proposes the use of a form for several reasons. One reason is that a form serves several institutional purposes. It provides both a means of record keeping and an audit trail for future questions about fees and credits. It also provides the institution with the opportunity to specify the conditions and requirements of that particular institution's assessment process to the student involved. If a portfolio, documentation, statement of educational goals, and identification of possible course equivalencies is required, the application blank may provide explanatory information on how to develop these items.

This step in the model is most valuable since it provides a method for the college to formally record its assessment processes and decisions. This is important,

since a number of institutions commented upon the lack of clarity in those institutional procedures which related to the assessment process. As a result of this assessment application step, both the college and the student should be aware of future requirements in the assessment of prior learning model. In addition, when the assessment process is completed, there will be a formal record of the decision which was made.

Portfolio Submission. Once an assessment application has been submitted, the next stage in the process is the submission of a portfolio. As was noted earlier, none of the colleges in the sample required that a portfolio be developed by the student. However, the submission of a portfolio is an extremely important element in the assessment model. It is important to stress that although a portfolio contains documentation, it is more than just documentation.

Knapp points out that the development of a portfolio is a vehicle which translates prior experiences into a manageable form for assessment.[6] Through the portfolio development process, documentation may be collected. However, it is likely that the portfolio will also include a resume, an autobiographical sketch, a statement of the individual's educational goals, and an identification of prior learning experiences and competencies.

---

[5]Knapp, p. 2.

Presently what the colleges in the study most often request from students is documentation. This documentation is usually in the form of certificates awarded for the completion of an experience, paycheck stubs as proof of employment, and descriptions of courses or programs in which the student may have enrolled. However, this material may not reflect the student's competencies, or the student's educational goals. It may also have been collected without specific guidance as to what may or may not be valuable. For example, stories about individuals with hundreds of pages of "documentation" are not uncommon.

As is the case with the assessment application forms, institutional practices vary in relation to the amount of information which is provided to the student about what should be included as documentation. At this time, it appears that there is a great deal of flexibility in documentation requirements, from student to student within the college and between assessment programs at the various institutions.

Participation in the portfolio development seminar, as discussed in the second step of the model, is not mandatory before an individual submits an acceptable portfolio. However, the portfolio course provides a student with a number of options. The student may wish to take the seminar to see if there is a possibility of academically creditable prior learning in his background. If the seminar identifies little of academic value, the student need not commit himself to the assessment process.

If, however, there appears to be a possibility of prior learning credit, the student may submit the application for assessment and the portfolio. If the student bypasses the portfolio development seminar, he or she will still be able to submit a portfolio on the basis of the directions in the application for assessment form. This route may be chosen by those who feel they have an adequate understanding of what may or may not be assessable for credit.

Regardless of whether or not one chooses the seminar, the student's portfolio will provide an organized and structured package of evidence upon which an objective judgment may be made. Through a portfolio, a great deal of the personal subjectivity found in interviews is eliminated and replaced with a means by which one may consider objectively a student's prior learning on the basis of the information available. The submission of a portfolio will also provide the college with a substantial basis for future assessment decisions. As a result of this step in the model, both the college and the student will have an objective package from which an initial assessment decision can be made.

Administrative Review. Once a portfolio has been submitted to the office which is responsible for the assessment process, it will be initially reviewed by the administrative staff. This review will determine whether a credit award can be made on the basis of the material in the

portfolio. Where credit awards are possible, either as a result of institutional policy or as a result of acceptable documentation, the award will be recorded. Those items which are not assessable at an administrative level will be identified for further analysis by a faculty member or an assessment committee.

An analysis of the present practices in Michigan's community colleges indicates that those eleven colleges with a prior learning assessment system all conduct an administrative review of the documentation submitted by the student. However, among the colleges in the study, substantial differences exist in the degree to which this procedure is carried out. Some assessment offices automatically send the documentation to the faculty for review; others may call upon faculty for assistance only in those cases where subject matter expertise is needed. At some colleges, the assessment office requests the faculty to develop an assessment instrument so that a final decision can be reached. At other colleges, the student is directed to request a faculty member to develop an assessment instrument. Overall, present practices reflect a wide range of procedures in the assessment step referred to as administrative review.

The inclusion of this clearly defined step in a college's assessment system will greatly facilitate the total assessment process. Both the literature and the results of the study show that there is a great deal of

material which can be assessed administratively. For example, documentation in a student's portfolio can be checked against the educational sources covered by the Guide, the American Council on Education's guidebook to military educational programs, and the business and industry sources contained in the University of New York's Guide to Noncollegiate Educational Experiences. Since prior learning which has resulted from military experience along with business and industrial training make up a substantial amount of the credit awarded, it may never be necessary to refer the portfolio to an assessment team for further review.

However, if the guidebooks suggest that an institution award credit only upon the successful completion of an examination, the material will then be referred to the next step in the model--the assessment team review. By initially screening and assessing the contents of a student's portfolio, faculty involvement in the initial review process can be minimized. In order for faculty to serve effectively in their role as subject matter experts, it is wise to reduce faculty burden by administratively completing whatever assessment review is possible before submitting a portfolio to a more detailed assessment examination.

Assessment Team Review. If the administrative review of the portfolio is unable to determine the credit value of certain experiences or of specific types of learning, the assessment office will submit the portfolio to review by an

assessment team. This step in the model is designed to provide a means of organizing and applying the institution's expertise in the assessment process. If all assessment decisions could be made administratively, this stage of the model would not be needed. However, such a situation is highly unlikely, since the prior learning experiences of those requesting assessment are often extremely diverse. Because of this diversity, the expertise of the faculty is often required in order to make an assessment decision.

At the present time, assessment team review is a practice in only four of the eleven institutions. The other institutions in the study refer material to be assessed to individual faculty members. Often the material was routed to the department chairperson, who then delegated the responsibility for the assessment review to the faculty member who was believed to be the most capable person in that particular discipline. In present practice, the degree to which the faculty assessors are controlled or coordinated by the assessment office varies widely from college to college. For example, at some colleges the office responsible for the assessment did not have designated faculty contacts. As a result, it is possible that the faculty member who finally accepted the assessment task may not have been the best choice. At other institutions, the office responsible for the assessment assigned the assessment to a chosen faculty member.

An assessment team approach was chosen as an essential stage of the model for several reasons. The use of a committee in the assessment process is stressed by Meyer as a vital means of guaranteeing objectivity and eliminating bias.[7] A second reason for the use of an assessment team is that a team, constituted as the college wishes, provides an element of balance in the assessment process which is not available through individual assessment. A team approach to the assessment process also establishes a degree of formality and consistency--two factors which were occasionally absent in existing assessment systems.

In making its decision, the assessment team may apply its expertise to one of three options. The first option is to award credit upon the basis of the information in the portfolio. As a second option, the team may decide that a credit award is not justified on the basis of the information in the portfolio. With either of these decisions, the portfolio should be transferred back to the assessment office so that the student can be notified of the action.

As the third option, the assessment team may decide that additional assessment information is needed. If this decision is made, the further information may be gained through a number of assessment methods, ranging from a request to see samples of work, to a request that a student complete a measurement instrument in a specific subject area. At

---

[7]Meyer, p. 180.

this point, the team should specify further steps to be taken by the college and the student in the assessment process.

Whatever decision is made, the assessment team will reach its decision based upon the information provided by the student in the portfolio. The inclusion of this step in the model will eliminate subjectivity in decision making and will provide a clear rationale for the need for further assessment.

Completion of An Assessment Device. If the assessment team decides that further assessment is necessary, it will identify the source and kind of assessment which will most effectively measure and evaluate the learning held by the student. The purpose and objective of this assessment and the level of results needed in order for credit to be given will be established before the assessment takes place. If an instrument, such as a laboratory experiment or an essay examination is to be developed, the assessment team will make the necessary arrangements with those responsible for developing the examination. In contrast to some of the present practices, the student is not expected to identify a faculty member or arrange a time and place for the examination. At this point, the development of the assessment instrument and the necessary arrangements, including evaluation, will be carried out by the assessment team.

As has been pointed out, the colleges presently assessing prior learning rely heavily upon the assessment devices of documentation, faculty and administrator interviews, and traditional credit by examination methods. The use of simulation exercises, performance or product evaluation, oral examinations, expert judgments, and other forms of assessment which have been recognized as effective means of assessing prior learning are infrequently used.

Willingham has noted that the factors of reliability and validity are often not present in the assessment of prior learning.[8] The involvement of the assessment team in the development of a criterion referenced instrument in those cases where an instrument is necessary is one means of including reliability and validity in a college's assessment process. When the assessment of prior learning is conducted individually by a number of different faculty members, it is possible that similar prior learning would be assessed quite differently. However, the literature strongly emphasizes the need for assessment which is competency based or criterion referenced. It is clear that the assessment team's agreement upon the means of assessment, the learning to be assessed, and the outcome required for a credit award will strengthen the assessment process and the value of the assessed credits.

---

[8]Willingham, p. 43.

Notification of Credit Award. The student who may have paid an initial assessment fee along with additional fees for the assessment described above, must be notified by the assessment office of their decision in the award of prior learning credit. The notification must be in writing and will be accompanied by a statement which specifies the basis for granting or not granting credit. This statement of notification will provide a duplicate copy which is needed for institutional record keeping. It will also clearly indicate the steps taken in the disposition of the student's application for the assessment of prior learning.

Presently institutional practice in the area of student notification varies widely. Those institutions which have developed assessment request forms or credit by examination request forms have a means of notifying students of the credit which was awarded. However, most institutions have not developed a complete package of record keeping devices to cover the students who are assessed or those who participate in credit by examination. As a result, the type of notification given to the student varies from college to college.

Although the forms needed for good record keeping may be criticized as unnecessary paperwork, such internal record keeping serves several valuable purposes. Initially it provides a means of collecting data on the assessment process. For example, basic data on the number and source

of students assessed, courses granted assessed credit most often, and elapsed time from application for assessment to completion of assessment can be valuable in adjusting and improving the system. A second reason in support of the value of such record keeping is that it provides the answers for student inquiries and permits the college to identify and eliminate loose ends. Therefore, student notification and record keeping are important elements in the model.

Student Evaluation of Assessment Process. At the same time that the student is notified of the college's decision regarding the award of credit for prior learning, the student will be asked to complete and return a brief questionnaire designed to evaluate the institution's credit for prior learning system. The questionnaire, which will elicit responses on the system's processes and upon its ability to help students reach their goals, will be returned to the assessment office where its information will be used in the development of changes which may be called for in the system.

At this time, none of the institutions visited utilized any form of evaluation of their credit for prior learning systems. Consequently, students who may have either indicated an interest in being assessed, or who may have been assessed, have little or no formal opportunity to respond regarding the assessment process. Any evaluative comments now made are unsolicited.

The completion of an evaluation form may also be criticized as another piece of unnecessary paper work. However, it is especially important that a college receive evaluative feedback from students who undergo the assessment of prior learning. It has been pointed out that these students may be older, more experienced, and may be approaching the college with clearly perceived educational goals. If a credit for prior learning system is to help a student reach those goals, evaluative feedback on the processes and procedures used by the college will be helpful in making necessary program modifications and in evaluating the success of the prior learning concept.

Transcription of Credit. Once the student has been notified of the credit award, the college will record the credits upon the student's transcript. All credit awarded will either be equated to specific institutional courses or will be recorded as general credit electives in specific disciplines. In other words, the student's transcript will indicate credit as equivalent to specific courses or as specific discipline electives. Credit awarded through the assessment of prior learning will have an explanatory notation attached which points out the manner in which the credit was earned.

Very few of the colleges in the study transcripted credit earned through the assessment of prior learning as blocks of credit. Instead, whenever possible, the institution attempted to translate the credit awarded into that

institution's course equivalencies. Those colleges which did grant blocks of credit usually granted such credit as "general credit - technical," to be applied to the elective requirement in an Associate in Technical Studies degree. A majority of the colleges used some form of special notation to indicate that the credit represented learning gained either through work or life experience, or through credit by examination. All of the colleges indicated that they informed students of the possible difficulties which could occur in an attempt to transfer the credit for prior learning to a baccalaureate degree institution.

Since the student may wish to apply the credits gained through assessment of prior learning to a college certificate or to an associate degree, it is important that the college be as specific as possible in transcribing such credits. Specific equivalencies allow the student to identify those degree requirements which have been met and which need to be met. Specific equivalencies also allow the student to identify those areas where further competencies need to be developed. If the student does ultimately decide to transfer, the more specifically the credits are identified, the greater the possibility is that they will be accepted. Ultimately, the process of transcribing the credits awarded is an integral part of the credit for prior learning assessment model.

Implications for Further Research

There are a number of implications for further study which have resulted from this research. One of the most valuable areas for further research would focus upon an analysis of the barriers involved in the implementation of a community college prior learning assessment system. Such a study should identify the major areas of conflict to be expected in the implementation of such a program. A study of the obstacles to implementing a credit for prior learning assessment process should also identify the organizational structure most likely to be effective in such a system. From this study, it would be possible to develop sound implementation strategies for credit for prior learning systems.

Additional study should be made to identify faculty attitudes and perceptions about credit for prior learning. Faculty perception of strengths, weaknesses, assessment methods and organizational processes would provide valuable information for the development of future programs. A related study to provide an in-depth examination of the faculty role in assessment systems across the country--in large, small, public, and private institutions--would also provide valuable information on the status and potential of credit for prior learning assessment systems.

A third area for study should concentrate on the evaluation of credit for prior learning systems. Although the literature concerning these systems is highly favorable,

it appears that this type of college credit option has never been evaluated. An evaluative study to determine the impact of such programs within institutions would be of importance, as would a study to determine whether or not such programs do achieve the objectives of expanded access and increased diversity.

A final area for further study would focus upon those students who use a credit for prior learning option. This study should attempt to identify a comprehensive student profile of those students who utilize the assessment of prior learning option in community colleges, both in Michigan and nationally. As colleges develop or revise their prior learning assessment systems, data concerning student age, occupation, background and educational goals would be extremely helpful. From this information, more effective and far reaching programs would be developed.

Reflections

The results of this study have clearly indicated that there is considerable interest in the process of granting credit for prior learning. In addition to the eleven community colleges included in the study, the survey identified two other colleges which had begun development of credit for prior learning assessment systems to be implemented during the 1976-77 academic year.

Unfortunately, the interest expressed by various institutions is often subject to the limits of available

time and resources. Interest and sometimes implementation is further hampered by the absence of any unifying factors which would enhance communication and the exchange of ideas on the subject of credit for prior learning in Michigan's community colleges. What is needed is a shared awareness and understanding of alternatives and possible solutions in the assessment of prior learning. At the present time, this need is not met for Michigan's community colleges.

The considerable amount of community college interest in this subject, in addition to the number of programs now in operation, reflects a facet of community college services which has not been thoroughly explored. It is hoped that the results of this study will be of some assistance in providing for the exchange of ideas between and among community colleges with programs in this area. It is also hoped that additional work will take place to further nurture this communications process.

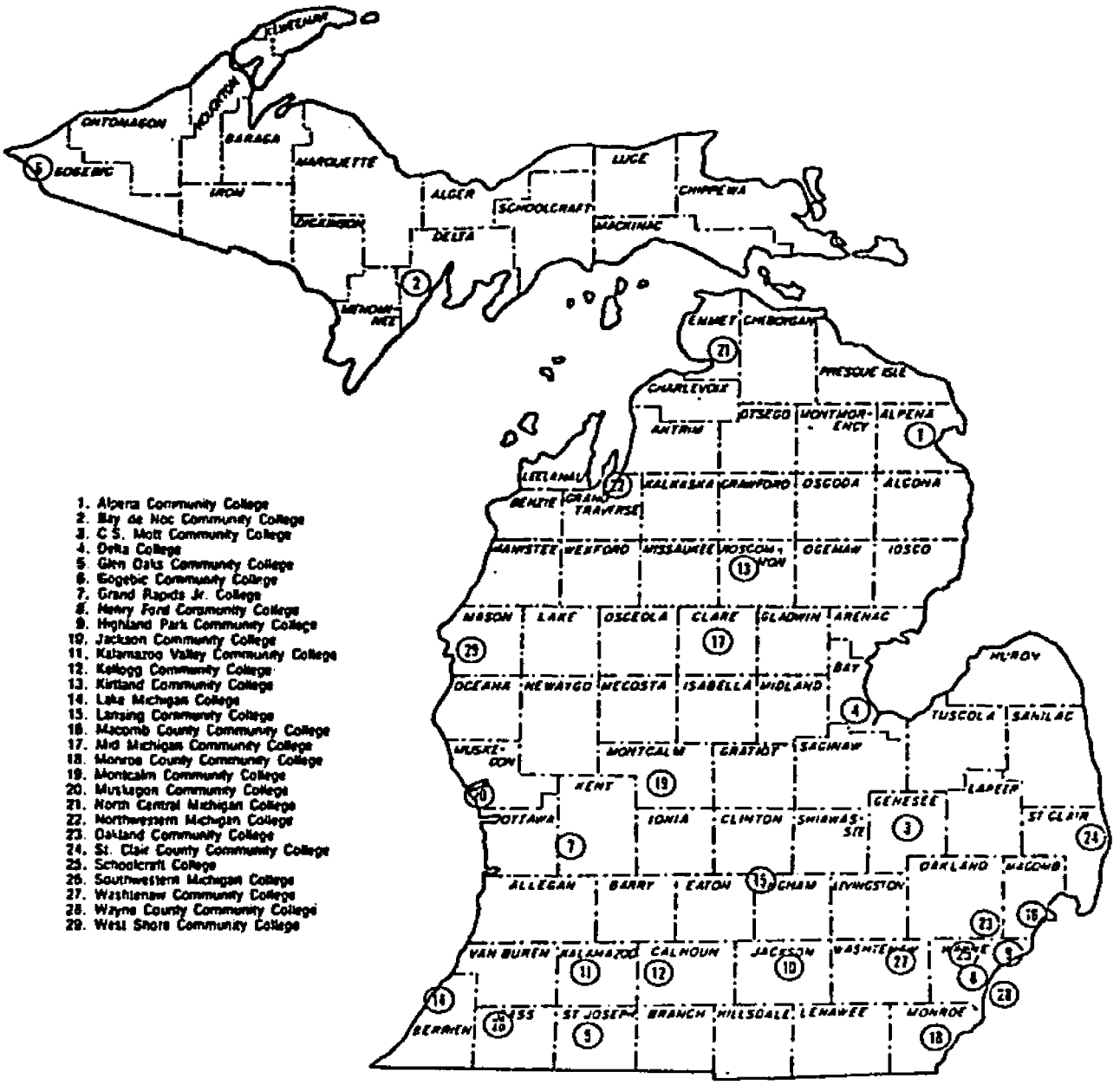
APPENDICES

APPENDIX A:

LOCATIONS OF MICHIGAN'S COMMUNITY AND JUNIOR COLLEGES

APPENDIX A:

LOCATIONS OF MICHIGAN'S COMMUNITY
AND JUNIOR COLLEGES



APPENDIX B:

STAGE I TELEPHONE SURVEY

APPENDIX B:

STAGE I TELEPHONE SURVEY

College _____ Date ___/___/_____

Person _____ Title _____

Phone No. _____ Time _____ Call back time _____

Phone interview successfully completed? Yes _____ No _____

	YES	NO
1. Do you grant credit for CLEP?	____	____
2. Do you grant credit for Advanced Placement?	____	____
3. Does your institution have a policy or practice of challenge examinations for specific courses?	____	____
4. Does your institution grant credit for certificates, such as a Certified Public Secretary (CPS) or a journeyman's card?	____	____
5. Does your institution grant credit on the basis of unaccredited but formal programs of learning, such as on-the-job training, educational programs in industry or business, proprietary school education, correspondence school courses, etc.?	____	____

	YES	NO
6. Does your institution grant credit based on an individual's work experience?	____	____
7. Does your institution grant credit to a person based on the person's previous life experience?	____	____
8. Does your institution utilize a formal and organized process of assessment before credit is awarded for prior learning?	____	____
9. Does your institution have a statement of policy with accompanying guidelines for granting credit for prior learning?	____	____
10. Has your institution established an office or identified one or more individuals as responsible for assessing experience or granting credit on the basis of experience?	____	____

COMMENTS:

APPENDIX C:

SAMPLE LETTER OF VERIFICATION

APPENDIX D:

CREDIT FOR PRIOR LEARNING TERMS

APPENDIX D:

CREDIT FOR PRIOR LEARNING TERMS

Objectives:

1. To identify those Michigan community and junior colleges which have in operation the basic elements of a system of granting academic credit for prior learning;

2. To identify the organizational processes and procedures used by community colleges in order to provide credit for prior learning; and

3. To determine which assessment methods are used in the award of credit

Terminology:

1. Prior experiential learning - learning which has occurred outside the classroom before an individual has matriculated in an institution of higher education

2. Challenge examinations - an institutional process in which a student is allowed to "challenge" a course. The student takes only the examination for a course and receives credit for that course if the examination score meets the instructor's, the department's, or the college's pre-established level

3. Assessment of prior learning - the process of determining the verifiable learning outcomes of experience and translating those outcomes into an academic credit equivalency. This process is often not standardized from institution to institution or from student to student.

4. Product assessment - the process of determining the college credit equivalency of an individual's prior learning by evaluating a product, such as an art work, a composition, or a machine tool, produced by the individual as a result of that learning.

5. Competency (proficiency) based evaluation - the process of determining whether an individual possesses the skills and proficiencies equivalent to the competencies developed or required for the successful completion of an academic course.

APPENDIX E:

STAGE II ON-SITE INTERVIEW INSTRUMENT

APPENDIX E:

STAGE II ON-SITE INTERVIEW INSTRUMENT

College _____ Person _____ Position _____
Date _____ Time _____

Armed Services Experiences	Location Assessed Credit Available	Assessment Methods
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

Proprietary and Correspondence Experiences	Location Assessed Credit Available	Assessment Methods
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

Business and Industrial Training	Location Assessed Credit Available	Assessment Methods
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

Work Experience	Location Assessed Credit Available	Assessment Methods
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

Community Service	Location Assessed Credit Available	Assessment Methods
1.		
2.		
3.		
4.		

Other	Location Assessed Credit Available	Assessment Methods
1.		
2.		
3.		
4.		

APPENDIX F:

STAGE II ORGANIZATIONAL PROCEDURES

INTERVIEW GUIDE

APPENDIX F:

STAGE II ORGANIZATIONAL PROCEDURES

INTERVIEW GUIDE

1. Student's role

   a. Which office must the student contact?

   b. Student role in documentation?

   c. Counseling, interviews, portfolio?

2. Faculty role

   a. Are faculty involved as assessors or evaluators?

   b. Is there a system?

   c. Do faculty develop the assessment tools?

   d. Are faculty reimbursed--is it part of their credit load?

3. Costs of assessment

   a. Are students charged a fee for each assessed or exam credit?

   b. Is there an assessment fee?

   c. Is there special assessment exam charge or rate?

4. Credits procedures

   a. How many credits are possible?

   b. How are credits transcripted?

   c. Which office is responsible for supervising the process?

   d. How many students per year?

      0-20 20-40 40-60 60-100 100+

   e. How many credits per year?

      0-60 60-120 120-180 180-300 300+

   f. Any problems in credit transfer?

5. PR of any kind?

APPENDIX G:

CHECKLIST OF ASSESSMENT METHODS

APPENDIX G:

CHECKLIST OF ASSESSMENT METHODS

1. Objective test
2. Essay test
3. Proficiency examination
4. Oral examination
5. Documentation - possession of certificate
6. Self-assessment
7. Administrative assessment
8. Supervisory assessment
9. Performance assessment
10. Product assessment
11. Faculty interview
12. Departmental/divisional assessment team
13. Simulation
14. Portfolio
15. Testimony from external source (expert judgment)

LIST OF WORKS CONSULTED

LIST OF WORKS CONSULTED

Arnstett, Robert R. "The Regent's External Degree Program and Its Graduates." College and University 49 (Winter 1974): 154-161.

Arbolino, Jack N. "A Plan for External Degrees." In New Teaching, New Learning: Current Issues in Higher Education 1971, pp. 65-69. Edited by G. Kerry Smith. San Francisco: Jossey-Bass Publishers, 1971.

Arbolino, Jack N. and Valley, John R. "Education: The Institution or the Individual." Continuing Education 3 (October 1970): 6-55.

Bailey, Stephen K. "Flexible Time-Space Programs: A Plea for Caution." In The Expanded Campus, pp. 172-176. Edited by Dyckman W. Vermilye. San Francisco: Jossey-Bass Publishers, 1972.

Benoit, Richard P. "Alternative Programs for Higher Education: External and Special Degrees." Intellect (April 1973): 422-425.

Bettinson, Charles. "External Delivery Systems Report: Expanded Access Through Credit for Prior Learning." University Center, Michigan: Delta College, 1975. (Mimeographed.)

Bowen, Howard R. "Time, Informal Learning, and Efficiency in Higher Education." Educational Record 54 (Fall 1973): 271-281.

Boyer, Ernest L. "Neither Transfer nor Terminal: The Next Step for Two Year Colleges." Intellect 101 (November 1972): 110-112.

Boyer, Ernest L. and Keller, George C. "The Big Move to Non-Campus Colleges." Saturday Review (17 July 1971): 46-49.

Brown, James D., Jr. "New Jersey: Thomas A. Edison College." In Exploring the External Degree. Seattle, Washington: University of Washington, May 1973.

Burnette, Richard R. "Here's How: Developing and Implementing Credit by Exam." College Board Review 81 (Fall 1971): 26-28.

CAEL Project Status Report: March, 1976. Princeton, New Jersey: Educational Testing Service, 1976.

Caldwell, Edward. "Analysis of an Innovation." Journal of Higher Education 44 (December 1973): 698-702.

Cannon, Harold C. "The Portfolio System: An Individualized Approach to Degree Requirements." In Let the Entire Community Become Our University, pp. 95-98. Edited by Phillip C. Ritterbush. Washington: Acropolis Books, Ltd., 1972.

Carnegie Commission on the Future of Higher Education. The Open Door Colleges: Policies for Community Colleges. A Special Report and Recommendations by the Carnegie Commission on Higher Education. New York: McGraw Hill, 1970.

Carnegie Commission on Higher Education. Less Time, More Options: Beyond the High School. New York: McGraw-Hill, 1971.

Carnegie Commission on Higher Education. New Students and New Places: Policies for the Future Growth and Development of American Higher Education. New York: McGraw-Hill, 1971.

Carnegie Corporation of New York. "There's More Than One Way to Earn a College Degree." Carnegie Quarterly 23 (Fall 1975): 1-7.

Casserly, Patricia Lund. College Level Examination Program: Its Meaning to Participants. Project Report PR 73-5. Princeton, New Jersey: Educational Testing Service, April 1973. ED 078 022.

Chickering, Arthur W. "Policies and Procedures for Granting Advanced Standing." State University of New York. Saratoga Springs, New York: Empire State College, May 1973. ED 078 805.

Christ-Janer, Arland F. "Credit by Examinations." In Current Issues in Higher Education, Vol. 27 (1972): 160-171.

Coleman, James A. "The Hopkins Games Program: Conclusions from Seven Years of Research." Educational Researcher 2 (August 1973): 3-7.

Commission on Nontraditional Study. Diversity by Design. San Francisco: Jossey-Bass Publishers, 1973.

A Compendium of Assessment Techniques. CAEL Working Paper No. 2. Princeton, New Jersey: Cooperative Assessment of Experiential Learning, September 1974.

Connick, George P. "Cooperative Approach." In Lifelong Learners--A New Clientele for Higher Education, pp. 71-75. Edited by Dyckman W. Vermilye. San Francisco: Jossey-Bass Publishers, 1974.

Credit for Life and Work Experience. Chicago: YMCA of Metro Chicago. Career Options Research and Development (CORD), September 1971. ED 057 744.

Cross, K. Patricia. "The External Degree." In Exploring the External Degree - Conference Report, pp. 33-52. Washington State Council on Higher Education, May 1973. ED 095 787.

Cross, K. Patricia and Jones, Quentin J. "Problems of Access." In Explorations in Nontraditional Study, pp. 40-61. Edited by Samuel P. Gould and K. Patricia Cross. San Francisco: Jossey-Bass Publishers, 1972.

Cross, K. Patricia, Valley, John R. and associates. Planning Nontraditional Programs. San Francisco: Jossey-Bass Publishers, 1974.

Culbertson, David J. "Corporate Role in Lifelong Learning." In Lifelong Learners--A New Clientele for Higher Education, pp. 29-33. Edited by Dyckman W. Vermilye. San Francisco: Jossey-Bass Publishers, 1974.

Davis, Charles, ed. The 1,000 Mile Campus. Los Angeles: California State Universities and Colleges, 1972.

Delta College. "Articulation Agreement between Dow Chemical Corporation and Delta College." University Center, Michigan, 1975. (Mimeographed)

Dennis, Laurence E. "The Other End of Sesame Street." In New Teaching, New Learning: Current Issues in Higher Education 1971, pp. 57-64. Edited by G. Kerry Smith. San Francisco: Jossey-Bass Publishers, 1971.

Doran, Bernadette. "The External Degree Program: Credits Without Classes." College and University Business 51 (October 1971): 58-64.

Drenovsky, Richard et al. "Advanced Placement Policies and Practices of Higher Educational Institutions in Michigan." Report of the MACRAO Articulation Committee, June 1975. (Mimeographed.)

Dumke, Glenn S. "Innovation: Priority of the '70's." In The 1,000 Mile Campus, pp. 5-10. Edited by Charles Davis. Los Angeles: California State Universities and Colleges, 1972.

Empire State College. The Nonresidential College of the State University of New York. Bulletin 1971-72. Saratoga Springs, New York: State University of New York, 1971.

Enger, John M. and Whitney, Douglas R. "CLEP Credit and Graduation: A Four Year Study of the University of Iowa." College and University 49 (Spring 1974): 236-241.

"Enrollments of Michigan's Colleges and Universities." Lansing, Michigan: Higher Education Management Services, Michigan Department of Education, 1975. (Mimeographed.)

Exploring the External Degree - Conference Report. Seattle, Washington: Washington State Council on Higher Education, May 1973. ED 095 787.

Fagin, Margaret C. "CLEP Credit Encourages Adults to Seek Degrees." College Board Review 81 (Fall 1971): 18-22.

Forrest, Aubrey. A Student Handbook on Preparing a Portfolio for the Assessment of Prior Experiential Learning. CAEL Working Paper No. 7. Princeton, New Jersey: Educational Testing Service, 1975.

Furness, W. Todd. Degrees for Nontraditional Students: An Approach to New Models. Washington: American Council on Education, April 1971. ED 054 745.

Ganzemiller, Jack A. An Investigation of Various Methods Used in Awarding Academic Credit for Non-Traditional Learning Experiences. Menominee, Wisconsin: University of Wisconsin-Stout, June 1973. ED 097 830.

Gibbs, O. B. and Lee, Herman C. "College Without Walls: The Status of Nontraditional Learning in California Community Colleges." College and University 49 (Spring 1974): 267-275.

Godwin, Winfred L. and Mann, Peter B., eds. Higher Education: Myths, Realities, and Possibilities. Atlanta, Georgia: Southern Regional Educational Board, 1972.

Goldman, Phyllis A. CLEP--Is it Alive, Well and Living in California? A Survey of CLEP Acceptance and Use in California Colleges. San Pablo, California: Contra Costa College, April 1974. ED 089 809.

Gould, Samuel B. "Less Talk, More Action." In The Expanded Campus, pp. 177-187. Edited by Dyckman W. Vermilye. San Francisco: Jossey-Bass Publishers, 1972.

_____. "New Arrangements for Learning." In Higher Education: Myths, Realities, and Possibilities, pp. 87-96. Atlanta, Georgia: Southern Regional Educational Board, 1972.

_____. "Prospects for Nontraditional Study." In Explorations in Nontraditional Study, pp. 1-11. Edited by Samuel B. Gould and K. Patricia Cross. San Francisco: Jossey-Bass Publishers, 1972.

_____ and Cross, K. Patricia, eds. Explorations in Nontraditional Study. San Francisco: Jossey-Bass Publishers, 1972.

Greenberg, Elinor. "Colorado: University Without Walls." In Exploring the External Degree - Conference Report, pp. 99-104. Seattle, Washington: Washington State Council on Higher Education, May 1973.

A Guide to Educational Programs in Noncollegiate Organizations. Albany, New York: Office on Noncollegiate Sponsored Instruction, The University of the State of New York, 1976.

Hartnett, Rodney T. "Nontraditional Study--An Overview." In Explorations in Nontraditional Study, pp. 15-32. Edited by Samuel B. Gould and K. Patricia Cross. San Francisco: Jossey-Bass Publishers, 1972.

Hedrick, James A. "College Credit by Examination." Journal of Higher Education 31 (April 1960): 212-214.

Hefferlin, J. B. Lon. "Avoiding Cut Rate Credits and Discount Degrees." In Planning Nontraditional Programs, pp. 148-173. Edited by K. Patricia Cross and John R. Valley. San Francisco: Jossey-Bass Publishers, 1974.

Heffernan, James M. "The Credibility of the Credit Hour: The History, Use and Shortcomings of the Credit System." Journal of Higher Education 44 (January 1973): 61-72.

Hodgkinson, Harold L. "Regional Examining Institutes." In Lifelong Learners--A New Clientele for Higher Education, pp. 97-102. Edited by Dyckman W. Vermilye. San Francisco: Jossey-Bass Publishers, 1974.

Houle, Cyril O. The External Degree. San Francisco: Jossey-Bass Publishers, 1973.

_____. Major Trends in Higher Adult Education. Chicago: Center for the Study of Liberal Education for Adults, March 1959.

_____. "The Student Population for an External Degree." In Exploring the External Degree - Conference Report. Seattle, Washington: Washington State Council on Higher Education, May 1973. ED 095 787.

_____ and Nelson, Charles A. The University, The Citizen and World Affairs. Washington: American Council on Education, 1956.

"Issue Paper on the External Degree Program." Lansing, Michigan: Michigan State Board of Education, 1973. (Mimeographed.)

Jacobson, Robert L. "Southern Accrediting Unit Sets Standards for Off-Campus Degree Programs." The Chronicle of Higher Education 6 (December 6, 1971): 1, 5.

Johnstone, J. W. C. and Rivera, R. J. Volunteers for Learning. Chicago: Aldine, 1965.

Keeton, Morris. "Dilemmas in Accrediting Off Campus Learning." In The Expanded Campus, pp. 139-148. Edited by Dyckman W. Vermilye. San Francisco: Jossey-Bass Publishers, 1972.

Kimmel, Ernest W. "Problems of Recognition." In Explorations in Nontraditional Study, pp. 66-91. Edited by Samuel B. Gould and K. Patricia Cross. San Francisco: Jossey-Bass Publishers, 1972.

Knapp, Joan. A Guide for Assessing Prior Experience Through Portfolios. CAEL Working Paper No. 6. Princeton, New Jersey: Educational Testing Service, 1975.

Kray, Eugene J. and Wyman, Bruce T. Policies, Procedures and Politics Effecting Experiential Learning. Ed. D. Practicum, Nova University, 1975. ED 103 080.

Kreplin, Hannah. Credit by Examination: A Review and Analysis of the Literature. Berkeley, California: University of California, July 1971. ED 064 616.

The Lifelong University: A Report to the President. Task Force on Lifelong Education. East Lansing, Michigan: Michigan State University, 1973.

MacKenzie, Ossian, Christiansen, Edward L., and Rigby, Paul H. Correspondence Instruction in the United States. New York: McGraw-Hill, 1968.

MacLure, Stuart. "England's Open University: Revolution at Milton Keynes." Change 3 (March - April 1971): 62-68.

Magarrell, Jack. "New 'Competency-Based' Education Plans Let Students Find Own Way to Goals." The Chronicle of Higher Education, 18 March 1974, pp. 3-4.

Marien, Michael. Beyond the Carnegie Commission: A Policy Study Guide to Space/Time/Credit Preference Higher Learning. Syracuse, New York: Educational Policy Research Center, 1972.

Martinko, Agnes. "Nontraditional Innovations in Higher Education Classified by Mode of Operation." Harrisburg, Pennsylvania: Pennsylvania State Department of Education, 1972. ED 069 217.

Mayeske, Betty Jo. "Open University in America." In Lifelong Learners - A New Clientele for Higher Education, pp. 76-81. Edited by Dyckman W. Vermilye. San Francisco: Jossey-Bass Publishers, 1974.

Mayhew, Lewis B. "External Degrees - The Views of a Skeptic." In The 1,000 Mile Campus, pp. 40-42. Edited by Charles Davis. Los Angeles: California State Universities and Colleges, 1972.

McGrath, Thomas H. "A Commission and Its Work." In The 1,000 Mile Campus, pp. 46-50. Edited by Charles Davis. Los Angeles: California State Universities and Colleges, 1972.

Meyer, Peter. Awarding College Credit for Non-College Learning. San Francisco: Jossey-Bass Publishers, 1975.

Miller, Jerry W. "Credit for Nontraditional Education: A Conceptual Framework for Recognition." Educational Record 55 (Summer 1974): 188-192.

Nelson, Fred A. "Has the Time Gone for An External Degree?" Journal of Higher Education 45 (March 1974): 174-183.

Newman, Frank. "A Preview of the Second Newman Report." Change 4 (Mary 1972): 28-34.

O'Hearne, J. J. "New College Scholarships--Rewards in the Coin of the Realm." College Board Review 83 (Spring 1973): 22-24.

Perry, Walter. "Britain's Open University." In Higher Education: Myths, Realities and Possibilities, pp. 97-106. Edited by Winfred L. Godwin and Peter B. Mann. Atlanta, Georgia: Southern Regional Educational Board, 1972.

Pifer, Alan. "Is It Time for an External Degree?" College Board Review 78 (Winter 1970 - 71): 5.

Regents External Degrees. College Proficiency Examinations. New York: State University of New York, 1973. ED 084 982.

Regents External Degree Program. Handbook of Information for Candidates. Albany, New York: New York State Education Department, 1972. ED 068 034.

"The Regents Plan for Higher Education in New York State." Intellect 101 (March 1973): 355-357.

Reich, David L. "A Public Library Becomes a CLEP Learning Center." College Board Review 81 (Fall 1971): 29-31.

Reilly, Richard. The Use of Expert Judgment in the Assessment of Experiential Learning. CAEL Working Paper No. 10. Princeton, New Jersey: Educational Testing Service, 1975.

Reports from the Presidential Committee on New Market Students. Madison, Wisconsin: University of Wisconsin System, 1973. ED 087 310.

Rickleffs, Roger. "Wooing the Adult Student." Change 6 (March 1974): 23-26.

Ritterbush, Phillip C., ed. Let the Entire Community Become Our University. Washington: Acropolis Books, Ltd., 1972.

Ruyle, Janet and Geiselman, Lucy Ann. "Nontraditional Opportunities and Programs." In Planning Nontraditional Programs, pp. 53-94. Edited by K. Patricia Cross and John R. Valley and associates. San Francisco: Jossey-Bass Publishers, 1974.

Sharon, Amiel T. College Credit for Off-Campus Study. Report No. 8. Washington, D.C.: ERIC Clearinghouse on Higher Education, March 1971. ED 048 520.

_____. A Task-Based Model for Assessing Work Experience. CAEL Working Paper No. 8. Princeton, New Jersey: Educational Testing Service, 1975.

Shulman, Carol Herrnstadt. A Look at External Degree Structures. Washington, D.C.: ERIC Clearinghous on Higher Education, November 1972. ED 068 070.

Smith, G. Kerry, ed. New Teaching, New Learning: Current Issues in Higher Education 1971. San Francisco: Jossey-Bass Publishers, 1971.

Smith, Norvel L. "The Community Colleges: Potential for Leadership." In The 1,000 Mile Campus, pp. 63-65. Edited by Charles Davis. Los Angeles: California State Universities and Colleges, 1972.

Solomon, Robert J. "Giving Credit Where It's Due." Educational Record 51 (Summer 1970): 301-304.

Stern, Bernard H. Never Too Late for College: The Brooklyn Degree Program for Adults. Chicago: The Center for the Study of Liberal Education for Adults, 1963.

Stern, Bernard H. and Missall, Ellswerth. Adult Experience and College Degrees. Cleveland, Ohio: The Press of Western Reserve University, 1960.

Stetson, Robert F. "Getting A Head Start on College." College Board Review 81 (Fall 1971): 23-25.

Sweet, David E. "Minnesota Metropolitan State College." In Higher Education: Myths, Realities, and Possibilities, pp. 107-125. Edited by Winfred L. Godwin and Peter B. Mann. Atlanta, Georgia: Southern Regional Educational Board, 1972.

Thomas A. Edison College. "General Instructions for Application for Individual Assessment." Materials prepared for the CAEL Assembly Meeting, Philadelphia, Pennsylvania, 3 October 1975. (Mimeographed.)

_____. "Involving Faculty in Student Assessment." Materials prepared for CAEL Assembly Meeting, Philadephia, Pennsylvania, 3 October 1975. (Mimeographed.)

_____. "Student Guide for Individual Assessment." Materials prepared for the CAEL Assembly Meeting, Philadelphia, Pennsylvania, 3 October 1975. (Mimeographed.)

Trivett, David A. Academic Credit for Off Campus Learning. Washington, D.C.: American Association for Higher Education, 1975.

_____. Goals for Higher Education: Definitions and Directions. ERIC/Higher Education Research Report No. 6. Washington, D.C.: American Association for Higher Education, 1973. ED 082 698.

Troutt, Ray. Special Degree Programs for Adults: Exploring Nontraditional Degree Programs in Higher Education. Ames, Iowa: The American College Testing Program, 1971.

The University Without Walls: A First Report. Yellow Springs, Ohio: Union for Experimenting Colleges and Universities, 1972. ED 063 880.

Valentine, John A. "England and the United States: An Excursion in Nontraditional Study." In The 1,000 Mile Campus, pp. 18-27. Edited by Charles Davis. Los Angeles: California State Universities and Colleges, 1972.

Valentine, John A. "The Vision and the Hard Road." College Board Review 85 (Fall 1972): 4-8.

Valley, John R. "External Degree Programs." In Explorations in Nontraditional Study, pp. 97-123. Edited by Samuel B. Gould and K. Patricia Cross. San Francisco: Jossey-Bass Publishers, 1972.

_____. Increasing the Options: Recent Developments in College and University Degree Programs. New York, New York: College Entrance Examination Board, 1972.

_____. "Promising Program Ventures: A Review of Recent Developments Regarding the External Degree." Paper presented at the Regional Meeting of the American Association for Higher Education, Memphis, Tennessee, 18 October 1973.

Vermilye, Dyckman W., ed. The Expanded Campus. San Francisco: Jossey-Bass Publishers, 1972.

_____. Lifelong Learners - A New Clientele for Higher Education. San Francisco: Jossey-Bass Publishers, 1974.

Vickers, Donn F. "The Learning Consultant: A Response to the External Degree Learner." Journal of Higher Education 44 (June 1973): 439-450.

Wachs, Melvin W. "Taking the University to the Student." In The 1,000 Mile Campus, pp. 37-40. Edited by Charles Davis. Los Angeles: California State Universities and Colleges, 1972.

Warren, Jonathan R. "Awarding Credit." In Planning Non-Traditional Programs, pp. 116-147. Edited by K. Patricia Cross and John R. Valley. San Francisco: Jossey-Bass Publishers, 1974.

_____. "External Degrees: Coping with the Problems of Credit." Journal of Higher Education 44 (June 1973): 465-477.

"Where All Education is Cooperative." College Management 7 (May 1972): 17-18.

Whitaker, Urban. "Credit by Examination at San Francisco State College." College Board Review 83 (Spring 1972): 12-16.

Willingham W., Burns, R., and Donlon, T. Current Practices in the Assessment of Experiential Learning. CAEL Working Paper No. 1. Princeton, New Jersey: Educational Testing Service, 1974.