

AN ABSTRACT OF THE THESIS OF

Jewell Charles Manspeaker for the degree of Doctor of Education
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Title: AN ANALYSIS OF OREGON COMMUNITY COLLEGE
STUDENTS' AND EDUCATORS' PERCEPTIONS OF OPPOR-
TUNITIES TO EARN ACADEMIC CREDITS FOR PRIOR
OFF-CAMPUS LEARNING

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Robert W. Chick

Introduction. The study was conducted in response to a need for systematic analysis of the practice of granting academic credits for prior off-campus learning. It was stimulated by a commitment to the goal of facilitating student development and an interest in the theory that such development can be enhanced through recognition of individual differences.

Problems. The study sought to resolve the following methodological problem: How can the perceptions of students and educators be assessed and analyzed to determine if current practices are fulfilling students' aspirations for opportunities to qualify for academic credits for prior off-campus learning? Resolution of this problem allowed consideration of three research problems.

Methodology. The study was conducted in four phases. First, a model was developed for the assessment of student needs for

opportunities to qualify for advanced credits. Second, two instruments were developed to measure the perceptions of the subjects of the study. Third, the instruments were utilized to collect data from educators associated with eleven Oregon community colleges and students enrolled in ten of those institutions. Educators were selected through the process of simple random sampling and were surveyed by mail. One hundred and eight educators (72% of those contacted) responded to the questionnaires sent to them. The student sample was obtained by selecting a stratified sample of thirty classes. A total of 417 students completed questionnaires in their classrooms. Finally, the data were analyzed to determine the effectiveness of the model and instruments developed for the study and to draw tentative interpretations from the data. Descriptive statistics were utilized to evaluate the assessment model and to make interpretations. In addition, the chi-square distribution statistic was used to test three hypotheses designed to investigate the proposition that existing practices are not currently fulfilling demand. In testing the hypotheses, the .05 level of confidence was accepted as indicating significance.

Findings. The following findings were observed:

1. The instruments and model developed for the study yielded measures of demand ("what should be"), current fulfillment ("what is"), and need ("what is lacking") for each of seven curriculum areas and for the curriculum taken as a whole.

2. Students tended to qualify the strength of felt demand; some indicated strong demand, some weak demand, and some no demand.

3. Each subject group tended to perceive consistently different levels of demand. Returning students tended to perceive greater demand than either entering students or educators.

4. Entering students reported receipt of advanced credits less frequently than returning students.

5. A range of need estimates was obtained for each of seven curriculum areas and the curriculum considered as a whole. Need estimates were found to vary depending upon the subjects perceiving demand and the strength of demand considered to legitimately indicate "what should be." (When considering the curriculum as a whole, one need estimate indicated that as many as 55.1% of all entering students are in need of advanced credit opportunities, while another predicted that no more than 17.7% of such students are missing desired advanced standing opportunities.)

6. When weak demand was assumed to be a legitimate indicator of desire, then significant differences were observed between desired conditions and current fulfillment in all seven curriculum areas and in general.

7. When strong demand was considered to be the only legitimate indicator of desire, significant differences between desired conditions and current fulfillment were observed less frequently.

Returning students and educators were more likely to perceive greater demand than fulfillment than were entering students.

8. Older students, female students, married students, and vocational technical students tended to indicate greater demand for advanced standing opportunities than their counterparts.

9. Most students were found to be unaware of the advanced standing opportunities available on their respective campuses.



1976

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An Analysis of Oregon Community College Students'
and Educators' Perceptions of Opportunities to
Earn Academic Credit for Prior
Off-Campus Learning

by

Jewell Charles Manspeaker

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AN ANALYSIS OF OREGON COMMUNITY COLLEGE STUDENTS'
AND EDUCATORS' PERCEPTIONS OF OPPORTUNITIES
TO EARN ACADEMIC CREDITS FOR PRIOR
OFF-CAMPUS LEARNING

I. INTRODUCTION

American higher education has demonstrated a long-standing commitment to the goal of facilitating personal development. It was a dominant goal when the first colleges were founded in America's colonies, and it continues to command the attention of educators as they plan for the twenty-first century. President Dunster of Harvard emphasized its significance in the seventeenth century when he directed his faculty to help all students advance in all learning "...according to their several abilities" (Rudolph, 1963, p. 6).

Quite recently, the Carnegie Commission on Higher Education expressed a similar emphasis when it charged that one of five dominant purposes of higher education is to provide "...opportunities for the intellectual, aesthetic, ethical, and skill development of individual students" (p. 1).

Though commitment to the goal of personal development has been constant, the context within which it has been pursued has changed dramatically through the years and continues to change rapidly. Students have become increasingly heterogeneous; the once stable and classical curriculum has been replaced by alterable and complex curricular options; career choices for college graduates have been

greatly expanded; and notions about the developmental needs of students have been modified by the findings of the social sciences and other influences.

Thus, colleges and universities have been continuously challenged to move in differing directions in order to meet the apparent needs of their students. Today, movement is advocated in several directions. Kerr (1974), in summarizing the beliefs of the Carnegie Commission on Higher Education, has identified five such directions. Two of them would seem specifically directed toward facilitating student development. One would move higher education toward social justice, which Kerr describes as equal access but not universal attendance. The second would inspire "a revolution of free choice," which can be effected through the introduction of more options, greater flexibility, and acceptance of diversity.

Supporting movement in these and other directions is a theory asserting that personal development can be facilitated through treatments which recognize, accept, and foster individual differences among people. This theory of individual differences gained prominence during the first half of the twentieth century and continues to influence education and the behavioral sciences. Promoted by the educational philosophy of progressivism and the school of psychology known as functionalism, recognition of the importance of individual differences guided the development of several key components of

higher education in the twentieth century. Colleges founded to experiment with the teachings of John Dewey and other progressive educators have added a unique dimension to higher education and have influenced instruction and other activities on many other campuses. Student personnel work, which is based upon a point of view concerned with the welfare and development of individual students, has become a valued endeavor supported on most college campuses. The community college movement, which pioneered the development of a comprehensive curriculum designed to meet individual needs of the common man, has become the most rapidly growing segment within post-secondary education.

This theory of individual differences continues to influence developing educational programs. One expression of the theory asserts that "comparable learning in one situation should be recognized in another" (Willingham, p. 145). Expressed in this way, the theory is supporting the practice of granting academic credits in recognition of prior off-campus learning. Advocates of this practice believe that such methods as credit by examination, accreditation of non-college training, and articulation agreements between colleges and high schools provide a means of appropriately recognizing prior learning, thus allowing students to maximize learning during the time they spend in college.

Like other developments inspired by the concept of individual differences, the practice of granting credits for prior learning is not new to American higher education. For instance, the option of meeting degree requirements by taking examinations rather than classes was available to students at the University of Illinois as early as 1895. Unlike such developments as progressive colleges, student personnel work, and the community college movement, however, the practice of granting academic credits for prior learning has not been widely accepted and recognized for its contributions. To be sure, an increasing number of colleges and universities are reportedly offering advanced credit options to their students (Haag, 1975; Ruyle and Geiselman, 1974), and it has been estimated that as many as half of the people entering college feel eligible for academic credits for prior off-campus learning (Haag, 1975). Nonetheless, it has been estimated that very few college students ever receive academic credits for prior off-campus learning (Kreplin, 1971). Thus it is hypothesized that the number of students receiving credits for prior off-campus learning is significantly below what it would be if individual differences were fully recognized (Kreplin, 1971; Haag, 1975; Carnegie Commission, 1971; Vittuli, 1970; and others).

Need for the Study

The proposition that there is a need to expand the recognition of individual differences by increasing the practice of granting credits for prior off-campus learning is supported by a rationale and selected empirical findings, but it has not been systematically analyzed and tested. The rationale supporting this proposition of need suggests that conditions exist which tend to increase the social value of college credits, thus increasing the demand for them. The American fetish for credentials is cited as the primary condition influencing this demand (Carnegie Commission, 1971). Employers, graduate schools, and "in-laws" all rely upon the college degree as evidence of the qualifications of their future associates. As a result, a large number of people enter colleges and universities each year in order to earn the credentials which are so important to their future endeavors. Many of these people have had prior learning experiences which are equivalent to the outcomes of some college course work. In many cases it would serve student interests to have these experiences recognized and applied toward desired college degrees.

At the same time the rationale suggests that other conditions exist which tend to require students to spend specified periods of time on college campuses in order to earn degrees regardless of their prior learning experiences. The time-based nature of the

credit system is cited as the primary influence retarding the recognition of prior learning. Time has always been the common denominator of the credit system; indeed, it has been the genius of the system. Since time is universally understood and uniquely measurable, credits which are based upon time spent in a college setting are readily equated to other college experiences. Time, however, is not directly related to learning and therefore does not provide a direct means of equating learning in one setting to learning in another. Although special means have been developed to make such equations, they are not well accepted and understood by faculty members or familiar to students. Thus they have had little impact upon the relationship between time spent in class and the receipt of academic credits. As a result, it is theorized that prior learning experiences of students are more likely to be ignored than recognized.

The rationale, then, poses a dilemma. It presents a situation in which an increasing number of people are entering colleges and universities with meaningful prior learning experiences already accomplished; but while theory would suggest that personal development will be enhanced if these learning experiences are recognized, conditions inherent to the American higher education system are operating to withhold this recognition. Proponents of the rationale conclude that existing conditions are counterproductive to the goals of higher education and should be corrected through the expansion of

such practices as granting academic credits for prior learning through one or more of the advanced standing options.

The accuracy of the rationale, however, has not been fully evaluated. Some recent estimates do exist which confirm that a large proportion of students entering American colleges and universities plan to attempt to qualify for advanced credits (Haag, 1975), but Kreplin (1971) has pointed out that specific measures of demand are lacking. There are scattered reports concerning the number of students qualifying for advanced credits through selected programs or from specific schools, but Trivett (1975) concluded that truly current or specific survey results do not exist to indicate the extent to which academic credit for prior off-campus learning is being granted. In short, neither measures of student demand nor assessments of current fulfillment are currently available in comprehensive and comparable forms. Without such information, it is impossible to adequately plan programs to meet student needs for advanced standing opportunities or even to confirm or reject the hypotheses suggesting that such need exists.

Statement of the Problem

This study is designed to meet the need for a systematic analysis of the practice of granting academic credit for prior off-campus learning. It seeks to resolve the following methodological

problem: How can the perceptions of students and educators be assessed and analyzed to determine if current practices are fulfilling students' aspirations for opportunities to qualify for advanced college credits?

The following research problems are addressed:

1. What is the scope and nature of student demand for opportunities to qualify for academic credits for prior off-campus learning?
2. To what extent are academic credits being granted for prior off-campus learning?
3. Is the current extent to which academic credits are being granted for prior off-campus learning meeting existing demand for such credits?

Purposes and Objectives

The primary purpose of the study is to provide a technique for the assessment of student needs for opportunities to qualify for credit for prior off-campus learning. To accomplish this purpose, three objectives are identified:

1. A model is to be designed for the assessment of student needs for advanced credit opportunities.
2. Instruments are to be developed to collect data required to implement the model.
3. The model and instruments are to be tested on the campuses of ten Oregon community colleges.

In addition, two secondary purposes are to be pursued. One purpose is to bring empirical evidence to bear upon the proposition

that the number of students currently receiving academic credits for prior off-campus learning is significantly below what it would be if the demand for opportunities to qualify for such credits were being met. The final purpose is to propose some possible interpretations of the data relative to selected beliefs regarding the practice of granting academic credits for prior off-campus learning. Three additional objectives are identified in response to these secondary purposes:

1. A review of related literature is to be conducted.
2. Working hypotheses are to be designed to empirically test the theory that existing advanced standing practices are not fulfilling demand.
3. Data collected on ten Oregon community college campuses is to be used to test each working hypothesis and propose interpretations of the data.

Importance of the Study

It is hoped that this study will make three contributions to the field of post-secondary education. First, by providing a technique for the identification of students' needs for advanced standing opportunities, the study should add a useful set of procedures and two instruments to the tools available for identifying the needs of students. Second, by bringing empirical data to bear upon the theoretical assumptions supporting the practices of granting credits for prior off-campus learning, the study should help to verify or reject the

rationale supporting the practice. Finally, by administering the needs identification model at ten Oregon community colleges, the study should provide information of practical importance to decision-makers within the Oregon community college system.

Research Hypotheses

The needs identification model and data collection instruments developed for this study are intended to yield descriptive data capable of resolving three research problems essential to needs identification. In addition, three null hypotheses are designed to facilitate statistical analysis of the data collected, so that the theorized need for increased advanced standing opportunities can be tested. Each hypothesis and two alternate hypotheses are based upon two assumptions. The first is that three groups of subjects -- entering students, returning students, and educators -- are capable of estimating the demand for opportunities to qualify for academic credits for prior off-campus learning. The second assumes that returning students can report the receipt of such credits and therefore indicate the extent to which demand is currently being met. Thus each hypothesis is designed to determine whether or not a significant difference exists between an estimate of demand and the recorded level of current fulfillment. The following hypotheses and alternate hypotheses are designed to test for significant need in each of seven curriculum

areas and in those seven areas taken as a whole:

- Ho 1: The proportion of entering students indicating gross demand for academic credits for prior off-campus learning is not significantly greater than the proportion of returning students reporting receipt of such credits.
- Ho 1(a): The proportion of entering students indicating strong demand for academic credits for prior off-campus learning is not significantly greater than the proportion of returning students reporting receipt of such credits.
- Ho 2: The proportion of returning students indicating gross demand for academic credits for prior off-campus learning is not significantly greater than the proportion of returning students reporting receipt of such credits.
- Ho 2(a): The proportion of returning students indicating strong demand for academic credits for prior off-campus learning is not significantly greater than the proportion of returning students reporting receipt of such credits.
- Ho 3: The proportion of entering students estimated by educators to be capable of qualifying for academic credits for prior off-campus learning is not significantly greater than the proportion of returning students reporting receipt of such credits.

Definition of Terms

The following section provides a glossary of terms used in this study. The following terms are listed in alphabetic order:

1. Academic credits. Units of measure used to record the progress students make toward college credentials. As Warren (1974) points out, credits are usually granted on

the basis of time spent receiving instruction in a college setting. They may, however, be granted on the basis of other standards.

2. Academic credits for prior off-campus learning. A general phrase referring to those academic credits granted to students for non-college learning achieved before entering college.
3. Administrator. A person employed by a college in the capacity of president, business manager, dean or assistant/associate dean, coordinator, or director (excepting coordinator/director of counseling, financial aids, or human services).
4. Advanced credits. Academic credits granted for prior off-campus learning.
5. Advanced credit options. A general phrase referring to methods available for granting academic credits for prior off-campus learning.
6. The Advanced Placement Program (AP). An advanced credit option developed by the College Entrance Examination Board (CEEB). The AP Program sponsors college-level high school courses; standardized examinations to assess the learning of students completing those courses;

and a record-keeping system for certifying students' achievement.

7. Advanced standing. Academic credits granted for prior off-campus learning.
8. Advanced standing practices. Advanced credit options.
9. Articulation agreements. Formal arrangements through which colleges equate planned programs and practices of high schools and other agencies with college credits.
10. The College Level Examination Program (CLEP). A credit by examination approach to granting credit for prior learning. Sponsored by the CEEB, the CLEP provides prospective students of all ages with a means of qualifying for advanced credits in general areas of the liberal arts as well as in specific subject areas.
11. The CLEP General Examination. The CLEP battery designed to test achievement in five areas of the liberal arts -- English composition, humanities, mathematics, natural sciences, and social sciences and history. When credits are granted through this battery, they are frequently granted in blocks equal to one or two years of college work in each of the five areas in which successful scores are achieved.

12. The CLEP Subject Examinations: Single-subject achievement tests designed to be equated to the learning outcomes expected of specific college courses. In 1974, thirty-seven specific Subject Examinations were available to students and prospective students.
13. Departmental tests of credit by examination. Locally developed examinations used by colleges and universities to grant academic credits for prior off-campus learning.
14. Educator. A person employed by a college in the general capacity of administrator, student personnel worker, or instructor.
15. Educators' estimate of demand for advanced credit opportunities. The mean percentage estimate made by a sample of educators asked to estimate the percent of entering students who would have a good chance of qualifying for academic credits for prior off-campus learning if all entering students were given an opportunity to earn advanced credits in a given curriculum area. This estimate is assumed to be an estimate of strong demand since it confines itself to the students who could actually qualify for credits rather than all students who might opt for such an opportunity.

16. Entering student. A person who is enrolled in a college but who has not completed a sequence of coursework in any of the following areas: English composition, social sciences, math or science, and health and physical education.
17. Entering students' demand for advanced standing opportunities. A measure indicating the percent of entering students who have received academic credits for prior off-campus learning and/or who would take advantage of an opportunity to attempt to qualify for such credits. Three measures of demand were used in this study. The first, strong demand, is the percent of entering students who indicate that one of the following conditions is appropriate to them: (1) They have been granted academic credits for prior off-campus learning; or, (2) they feel confident enough to pay \$15.00 for an opportunity to attempt to qualify for such credits. The second weak demand, is the percent of students who indicate that they have experienced significant prior off-campus learning and would like to receive credit for it but would not pay for an opportunity to attempt to qualify for advanced credits. Third, gross demand is the percent of students indicating either weak or strong demand.

18. Evaluation of "life" experiences. A process of recognizing key "life" experiences to be equivalent to college learning experiences. Unlike credit-by-examination, such evaluations equate the nature of the "life" experiences to college course work rather than evaluating the specific competencies an individual achieved as a result of the experience.
19. The Guide to the Evaluation of Educational Experiences in the Armed Forces (GUIDE). Four volumes of evaluations made by the Council on Education's Commission for Accreditation of Service Experiences. The GUIDE provides an accreditation option for granting academic credits for prior off-campus learning.
20. Instructor. A person employed at a college for the purpose of teaching specific courses as a part of the formal curriculum of the college.
21. Lower division collegiate students. Students majoring in fields normally leading to baccalaureate degrees.
22. Need. The definition of need used by Kaufman (1972, p. 49) is accepted for this study:

an educational need is a measurable outcome discrepancy between "what is" and "what should be." If there is no difference between where we are and where we should be, then we have no "need."

Two measures of need were conceptualized for this study.

The first, active need, was obtained by subtracting the returning students reported level of demand fulfillment from a measure of strong demand. The second, gross need, was obtained by subtracting the returning students' reported level of demand fulfillment from a measure of gross demand.

23. Needs assessment. A systematic process of assessing whether a discrepancy exists between "what is" and "what should be" in relation to a specified set of desired outcomes.
24. Needs identification. A synonym for needs assessment.
25. Perception. An expression of awareness, such as a response to a statement or question contained in a questionnaire.
26. Retrospective demand for advanced standing opportunities.
The percent of returning students indicating that they either received advanced credits in a given curriculum area or that they now feel that they should have received such credits. As with entering students' demand, three measures of retrospective demand were operationalized. Strong retrospective demand is the percent of returning students indicating that at least one of the following conditions is appropriate to them: (1) They have been granted academic

credits for prior off-campus learning in the given curriculum area; (2) they took the courses in the curriculum area but believe in retrospect that they should have been excused from taking the courses and been granted credits for prior learning; or (3) they have not taken the courses yet but believe they know the material and would be willing to pay \$15.00 for an opportunity to qualify for advanced credits in the curriculum area. Weak retrospective demand is the percent of students indicating that one of the following conditions applies to them: (1) They have taken the courses in the curriculum area but now believe that they should have received some academic credits for prior learning in that field but not enough to satisfy the requirements in the area; or, (2) they have not yet taken the courses in the curriculum area and would like an opportunity to qualify for advanced credits in the field but would not pay for such an opportunity. Third, gross retrospective demand is the percent of students indicating weak or strong demand.

27. Returning student. A person who is enrolled in a college and who has completed at least one sequence of course work in any of the following areas: English composition or communication skills, social sciences, math or science, and physical education.

28. Returning students' reported level of demand fulfillment.

The percent of returning students reporting that they received academic credits for prior off-campus learning in a given curriculum area or set of curriculum areas.

29. Student personnel worker. A person who is employed by a college in the capacity of dean of students, registrar, student activities director, counselor, director of counseling, financial aids director, or human services coordinator.

30. Vocational-technical student. A student enrolled in an educational program which is designed to prepare him or her for employment in a vocational or technical field within two years. Vocational-technical courses are not normally designed to be transferable to four-year colleges as they are not necessarily designed to correlate with baccalaureate degrees.

II. REVIEW OF RELATED LITERATURE

The review of literature is designed to present the basic concepts, methods, and outcomes influencing the practice of granting academic credit for prior off-campus learning and to describe the research model used in the study. To meet this design, the chapter is divided into four sections. The first section reviews published works pertaining to the historical movements and rationale which led to and continue to support advanced standing programs. The second section identifies and evaluates the types of practices and the scope of institutional policies which have been developed to provide students with opportunities to earn advanced college credits. The third section surveys professional assessments which have been made to determine the impact which these practices and policies have had or may have upon students. The final section develops the conceptual framework supporting the needs assessment model used in this study.

Historical and Conceptual Aspects of Advanced Standing/Credit Practices

The practice of advancing academic credit for prior off-campus learning is an extension of the credit-hour system. In one sense, it may be viewed as a logical expansion of the credit hour system's capacity to add flexibility to the collegiate curriculum, for the credit-hour system was once as instrumental to the development of today's

comprehensive curricula as advanced standing practices now seem to the development of non-traditional programs. In another sense, however, the practice of granting credit for prior off campus learning can be seen as a reaction to the tendency of the credit system to equate learning to time spent in the classroom. Regardless of the perspective chosen, one must consider advanced standing practices within the context of the credit-hour system to understand them.

Heffernan (1973) traces the emergence of the credit-hour system to two nineteenth century movements:

The first was the break from the classical curriculum and the introduction of the elective system; the second was a move toward standardization of high school curricula and their improved articulation with college programs (p. 61).

This first movement provided the impetus for flexibility which was to be facilitated by the credit system. First implemented at Harvard in 1869 by President Charles Eliot, the elective system rapidly spread to other institutions and throughout the various disciplines. The second movement provided the force for standardization which led to the time-based nature of the system. The growth of mass secondary education, which gained momentum during the last half of the nineteenth century, led to demands for national standards by which high schools and students could be evaluated. By the turn of the century, both the elective system and the growth of mass secondary education had become popular movements, and the pressures they placed upon

the classical curriculum demanded a response. When the response came, it was implemented quickly.

Two famous committees, the Committee of Ten on Secondary School Studies and the Committee on College Requirements, had powerful influence upon the development of the elaborate system which gained wide acceptance during the early twentieth century. Several newly emerging organizations, however, were responsible for assuring that wide-spread acceptance. The College Entrance Examination Board utilized the system in formulating admissions standards. The North Central Association adopted it as a criterion of accreditation. Most importantly, the Carnegie Foundation for the Advancement of Teaching assured a place for the system by making it a prerequisite to institutional participation in the Foundation's pension program. The Foundation also formalized the relationship existing between a credit and time by stating explicitly that "...the fundamental criterion was the amount of time spent on a subject, not the results attained" (Gerhard, 1955, p. 6). Thus, as Kreplin (1971) observes, "...by 1910 the credit system had come to embrace the whole American educational system above the level of the grade school" (p. 8). Today, the system seems so firmly entrenched that as Warren (1974) puts it, "...a system of earning a degree without accumulating semester hours or quarter hours or some other set of units is hard to imagine" (p. 116).

Kreplin identifies two reasons why the credit system has become so well established. Awareness that education is a commodity to be valued has caused a need for an educational currency. In addition, diversity in American education has made time the only universal measure of exchange. By equating time spent in class to educational accomplishments, the credit system provides measures which are interchangeable among the many institutions in higher education. By reducing courses to fractions of the four-year period, which has come to be accepted as the legitimate, if arbitrary, period of baccalaureate study, courses assume a recognizable value. That is the genius of the credit system, and in today's society, it is probably more important than ever to have a recognized and accepted academic currency. Students need it to move freely from one college to another. Faculty members need it to verify their own expertise. Administrators need it to measure institutional productivity, and bureaucrats need it to develop funding formulas or to obtain measures of accountability.

If exchangeability is the genius of the system, however, the use of "time" as the measure of exchange may be its Achilles' heel. As early as 1912, Henry S. Pritchett, who was then president of the Carnegie Foundation, criticized that aspect of the system and advocated modifications to the Carnegie Unit in order to insure flexibility. Since that time countless other critics have emerged,

and most have focused their criticisms upon the fact that the close relationship between time and credits tends to obscure what they believe to be the legitimate outcomes of higher education - competencies, skills, achievement, or, in a word, learning. Until credits become more closely related to learning and less dependent upon time spent in the classroom, it seems likely that criticisms, such as the one expressed by E. L. Chalmers, Jr., will continue to flourish:

The most revered nonsense in higher education are the notions of class periods and credit hours. In their place we must develop careful overt statements of course objectives and equally careful measures of learning that will enable us to make a reasonably dichotomous statement as to whether further endeavor is warranted (Vittuli, 1970, p. 372).

The belief that careful measures of learning rather than of time provide the key to evaluating students is, of course, an ancient notion. To be sure, Socrates was not content to let time be equated with wisdom. He is quoted by Plato as stating that "...to work wrongly is not merely an error in itself; it also creates an evil in the soul." It would not alter the meaning of that statement if the word "work" were replaced with the words "spend time." Wisdom to Socrates is nothing less than "clear, unconfused sight of truth..." (Lavell, 1914, p. 362). Thus, it was his practice to question his students relentlessly until they found their levels of competence, recognized their ignorance, and were inspired to seek clearer knowledge of the way things are. This classic method of instruction,

the Socratic method, has allowed countless teachers to help their students move beyond ignorance to higher levels of learning.

As long as formal education was conducted through an intimate relationship between a student and a scholar, there was no need for specialized advanced standing practices. The close relationship between the two parties and the Socratic method of inquiry guaranteed that a student's abilities would be known and that learning exercises would be focused at or above the student's temporary level of competence. The need for specialized advanced standing practices emerged as students became separated from their teachers, as learning became equated with time spent in the classroom, and as formal education became a commodity of value. In other words, as the methods and impact of mass education have expanded, the need for advanced placement/credit practices has developed and grown.

The University of London was perhaps the first institution to formally recognize prior off-campus learning. As Lewis (1961) has pointed out, external students at that institution have been able to satisfy degree requirements on the basis of examination scores for more than one hundred and fifty years. In America, the University of Illinois may hold the honor of being the first American college or university to grant academic credit for prior off-campus learning. Students there have been able to take special examinations for credit since 1895. For all practical purposes, however, granting academic

credit for prior off-campus learning is a twentieth century phenomenon:

Granting credit to students for something other than college classroom work was little needed before 1900 because college courses of study allowed little choice within each curricular sequence. With the introduction of electives and the quantitative measurement of subject matter in hours and credit units, "interchangeable parts" became the basis for awarding baccalaureate degrees. Within this framework, educationally valid arguments could be made for allowing students to demonstrate proficiency by taking a test, often the final examination in the course. By the early '30's almost a quarter of American colleges had made provision for credit by examination, but except at rare institutions like the University of Buffalo, few students braved the gauntlet of academic regulations surrounding such "challenge exams." Studies over the years show a growing acceptance of credit by examination, with over 50 percent of the colleges responding affirmatively by the mid-'50's and over two-thirds by 1970, albeit a token acceptance at some campuses (Haag, 1974, p. 2).

The growth in the use of advanced credit and other course exemption practices may be directly related to an increase in the need for the purposes they serve. It has been common to suggest two major purposes which are served by advanced credit practices -- enrichment and acceleration. Kreplin (1971) reports that before World War Two, "efforts to inject greater flexibility into the credit-hour system were prompted primarily by an interest in enrichment rather than acceleration" (p. 5). During the Second World War, the concept of acceleration received the attention of American higher education. The war simply demanded a more efficient and larger

output of educated people. Advanced credit practices provided one means of meeting that need. Enrichment, however, regained its preeminence, replacing advanced credit practices with honors programs or independent study. Only recently has the appeal of "less time, more options" regained influential support (Carnegie Commission on Higher Education, 1971).

Willingham (1974) has adopted another approach to identifying the purposes of course exemption practices. Though acceleration and enrichment concepts are apparent in the objectives he identifies, they are not identified as such. Willingham suggests that exemption practices -- whether they lead to academic credit or not -- are supported by one basic assumption, serve one major educational function, and facilitate five fairly specific objectives. He finds that one basic assumption supports exemption practices:

The general assumption here is that articulation refers to the fact that comparable learning in one situation should be recognized in another and that administrative relationships among learning contexts should not be so disconnected that students moving from one to another must approach their educational goals *de novo* (p. 145).

Willingham believes the main function of exemption practices to be curriculum articulation:

The position here is that exemption is the basic mechanism for maintaining articulation in the programs of individual students who move about within the larger education system and, as a corollary, such articulation is the basic function of exemption (p. 145).

There are several desirable outcomes that are served by practices which exempt students from requirements already satisfied through prior learning. Willingham identifies them to be (1) continuity, (2) transportability, (3) opportunity, (4) integration, and (5) efficiency. Continuity, the most important objective, "is the obvious one of recognizing what the matriculating student knows" (p. 146). Transportability exists when "learning is not bound to a particular situation, and when movement of students is facilitated within the total learning society" (p. 146). Educational opportunity is fostered when "adults are encouraged to reenter education by the knowledge that their experience will be taken into account..." (p. 146). Integration, a subtle but important objective, "is to encourage faculties to give careful attention to what types of learning... should be recognized" (p. 147). Efficiency is the conservation of resources -- the student's and the institution's -- which results when students are not needlessly required to repeat courses in which they are sufficiently competent.

The growing tendency for institutions to adopt advanced placement and credit practices attests to the fact that purposes such as enrichment and acceleration as well as Willingham's more specific objectives are viable influences in American higher education today. Nonetheless, the practice of advancing credit for prior off-campus learning faces significant resistance from many faculty members.

Meyer (1974) has identified four reasons why this is so. First, he notes that many faculty members inwardly believe that "if you have not learned it from me in my classroom, you have not learned it" (p. 10). On top of that, they often find the process of granting advanced credits to be too subjective. As a result, Meyers believes that "many faculty insist upon using more stringent standards for off-campus or experiential education than they would apply on campus, and employ even more stringent standards for prior learning" (p. 11). Third, "faculty do not like to view themselves as credentialers or certifiers" (p. 12). Finally, there is concern that "the accrediting association will not allow them to grant credit for prior learning" (p. 12). Kreplin (1971) investigated this latter concern but concluded that the literature offers no specific examples of opposition from accrediting agencies (p. 51). She did find, however, that the literature indicates no fewer than nineteen objections which are frequently expressed by faculty members, regarding credit by examination:

- (1) Credit by examination, with or without acceleration, poses problems for transfer students, since other institutions may not accept such credit.
- (2) Credit by examination, with or without acceleration, may conflict with preprofessional and graduate school requirements or with state licensing and certification requirements.
- (3) National programs of credit by examination (such as AP, CLEP, CCT) arouse fears of an imposed national uniformity in courses covered by such programs.

- 4) When the better students are taken out of their regular classes through credit by examination, the faculty and students in the regular classes will suffer.
- 5) Credit by examination involves the sectioning of very able students apart from the others, which violates certain supposedly democratic notions about education.
- 6) Students could sometimes get higher grades by taking the course rather than taking the examination alone.
- 7) Some students who skip the freshman year through credit by examination and acceleration may not have backgrounds in certain subjects which normally begin in college, such as philosophy and economics.
- 8) College teachers frequently feel that work done during high school or through independent study, or knowledge acquired as the result of life experience, cannot be the equivalent of college course work.
- 9) Lower division students are not mature enough to accelerate through credit by examination.
- 10) College life involves social and emotional intangibles which should not be missed through acceleration.
- 11) Advanced Placement and such schemes may undermine the function of liberal arts colleges by blurring the lines between high school and college. Instead of granting credit for high school courses that are freshman level, the level of freshman courses ought to be raised.
- 12) Certain disciplines and/or specific courses (most frequently the faculty member's own) are sufficiently unique that knowledge cannot be measured by an examination alone.
- 13) National programs of credit by examination may conflict with the diverse standards and objectives of individual institutions.
- 14) Acceleration through examination may unduly affect initial choice of major or may make changes in fields of concentration difficult, or result in premature specialization.
- 15) Acceleration through credit by examination may result in sacrifice of breadth and depth of study.
- 16) By not attending classes, students miss certain things in their general education, such as:
 - a) a systematic coverage of subject-matter;
 - b) supporting data, material not contained in a regular textbook but furnished by the professor;
 - c) enthusiasm and deeper points of view through interaction with faculty and other students.
- 17) Credit by examination places undue emphasis upon the certification function in higher education.

- 18) Credit by examination undermines class-wide solidarity among students entering in the same year.
- 19) Where standardized examinations for credit are used to test the competence of large numbers of students, as in certification for nursing or teaching, classroom instruction and/or independent study may come to be oriented simply toward passing the examination, rather than toward the mastery of a body of subject-matter (pp. 44-45).

In the light of the scope and intensity of faculty resistance to credit by examination, the fact that advanced credit practices are not widely used by students becomes understandable. Enabling policies have only recently come to most campuses. Students are rarely encouraged to use options which are available to them, and the options which exist often require assertiveness, effort, and competence far in excess of what is required in the classroom. Nevertheless, more and more students are asserting themselves as more options become available to them. The number of students positively inclined to pursue advanced credits has jumped by fifty percent in five years (1969-70 to 1973-74), leaving the prospect that in a very few years, more than half of the entering freshmen will be determined to assert their eligibility for academic credit for prior off campus learning (Haag, 1975).

In summary, the practice of advancing academic credit for prior off-campus learning is an extension of the credit-hour system. The credit system did not become established until the turn of this century, but since that time it has become so firmly entrenched that

the thought of earning a degree in this country without accumulating credits of some kind is hard to imagine. The resilience of the credit system is due to its ability to provide measures of educational achievement which are interchangeable among the many institutions in higher education. However, the close relationship which exists between credits and time causes many educators to believe that the credit system obscures the true outcomes of higher education -- learning in its various forms. Critics of the credit system advocate alternatives which utilize careful measures of learning rather than time as the measure of exchange. The practice of granting academic credit for prior off-campus learning is one of these alternatives. It was first employed more than one hundred and fifty years ago, but it has not been widely used. Recently, however, its usage has been on the increase, perhaps because of an increased need for the purposes which it serves -- continuity, transportability, opportunity, integration, and efficiency. Roadblocks in the form of faculty resistance and a gauntlet of academic regulations continue to keep the practice in check on most campuses, however, and it remains to be seen whether the practice will become a truly viable alternative for most students.

Methods of Granting Credit for
Prior Off-campus Learning

Granting academic credit for prior off-campus learning is frequently identified with a growing movement in higher education known as non-traditional education. Non traditional education focuses upon experiential learning which is accomplished outside the confines of the college classroom. As such it encompasses a broader set of practices than are relevant to this study, but it does include most which are germane. Miller (1974) reports three types of non-traditional learning which have been identified by the American Council on Education to be worthy of recognition:

One includes those nonformal learning experiences that result in the accumulation of knowledge or competencies without supervision or sponsorship. Such knowledge might be evaluated through use of a standardized examination or other means. The second category includes formal learning experiences that occur in agencies not primarily designed to be educational institutions, for example, the military service, business, and industry. The third category is sponsored learning experiences that are non-traditional primarily because the instructional method is unique. Examples include work done under learning contracts, field experience education, and study with a mentor (Trivett, 1975, p. 10).

The first two of these types of learning are of particular concern to this study because these learning approaches are frequently available to students before they enter college. The third category is of less interest because it is commonly available to students after they enter colleges. Nonetheless, methods do exist to relate each of these

types of learning to traditional classroom learning, and each type of learning often does occur before students enter college. Non-formal learning experiences are commonly evaluated through various credit-by examination practices. Many formal non-college learning experiences can be validated through accreditation reviews such as those reported in the American Council on Education's Guide to the Evaluation of Educational Experiences in the Armed Forces. In addition, high school students are finding it possible to enter sponsored college-level programs through articulation agreements being worked out among high schools, colleges, and national testing services.

Since a relationship does seem to exist between the methods available for granting advanced college credits and the types of non traditional learning, this section presents methods of granting credit for prior learning as they relate to the types of non-traditional learning. It is recognized, however, that the relationship which does exist between methods of granting credits and types of learning is an imperfect one. Specific methods can be used to grant credit for various types of learning. Credit by examination, for instance, is used at some institutions as the sole means of validating non-traditional learning. The methods themselves are not always distinct. The Advanced Placement Program is a case in point; it is presented as a means of granting credit for sponsored learning

experiences though it is very closely related to the standardized forms of credit by examination discussed as methods of validating non-formal learning experiences.

Credit by examination techniques are the most frequently used methods of granting credit for prior off-campus learning. As noted in an earlier section of this chapter, they have a history which dates back at least one hundred and fifty years. In recent years they have become so widely used that they are often recognized as legitimate parts of academic programs (Dressel and Delisle, 1969). Two general types of credit by examination practices have become prevalent. One relies upon standardized examinations developed and validated by national and state agencies. The other utilizes tests developed on-campus at the departmental level.

Of the standardized testing programs available, the College Level Examination Program (CLEP) is by far the best known and most widely accepted. It was developed in the early 1960's by the Educational Testing Service and the College Entrance Examination Board. Using the Advanced Placement Program and the Subject Standardized Tests of the United States Armed Forces Institute (USAFI) as models, the CLEP program developed into two types of examinations -- general examinations and subject examinations. The General Examinations are designed to test achievement in five areas of the liberal arts -- English composition, humanities,

mathematics, natural sciences, and social sciences and history. Competence in each area is tested through a sixty minute multiple-choice test. These tests are designed to evaluate an individual's competence with the range of subject matter commonly covered during the first two years of college. As a result, institutions may grant as many as sixty semester credits (ninety quarter units) through the battery of General Examinations. In contrast, the Subject Examinations are designed to measure achievement equivalent to that expected as the result of completing specific courses. These examinations are prepared by committees of examiners, which are composed of college instructors, as the need arises; they are normed by administering the tests to groups of students completing the subjects involved and then made available to candidates. By 1974, thirty-seven separate Subject Examinations had been developed (CLEP General and.... 1974, pp. 1-6).

In addition to CLEP, there are two other standardized test batteries which are specifically designed to validate prior off-campus learning. They are the College Proficiency Examination Program (CPEP) and the Regents External Degree Examinations (REDE). Both of these programs were developed by the Regents of the University of the State of New York. CPEP was developed in 1961 and is similar to the CLEP Subject Examinations. It is comprised of a variety of single-subject examinations. The REDE

examinations were begun in 1970 and are similar in concept to the CLEP General Examinations. Presently, there are two REDE examinations designed to measure broad areas of competence rather than knowledge specific to one course. One REDE examination covers business and the other nursing. Both were specifically designed to help students qualify for external degrees which are now being granted by the Regents. The direct tie which CPEP and REDE have with an accredited agency, the University of the State of New York, allows students using those programs to be assured of earning credits for successful test scores. CLEP examinations offer no such assurances.

Other standardized tests can be used to grant credit for prior learning though they have not been designed for that purpose. For instance, the American College Testing Program and the College Entrance Examination Board's Scholastic Aptitude Tests are used by some colleges to grant credit or waive course requirements. Those tests, however, were designed as tools for admissions and placement; they are not widely used to grant credit for prior learning.

When CLEP, CPEP, and REDE do not meet institutional needs and standards, colleges frequently opt for locally developed tests. These locally developed tests take many forms and may or may not meet minimal standards of validity and reliability. Frequently they are constructed by instructors as the needs arise and discarded after

initial use. Such tests lack the legitimacy which norming efforts and other studies tend to give to the standardized tests, but they do offer flexibility and local control. These factors allow colleges to adopt credit by examination tests which are closely related to their curricula. Community colleges, in particular, may find locally developed tests to be appropriate since few standardized examinations exist in vocational and technical areas.

As Haag (1975) points out, "studies over the years show a growing acceptance of credit by examination, with over 50 percent of the colleges responding affirmatively by the mid-50's and over two-thirds by 1970..." (p. 2). More recently, Ruyle and Geiselman (1974) found that credit-by-examination policies are in existence at fully 93 percent of the colleges and universities which responded to their national survey (p. 64). Thus, credit by examination is a reality on nearly all American campuses. The CLEP program is accepted at 78.4 percent of the colleges which utilize credit by examination; CPEP is in use at 4.3 percent of those schools; ACT is used at 8.4 percent and 38.7 percent use individual department examinations (Trivett, 1975, p. 31).

The methods of granting credit by examination are becoming increasingly valuable means by which students can individually match the scope of their prior learning with the content of the educational programs they are pursuing. It is not always necessary,

however, for students to individually match wits with college curricula in order to earn credits. In some cases, it is more efficient to all concerned and helpful to students to accredit formal training programs offered by non-collegiate institutions than it is to make all of the recipients of such training individually validate what they know. The armed forces, business and industry, organized labor, governmental agencies and religious groups all support formal educational programs which overlap with college curricula. Many of these non-collegiate programs are as professionally organized and well documented as those offered on college campuses. It is as reasonable, then, to equate them to courses on a college campus as it is to transfer college credits from one campus to another. For many years, the American Council on Education through its Commission on Accreditation of Service Experience (CASE) led the way toward such intersegmental accreditation. CASE has sponsored thousands of efforts to evaluate formal courses offered by the military services for their relatedness to college courses. Four editions of a publication entitled The Guide to the Evaluation of Educational Experiences in the Armed Forces have been published since CASE was founded in 1941. Each of the four so called "CASE Guides" lists formal training programs sponsored by the military during the time period covered and recommends credit equivalencies for each training program.

The first volume, published in 1948, evaluates service courses offered during and shortly after World War Two. The second, published in 1955, covers the Post-war Period through the Korean Conflict. The third edition, published in 1968, lists the many service courses offered between 1955 and 1968. The fourth edition, published in 1975, deals with those military courses offered during the Vietnam era.

Changes have been included in this latter edition which suggest that the American Council on Education is expanding its commitment to providing accrediting services. In the first place, CASE is not shown as the originator of the publication; its successor, the Office of Educational Credit (OEC), is. This new office was formed to expand upon the work of CASE and assess a variety of educational efforts in non-collegiate organizations. Credit recommendations for programs offered through business and industry are to follow the latest edition of the "Guide." Since the OEC is to be a continuously functioning office rather than an occasionally productive commission, the most recent "Guide" is to be updated annually with supplements. Thus, the new OEC promises to provide up-to-date credit recommendations for all military courses as well as an increasing number of other non-collegiate educational programs. In addition, the OEC seems to have recognized differences within higher education which must be taken into account in awarding college credit. Credit

recommendations included in the 1975 edition of the "Guide" are more explicit than they have been in the past:

In addition to a credit hour recommendation, a credit level recommendation is included for one of four categories: (1) vocational certificate level describing a course where the objective is to prepare an individual for employment on a prescribed job, (2) technical or associate degree level, including lower division baccalaureate work, (3) upper division baccalaureate degree level, and (4) graduate level. (Trivett, p. 37).

The increased commitment which the American Council on Education (ACE) has demonstrated by establishing the OEC and sponsoring new activities may lead to greater recognition of the accreditation option. Ruyle and Geiselman (1974, p. 249) found that far fewer colleges and universities were utilizing it than were using credit-by-examination. Only 35 percent of the colleges responding to their survey were granting credits on the basis of recommendations found in the four volumes of the "Guide."

Though most non-traditional programs which are sponsored by colleges and universities begin for students after they matriculate, there are some sponsored programs which are open to prospective students, thus, yielding credit for learning accomplished prior to entering a college or university. Most of these are arrangements which are made between post-secondary institutions and high schools. They may be based upon nationally recognized programs such as the Advanced Placement Program (AP) or they may be based upon

articulation efforts between specific colleges and high schools.

For twenty years the College Entrance Examination Board (CEEB) has sponsored the Advanced Placement Program, thus, providing high school educators with a means of offering college-level courses to their able students with some assurance that successful students will be granted academic credits for these courses when they enter college. Through the AP Program, high school teachers can obtain training and standardized materials, so that they can teach one or more of fifteen courses in a way which is recognized to be meeting college standards; through the AP program, students may take standardized examinations and forward their test scores to admissions officers at their prospective colleges; and, through the AP Program, college officials can assess the prior learning of some of their entering students with some understanding of the meaning of the credentials they are examining.

Since this program is as comprehensive as it is, it is by far the most widely used program of its kind. The CEEB reported that in 1974 alone, 60,863 students at over 3,300 high schools took AP examinations (The College Board News, 1975, p. 3). From other data reported, it would appear that approximately 70 percent of those students received qualifying scores on their exams and that well over 50 percent of the nation's colleges would be willing to grant credits for successful scores. Thus, Dr. Harlan Hanson, director of the

program, asserts that the AP Program is saving students and their parents millions of dollars each year:

Students who took Advanced Placement courses in high school and entered college this year probably saved an average of \$400 on college costs. As a group, AP students could have saved as much as \$24 million (p. 3).

Other sponsored programs are frequently arranged between colleges and local high schools. Rather than relying upon the standardized tests and materials available through the AP Program, college educators describe their programs and standards to high school instructors and develop methods for determining whether or not high school offerings are equivalent to the college ones. Project Advance, which is sponsored by the Center for Instructional Development at Syracuse University, is a well documented example of a program developed by a college for use on high school campuses. Begun in 1972, Project Advance was designed to meet four criteria which are not met by the AP Program or options which take high school students away from their home campuses. This project concentrated upon training high school instructors to teach various lower division collegiate courses commonly offered at Syracuse University. Once trained, the high school teachers are certified to teach courses for the university in their high school settings. Students enroll, pay tuition, and receive credits just as if they were taking their courses on the Syracuse University campus (Project Advance, 1975).

Though it operates on a much smaller scale than does the AP Program, Project Advance has demonstrated that a demand exists for it. It was field tested in 1973-74 and became operational in 1974-75. During its first operational year, 40 high schools chose to participate, yielding an enrollment of over 2000 students. These students were earning college credits in such courses as psychology, English, religion, and perspective on drugs while still attending their respective high schools.

Similar programs are emerging on other campuses. One program at Southwestern Oregon Community College has been developed to fill a gap not covered by either the AP Program or Project Advance. The program at Southwestern Oregon Community College focuses upon vocational-technical courses rather than the lower division collegiate ones covered by the other two approaches. Using graduate level courses offered by the Oregon Division of Continuing Education, the sponsors of the articulation project in Southwestern Oregon have brought high school and community college instructors together to work toward coordinating vocational-technical education offered in that section of the State of Oregon. Nine high schools have worked with Southwestern Oregon Community College to develop articulated curriculum guidesheets in appropriate vocational-technical areas. At the time of this writing, only a few of the guidesheets have

been completed, but activity is reported in fourteen vocational-technical program areas, promising that an increasing number of students will have opportunities to earn college credits for their vocational-technical training accomplished in high school (Cumpston, 1975, pp. 1-8).

In summary, methods available for granting credit for prior off-campus learning tend to fall into three categories. Most of the advanced standing practices are what has been called credit-by-examination methods. Through these means, students are granted credit for prior learning if they can demonstrate through an examination that their knowledge is equivalent to that of students who have completed the relevant course work. Two general types of credit-by-examination approaches are used -- standardized examinations and locally developed tests. The College Level Examination Program (CLEP), the College Proficiency Examination Program (CPEP), and the Regents External Degree Examinations (REDE) are examples of standardized examinations. Locally developed tests are available at most colleges and universities covering many courses of instruction.

Credit by accreditation is another category into which advanced standing practices may fall. Practices of this category are approaches which evaluate formal non-college training programs to determine if they are equivalent to college courses. Thus, students are not

required to demonstrate individual competencies as in the case of credit-by-examination; rather, evidence of successful completion of non-college training can be sufficient to command credit recognition. The productive efforts of the American Council on Education's Commission on Accreditation of Service Experience (CASE) have yielded a four volume collection of recommendations covering every formal military course offered since the beginning of the Second World War. The recent successor to CASE, the Office of Educational Credit (OEC), promises to expand accreditation options beyond the military focus to which CASE was restricted. Colleges and universities may soon have access to authoritative credit recommendations for training programs offered by industrial firms, churches, labor organizations, and other institutions to supplement the information they now have regarding military courses.

Credit through sponsored off-campus programs is the final category into which credit for prior learning practices may fall. Practices of this kind rely upon arrangements made between colleges and other agencies, primarily high schools, which allow a college to treat specified off-campus learning as if it were a part of the college program. The standardized materials available through the College Entrance Examination Board's (CEEB) Advanced Placement Program (APP) is by far the most widely recognized and utilized program of this kind, but many colleges and universities have made

agreements with high schools and other agencies, so that the non-collegiate institutions' programs may become sponsored courses eligible for academic credits.

None of these advanced credit categories are new to higher education. Credit-by-examination dates back to the beginnings of the credit system, and other types of practices have been tested over many years. In recent years, however, the practices have been gaining momentum. During the 1950's it was estimated that 50 percent of all colleges and universities accepted at least one method of granting credit for prior learning (Haag, 1975); by 1970, two-thirds of them were reportedly doing so (Haag, 1975); and by 1974, it has been estimated that over 90 percent of the nation's colleges and universities may be granting credits for prior learning (Ruyle and Geiselman, 1974).

This national trend has also been apparent in Oregon, the state in which this study was conducted. In 1972, the Oregon Office of High School College Relations (1972) conducted a survey of all colleges and universities in the state to determine which advanced credit options were available to Oregon college students. Manspeaker replicated that survey in 1975 for the Trends newsletter of the Oregon Department of Education ("Schooling is Leaving its Cocoon," 1975, p. 3). Comparisons of the findings of the two surveys indicate that there has been a steady increase in the acceptance of options which help

students qualify for advanced credits. While 66 percent of the Oregon schools granted credits through the AP Program in 1972, 77 percent were doing so in 1975; while 85 percent of the schools utilized locally developed tests to grant advanced credits in 1972, 91 percent were doing so in 1975; while only 23 percent of the schools granted credit through the CLEP General Examinations in 1972, 77 percent were doing so by 1975; and, while 43 percent of the schools used the CASE Guide to grant credits for military training in 1972, 68 percent were doing so in 1975.

Table 1 was developed from the data collected by Manspeaker in 1975. It identifies the policies which were in force at the eleven community colleges which participated in this study.

Table 1. Policies regarding credit for prior learning at eleven Oregon community colleges during 1975-76.

	A. P.	CLEP Gen.	CLEP Subj.	Local Tests	CASE Guide	Articu- lation
Blue Mountain C. C.	a	c	c	-	a	d
Central Oregon C. C.	a	d	d	a	d	d
Chemeketa C. C.	d	c	c	a	a/b	b
Clackamas C. C.	a	a	a	a	a/b	a
Clatsop C. C.	d	a	a	a	a	d
Lane C. C.	a	a	a	a	-	a
Linn-Benton C. C.	a	a	a	a	d	c
Mt. Hood C. C.	a	a	a	a	f	b
Rogue C. C.	a	-	a	a	a	-
Treasure Valley C. C.	a/b	a/b	a/b	a	c	d
Umpqua C. C.	a	a	d	a	c	c

LEGEND: (a) = Using to grant degree credit; (b) = Using to grant exemption but no credit; (c) = Not using but under consideration; (d) = Not using and no plans to use; (-) = No response received.

The Impact of Advanced Standing
Practices Upon Students

In the final analysis, the success or failure of the practice of granting academic credits for prior off-campus learning must rest upon the impact it can be shown to have upon the growth and development of students. Advanced standing policies are adopted on college campuses in order to help students meet felt needs. Specifically, they are adopted in the belief that they will be instrumental in allowing a student to accelerate or enrich his or her collegiate program. In addition, it is asserted that they have the affective power to increase a student's sense of self-confidence and the economic potential to save him or her money. It is the value of these outcomes which tends to justify the commitment of resources which is essential to make advanced standing practices function.

What, then, is the impact which advanced credit practices are having upon students? A review of related literature suggests that the answer to this question is not yet fully known. Though many studies have been conducted with students who have earned advanced credits, most have been intended to validate the techniques used to grant the credits rather than to determine the impact which the credits have had upon students. For the most part, these studies have sought to determine whether students who receive advanced credits will enjoy academic success in subsequent courses at levels

equivalent to those enjoyed by students who are not granted advanced credits (Aleamoni, 1973; Auger, 1969; Bergeson, 1966; Bingham, 1972; Bohensky, 1978; Brubacher, 1967; Burnham, 1972; Cardwell, 1971; Fry, 1973; Gollmore, 1974). Other studies have investigated a similar indicator; they have sought to determine whether the persistence rates of advanced credit recipients are as high as those of students who did not receive such credits (Helton, 1964; Knight, 1974; Morris, 1964). The results of both types of studies have been consistent. They indicate that the methods used to grant credits for prior learning do not endanger the future success of students receiving advanced credits. Stated another way, they suggest that the academic standards of an institution are not threatened by the use of advanced credit practices on that campus. After reviewing several of these studies, Kreplin (1971, p. 59) came to the following conclusion:

In general, students awarded course credit by examination, whether or not they accelerate, are likely to have the following characteristics:

- 1) Low attrition rates.
- 2) High G. P. A. 's
- 3) High likelihood of graduating with honors.
- 4) High likelihood of continuing to graduate or professional schools.
- 5) Average extracurricular participation.

As significant as these characteristics may be, they are not outcomes of the practice of granting credits for prior learning. They are the characteristics of superior students; thus, the findings of

these studies suggest that students who receive advanced credits upon entering college tend to function in college as superior students.

Since we know that students earn advanced credits as a result of knowledge and skills not held by most entering students, we can assume that entering students who receive advanced credits are superior in some ways to most of their fellow students. Therefore, these studies allow us to infer that the practice of granting credits for prior learning is not fraught with serious negative impacts which threaten the success of students, but they do not allow us to identify the impacts which do result from the practice.

A few studies have been conducted to determine the nature of the impacts which can be attributed to advanced standing practices. None of these have been comprehensive in their design, and none are directly comparable with any other study, but they do report consistent findings and, thus, suggest the nature of some of the impacts of granting academic credits for prior off-campus learning.

Flesher and Pressey (1955) conducted a ten-year follow-up study of 112 women who had completed a four-year undergraduate program at Ohio State University in three years or less during the years 1941 through 1945. Most of the respondents indicated that their opportunities to accelerate their programs had desirable impacts upon them. Seventy-nine percent felt they saved valuable time and 62 percent felt the opportunities had presented a worthwhile

challenge to them. A small minority of the respondents reported negative implications. Twelve percent felt that acceleration had prevented them from doing their best work; 9 percent felt their social life had been undesirably limited; and 7 percent found acceleration to be a strain on their health.

Wagner (1952) surveyed 140 students from the University of Buffalo who had earned at least nine hours of advanced credits. Through her survey, she asked students to identify the advantages and disadvantages of earning advanced credits. As a result, 326 advantages were identified as opposed to 19 disadvantages. Fully 80 percent of the respondents cited the opportunity to save time as an advantage. Almost half commented upon feelings of satisfaction, confidence, and motivation as advantages. Thirty-six percent mentioned various enrichment opportunities which were available to them as a result earning advanced credits.

Casserly (1968, 1969) interviewed over 500 college students who had taken Advanced Placement Program courses while in high school. Although only half of the students had received credits for their AP experiences, 90 percent of them reported that the experiences had either heightened their interest and motivation in the fields covered, increased their self-confidence, or prepared them well for advanced sequent courses. Indeed, fully 90 percent stated

that the AP courses had been the most valuable of their high school courses.

More recently, Casserly (1973) conducted a study to determine the benefits of the College Level Examination Program (CLEP). She found that the opportunity to attain a college degree in less time for less money was the prime benefit which a majority of respondents identified. In addition, 25 percent of the younger respondents and 40 percent of the older ones mentioned "...increases in self-assurance which in turn led to increased aspirations and elevated goals" (p. 25).

Finally, the results of the College Diagnostic Questionnaire (CDQ) used on the campus of the Illinois University, Urbana, helps to confirm the importance of enrichment opportunities to students (Brandenburg, 1974). One of many questions asked in the CDQ attempts to identify the reasons why students seek credit by examination. Sixty-six percent of the students who actually sought credit by examination indicated that they did so either to (1) allow time for more courses in their major or (2) to allow more time for electives and extracurricular activities. Surprisingly, only 18 percent did so to complete their undergraduate work in less than eight semesters. The remaining 16 percent indicated that they had sought advanced credits to reduce their work load in order to obtain higher grade point averages (Table 14).

These studies do not provide conclusive information about the nature of the impacts which advanced standing practices have upon students, but they do tend to verify that such practices can provide valuable opportunities for students to accelerate or enrich their collegiate programs while also gaining other benefits. Information available about the scope of the impacts is so limited, however, that it is only possible to speculate about the numbers of students who could benefit from the impacts of advanced standing practices.

Kreplin (1971) reviewed the literature to determine how great the demand was for advanced standing opportunities but was forced to conclude that "...an estimate of potential student demand for credit by examination must await empirical investigation" (p. 48). Trivett (1975) attempted to determine the extent to which academic credit is granted for prior off-campus learning by American colleges and universities, but he found no "...truly current or specific survey results...." to report in this regard (p. 10).

Two investigations have been conducted since Kreplin's review which do provide empirically derived indicators of the potential student demand for opportunities to earn credits for prior off-campus learning. An experiment conducted in the fall of 1971 at San Francisco State University led to the finding that 67 percent of the entering freshmen took the CLEP General Examinations when those tests were made available at no charge to students and when special

efforts were made to let students know of this availability (Whitaker, 1972, p. 13). More recently, the American College Testing Program and the Scholastic Aptitude Testing Program were utilized to determine how many high school seniors were planning to attempt to earn advanced standing of some kind when they entered college. As cited in Chapter One, 54 percent of the 814,000 respondents indicated that they did hope to qualify for advanced credits of some kind (Haag, 1975, pp. 1-3).

Findings of this kind do indicate that interest in advanced credit opportunities is very great, but they do not suggest the scope of current impact nor even the scope of potential impact. The experiment at San Francisco State College did provide some indication of what this latter figure might be, for as a result of the experiment, 94 percent of the students who took the CLEP General Examinations qualified to receive some credits. Thirty-eight percent qualified to be eligible for 30 semester units of credit: These percentages cannot be used to make general estimates of the potential impact, however, because San Francisco State College used the results of the experiment in quite an other way. Educators at that institution were concerned that the qualifying standards used in the experiment were too lenient and, as a result, saw to it that they were subsequently changed. Had the new standards been used during the experiment, 64 percent of the students taking the exams would have received

some credit while only 7 percent would have become "instant sophomores" (Whitaker, 1972, p. 13).

In summary, it can be stated that strong evidence does exist to indicate that the practice of granting academic credits for prior off-campus learning does have positive impacts upon students. Objective indicators of educational achievement, student perceptions of the benefits of advanced credits, and measures of student demand all support this conclusion. Little evidence now exists, however, to suggest the scope of the impact. There is too little information to estimate the extent to which colleges and universities are currently granting advanced credits, and it is not clear how many students could benefit from advanced standing opportunities under ideal conditions. One might conclude, then, that it is justifiable to commit resources to services designed to provide opportunities for students to earn academic credits for prior off-campus learning, but it is not yet possible to clearly determine how great the commitment of resources should be.

Needs Identification Methodology

The previous sections of this chapter have focused upon the practice of granting academic credits for prior off-campus learning. In this final section, the focus is changed and moves to the methodology providing the bases upon which the needs assessment model

used in this study was developed.

This section will not review the writings of behavioral scientists and organizational theorists who have attempted to develop the theoretical constructs supporting the assumption that people feel needs of various kinds and the assumption that organizations are formed and exist to meet needs which are felt by a supporting constituency. Rather, these two assumptions will be accepted without comment, but their implications will be considered.

Given the above assumptions, it seems safe to state that some form of needs assessment has preceded the introduction of new approaches to organizations for many centuries. This is not to suggest that sophisticated techniques have long been available or that all organizational decision-making procedures have explicitly included a consideration of needs. It is to suggest, however, that decision-makers and decision-making strategies which have stood the test of time have attended to the needs of the people being served, and in doing so they have assessed the needs of a constituency. Survival has depended upon it.

This has been the case within the field of education just as in other endeavors. However, it was not until the late 1960's that the professional literature in education began to emphasize the concept of needs identification. Until that time, it was an implicit facet of decision-making which received little explicit attention. Coffing

and Hutchison (1974, p. 1) suggest two reasons why needs assessment techniques have recently begun to command attention. First, they point out that

...students, parents, employers, taxpayers, and others are demanding educational services that meet their needs, and they are less willing than they were in the past to have educators define their needs for them.

Second, they note that needs assessment techniques are being adopted as a result of the more systematic decision-making strategies which have been introduced to education in recent years.

Though it is not the purpose of this section to prove or disprove the validity of the reasons presented by Coffing and Hutchison, it can be noted that recent actions of state legislatures, such as the 1975 session of the Oregon Legislative Assembly, tend to support their first contention; in addition, the five-year plan of the National Center for Higher Education Management Systems (NCHEMS) supports the second. It indicates that the recognized leader in the process of adapting systematic decision-making strategies to the uses of higher education has identified the task of "assessing program needs" to be one of its seven priority concerns (NCHEMS, 1975, p. 5).

Whatever the reasons, a growing number of assessment techniques are being used to measure the educational needs of students and citizens at large. Coffing and Hutchison have identified the foundations upon which they believe needs assessment strategies

should be based. In doing this, they defined several terms of importance to their methodology:

1. Need: "...a concept of some desired set of conditions"...
"a concept of what 'should'" (p. 5).
2. Need fulfillment: "...refers to the status of 'what is'"
(p. 5).
3. Discrepancy: "The observed difference between 'what
should be' (a need) and 'what is' (need fulfillment) (p. 6).
4. Needer: "...someone to whom the need is attributable"
(p. 7).
5. Definer: A person who conceives or defines a concept of
"what should be" in relation to some needer (p. 8).
6. Information user: "...a person, or a group of persons
acting as a group who want to use information about needs
in making their decision..." (p. 9).

Through the framework which these and six other definitions are designed to provide, Coffing and Hutchison describe a process which they believe will answer the basic question which drives an inquiry into needs: "Who needs what, as defined by whom?". Though the process described identifies five purposes and consists of many steps to be accomplished, it appears to include four major procedures which this reviewer found to be inherent in the other needs assessment techniques he considered. First, the nature of the need, the identity of the needers, and other definitional considerations are made. Second, the expectations or aspirations of the needers are measured ("what should be"). Third, the extent of current fulfillment

("what is") is measured. Lastly, an analysis is made to determine if a discrepancy can be found between "what should be" and "what is."

The conceptual work of Coffing and Hutchison does seem to differ from the field work reviewed, however, in one significant way. It would appear that most needs assessment techniques are based upon a different definition of the word "need" than is proposed by Coffing and Hutchison. Instead of equating the term "need" with the concept of "what should be," most researchers accept Webster's (1972) definition, which characterizes a need as "...something useful, required or desired that is lacking..." (p. 981). Kaufman (1972, p. 49) seems to be writing for the majority when he states that:

an educational need is a measurable outcome discrepancy between "what is" and "what should be." If there is no difference between where we are and where we should be, then we have no "need."

This technical point of difference between the conceptual work of Coffing and Hutchison and the field work reviewed for this study does not diminish the importance of the methodology which Coffing and Hutchison describe, but it does present a potential source of confusion for anyone not aware that two definitions of the word need are being used by researchers. As noted in the definitions' section of Chapter One, the discrepancy definition of "need" was used in this study.

None of the needs identification techniques identified through the literature are designed to measure students' needs for opportunities to qualify for academic credits for prior off-campus learning, but several were identified which are being used on college campuses to identify other student needs. Consequently, they were reviewed to accommodate the development of the specific needs assessment model used in this study.

Perhaps the most widely publicized needs identification process available for use in community colleges is one which was developed by the Battelle Center for Improved Education. The techniques used relies upon survey instruments designed for students, faculty, supportive staff, administrators, and board members. The surveys are based upon a number of specifically stated goals and conditions; the respondents give their opinions on the extent the stated goal exists and on the extent it should exist. The difference (discrepancy), then, presents the "need." Thus, through analysis procedures provided by Battelle, college officials are able to compare the needs perceived by each group of respondents.

The Commission on Educational Planning of Phi Delta Kappa, Inc., distributes a program developed by the Northern California Program Development Center of Chico, which solicits the opinions of a cross-section of people from a given community to identify needs and provides procedures for developing goals and objectives to fulfill

those needs. Materials included with this program are designed to determine the general educational needs existing within a community and, therefore, include surveys for professional staff members, a "representative community committee," and students. Also included are instructions for analyzing data and for constructing goals and objectives (Phi Delta Kappa, 1972).

The Center for Community Needs Assessment has coordinated a series of projects conducted by a consortium of Central Florida community colleges. These projects have yielded research techniques which can be used by community college planners across the country and in-depth data related to the needs of constituent groups in Central Florida. Seven distinct projects were conducted by the participants of this study in order to test a core model developed for the consortium. These projects included studies of student characteristics, community awareness, past student success, employer needs, management profiles, manpower projections, and faculty evaluations (Tucker, 1973; Central Florida..., 1974; Florida Junior College, 1974; St. Johns River..., 1974; Valencia Community College, 1974; Brevard Community College, 1974; Florida Keys..., 1974; Lake City..., 1974).

The three approaches cited above were designed to provide a means of conducting a comprehensive assessment of the needs of an institution's constituencies. Other similar approaches exist, and

several additional techniques have been developed to identify the needs for specific programs within an institution. Since the model developed for this study is of this latter type, special consideration was given to three of these techniques.

Carp, Peterson, and Roelfs (1974) conducted a study to determine the potential market for adult learning. Special sampling techniques were used to make the sample representative of the national population of adults, and a thirty-four item questionnaire was sent to each subject in an attempt to determine adult needs for educational services. The data, which were collected in mid-1972, yielded measures of demand for instructional services in many subject areas and provided estimates of the current extent to which adults are enrolled in formal educational programs.

Some of the findings of the study conducted by Carp and his associates seem to be of particular relevance to a study of students' needs for opportunities to qualify for credits for prior-learning. The general findings suggest the scope of adult interest in learning:

... 77 percent of adult Americans (aged eighteen to sixty) report interest in learning more about some subject or pursuing some skill; a remarkable 31 percent of the population is engaged in some form of adult learning; and 95 percent of the present learners wish to continue their learning (p. 15).

One specific finding also provides a gross indication of how this great interest in adult learning could have impact upon the practice

of granting credits for prior learning. That finding is one which indicates that nearly two-thirds (63 percent) of the "would-be learners" (those persons interested in learning but not now enrolled in any formal programs) would like to receive some form of recognition for their learning (p. 36). That finding could imply that in addition to the students who currently feel in need of opportunities to qualify for academic credits for prior learning, tens of millions of other adults are interested in continuing their learning and would like recognition for it (perhaps through credit for prior learning options).

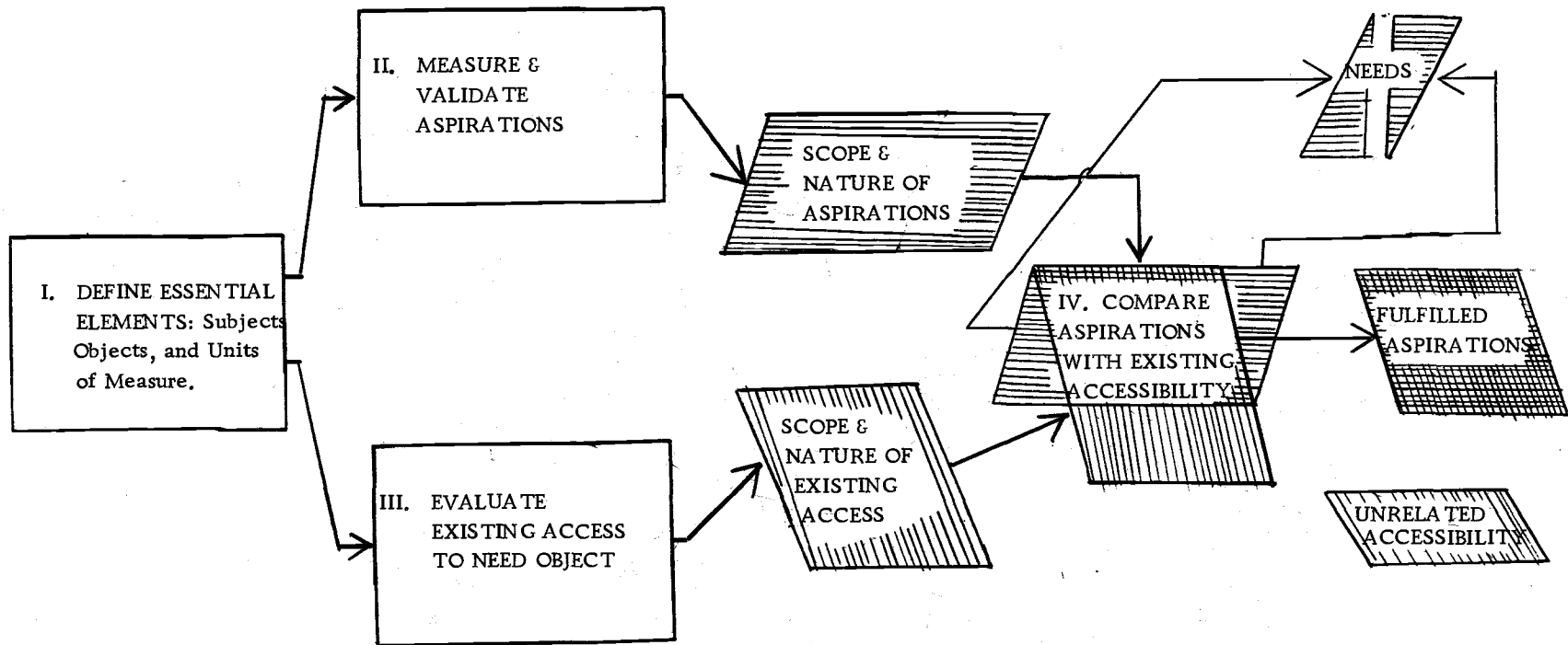
Two other assessment techniques deserve mention. They were both designed to assess needs for student personnel services. Flores (1972) developed such a procedure and tested it upon married students attending two Universities in Texas. Schmidt (1974) developed a student services needs assessment technique which she tested at Indiana University, Bloomington Campus. Both techniques are based upon the discrepancy definition of "need," but Flores' survey instrument restricts itself to an investigation of needs for services within what he calls the "Student Selfhood and Development area of responsibility," while Schmidt attempted to identify a comprehensive set of needs for student personnel services. In addition, the two researchers relied upon different sources to identify the extent of existing fulfillment ("what is"). Flores relied upon the perceptions

of a jury of student personnel workers, while Schmidt asked students to estimate the availability of selected services in much the same way that the Battelle survey does. The findings of the two studies varied significantly. Flores found very little need for additional student personnel services among the married students he surveyed on two Texas campuses, while Schmidt identified needs of considerable proportion at the University of Indiana, Bloomington Campus. Since the two techniques used were not comparable, it is not possible to infer why the findings differed so. The two techniques would need to be administered simultaneously on one or more campuses to begin to make this determination.

To summarize this last section of the review of literature, it can be stated that the importance of human needs has long been recognized by organizational decision-makers, but it was not until the last decade that explicit techniques for measuring needs began to be widely used in education. Six specific needs assessment methods were reviewed which are representative of the methods of this type being used on college campuses during the 1970's. It was apparent that each of these methods was designed to complete four general procedures which yield a measure of needs, but it was also apparent that some methodological differences exist among the techniques. The most significant difference is the fact that two definitions of the word need are found in the literature. One

definition considers a need to encompass all that is desired ("should be"), while the other considers a need to be the difference between what "should be" and what "is." Table 2 indicates how the four general procedures of needs identification can lead to a measure of need, using this latter definition.

Table 2. Four general needs assessment procedures



III. METHODOLOGY

The problem of this study was to assess and analyze the perceptions of students and educators toward the practice of awarding academic credits for prior off-campus learning. The study was conducted in four phases. First, a model was developed for the assessment of student needs for opportunities to qualify for advanced credits. Second, two instruments were developed to measure the perceptions of the subjects of the study. Third, the instruments were administered to samples of students and educators. Finally, the data collected were analyzed to determine the effectiveness of the model and the instruments developed and to make some interpretations of the data collected. This chapter describes the procedures employed to complete these phases.

The Needs Assessment Model

The primary purpose of the study was to provide a technique for the assessment of student needs for opportunities to qualify for academic credits for prior off-campus learning. The approach which was developed to meet this purpose was built upon the discrepancy definition of need which was reviewed in the previous chapter. This definition, which characterizes a need as "...something useful, required or desired that is lacking" (Webster's..., 1972, p. 981),

suggests that a need can be described in terms of gaps existing between what is determined to be "useful, required or desired" and what is assessed to be available to the subjects concerned. The six specific educational needs identification techniques described in the previous chapter utilized this discrepancy concept of a need and thus influenced the development of the model designed for this study.

As indicated in Table 2 presented in the previous chapter, four general procedures were found to be inherent aspects of each of the assessment techniques reviewed. Through the first procedure, the basic elements of an assessment problem are defined; through the second, the aspirations of the subjects of a study are assessed; through the third, the levels of existing accessibility to the desired objects of need are measured; and through the fourth procedure, estimates of need (discrepancies between what is desired and what is accessible) are computed. These procedures provide the framework around the needs identification model developed for this study.

Through the definitional procedure, the subjects in need were identified, surrogate subjects were also named, the object of need was pinpointed, and units of measure were conceptualized. The subjects in need were determined to be entering students. In addition, returning students and educators were identified as surrogate subjects who could help to validate the aspirations of the subjects in need. The object of need was clarified as opportunities to qualify

for academic credits for prior off-campus learning. Finally, two types of measures were conceptualized for the purpose of measuring aspirations for the object of need and current accessibility to it in units of measure which are comparable. One type of measure, student demand, was designed to serve as a measure of entering students' aspirations for advanced standing opportunities. Two similar measures, retrospective demand and educators' estimate of demand, were defined as measures which could serve to validate entering students' demand. These measures of demand were further qualified as measures of strong, weak, or gross demand. The second type of measure, self-reported receipt of advanced credits, was designed to provide a measure of current accessibility to the object of need. Based upon responses from returning students, this measure indicates the proportion of entering students who can be expected to receive credits for prior off-campus learning during their initial year of college. Both measures of student demand and self-reported receipt of advanced credits were designed to be expressed as a percent of the total population of entering students, so that comparability would exist. All such measures are defined in the definitions' section of Chapter One.

The second general procedure of needs identification must assess and validate the aspirations of the subjects in need. The model developed for this study utilizes two questionnaires to obtain

measures of entering students' demand, retrospective demand, and educators' estimate of students' demand. These three measures of demand and the qualifiers associated with them were conceived to provide a range of percentages which would indicate the general scope of demand while also providing high, low, and median estimates of it.

The third general procedure must evaluate existing conditions to determining the actual level of accessibility to the object of need. Several methods were investigated before utilizing a questionnaire to make this evaluation. Officials at all of the colleges participating in this study were contacted to determine if records are kept of credits granted for prior off-campus learning. Without exception, the college officials responded by estimating the number of students at their colleges who earn such credits but stating that no specific records were available to verify those estimates. In addition, data available through the College Entrance Examination Board were considered to determine if the number of students receiving credits through the CLEP Exams and the Advanced Placement Program could be identified. Again, rough estimates could be made but they could not be substantiated. Therefore, self-reported receipt of advanced credits was determined to be the most accurate measure of existing accessibility available. The students' questionnaire utilized to obtain measures of entering students' demand and

retrospective demand was also used to measure existing accessibility. Measures of existing accessibility could thus be obtained from entering students and returning students. However, only measures obtained from returning students were included in the needs identification model. The decision not to use data obtained from entering students was made in recognition that entering students cannot be expected to have had adequate exposure to opportunities available to them at the time they are asked to complete the data collection instruments.

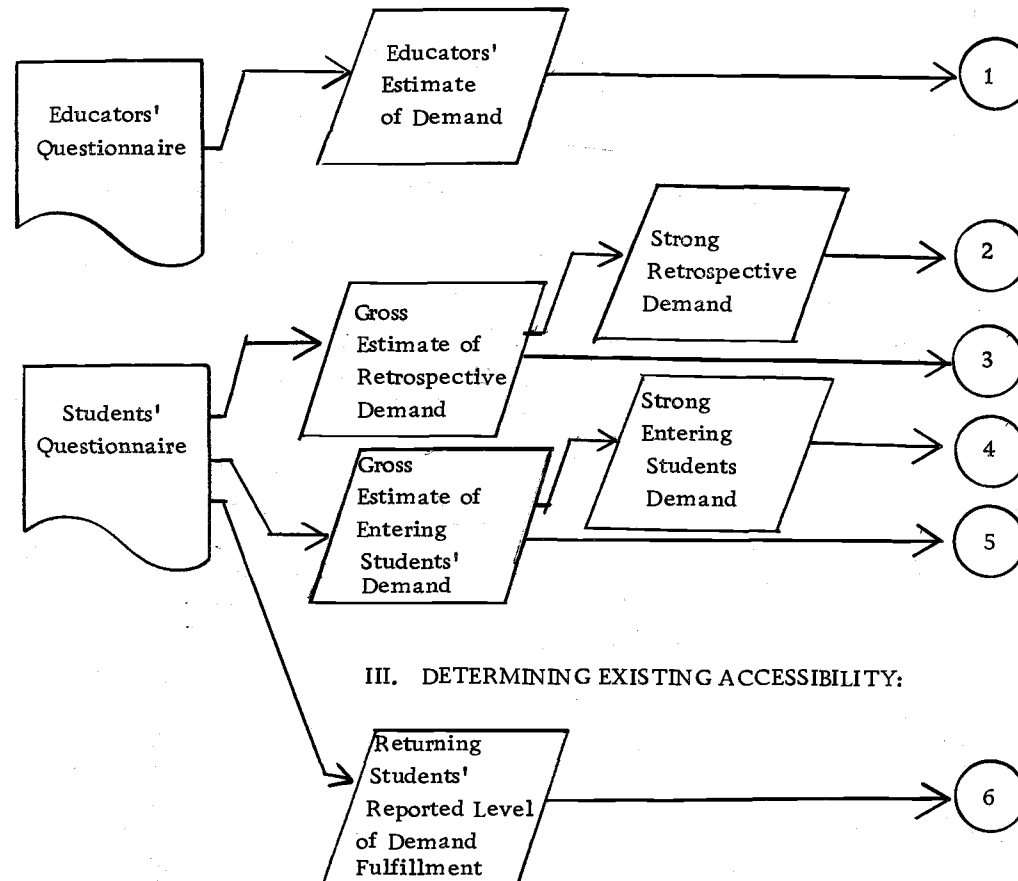
Measures of need can be obtained through the fourth procedure by comparing measures of aspiration (demand) with measures of existing accessibility. Theoretically, this final procedure can be as simple as the act of subtraction; one measure indicating the level of existing accessibility is subtracted from another measure indicating the level of desired accessibility, thus yielding a precise measure of need. In the model developed for this study five alternative measures of demand were to be obtained and one measure of existing accessibility was to be determined. Therefore, five alternative measures of need were to be computed. These multiple measures were conceived to avoid misleading conclusions which could result if only one measure of aspirations were to be compared with one measure of existing accessibility. By considering the perceptions of entering students, returning students, and educators, the model was

Table 3. A model to assess student needs for advanced credit opportunities

I. DEFINITIONAL PROCEDURES:

- A. Subjects in need (needers):
 - 1. Entering students.
- B. Validation subjects:
 - 1. Returning students,
 - 2. Educators.
- C. Object of need:
 - 1. Opportunities to qualify for academic credits for prior off-campus learning.
- D. Units of measure:
 - 1. Student demand,
 - a. Educators' mean estimate of student demand
 - b. Entering students' demand,
 - (1) Strong demand,
 - (2) Weak demand,
 - (3) Gross demand,
 - c. Returning students' retrospective demand,
 - (1) Strong demand,
 - (2) Weak demand,
 - (3) Gross demand,
 - d. Reported level of fulfillment,
 - e. Entering Students Need;
 - (1) Gross,
 - (2) Active.

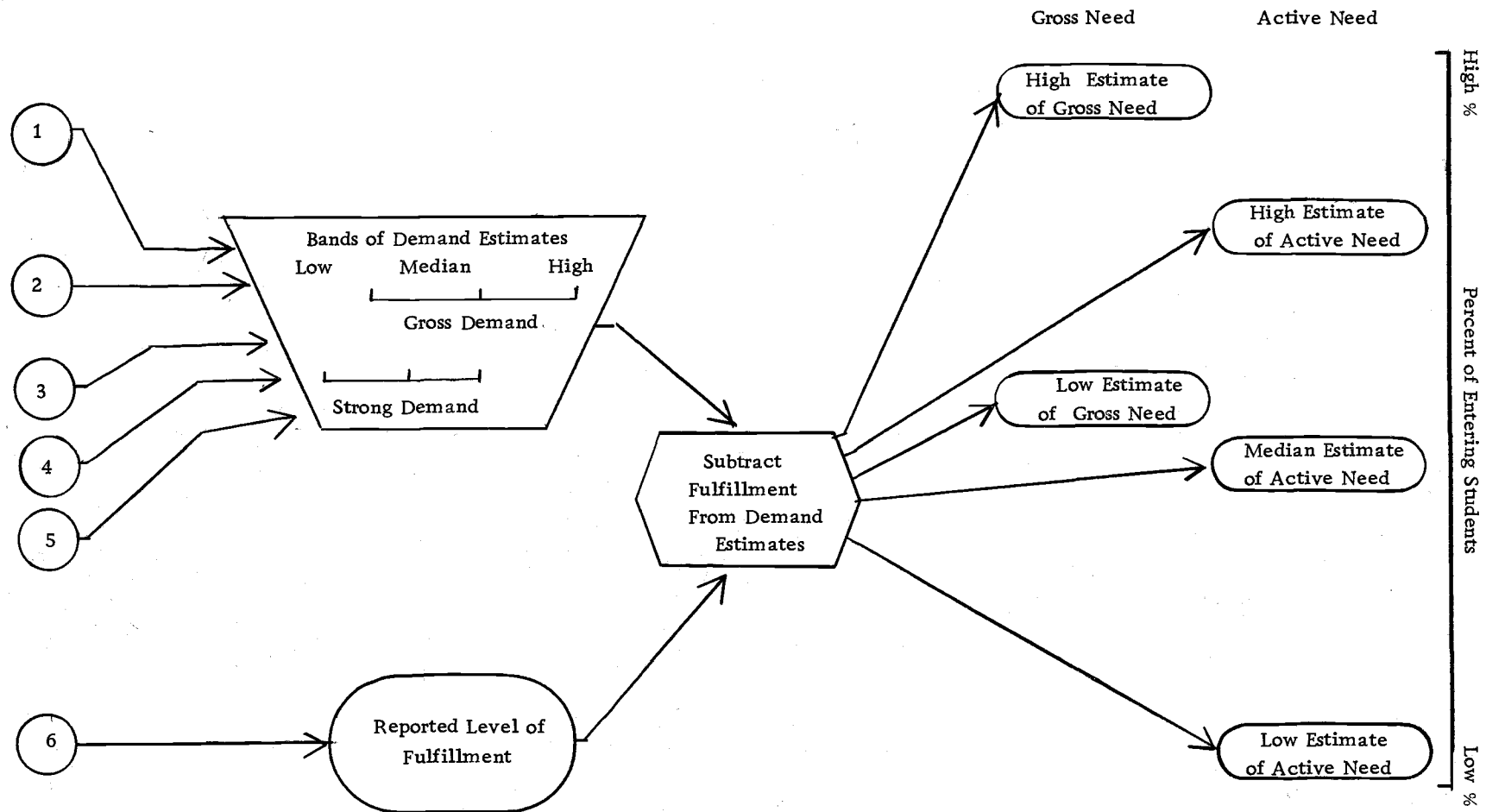
II. ASSESSING ASPIRATIONS/EXPECTATIONS:



III. DETERMINING EXISTING ACCESSIBILITY:

Table 3 . (Continued)

IV. COMPARE ASPIRATIONS/EXPECTATIONS
WITH EXISTING ACCESSIBILITY:



designed to provide high, median, and low estimates of the scope of students' needs for advanced standing opportunities and to allow subjective interpretations of the validity of each.

Table 3 is a flow chart indicating how the four general procedures of needs identification were incorporated into the model developed for this study.

Development of the Instruments

Two instruments were designed to facilitate collecting the data needed to implement the needs assessment model developed for this study. They were also constructed to serve the secondary purposes of the study which were to bring empirical evidence to bear upon selected aspects of the practice of granting academic credits for prior off-campus learning. One instrument, the "Questionnaire to Determine Students' Needs for Opportunities to Earn Academic Credits for Prior Off-campus Learning (Appendix A), was designed to be administered to college students. The other, the "Questionnaire to Determine Educators' Perceptions of Granting Academic Credits for Prior Off-campus Learning (Appendix B), was designed to be mailed to college educators.

Both instruments went through four stages of development. First, a rough draft version of each questionnaire was created.

Second, selected professionals were asked to critique the drafts.

Third, each instrument was pilot-tested. Fourth, refined drafts were sent to a panel of experts (Appendix C) for final review.

Twelve principles of questionnaire construction (Best, 1970, p. 164-167) were observed in developing the first drafts of the two questionnaires. Those drafts were then reviewed by several interested professionals and revised in response to their criticisms. These revised drafts served as the instruments used during the pilot-testing phase. The students' questionnaire was pilot-tested at Lane Community College during the summer of 1975, and the educators' questionnaire was tested at Oregon State University and Clatsop Community College during the summer and fall of 1975. During this phase, each instrument was administered to a sample of subjects on two occasions spaced four weeks apart. This test-retest method was utilized to evaluate the reliability of the drafts of each instrument and to predict appropriate sample sizes for the subsequent data collection phase of the study. The Pearson Product-Moment formula was used to compute the coefficients of correlation used to evaluate reliability, and Parten's formula for determining sample size (Goode and Hatt, 1952, p. 229) was used to predict sample size.

Coefficients of correlation and estimates of appropriate sample size were computed for three sections of each questionnaire. Items in section one relate to awareness of existing advanced standing

policies and attitudes about those policies; items in section two were designed to measure student demand; and items in section three were designed to measure attitudes about the use of advanced credit options and the impact they have upon students. Table 4 presents the key statistics which were derived through the field-testing phase of development:

Table 4. Statistics derived from pilot test data.

	Students' Questionnaire			Educators' Questionnaire		
	Section One	Section Two	Section Three	Section One	Section Two	Section Three
Number of Respondents (n)	36	36	36	24	24	24
Mean score (\bar{x})	6.88	6.6	9.9	6.77	15.68	45.6
Standard Deviation (s)	4.2	2.2	3.6	1.86	5.48	6.03
Coefficient of Correlation (r)	.76	.50	.88	.70	.61	.77
Appropriate Sample Size (N):						
90% Confidence Level	109	36	35	28	34	8
99% Confidence Level	246	91	85	51	81	18
Proportion of Permissible error	.10	.10	.10	.10	.10	.10

The interpretations which were made of the reliability coefficients as well as comments received from respondents during the field-testing phase led to significant revisions of each instrument. The revised instruments were then sent to a panel of experts for final review. The final drafts of each instrument were developed after receiving comment from the panel of experts.

Selection of the Samples of Subjects

Appropriate administrators on the campuses of the thirteen Oregon community colleges were contacted to solicit participation in this study (Appendix D). Agreements to participate were received from twelve of the thirteen colleges. Other conditions restricted two of those colleges from full participation, however. The contact person at Treasure Valley Community College was unable to arrange to have the students' questionnaire administered during the time-frame established for the study, and the agreement to participate in the study was received from Southwestern Oregon Community College after the data collection phase had been completed.

Thus, students enrolled at ten Oregon community colleges during the fall term of 1975 and educators associated with eleven of those colleges comprised the population sampled for this study. From that population, samples of educators, entering students, and returning students were surveyed. The sample of educators was selected through a stratified random sampling technique, and the student samples were indirectly selected by randomly selecting a stratified sample of college classes.

The following steps were designed to select a sample of educators simply and without introducing bias: First, the appropriate sample size was determined by utilizing information contained in

Table 4 of this chapter as well as tables recommending sample size minimums for Chi Square tests contained on Psychological Statistics (McNemar, 1969, pp. 253-254). Second, each educator listed in the "1975-76 Directory of Oregon Community College Personnel" and employed by one of the eleven participating colleges was given a reference number and categorized to be an administrator, student personnel worker, or instructor. Third, a table of random numbers was used to select a sample of educators to become subjects in this study; this sample was selected by simple random sampling except that steps were taken to ensure that a sufficient number of administrators and student personnel workers would respond to the questionnaire. Fourth, a letter of explanation (Appendix E), the appropriate instrument, and a stamped and addressed envelope were sent to each subject. Table 5 indicates the number of subjects selected, the number of responses received, and the response rate achieved for each of three professional categories.

Table 5. Summary of participating educators.

	Total Subjects	Total Respondents	Response Rates
Administrators	20	13	.65
Student Personnel Workers	30	28	.93
Instructors	100	67	.67
GRAND TOTAL	150	108	.72

Community college students were found to be poorly suited to selection through a simple random sampling technique similar to that used to select the sample of educators. No centralized roster of Oregon community college students existed; student records which do exist on college campuses were not readily accessible to the researcher; and the high degree of mobility which characterizes community college students suggested that distribution through the mail system would be destined to yield a low response rate. It was determined that these limitations precluded the use of a selection process identical to the one used to sample educators. As a result a technique was devised for selecting a representative sample of classes offered at participating colleges, so that students in those classes could become the student subjects selected for the study.

In order to select a representative sample of student subjects, three types of classes were included in the sample of classes selected at each of ten colleges participating in this phase of the study. A vocational-technical preparatory class; a lower-division collegiate class; and a class considered to be a general education course were selected at each participating college. In addition, one of the three classes at each college was being offered during the evening hours. Contact persons on each campus selected the specific courses based upon these criteria. As a result, instructors of thirty selected classes administered the students' questionnaires during the fall

quarter of 1975. A total of four hundred and seventeen students completed the questionnaires as a result of his effort. Table 6 indicates the number of respondents acknowledging selected characteristics of interest in this study.

Table 6. Summary of student respondents.

	Entering Students	Returning Students	Total Students
Student Status			
Full-time	202	134	336
Part-time	28	30	58
Age			
19 or under	106	30	136
20 to 24	47	58	105
25 to 30	40	38	78
Over 30	45	41	86
Academic Background			
3.50 G. P. A. or Higher	30	28	58
3.00 to 3.49 G. P. A.	70	50	120
2.50 to 2.99 G. P. A.	63	54	117
2.00 to 2.49 G. P. A.	57	29	86
1.99 G. P. A. or lower	11	7	18
Marital Status			
Married	83	81	164
Single	151	84	235
Sex			
Male	144	119	263
Female	91	45	136

As indicated in Table 6, not all of the students responding to the questionnaire chose to complete the section dealing with student characteristics. Three hundred and ninety-nine students completed

the section, while eighteen did not. This phenomenon was not confined to the section regarding student characteristics nor was it confined to the student questionnaire. Educators also tended to complete some items and leave others blank. Educators were particularly prone to opt not to complete the sections requiring them to estimate the percent of students likely to be capable of qualifying for advanced credits in a given curriculum area. Eighty-four of the one hundred and eight educators who returned questionnaires completed at least one of the sections dealing with student ability in a specific curriculum area, twenty educators opted not to complete any of those items. Since each item in the questionnaire was designed to either stand alone or be cross-tabulated with no more than two other items, this tendency to leave some items blank was not considered to be a particularly damaging one for the purposes of the study. Partially completed questionnaires provided valuable data to the extent that they had been filled in. In the case of educators, however, this phenomenon did indicate a belief on the part of a significant proportion of respondents (particularly instructors) that it is not appropriate to ask educators to estimate the percent of students capable of qualifying for advanced credits. Several written comments included with questionnaires were received which emphasized this belief.

Analysis of the Data

The collected data were analyzed for three purposes. First, they were analyzed to determine whether or not the assessment model developed for the study would yield the measures of estimated need for which it was designed. Second, the data were analyzed to test three hypotheses designed to support or challenge the theory that increased advanced standing practices are needed. Finally, they were analyzed to bring evidence to bear upon selected beliefs identified through a review of related literature.

Simple arithmetical operations were used to test the assessment model. Frequency distributions were converted to percentages, so that measures of demand and one measure of existing fulfillment could be obtained for each curriculum area. Percentages representing measures of demand were then subtracted from the appropriate measure of fulfillment to yield measures of need.

The Chi-square (X^2) distribution statistic was used to test each hypothesis. That statistic was computed by utilizing the 2 x 2 contingency table formula:

$$X^2 = \frac{N(AD-BC)^2}{(A+B)(C+D)(A+C)(B+D)}$$

In addition, the Yates' correction was utilized in each case in which an expected frequency in any cell was less than 20.

Descriptive statistics were utilized to bring empirical evidence to bear upon selected beliefs identified through the literature. No attempt was made to draw conclusive interpretations of the data relating to the selected beliefs. Instead, possible interpretations were identified for the purpose of facilitating future research.

IV. ANALYSIS OF THE DATA

This study was designed to serve three purposes. The primary purpose was to develop and validate a technique for the assessment of student needs for opportunities to qualify for academic credits for prior off-campus learning. A secondary purpose was to bring empirical evidence to bear upon a theory stating that the number of students currently receiving academic credits for prior off-campus learning is significantly below what it would be if the demand for opportunities to qualify for such credits were being met. A final purpose was to propose some possible interpretations of the data relative to the conditions influencing the need for opportunities to qualify for academic credits for prior off-campus learning.

This chapter presents an analysis of the data collected from four hundred and seventeen students on ten Oregon community college campuses and from one hundred and eight educators associated with eleven Oregon community colleges. The chapter is presented in four sections. The first section presents the data as they were used to test the operation of a model designed to assess student needs for advanced credit opportunities (See Table 3). The second section presents an analysis of the data used to test three hypotheses designed to validate the theorized need for increased access to advanced standing opportunities. The third section presents data which tend

to pinpoint student perceptions and educator attitudes influencing the practice of granting academic credits for prior off-campus learning. The final section presents a summary of the findings of the analysis of the data.

Validating the Needs Assessment Model

As presented in the previous chapter, a needs identification model and two data collection instruments were developed for this study. They were designed to provide a means of completing four procedures required to assess students' needs for opportunities to qualify for academic credits for prior off-campus learning. The data presented in this section were compiled to determine whether or not the model and instruments would yield the measures of estimated need for which they were designed.

The four procedures of needs identification can be expressed as criteria which must be met to adequately resolve a needs assessment problem. The first criterion requires that the elements of a needs assessment problem be clearly defined. The conceptual considerations and resulting definitions supporting the needs identification model developed for this study were presented in Chapters One and Three and are not discussed in this section. It is recognized, however, that the validity of the findings presented in this chapter

is heavily dependent upon the credibility of the definitions supporting the needs assessment model.

The second criterion requires that desired conditions (i.e., "what should be") be measured and expressed in terms comparable with measures of existing conditions (i.e., "what is"). Tables 7, 8, and 9 present the measures of desired conditions which were obtained when the instruments were administered to students on ten campuses and faculty members on eleven. They present measures of strong, weak, and gross demand as defined for each of the subject groups. Table 7 identifies demand for opportunities to qualify for academic credits for prior off-campus learning as perceived by entering students; Table 8 lists demand measures perceived through the retrospection of returning students; and Table 9 reports the mean estimates of demand as indicated by educators.

As each of these tables indicates, the instruments developed for the study yielded precise indicators of the percent of entering students who might be expected to exhibit demand for opportunities to qualify for academic credits for prior off-campus learning. Measures of demand are listed in such curriculum areas as English composition/communications skills, the social sciences, mathematics or sciences, physical education, personal health, vocational-technical education, and other transfer courses. In addition, a general measure of demand was obtained to indicate the percent of

Table 7. Measures of entering students' demand for opportunities to qualify for academic credits for prior off-campus learning in seven curriculum areas.

Curriculum Area	Total Respondents	Respondents Indicating Strong Demand		Respondents Indicating Weak Demand		Respondents Indicating Gross Demand	
	N	N	%	N	%	N	%
a. English Composition/ Communication Skills	186	18	9.6	18	9.6	36	19.4
b. Social Sciences	217	12	5.5	17	7.8	29	13.4
c. Math or Sciences	206	19	9.2	18	8.7	37	18.0
d. Physical Education	212	8	3.8	16	7.5	24	11.3
e. Personal Health	191	8	4.2	16	8.4	24	12.6
f. Vocational-Technical	216	17	7.9	9	4.2	26	12.0
g. Other Transfer Courses	215	11	5.1	13	6.0	24	11.2
h. Demand in at Least One of the Seven Curriculum Areas	246	72	29.3	56	22.8	128	52.0

Table 8. Measures of returning students' retrospective demand for opportunities to qualify for academic credits for prior off-campus learning in seven curriculum areas.

Curriculum Area	Respondents N	Respondents Indicating Strong Demand		Respondents Indicating Weak Demand		Respondents Indicating Gross Demand	
		N	%	N	%	N	%
a. English Composition/ Communication Skills	153	30	19.6	32	20.9	62	40.5
b. Social Sciences	161	20	12.4	27	17.0	47	29.2
c. Math or Sciences	158	22	13.9	24	15.2	46	29.1
d. Physical Education	155	42	27.1	18	11.6	60	38.7
e. Personal Health	155	33	21.3	30	19.4	63	40.6
f. Vocational-Technical	148	6	4.1	21	14.2	27	18.2
g. Other Transfer Courses	151	17	11.3	15	9.9	32	21.2
h. Demand in at Least One of the Seven Curriculum Areas	171	93	54.4	21	12.4	114	66.7

Table 9. Measures of educators' estimates of entering students demand for academic credits for prior off-campus learning.

	Total Respondents	Mean Demand Estimate %
1. Demand in Specific Curriculum Areas:		
a. English Composition/ Communications	84	10
b. Social Sciences	77	11
c. Math or Science	83	8
d. Health or P. E.	83	24
e. Vocational-Technical	84	11
f. Other Transfer Courses	73	11
2. Demand in at Least One Curriculum Area:		
a. Estimated percent of students willing to pay \$15.00 to qualify for advanced credits in all least one curriculum area	86	46
b. Estimated percent of students capable of qualifying for at least three advanced credits in one or more curriculum areas	87	50

entering students who would exhibit demand in one or more of the curriculum areas. Though not presented in these tables demand was also measured in relation to six student variables -- sex, age, marital status, educational goals, academic background, and enrollment status. Some implications of the measures of demand obtained for those variables are presented in a later section of this chapter.

Comparable measures of strong, weak and gross demand were obtained from entering students and returning students in all seven curriculum areas and in general. The questionnaire designed for educators was not designed to identify weak demand in any of the seven curriculum areas, so that only measures of strong demand were computed for educators. In addition, comparability between educators' perceptions and those of the two groups of students was lost in the areas of health and physical education because the educators' questionnaire grouped those two curriculum areas into one, while the students' form dealt with them separately. Though not done for this study, comparability could have been regained for the combined category of health and physical education by collapsing student responses in those areas.

As anticipated, perceptions of demand varied among subject groups, and students did indicate that the strength of demand differed among students. Returning students were consistently more likely to perceive demand than were entering students or educators.

Entering students tended to indicate lower levels of strong demand than were estimated by educators or perceived in retrospect by returning students. When weak demand was taken into account, however, educators' mean estimates of demand were invariably lower than any of the measures of gross demand.

The third criterion of needs identification requires that the level of current demand fulfillment (i. e. , "what is") be measured and expressed in a term comparable with that used to indicate desired conditions. Table 10 presents the measures of current fulfillment which were obtained from the data collected. It presents data indicating the percent of entering students and returning students reporting the actual receipt of academic credits for prior off-campus learning. As anticipated, a consistently larger percentage of returning students reported receiving advanced credits than did entering students. This finding supports the assumption that returning students have been exposed to existing advanced credit options for a long enough period to be expected to have taken advantage of them if they are going to do so. It also tends to support the assumption that entering students had not had sufficient exposure to advanced credit options at the time the instruments were administered to assume full use of them. These two assumptions support the use of ~~one~~ measure of current fulfillment in the needs identification model.

Table 10. Measures of entering students' and returning students' reported receipt of academic credits for prior off-campus learning in seven curriculum areas.

	ENTERING STUDENTS			RETURNING STUDENTS		
	Total N	Students Reporting Receipt of Advanced Credits		Total N	Students Reporting Receipt of Advanced Credits	
		N	%		N	%
a. English Composition/ Communication Skills	186	8	4.3	153	15	9.8
b. Social Sciences	217	4	1.8	161	5	3.1
c. Math or Sciences	206	7	3.4	158	7	4.4
d. Physical Education	212	4	4.5	155	7	4.5
e. Personal Health	191	1	0.5	155	3	1.9
f. Vocational Technical	216	1	0.4	148	4	2.7
g. Other Transfer Courses	215	3	1.3	151	6	3.9
h. Advanced Credits Received in at Least One Curriculum Area	246	12	4.8	171	20	11.7

That measure is the level of reported fulfillment indicated by returning students.

The fourth criterion of needs identification requires that measures of desired conditions be compared with measures of existing fulfillment to determine if a discrepancy exists. It is through this process that needs are identified. To the extent that a discrepancy exists between what is desired and what exists, it can be inferred that need is evident.

The model developed for this study was designed to yield five alternative measures of need. Each measure of need resulted from subtracting a measure of demand from the measure of current fulfillment. Each measure of need was related to demand perceived by a specific group of subjects and was weighted by the nature of the definition of the demand supporting it. Tables 10 through 18 demonstrate how the needs identification model was tested to identify alternative measures of need in each of the seven curriculum areas and in general.

The data collected through the needs identification model also allowed the measurement of alternative need estimates as they related to six student variables. Those measures are not presented in this section because it is believed that the eight tables presented are sufficient to test the utility of the model. Some interpretations of the data as they relate to the student variables are presented in a later

section of this paper.

1. Identified need for opportunities to qualify for academic credits for prior off-campus learning in English composition and/or communication skills. Table 11 identifies the five alternative measures of need computed for the curriculum area of English composition and related communication skills. The band of need estimates obtained for this curriculum area spans a range of 30.9 percentage points. However, when need estimates are qualified into the categories of gross need and active need, two narrower ranges are identified. Estimates of gross need span from a low of 9.6 percent of all entering student to a high estimate of 30.7 percent of such students; estimates of active need range from an estimate of no need to a high of 9.8 percent of all entering students. When active need is considered, both educators and entering students indicated a level of demand equivalent to the level of fulfillment reported for English composition and related courses. Only the retrospective perceptions of returning students would suggest an active need for increased opportunities to qualify for academic credits for prior off-campus learning in this curriculum area.

Table 11. Five estimates of need for opportunities to qualify for academic credits for prior off-campus learning in the curriculum area of English composition and communication skills.

Computation Made	Alternative Need Estimates	
	Gross Need	Active Need
Reported Level of Fulfillment (9.8%)	30.7%	
Subtracted From:		
a. Educators Mean Estimate of Demand: $10\% - 9.8\% = 0.2\%$		
b. Strong Retrospective Demand: $19.6\% - 9.8\% = 9.8\%$		9.8%
c. Gross Retrospective Demand: $40.5\% - 9.8\% = 30.7\%$	9.6%	
d. Strong Entering Students' Demand: $9.6\% - 0.8\% = 0.2\%$		0.2%
e. Gross Entering Students' Demand: $19.4\% - 9.8\% = 9.6\%$		-0.2%
		High 30.7% % of Entering Students Low -0.2%

2. Identified need for opportunities to qualify for academic credits for prior off-campus learning in the social sciences. Table 12 identifies the five alternative measures of need computed for the curriculum area of the social sciences. It indicates a high estimate of need of 26.1% and a low estimate of 2.4%. Like the estimates identified for English composition, this range of 23.7 percentage points can be separated into two narrower ranges. The range of gross need estimates spans from a low estimate of 10.2% to a high estimate of 26.1% estimates of active need range from a low estimate of 2.4% to a high estimate of 9.3%. As was characteristic of need estimates obtained for other curriculum areas, need estimates based upon measures of entering students' demand were the low estimates for both gross need and active need, while need estimates based upon retrospective demand were the high estimates in both categories.
3. Identified need for opportunities to qualify for academic credits for prior off-campus learning in mathematics or science. Table 13 identifies the five alternative measures of need computed for the combined curriculum areas of mathematics and sciences. It indicates a high estimate suggesting that 24.7% of all entering students have need for opportunities to qualify for advanced credits in mathematics or science and a low estimate predicting

Table 12. Five estimates of need for opportunities to qualify for academic credits for prior off-campus learning in the curriculum area of social sciences.

Computation Made	Alternative Need Estimates	
	Gross Need	Active Need
Reported Level of Fulfillment (3.1%) Subtracted From:	26.1%	
a. Educators' Mean Estimate of Demand: $11\% - 3.1\% = 7.9\%$		
b. Strong Retrospective Demand: $12.4\% - 3.1\% = 9.3\%$		
c. Gross Retrospective Demand: $29.2\% - 3.1\% = 26.1\%$		9.3%
d. Strong Entering Students' Demand: $5.5\% - 3.1\% = 2.4\%$		7.9%
e. Gross Entering Students' Demand: $13.3\% - 3.1\% = 10.2\%$		2.4%
	10.2%	
		26.1%
		High
		Low
		% of Entering Students
		2.4%

Table 13. Five estimates of need for opportunities to qualify for academic credits for prior off-campus learning in the curriculum areas of mathematics or sciences.

Computation Made	Alternative Need Estimates	
	Gross Need	Active Need
Reported Level of Fulfillment (4.4%) Subtracted From:	24.7%	
a. Educators' Mean Estimate of Demand: $8.0\% - 4.4\% = 3.6\%$		
b. Strong Retrospective Demand: $13.9\% - 4.4\% = 9.5\%$	13.6%	9.5%
c. Gross Retrospective Demand: $29.1\% - 4.4\% = 24.7\%$		
d. Strong Entering Students' Demand: $9.2\% - 4.4\% = 4.8\%$		4.8%
e. Gross Entering Students' Demand: $18.0\% - 4.4\% = 13.6\%$		3.6%
		High 24.7% % of Entering Students Low 3.6%

that no more than 3.6% of the entering students have such needs. The range of gross need estimates spans from a low estimate of 13.6% to a high estimate of 24.7%. The range of active need estimates spans from a low estimate of 3.6% to a high of 9.5%. Again, high need estimates stemmed from the retrospective demand of returning students, but in this case the low estimate of active need resulted from the educators' mean estimate of demand rather than from entering students' demand. Entering students' demand was only 1.2 percentage points greater than that estimated by educators.

4. Identified need for opportunities to qualify for academic credits for prior off-campus learning in physical education. Table 14 identifies four alternative measures of need computed for the curriculum area of physical education. As discussed previously, an educators' mean estimate of demand was obtained for the combined curriculum area of health and physical education, but no distinct measure of demand was obtained for physical education. For that reason, no measure of need was computed based upon educators' mean estimate of demand. Table 14 indicates a high estimate of 34.2% and a low estimate of no need. The range of gross need estimates spans from a low of 6.8% to a high of 34.2%, and the range of active need estimates spans from a low of -0.7% (no need) to a high of 22.6%. This wide range of need estimates

Table 14. Four estimates of need for opportunities to qualify for academic credits for prior off-campus learning in the curriculum area of physical education.

Computation Made	Alternative Need Estimates	
	Gross Need	Active Need
Reported Level of Fulfillment (4.5%) Subtracted From:		
a. Strong Retrospective Demand: $27.1\% - 4.5\% = 22.6\%$		22.6%
b. Gross Retrospective Demand: $38.7\% - 4.5\% = 34.2\%$	34.2%	
c. Strong Entering Students' Demand: $3.8\% - 4.5\% = -0.7\%$		-0.7%
d. Gross Entering Students' Demand: $11.3\% - 4.5\% = 6.8\%$	6.8%	

High 34.2%

% of Entering Students

Low -0.7%

is indicative of disparate perceptions of entering students and returning students. Entering students indicate a very low demand for advanced credits in this area, while returning students show a strong propensity to believe in retrospect that they should have been granted such credits.

5. Identified need for opportunities to qualify for academic credits for prior off-campus learning in personal health. Table 15 identifies four alternative measures of need computed for the curriculum area of personal health. No measure of need was gleaned from educators' perceptions since educators estimated demand in the combined areas of physical education and health rather than in each distinct area. Table 15 indicates that the high estimate of need was the highest found for any curriculum area, 38.7%, but that the lowest estimate was a rather low 2.3%. This resulted in the widest range of need estimates found for any curriculum area. As with physical education, this wide range can be accounted for by two findings. First, returning students tend to believe in retrospect that they knew the material covered in the course and should have received advanced credits for that knowledge. Second, entering students indicate a rather low demand for opportunities to qualify for advanced credits in the subject area. This may indicate that students are unable to relate prior experiences to this course area until after they have

Table 15. Four estimates of need for opportunities to qualify for academic credits for prior off-campus learning in the curriculum area of personal health.

Computation Made	Alternative Need Estimates	
	Gross Need	Active Need
Reported Level of Fulfillment (1.9%) Subtracted From:		
a. Strong Retrospective Demand: $21.3\% - 1.9\% = 19.4\%$	38.7%	19.4%
b. Gross Retrospective Demand: $40.6\% - 1.9\% = 38.7\%$	10.7%	
c. Strong Entering Students' Demand: $4.2\% - 1.9\% = 2.3\%$		2.3%
d. Gross Entering Students' Demand: $12.6\% - 1.9\% = 10.7\%$		
		High 38.7% % of Entering Students Low 2.3%

had an opportunity to learn more about the course; once they have had this experience, they tend to indicate that they have had equivalent prior experiences.

6. Identified need for opportunities to qualify for academic credits for prior off-campus learning in vocational-technical courses.

Table 16 presents five alternative measures of need computed for the general category called vocational-technical courses. It indicates a high need estimate of 15.5% and a low estimate of 1.4%. This represents the narrowest range of estimates obtained for any curriculum area. It also suggests the lowest level of need for any curriculum area. This latter finding may be due, in part, to the fact that lower division collegiate students as well as vocational-technical students responded to questionnaire items dealing with this curriculum area. Thus, vocational-technical students may have as great a need for opportunities to qualify for advanced credits in this area as they do in others while lower division collegiate students may have relatively little need for such opportunities. Confirmation of this possibility was not pursued as it was beyond the scope of the study.

7. Identified need for opportunities to qualify for academic credits for prior off-campus learning in other transferable curriculum areas. Table 17 identifies five alternative measures of need computed for the general category called other transferable

courses. It indicates a high need estimate of 17.3% and a low estimate of 1.2%, yielding a range of 16.1%. As with the data presented for vocational-technical courses, this range is relatively narrow and the estimated levels of need are rather low in comparison with estimates for other curriculum areas. Since vocational-technical students as well as lower division collegiate students completed items of the questionnaire dealing with this curriculum, it is possible that lower division collegiate students have as great a level of need for advanced credits in this field as in any other curriculum area but that vocational-technical students have less need. That possibility was not pursued in this study, however.

8. Identified need for opportunities to qualify for academic credits for prior off-campus learning in any one of the seven curriculum areas. The final table in this section presents five alternative measures of need for opportunities to qualify for academic credits for prior off-campus learning in at least one curriculum area. Any student indicating demand for advanced standing opportunities in any curriculum area was assumed to indicate demand, and any student reporting receipt of advanced credits in any curriculum area was considered to indicate fulfillment for the purposes of this final category. As indicated in Table 18, a high estimate of 55.1% of all entering students may be in need of opportunities to

Table 18. Five estimates of need for opportunities to qualify for academic credits for prior off-campus learning in any one of seven curriculum areas.

Computation Made	Alternative Need Estimates		
	Gross Need	Active Need	
Reported Level of Fulfillment (11.6%) Subtracted From:	55.1%		High 55.1%
a. Educators' Mean Estimate of Demand: $46\% - 11.6\% = 34.4\%$		42.8%] % of Entering Students Low
b. Strong Retrospective Demand: $54.4\% - 11.6\% = 42.8\%$	40.4%	34.4%	
c. Gross Retrospective Demand: $66.7\% - 11.6\% = 55.1\%$			
d. Strong Entering Students' Demand: $29.3\% - 11.6\% = 17.7\%$			
e. Gross Entering Students' Demand: $52.0\% - 11.6\% = 40.4\%$		17.7%	

qualify for advanced credits in at least one curriculum area.

The low estimate indicates that no more than 17.7% of all entering students have such needs. As was typical of the need estimates derived for specific curriculum areas, returning students' perceived demand was the driving force behind the high estimate of need, and entering students' perceived demand was the basis from which the low estimate was calculated.

Testing the Hypotheses

As presented in Chapter One, three working hypotheses and two alternate hypotheses were designed as a partial test of the proposition that there is a need to expand the recognition of individual differences by increasing the practice of granting credits for prior off-campus learning. Based upon the assumption that the percent of returning students reporting receipt of credits for prior off-campus learning is an indicator of existing accessibility, each hypothesis was designed to determine whether measures of demand obtained from one group of subjects were significantly different from the corresponding percent of returning students reporting receipt of advanced credits. The data presented in this section were compiled to test the hypotheses as they relate to the need identified in six curriculum areas and in general.

1. Hypothesis One. The first hypothesis was designed to determine if entering students indicate a significant need for opportunities to qualify for academic credits for prior off-campus learning. Since entering students were defined to be the subjects in need, it was assumed that they must indicate such need in order for it to be inferred to exist. The following hypothesis was designed to test the significance of the need identified:

Ho 1: The proportion of entering students indicating gross demand for academic credits for prior off-campus learning is not significantly greater than the proportion of returning students reporting receipt of such credits.

In the event that Ho 1 must be rejected, an alternate hypothesis was designed to further pinpoint significant need in any of the curriculum areas or in general. This alternate hypothesis follows:

Ho 1(a): The proportion of entering students indicating strong demand for academic credits for prior off-campus learning is not significantly greater than the proportion of returning students reporting receipt of such credits.

As indicated in Table 19, hypothesis one (Ho 1) was rejected for each of the seven curriculum areas and for the general category encompassing demand in at least one curriculum area. This finding suggests that a significantly larger proportion of entering students surveyed perceive themselves as having the ability and desire to qualify for advanced credits than can be

Table 19. Chi square (X^2) values and derived significance levels measuring differences between proportions of entering students indicating gross demand and returning students reporting demand fulfillment.

Curriculum Area	Positive Responses	Negative Responses	Chi Square X^2	Significance Level
a. English Composition/Communication skills:				
(1) Gross Entering Students' Demand	36	150	5.267	.05
(2) Returning Students' Reported Receipt of Advanced Credits	15	138		
b. Social Sciences:				
(1) Gross Entering Students' Demand	29	188	10.662	.005
(2) Returning Students' Reported Receipt of Advanced Credits	5	156		
c. Mathematics or Sciences:				
(1) Gross Entering Students' Demand	37	169	14.158	.001
(2) Returning Students' Reported Receipt of Advanced Credits	7	151		
d. Physical Education:				
(1) Gross Entering Students' Demand	24	188	4.518	.05
(2) Returning Students' Reported Receipt of Advanced Credits	7	148		
e. Personal Health:				
(1) Gross Entering Students' Demand	24	167	12.001	.005
(2) Returning Students' Reported Receipt of Advanced Credits	3	152		
f. Vocational-Technical Courses:				
(1) Entering Students' Gross Demand	26	190	8.921	.005
(2) Returning Students' Reported Receipt of Advanced Credits	4	144		
g. Transfer Electives:				
(1) Entering Students' Demand	24	191	5.174	.05
(2) Returning Students' Reported Receipt of Advanced Credits	6	145		
h. At Least One Curriculum Area:				
(1) Entering Students' Demand	128	118	71.688	.001
(2) Returning Students' Reported Receipt of Advanced Credits	20	151		

Table 20. Chi square (X^2) values and derived significance levels measuring differences between proportions of entering students indicating strong demand and returning students reporting demand fulfillment.

Curriculum Areas	Positive Responses	Negative Responses	Chi Square X^2	Significance Level
a. English Composition/Comm. Skills				
(1) Entering Students' Strong Demand	18	168		
(2) Returning Students' Reported Receipt of Advanced Credits	15	138	0.021	* N. S. D.
b. Social Sciences:				
(1) Entering Students' Strong Demand	12	205		
(2) Returning Students' Reported Receipt of Advanced Credits	5	156	0.763	N. S. D.
c. Mathematics or Sciences:				
(1) Entering Students' Strong Demand	19	187		
(2) Returning Students' Reported Receipt of Advanced Credits	7	151	2.416	N. S. D.
d. Physical Education:				
(1) Entering Students' Strong Demand	8	204		
(2) Returning Students' Reported Receipt of Advanced Credits	7	148	0.008	* N. S. D.
e. Personal Health:				
(1) Entering Students' Strong Demand	8	167		
(2) Returning Students' Reported Receipt of Advanced Credits	3	152	0.773	N. S. D.
f. Vocational-Technical Courses:				
(1) Entering Students' Strong Demand	17	199		
(2) Returning Students' Strong Demand for Advanced Credits	4	144	3.415	N. S. D.
g. Transfer Electives:				
(1) Entering Students' Strong Demand	11	204		
(2) Returning Students' Reported Receipt of Advanced Credits	6	145	0.067	N. S. D.
h. At Least One Curriculum Area:				
(1) Entering Students' Strong Demand	72	174		
(2) Returning Students Reported Receipt of Advanced Credits	20	151	18.115	.001

* Asterisk indicates that the proportion of entering students indicating demand was not as great as the proportion of returning students reporting receipt of advanced credits.

expected to receive such credits. Thus this finding would tend to support the proposition that expanded opportunities are needed. As Table 20 indicates, the findings related to the first alternate hypothesis [Ho 1(a)] do not confirm this support. No significant difference was found between the measure of strong demand and the measure of fulfillment compiled for any curriculum area. Most measures of strong demand were greater than the measure of fulfillment but not significantly greater. Only when all curriculum areas were combined was the difference between demand and fulfillment found to be statistically significant. Thus the findings related to Ho 1(a) would seem to place the theorized need for expanded opportunities in doubt or, at least, in need of qualification. Additional interpretations of the findings of hypothesis one and its alternate are presented in the final chapter of this study.

2. Hypothesis Two. The second hypothesis was designed to determine if returning students indicate in retrospect a significant need for entering students to be given opportunities to qualify for academic credits for prior off-campus learning. Though returning students were not assumed to be in need of advanced standing opportunities, they were assumed to have had recent experiences which would make them particularly capable of assessing the needs of entering students. Thus the perceptions

of returning students were to be used to validate those of entering students. The following hypothesis was designed to test the significance of need as identified by returning students:

Ho 2: The proportion of returning students indicating gross demand for academic credits for prior off-campus learning is not significantly greater than the proportion of returning students reporting receipt of such credits.

In the event that Ho 2 would be rejected for any curriculum area, an alternate hypothesis was designed to weigh more precisely the significance of identified need. This alternate hypothesis follows:

Ho 2(a): The proportion of returning students indicating strong demand for academic credits for prior off-campus learning is not significantly greater than the proportion of returning students reporting receipt of such credits.

As indicated in Tables 21 and 22, rejection of hypothesis two (Ho 2) was indicated for each of the seven curriculum areas and for the general category, and rejection of the alternate hypothesis [Ho 2(a)] was indicated for all but one of the curriculum areas and for the general category. The only curriculum area in which significant need could not be substantiated was the general curriculum category encompassing all vocational-technical courses. Most other curriculum areas indicated significance at the .001 level. Thus, the retrospective perceptions of returning

Table 21. Chi square (X^2) values and derived significance levels measuring differences between proportions of returning students indicating gross retrospective demand and returning students reporting receipt of advanced credits.

Curriculum Area	Positive Responses	Negative Responses	Chi Square X^2	Significance Level
a. English Composition/Comm. Skills:				
(1) Gross Retrospective Demand	62	91		
(2) Returning Students' Reported Receipt of Advanced Credits	15	138	38.334	.001
b. Social Sciences:				
(1) Gross Retrospective Demand	47	114		
(2) Returning Students' Reported Receipt of Advanced Credits	5	156	40.456	.001
c. Mathematics or Sciences:				
(1) Gross Retrospective Demand	46	112		
(2) Returning Students' Reported Receipt of Advanced Credits	7	151	34.481	.001
d. Physical Education:				
(1) Gross Retrospective Demand	60	95		
(2) Returning Students' Reported Receipt of Advanced Credits	7	148	53.484	.001
e. Personal Health:				
(1) Gross Retrospective Demand	63	92		
(2) Returning Students' Reported Receipt of Advanced Credits	3	152	69.299	.001
f. Vocational- Technical Courses:				
(1) Gross Retrospective Demand	27	121		
(2) Returning Students' Reported Receipt of Advanced Credits	4	144	17.439	.001
g. Transfer Electives:				
(1) Gross Retrospective Demand	32	119		
(2) Returning Students' Reported Receipt of Advanced Credits	6	145	18.814	.001
h. At Least One Curriculum Area:				
(1) Gross Retrospective Demand	114	57		
(2) Returning Students' Reported Receipt of Advanced Credits	20	151	108.421	.001

Table 22. Chi square (X^2) values and derived significance levels measuring differences between proportions of returning students indicating strong retrospective demand and returning students reporting receipt of advanced credits.

Curriculum Area	Positive Responses	Negative Responses	Chi Square X^2	Significance Level
a. English Composition/Comm. Skills:				
(1) Strong Retrospective Demand	30	123		
(2) Returning Students' Reported Receipt of Advanced Credits	15	138	5.862	.05
b. Social Sciences:				
(1) Strong Retrospective Demand	20	141		
(2) Returning Students' Reported Receipt of Advanced Credits	5	156	8.499	.005
c. Mathematics or Sciences:				
(1) Strong Retrospective Demand	22	136		
(2) Returning Students' Reported Receipt of Advanced Credits	7	151	7.441	.01
d. Physical Education:				
(1) Strong Retrospective Demand	42	113		
(2) Returning Students' Reported Receipt of Advanced Credits	7	148	29.693	.001
e. Personal Health				
(1) Strong Retrospective Demand	42	113		
(2) Returning Students' Reported Receipt of Advanced Credits	3	152	39.539	.001
f. Vocational-Technical Courses:				
(1) Strong Retrospective Demand	6	142		
(2) Returning Students' Reported Receipt of Advanced Credits	4	144	0.103	N. S. D.
g. Transfer Electives:				
(1) Strong Retrospective Demand	17	134		
(2) Returning Students' Reported Receipt of Advanced Credits	6	145	4.706	.05
h. At Least One Curriculum Area:				
(1) Strong Retrospective Demand	93	78		
(2) Returning Students' Reported Receipt of Advanced Credits	20	151	70.430	.001

students strongly support the proposition that expanded opportunities are needed.

3. Hypothesis Three. The third hypothesis was designed to determine if educators' perceptions of the abilities of students tend to support the theorized need for increased opportunities for students to qualify for academic credits for prior off-campus learning. It was assumed that educators' estimates of student ability to qualify for advanced credits would help to validate the measures of demand obtained from entering students and returning students. It was hypothesized that by analyzing the differences between educators' estimates of ability and returning students' reported level of demand fulfillment, another test of the theorized need for expanded opportunities could be made. The following hypothesis was designed to facilitate this test:

Ho 3: The proportion of entering students estimated by educators to be capable of qualifying for academic credits for prior off-campus learning is not significantly greater than the proportion of returning students reporting receipt of such credits.

Educators were asked to estimate the percent of students who would have a good chance of qualifying for advanced credits in each curriculum area. They were not asked to predict the percent of students who had strong or weak interest in earning such credits. Therefore, only one measure of demand was

derived from educators responses, and it was not directly comparable to those gleaned from students. It was assumed that the educators' estimate of demand would be a measure of strong demand since it was designed to identify the percent of students who might actually be expected to earn advanced credits if given the opportunity. Thus it was anticipated that the findings for hypothesis three (Ho3) would be more similar to the findings reported for the two alternate hypotheses Ho 1(a) and Ho 2(a) than to those reported for the other two basic hypotheses (Ho 1 and Ho 2).

As Table 23 indicates, this anticipated similarity was confirmed by the data compiled for hypothesis three. The hypothesis was rejected for five of the curriculum areas but was not rejected for two of them. Paralleling the findings related to strong retrospective demand perceived by returning students, educators' estimates of demand were significantly different from measures of existing fulfillment in the following curriculum areas: social sciences, health and physical education, vocational-technical courses, and transfer electives. Paralleling the findings related to entering students' strong demand, educators' estimates of demand were not significantly different from measures of existing fulfillment in two curriculum areas -- English composition/communication skills and mathematics or

Table 23. Chi square (X^2) values and derived significance levels measuring differences between educators' expected frequencies of entering students' demand responses and the proportion of returning students reporting receipt of advanced credits.

Curriculum Area	Positive Responses	Negative Responses	Chi Square X^2	Significance Level
a. English Composition/Comm. Skills:				
(1) Expected Frequencies based upon Educators' Mean Demand Estimates	18	168		
(2) Returning Students' Reported Receipt of Advanced Credits	15	138	0.015	N. S. D.
b. Social Sciences:				
(1) Expected Frequencies based upon Educators' Mean Demand Estimates	24	193		
(2) Returning Students' Reported Receipt of Advanced Credits	5	156	7.171	.01
c. Mathematics or Sciences:				
(1) Expected Frequencies based upon Educators' Mean Demand Estimates	16	190		
(2) Returning Students' Reported Receipt of Advanced Credits	7	151	1.350	N. S. D.
d. Health or Physical Education:				
(1) Expected Frequencies based upon Educators' Mean Demand Estimates	51	161		
(2) Returning Students' Reported Receipt of Advanced Credits	10	155	20.024	.001
e. Vocational-Technical Courses:				
(1) Expected Frequencies based upon Educators' Mean Demand Estimates	24	192		
(2) Returning Students' Reported Receipt of Advanced Credits	4	144	7.600	.01
f. Transfer Electives:				
(1) Expected Frequencies based upon Educators' Mean Demand Estimates	24	191		
(2) Returning Students' Reported Receipt of Advanced Credits	6	145	5.174	.05
g. At Least One Curriculum Area:				
(1) Expected Frequencies based upon Educators' Mean Demand Estimates	113	133		
(2) Returning Students' Reported Receipt of Advanced Credits	20	151	54.442	.001

sciences. Educators, returning students, and entering students all indicated a significant difference between the level of demand and the level of fulfillment when considering the general category which grouped all curriculum areas into one whole. These findings suggest that educators, like returning students, tend to confirm the theorized need for expanded opportunities to qualify for academic credits for prior off-campus learning, but, like entering students, they tend to qualify the scope and nature of that need.

Interpreting Related Data

Through the review of related literature, several expressed beliefs were identified which would seem to be influencing the development of the practice of granting academic credits for prior off-campus learning. The literature suggests that several of these beliefs have not been substantiated through empirical investigation. This study was not specifically designed to analyze any of these beliefs but data collected tend to bring evidence to bear upon some of them. Therefore, this section is presented to interpret the data collected for this study as they relate to three expressed beliefs. It is not presented to draw definitive conclusions about the validity of each belief but, rather, to make some tentative interpretations which may serve as springboards for future research.

1. Non-traditional students. Kreplin (1971) reported the probability that non-traditional students are more likely to want opportunities to qualify for advanced credits than are traditional college students. The Carnegie Commission (1971, pp. 11-12) reinforced this belief through its five "possibilities for improvement," which would "...make educational opportunities more available to more people, including women, employed persons, older people, and persons from lower income levels" (p. 12). However, no studies were identified through the literature review which actually relate characteristics associated with non-traditional students to a tendency to have demand for opportunities to qualify for academic credits for prior off-campus learning.

It was not possible to relate all of the characteristics commonly identified with non-traditional students to such demand through this study. However, measures of several student variables were cross-tabulated with measures of demand in at least one curriculum area. Table 24 presents these cross-tabulations:

Table 24. Measures of students' demand for opportunities to qualify for advanced credits in at least one curriculum area cross-tabulated with six student variables.

Student Variable	Total Respondents	Students With Strong Demand		Students With Weak Demand		Students With Cross Demand	
		N	%	N	%	N	%
a. Sex							
(1) Male	263	107	40.7	44	16.7	151	57.4
(2) Female	136	54	39.1	29	21.3	83	61.0
b. Age							
(1) 19 or under	136	41	30.1	34	25.0	75	55.1
(2) 20 to 24	105	39	37.1	17	16.2	56	53.3
(3) 25 to 30	78	38	48.7	12	15.4	50	64.1
(4) Over 30	86	45	52.3	12	13.9	57	66.3
c. Marital Status							
(1) Single	235	82	34.9	49	20.8	131	55.7
(2) Married	164	77	46.9	25	15.2	102	63.2
d. Educational Goals							
(1) 4-yr. Degree	191	84	43.9	23	12.0	107	56.0
(2) Voc-Tech Degree	138	50	36.2	38	27.5	88	63.7
(3) No Degree (voc)	50	13	26.0	10	20.0	22	44.0
(4) Gen. Interest	35	16	45.7	6	17.1	22	62.8
e. Academic Background							
(1) 3.5 GPA or above	58	21	36.2	16	27.6	37	63.8
(2) 3.0 to 3.49 GPA	120	46	38.3	14	11.7	60	50.0
(3) 2.5 to 2.99 GPA	117	55	47.0	24	20.5	79	67.5
(4) 2.0 to 2.49 GPA	86	31	36.0	16	18.6	47	54.6
(5) Below 2.0 GPA	18	6	33.3	2	11.1	8	44.4
f. Enrollment Status							
(1) Full-time	336	138	41.1	65	19.3	203	60.4
(2) Part-time	58	23	37.7	8	17.9	31	53.4
TOTAL RESPONDENTS	417	165	39.6	77	18.5	242	58.0

No analysis was attempted to identify significant differences in levels of demand as they exist within the selected variables. To have done so would have gone beyond the scope of this study. However, the descriptive data presented in Table 24 do yield some indications of relationships which may exist between student characteristics and the tendency to have demand for opportunities to qualify for advanced credits. On the whole, the data tend to support the belief that non-traditional students are more likely to seek opportunities to earn credits for prior off-campus learning than are traditional college students, but this support is not conclusive.

The students surveyed did indicate a slight tendency for female students, older students, married students, and vocational-technical students to indicate greater gross demand for advanced standing opportunities than males, younger students, single students, and lower division collegiate students. On the other hand, full-time students indicated a greater demand for advanced credit opportunities than did the non-traditional part-timers, and students with high academic backgrounds appeared to be more likely to have such demand than the so called "new students" (Cross, 1972) with low academic backgrounds.

Women students and vocational-technical students indicated greater gross demand than their respective counterparts, but

this finding becomes reversed when strong demand is considered exclusively. Additional research would seem required to draw further meaning from these mixed findings.

3. Awareness of existing opportunities. Two general explanations were reported in the literature to explain why students may feel in need of opportunities to qualify for advanced credits. One suggests that the absence of appropriate policies and options restricts students from satisfying their demand for credits for prior experiences. The other asserts that students are not aware of the opportunities which are available to them and are missing chances unnecessarily to satisfy their needs. As discussed in other sections of this study, several studies have been conducted to determine the extent to which enabling policies and options currently permit students to qualify for academic credits for prior off-campus learning. A recent study of this kind found that 90 percent of the schools surveyed offered some advanced credit options to students (Ruyle and Geiselman, 1974). This finding would tend to challenge the validity of the first reason cited to explain why need for opportunities is not being met. That same study, however, found that only 26 percent of the colleges publicize the existence of the options which they have adopted. This latter finding tends to support the second reason cited to explain need while simultaneously providing a

clue to the cause of student ignorance of available opportunities.

The combined findings support the belief that the practice of granting academic credits for prior off-campus learning may be in a state of transition. A state may exist in which the enabling policies and procedures are now in place on most college campuses awaiting the implementation of effective programming. If this were so, one might expect to find two conditions at a given college or set of colleges. First, one might expect to find policies in force which allow students to qualify for academic credits for prior off-campus learning. Second, one might expect to find that students and possibly educators are unaware of these policies and the means which are available to implement them.

Data collected for this study allowed a partial test for these two conditions at the ten community colleges which participated in all phases of data collection. Table 1, which is presented in Chapter Two, confirms that all participating colleges are currently granting academic credits for prior off-campus learning and that most offer at least three alternative methods for qualifying for such credits. Thus, the first condition would seem to exist at the participating colleges.

To determine whether or not the second condition also seems to exist, students and educators were asked to identify

the general policies which are in force at their respective colleges. Their responses were compared with the policies reported to be in effect by registrars and scored for their accuracy. As indicated in Tables 25 and 26, findings suggest that the second condition does seem to exist at the participating colleges with respect to students and instructors. Student personnel workers and administrators were found to have relatively accurate knowledge of the pertinent policies in force at their colleges.

Many students admitted that they did not know what their colleges' policies were. As a result, most students were unable to accurately identify their schools' policies regarding one out of four of the advanced standing practices described for them. Instructors were somewhat more knowledgeable. The average instructor was able to identify three out of eight policy positions taken by their colleges. Student personnel workers identified an average of six out of eight of their schools' policies, and administrators demonstrated awareness of seven out of eight of their institutions' policies.

Summary of Findings

The following findings were observed as a result of the analysis of data:

Table 25. Measures of student awareness of existing policies regarding the practice of granting academic credits for prior off-campus learning.

Awareness Category	Entering Students (N=246)		Returning Students (N=171)		All Students (N=417)	
	N	%	N	%	N	%
I. <u>Students accurately aware of college policies regarding:</u>						
a. Standardized tests of credit by examination (i. e. , CLEP)	58	23.6	42	24.6	100	24.0
b. Locally developed tests for Credit by Examination	52	21.1	45	26.3	97	23.3
c. Articulation Agreements	46	18.7	34	19.9	80	19.2
d. Accreditation of non-college training programs (i. e. , military schools, etc.)	27	11.0	27	15.8	54	12.9
II. <u>Overall awareness scores:</u>						
a. Students accurately aware of college's policies in all four of the above areas	2	0.8	2	1.2	4	1.0
b. Students accurately aware of three out of four of their colleges' policies	13	5.3	17	9.9	30	7.2
c. Students accurately aware of two out of four of their colleges' policies	40	16.3	24	14.0	64	15.3
d. Students accurately aware of one out of four of their colleges' policies	49	19.9	42	24.6	91	21.8
e. Students unable to accurately identify existing policies in any of the areas	142	57.7	86	50.3	228	54.7

Table 26. Measures of educators' awareness of existing policies regarding the practice of granting academic credits for prior off-campus learning.

Awareness Category	Administrators (N=13)		Student Personnel Workers (N=29)		Instructors (N=60)	
	N	%	N	%	N	%
I. <u>Educators demonstrating accurate awareness of policies regarding:</u>						
a. The Advanced Placement Program	10	76.9	23	76.7	20	33.3
b. CLEP General Examinations	12	92.3	24	80.0	23	38.3
c. CLEP Subject Examinations	11	84.6	24	80.0	33	55.0
d. Locally developed tests for credit by examination	12	92.3	26	86.7	42	70.0
e. A. C. E. 's Guide	7	53.8	15	51.7	10	16.7
f. U. S. A. F. I. Courses	9	69.2	17	56.7	11	18.3
g. Articulation Agreements	8	61.5	19	63.3	31	51.7
h. "Life" Experiences	10	76.9	19	63.3	34	56.7
II. <u>Overall awareness scores:</u>						
a. Eight out of eight correct	6	46.2	9	31.0	2	3.3
b. Seven out of eight correct	2	15.4	6	20.7	-	-
c. Six out of eight correct	3	23.1	2	6.9	6	10.0
d. Five out of eight correct	2	15.3	4	13.7	15	25.0
e. Four out of eight correct	-	-	3	10.3	4	6.7
f. Three out of eight correct	-	-	4	13.8	12	20.0
g. Two out of eight correct	-	-	1	3.5	6	10.0
h. One out of eight correct	-	-	-	-	9	15.0
i. Zero correct out of eight	-	-	-	-	6	10.0

1. Precise measures of demand and fulfillment were derived from the responses of entering students, returning students, and educators. Strong, weak, and gross measures of demand were obtained from student responses in seven curriculum areas and in general. One mean estimate of demand was derived from the responses of educators in each of six curriculum areas and in general. Measures of current fulfillment were obtained from the responses of both entering students and returning students though returning students' responses were the only ones utilized to obtain the measures used to test the needs identification model.

2. Students were found to tend to qualify the demand they perceived for opportunities to qualify for advanced credits. Some indicated a willingness to pay for such opportunities; others did not. Some indicated a belief that they should be awarded full credit in a given curriculum area; others desired only partial credit.

3. Each subject group was observed to perceive demand at consistently different levels. Returning students tended to perceive greater demand in retrospect than either entering students or educators. Entering students indicated gross demand of greater intensity than the demand estimated by educators, but entering students indicated strong demand of lesser intensity than that estimated by educators.

4. As anticipated, entering students were found to report actual receipt of advanced credit less frequently than returning students. Returning students were two times more likely to report receipt of such credits than entering students.

5. When measures of current fulfillment were subtracted from corresponding measures of demand, a range of need estimates was obtained for each curriculum area. The range was as great as 36.4 percentage points and as narrow as 14.1 percentage points when computed for specific curriculum areas. When need in any curriculum area was considered, a range of 37.4 percentage points was observed. Some measures related to this general category indicated that as many as 55.1% of all entering students at the participating institutions may be missing opportunities to qualify for advanced credits, while other measures indicated that no more than 17.7% of such students are missing desired opportunities.

6. When measures of gross student demand were utilized as the measures of desired conditions, significant differences were observed between the measures of desired conditions and current fulfillment in all seven curriculum areas and in general. These findings were consistent whether considering the perceptions of entering students or returning students.

7. When measures of strong student demand were utilized as measures of desired conditions, significant differences were not

consistently observed between the measures of desired conditions and current fulfillment. No significant differences were found between the measures of entering students' strong demand and current fulfillment for any specific curriculum area. Measures of returning students' strong retrospective demand were found to be significantly greater than measures of fulfillment in six out of seven curriculum areas. Significant difference was observed through the perceptions of both entering students and returning students when measures related to the curriculum as a whole were compared.

8. Educators' estimates of the ability of students to qualify for advanced credits were found to be significantly greater than comparable levels of fulfillment in four out of six curriculum areas considered. Highly significant difference was also observed when measures related to the curriculum as a whole were compared.

9. The data were found to mildly support Kreplin's (1971) belief that non-traditional students are more likely to need advanced standing opportunities than their traditional counterparts. These findings were not considered to be conclusive.

10. The data indicated that the students surveyed were unlikely to be aware of the specific advanced standing options available to them on their respective campuses. The average student could not identify correctly his or her school's policies regarding one out of four of the advanced standing practices described in the students'

questionnaire. On the average, instructors were found to be aware of three out of eight of their colleges' policies regarding the specific practices listed in the educators' questionnaire. Student personnel workers were aware of six out of eight of their schools' policies, and administrators accurately identified an average of seven out of eight of their institutions' policies.

V. SUMMARY, CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

This study was conducted in response to a need for systematic analysis of the practice of granting academic credits for prior off-campus learning. It was stimulated by a commitment to the goal of facilitating student development and an interest in the theory that such development can be enhanced through recognition of individual differences. The practice of granting academic credits for prior off-campus learning was viewed to be one example of an educational program designed to foster human growth through direct recognition of individual differences.

The study was designed with three purposes in mind. The primary purpose was to provide a technique capable of assessing student needs for opportunities to qualify for advanced academic credits. A model set of procedures and two data collection instruments were developed in this regard. Two secondary purposes were also served. First, the data collected were analyzed to bring empirical evidence to bear upon the theory that the current extent to which advanced credits are being granted is not sufficient to meet students' demand for such credits. Second, some tentative interpretations were made concerning some widely held beliefs about advanced standing practices. Three hypotheses and two alternate hypotheses were designed and tested to serve the first of these secondary

purposes, and descriptive statistics were organized to yield other interpretations from the data.

The subjects of the study were educators associated with eleven Oregon community colleges and students enrolled at ten of those schools. Educators were selected through the process of simple random sampling and were surveyed by mail. One hundred and eight educators (72% of those contacted) responded to the questionnaires sent to them. The student sample was obtained by selecting a stratified sample of thirty classes being conducted on ten Oregon community college campuses during the fall term of 1975. A total of 417 students completed the questionnaires administered in their classrooms; it is not known how many students in those classrooms opted not to complete the questionnaires though instructors reported little or no resistance from students toward the instruments.

Descriptive statistics were utilized to evaluate the assessment model and to draw tentative interpretations from the data. In addition, the chi-square distribution statistic was used to test the hypotheses designed to investigate the theory that current practices are not fulfilling demand. In testing the hypotheses, the .05 level of confidence was accepted as indicating significance.

Since the findings of this study were summarized in the preceding chapter, they are discussed in this chapter only as they support the conclusions presented in the next section. The findings were

utilized to draw conclusions about the effectiveness of the model and instruments developed for this study, the scope and significance of identified need for advanced standing practices, and the validity of certain beliefs. The findings were drawn from subjects associated with one type of college in one geographic area. For this reason, conclusions dealing with the significance of identified needs and the validity of beliefs are not projected beyond the participating population.

Conclusions

The following conclusions were drawn from the observed results of the study:

1. The needs identification model developed for the study is capable of satisfying the four criteria determined to be essential to the assessment of human needs. First, the definitions were found to be adequate to clarify the nature of the need object, to identify the subjects in need and two surrogate groups of subjects, and to conceptualize comparable measures of desired conditions ("what should be") and existing conditions ("what is"). Second, the measures of perceived demand were found to be discriminative and easily calculated. Third, each measure of existing fulfillment was found to be comparable with measures of demand and easily computed. Finally, it was found that a measure of existing fulfillment could be subtracted from a corresponding measure of demand to yield a need estimate

(discrepancy). As intended, the model is capable of yielding five alternative need indicators in each case that it is followed.

2. The two instruments developed for the study are capable of collecting the data required to implement the model. The instruments can collect data which will yield estimates of need for advanced standing practices in seven curriculum areas and for the curriculum taken as a whole. Though minor imperfections were noted, the instruments were found to be easily administered, and responses entered on the questionnaires were readily transferred to data processing cards. Some confusion was inferred from the responses of a small number of students, suggesting that a glossary may be needed to clearly define the concept of granting credits for prior off-campus learning. In addition, it is believed that the responses of returning students with regard to demand can be made more comparable with those of entering students by changing the wording used in one section of the students' questionnaire.

3. The students surveyed tended to qualify their perceptions of demand for opportunities to earn academic credits for prior off-campus learning. Some students indicated a willingness to pay for such opportunities, while others indicated that they would not assert themselves in this way. Some students indicated a desire for full credit for a given curricular requirement, while others indicated a desire for partial credit only. In addition, it was found that the three

groups of subjects tended to perceive the scope of demand differently. Returning students indicated the highest levels of demand, while educators and entering students identified lower levels. Two conclusions are drawn from these findings. First, it is concluded that the nature of the demand to be satisfied and the characteristics of the subjects perceiving demand were two variables directly influencing the scope of the need identified through the model and instruments. Second, it is concluded that users of the model and instruments must be prepared to make subjective judgments regarding the nature of legitimate demand and the value of the perceptions of each group of subjects.

4. A measure of the percent of returning students reporting receipt of credits for prior off-campus learning provides an adequate indicator of the extent to which advanced standing credits are being granted. It is believed that this measure is inflated somewhat since it does not take into account the experiences of early leavers. As a result, measures of need derived from levels of fulfillment reported by returning students may be considered conservative estimates.

5. If a general confidence in one's ability to qualify for advanced credits and an interest in doing so are accepted as minimal conditions required to indicate demand, then the findings consistently supported the theory that the number of students currently receiving academic credits for prior off-campus learning is significantly below

what it would be if the demand for opportunities to qualify for such credits were being met.

6. If a general confidence in one's ability to qualify for advanced credits and a willingness to pay \$15.00 for an opportunity to qualify for such credits are accepted as minimal conditions required to indicate demand, then the findings supported the theory when the general curriculum was considered but failed to support it with relation to seven specific curriculum areas.

7. Educators' estimates of the ability of students to qualify for advanced credits were found to be significantly greater than comparable measures of current fulfillment in four curriculum areas and when the curriculum was considered as a whole. Thus the perceptions of educators tended to support the theory under investigation.

8. All participating community colleges had adopted policies and practices enabling students to earn credits for prior off-campus learning, but the students surveyed were found to be ignorant of most of the options available to them. These findings suggest that the advanced standing practices on these college campuses may be in states of transition. Many of the enabling policies were recently adopted and may be awaiting adequate implementation. Other explanations exist to reconcile these findings. However, it can be concluded that more active efforts to inform students of the opportunities

available to them would help to meet the needs identified on the campuses surveyed.

Limitations of the Study

The techniques and instruments developed for this study were constructed because no existing needs identification tools were found dealing with the practice of granting academic credits for prior off-campus learning. The instruments were subjected to a field testing process designed to enhance their reliability and validity, but weaknesses did survive to affect the data collected and analyzed.

Several characteristics of the design of the study and the subjects surveyed may have introduced bias to the study. Data were collected on community college campuses. They were collected in one regional area -- Oregon. They were collected from only those subjects willing to participate. Therefore, attempts to generalize the results of the study beyond the participating institutions should be made with appropriate caution.

Recommendations

The following recommendations for further research seem appropriate:

1. The study should be replicated on other community college campuses to determine if the phenomena observed at the participating

Oregon community colleges will be observed at other similar colleges.

2. The model and instruments should be tested on the campuses of public and private four year colleges to determine the utility of the technique for those institutions and to obtain more comprehensive indicators of student needs for advanced standing opportunities.

3. A longitudinal study should be conducted to determine the extent of current fulfillment more accurately than is possible through the technique developed for this study.

4. Studies should be conducted to determine how background characteristics influence student needs for advanced standing opportunities.

5. Research should be initiated to identify the means of maximizing the effectiveness of existing advanced standing policies and practices on college campuses.

6. Model programs should be developed to increase student awareness of existing advanced standing opportunities.

7. A planning project should be supported on at least one college campus which develops a plan for meeting student needs for opportunities to qualify for academic credits for prior off-campus learning.

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APPENDICES

APPENDIX A

QUESTIONNAIRE TO DETERMINE STUDENTS' NEEDS FOR OPPORTUNITIES TO EARN ACADEMIC CREDITS FOR PRIOR OFF-CAMPUS LEARNING

**QUESTIONNAIRE TO DETERMINE STUDENTS' NEEDS
FOR OPPORTUNITIES TO EARN ACADEMIC CREDITS FOR
PRIOR OFF-CAMPUS LEARNING**

INTRODUCTION: You are being asked to complete this questionnaire, so that more can be learned about the needs students have for opportunities to earn college credits for previous off-campus learning. We are asking for your voluntary participation in this project; you are free to choose not to complete this questionnaire. If you do complete the questionnaire, you can be sure that you will not be asked to provide any information which could be used to identify you by name, and you can be sure that you will not be contacted at a later date as a result of completing this questionnaire. YOUR HELP WILL BE GREATLY APPRECIATED.

DIRECTIONS: In some sections of this questionnaire, you will be asked to check (✓) appropriate blanks or write short answers in spaces provided. In most sections, though, you will be asked to match appropriate statements in one column with statements in an other column. THE FOLLOWING EXAMPLE QUESTION DEMONSTRATES HOW A MATCHING PROBLEM CAN BE ANSWERED:

EXAMPLE QUESTION: Please match the experiences listed in Column 2 with the famous people listed in Column 1:

COLUMN 1	COLUMN 2
** <u>1,2</u> a. John F. Kennedy	(1) "PT" boat skipper.
<u>2</u> b. George Washington	(2) President of the U.S.
<u>3</u> c. Tom McCall	(3) Governor of Oregon.

**Note that where more than one statement in Column 2 seems appropriate, more than one number is entered in the answer blank.

BEGIN THE QUESTIONNAIRE:

1. Column 1 lists types of non-college learning experiences which students frequently have before entering college. Column 2 lists various levels of these experiences. Please indicate the extent to which you feel you have had the experiences listed in Column 1: (*Match statements in Column 2 which best fit you with each of the types of non-college learning listed in Column 1*)

COLUMN 1	COLUMN 2
_____ a. Advanced high school classes.	(1) I have had experiences of this kind, and I <u>have</u> earned college credits for them.
_____ b. Military training schools.	(2) I have had experiences of this kind, and I feel I <u>should</u> be granted some credits for them.
_____ c. Other non-college training programs.	(3) I have had experiences of this kind, but I <u>do not feel</u> I deserve college credits for them.
_____ d. On-the-job work experiences.	(4) I have not had experiences of this kind.
_____ e. Other important "life" experiences. Please specify: _____	
(<i>Travel, hobbies, child-rearing, etc.</i>)	

2. Column 1 lists four methods which can be used to grant credits to students for prior learning. Column 2 lists policies which colleges may adopt regarding these methods. Please indicate the policy which you believe exists at your college for each of the methods listed in column 1: *(match policies found in Column 2 with methods found in Column 1)*:

COLUMN 1

COLUMN 2

- | | |
|---|--|
| <p>_____ a. <u>Standardized tests</u>. Such as the College Level Examination Program (CLEP).</p> <p>_____ b. <u>Locally developed credit-by-examination tests</u>.</p> <p>_____ c. <u>Articulation agreements</u>. Such as agreements to grant college credits for high school courses.</p> <p>_____ d. <u>Accreditation</u>. Such as willingness to grant credits for military training without first requiring the person to take a test.</p> | <p>(1) The college does use this method to grant advanced credits.</p> <p>(2) The college uses this method to excuse students from having to take certain courses, but <u>no credits</u> can be earned this way.</p> <p>(3) The college does not recognize or use this method at this time.</p> <p>(4) I do not know what the college policy is.</p> |
|---|--|
3. In this section, please indicate what you believe the policies should be at your college. *(Match policies found in Column 2 with methods listed in Column 1)*:

COLUMN 1

COLUMN 2

- | | |
|---|---|
| <p>_____ a. Standardized Tests.
<i>(Such as CLEP)</i></p> <p>_____ b. Locally developed credit-by-examination tests.</p> <p>_____ c. Articulation agreements.
<i>(Such as recognizing high school courses for college credit.)</i></p> <p>_____ d. Accreditation. <i>(Such as recognizing certain training programs as being worthy of credit.)</i></p> | <p>(1) The college should grant credits through this method.</p> <p>(2) The college should excuse students from taking courses through this method, but no college credits should be granted.</p> <p>(3) The college <u>should not</u> use this option to grant academic credits.</p> <p>(4) I do not feel I know enough about these methods to say what the college should do.</p> |
|---|---|
4. Please check one statement which best describes why you are now enrolled in college.

- _____ a. I am enrolled to complete the courses I need to transfer to a four-year college. *(I hope to earn a bachelor's degree.)*
- _____ b. I am currently enrolled to prepare for a vocation or technical career which requires two years of training beyond high school. *(I hope to earn an associate's degree at this college.)*
- _____ c. I am enrolled to prepare for a job which requires skills which I do not now have but which I plan to learn in one year or less. *(I do not plan to earn an associate's degree at this college.)*
- _____ d. I am attempting to improve my skills in a job which I already have. *(I am not preparing for a new career.)*
- _____ e. I am enrolled for other reasons. Please specify: _____

5. Column one lists several course requirements which must be completed to earn an associate's degree. Column 2 lists statements related to the use of advanced credit options. Please match one or more statements from Column 2 with each course requirement listed in Column 1:

COLUMN 1

- _____ a. English composition or communications courses required in your program.
- _____ b. Social science courses required in your program.
- _____ c. Math or science courses required in your program.
- _____ d. Physical education courses required in your program.
- _____ e. Personal health course.
- _____ f. Vocational-technical courses required in your program.
- _____ g. Vocational-technical courses serving as elective credits.
- _____ h. Transfer courses serving as electives.

COLUMN 2

I have earned advanced credits in this course area.....

- (1) I earned four credits or less.
- (2) I earned four to eight credits.
- (3) I earned nine or more credits.

I have already taken these courses, and.....

- (4) I feel I already knew most of the course content before taking the courses. (*I should have been granted enough advanced credits to satisfy this requirement.*)
- (5) I feel I already knew some of the course content before taking the courses. (*I should have received some advanced credits but not enough to satisfy the requirement.*)
- (6) I did not know enough of the course content before taking them to have qualified for advanced credits.

I have not completed these requirements yet, but I feel I have already learned much of the course content.....

- (7) I would be willing to pay \$15.00 for a chance to earn advanced credits in this subject area.
- (8) I would like a chance to earn advanced credits, but I would not pay for the opportunity.
- (9) I want to take the courses anyway.

I have not completed these requirements yet, and I do not believe that I know much about the content they cover.....

- (10) I am looking forward to taking these courses.
- (11) I have an open mind about taking these courses.
- (12) I would love to get out of taking these courses.
- (13) I do not plan to take these courses.

6. Students go to the trouble of attempting to qualify for advanced credits when they feel that such credits will help them accomplish some objectives they have set for themselves. Please indicate how important each of the following objectives is to you: (Match the level of importance listed in Column 2 which best fits you with each objective listed in Column 1.)

COLUMN 1

COLUMN 2

- | | |
|--|---|
| <u> </u> a. To earn an Associate's Degree in as short a period of time as possible. | (1) This is <u>very important</u> to me. |
| <u> </u> b. To earn some other kind of credential in as short a period of time as possible. | (2) This is <u>important</u> to me. |
| <u> </u> c. To have an opportunity to really see how much I can learn. | (3) This is <u>not too important</u> to me. |
| <u> </u> d. To be free to take only those courses which I feel are important to me. | (4) |
| <u> </u> e. To feel a sense of satisfaction and self-confidence. | (4) This is <u>of no importance</u> to me. |

7. Though it is not important to know who you are, it is important to know some things about you. (Please check all appropriate blanks)

STUDENT STATUS: Freshman Sophomore Unclassified

 Full-time student Part-time student
(12 credits or more) (less than 12 credits)

AGE: 19 or under 20 to 24 25 to 30 Over 30

ACADEMIC BACKGROUND: (Please check the statement which best describes the grades or grade point average you received in high school.)

- I had nearly an "A" average. (3.50 GPA or higher)
 I had above a "B" average. (3.00 to 3.49 GPA)
 I had nearly a "B" average. (2.50 to 2.99 GPA)
 I had above a "C" average. (2.00 to 2.49 GPA)
 I had below a "C" average. (1.99 GPA or lower)
 Other. Please specify _____

MARITAL STATUS: Married Single

SEX: Male Female

***** END OF QUESTIONNAIRE. THANK YOU FOR YOUR HELP. *****

APPENDIX B

**QUESTIONNAIRE TO DETERMINE EDUCATORS'
PERCEPTIONS OF GRANTING ACADEMIC CREDITS
FOR PRIOR OFF-CAMPUS LEARNING**

INTRODUCTION: This questionnaire is being circulated to determine how educators in Oregon's community colleges view the practice of granting academic credits to students for prior off-campus learning. The questionnaire was designed to take no more than fifteen minutes to complete, and each item was constructed to be easily completed. Please fill out the questionnaire immediately and return it to Jewell Manspeaker, 3768 Kermit Ct., N.E. Salem, Oregon 97303. A stamped and addressed envelope is attached for your convenience. If you do not choose to participate, please send the attached envelope back to Jewell Manspeaker to assure that no further efforts will be made to solicit your participation. YOUR HELP WILL BE APPRECIATED.

DEFINITIONS: A glossary of terms is provided on the back page of the questionnaire. PLEASE REFER TO IT WHEN A TERM IS USED WHICH YOU DO NOT FULLY UNDERSTAND.

DIRECTIONS: In some sections of this questionnaire, you will be asked to check (✓) appropriate blanks or write short answers in spaces provided. (In most of these latter cases you will be asked to estimate the percent of students whom you believe would meet certain conditions.) In other sections, you will be asked to match appropriate statements in one column with statements in an other column. THE FOLLOWING EXAMPLE DEMONSTRATES HOW A MATCHING PROBLEM CAN BE ANSWERED:

EXAMPLE QUESTION: Please match the professional experiences listed in Column 2 with the professionals listed in Column 1:

COLUMN 1

COLUMN 2

- | | |
|----------------------------------|---------------------------|
| ** <u>2,3</u> a. John F. Kennedy | (1) Governor of Oregon. |
| <u>1</u> b. Tom McCall | (2) President of the U.S. |
| <u>2</u> c. Lyndon Johnson | (3) "PT" boat skipper. |

** NOTE THAT WHERE MORE THAN ONE STATEMENT IN COLUMN 2 SEEMS APPROPRIATE, MORE THAN ONE NUMBER IS ENTERED IN THE ANSWER BLANK.

BEGIN THE QUESTIONNAIRE:

1. Please estimate the percent of students who are entering your college with the following non-college learning experiences behind them. (Please make one estimate for each non-college experience listed; each estimate should be expressed as a percent of the total population of entering students at your college.)
 - a. Advanced high school classes: _____%
 - b. Military training schools: _____%
 - c. Other non-college training programs (such as proprietary schools): _____%
 - d. On-the-job work experiences: _____%
 - e. Other important "life" experiences (such as travel, hobbies, etc.) _____%

2. What percent of the students entering your college would you estimate to be entering with at least one of the non-college experiences listed in Question 1 behind them? _____%
3. How many years of professional experience have you had in education? _____
4. Column 1 lists eight specific methods which can be used to grant credits to students for prior learning. Column 2 lists policies which colleges may adopt regarding these methods. Please indicate the policy which you believe is in force at your college for each of the methods listed in Column 1: (Match policies found in Column 2 with methods found in Column 1. Also, please refer to the glossary of terms for definitions of each of the eight methods listed.)

COLUMN 1

COLUMN 2

- _____ a. CEEB's Advanced Placement Program
- _____ b. CLEP General Exams.
- _____ c. CLEP Subject Exams.
- _____ d. Locally developed credit-by-examination tests.
- _____ e. ACE's Guide to the Evaluation of Educational Experiences in the Armed Forces.
- _____ f. U.S.A.F.I. Courses (Now referred to as D.A.N.T.E.S.)
- _____ g. Articulation agreements with high schools.
- _____ h. Evaluation of "life" experiences.

- (1) The college does use this method to grant advanced credits.
- (2) The college uses this method to excuse students from having to take certain courses, but no credits are granted through this method.
- (3) The college does not recognize or use this method at this time.
- (4) I do not know what the college policy is.

REMARKS: (Please make any remarks which seem appropriate.) _____

5. Please indicate what you believe the policies should be at your college:

- _____ a. CEEB's Advanced Placement Program.
- _____ b. CLEP General Exams.
- _____ c. CLEP Subject Exams.
- _____ d. Locally developed tests.
- _____ e. ACE's Guide for evaluating military experiences.
- _____ f. U.S.A.F.I. Courses.
- _____ g. Articulation agreements
- _____ h. Evaluation of "life" experiences

- (1) The college should grant credits through this method.
- (2) The college should excuse students from taking courses through this method, but no college credits should be granted.
- (3) The college should not use this option to grant academic credits.
- (4) I do not feel I know enough about these options to say what the college should do.

REMARKS: _____

Assume that all entering students at your college were given opportunities to use any or all of the eight options listed in Questions 3 & 4 to attempt to qualify for blocks of advanced credits. Assume also that all entering students knew that these opportunities were available to them and understood what each option entails. Basing your answers upon these assumptions, please answer the following questions:

- a. What percent of the entering students do you believe would be willing to pay \$15.00 to use one or more of the eight methods to attempt to qualify for academic credits of one kind or another? ____%
- b. If all entering students used one or more of the methods to attempt to qualify for advanced credits, what percent do you believe would have a good chance of qualifying for:
 - (1) at least three credits? *(The answer to this question should be all-encompassing; it should include the students who could earn three credits and the ones who could earn ninety.)* ____%
 - (2) from three to fifteen credits? ____%
 - (3) from fifteen to thirty credits? ____%
 - (4) from thirty to forty-five credits? ____%
 - (5) from forty-five to ninety credits? ____%
- c. If all entering students pursuing A.A. Degrees in Liberal Arts and Sciences attempted to qualify for advanced credits, what percent would have a good chance of earning:
 - (1) 6 credits in English composition? ____%
 - (2) 9 credits in the social sciences? ____%
 - (3) 12 credits in math or science? ____%
 - (4) 9 credits in the humanities *(literature, music, art, or foreign languages)*? ____%
 - (5) 3 credits in personal health or physical education? ____%
- d. If all entering students pursuing A.S. Degrees in vocational-technical fields attempted to qualify for advanced credits, what percent would have a good chance of earning:
 - (1) 6 credits in English or communications skills? ____%
 - (2) The credits essential to meet the general social science requirement for the A.S. Degree? ____%
 - (3) The credits essential to meet the general math or science requirement for the A.S. Degree? ____%
 - (4) 3 credits in personal health or physical education: ____%
 - (5) At least 9 credits in a vocational-technical field: ____%
- e. REMARKS: *(Use the back of this page if necessary)* _____

Please rate the role which you believe advanced credit opportunities can play in regard to the following student objectives: (Match a role in Column 2 with each objective listed in Column 1)

COLUMN 1

COLUMN 2

- | | |
|--|---|
| <p>_____ a. To earn an Associate's Degree in as short a period of time as possible.</p> <p>_____ b. To learn as much as possible in a two year period.</p> <p>_____ c. To earn a degree with as much freedom to schedule my time as possible.</p> <p>_____ d. To gain a sense of satisfaction and self-confidence.</p> <p>_____ e. To cut costs by taking only those courses which are required.</p> | <p><u>For a student to obtain this objective, use of advanced standing options:</u></p> <p>(1) would be essential.</p> <p>(2) would be helpful.</p> <p>(3) would be of little value.</p> <p>(4) would be of no consequence.</p> |
|--|---|

Critics of the use of advanced credit options have warned of the following dangers. Please indicate how real and important you feel these dangers are: (Match the most appropriate rating found in Column 2 with each danger listed in Column 1.)

COLUMN 1

COLUMN 2

- | | |
|--|---|
| <p>_____ a. Since they tend to exempt better students from classes, regular classes suffer.</p> <p>_____ b. Since they tend to section able students apart from others, important democratic ideals are violated.</p> <p>_____ c. Since standardized tests are often used, they threaten to impose national uniformity.</p> <p>_____ d. They place an undue emphasis upon the certification function in education.</p> <p>_____ e. They threaten to reduce enrollment in basic courses and, thus, threaten faculty jobs.</p> | <p>(1) This is a real and important danger.</p> <p>(2) This could be a danger, but the danger is not too important.</p> <p>(3) There is little danger of this happening.</p> <p>(4) There is no danger of this.</p> |
|--|---|

***** GLOSSARY OF TERMS *****

CEEB's Advanced Placement Program. A high school based program through which students may take advanced courses in high school and demonstrate their competencies with subject matter through a standardized test.

CLEP General Exams and Subject Exams. A credit-by-examination program sponsored by the College Entrance Examination Board (CEEB). The general exams are designed to test competencies in five areas of the liberal arts; subject exams test competencies in thirty-seven specific college courses.

ACE's Guide to the Evaluation of Educational Experiences in the Armed Forces. Four volumes of recommendations made by a commission of the American Council on Education (ACE), which list and make credit recommendations for every formal military training program offered since World War II.

U.S.A.F.I. Courses. Courses offered by the U.S. Armed Forces Institute. This institute has recently been reorganized and is now referred to as D.A.N.T.E.S.

Articulation Agreements. Agreements between colleges and other institutions through which the college equates programs at the other institution with courses at the college.

Evaluation of "life" experiences. A process of recognizing key "life" experiences to be equivalent to college courses. Unlike credit-by-examination, such evaluations analyze the nature of the experiences rather than the specific competencies of an individual.

END OF QUESTIONNAIRE. THANK YOU FOR YOUR HELP.

APPENDIX C

PANEL OF EXPERTS HELPING WITH THE DEVELOPMENT
OF TWO INSTRUMENTS UTILIZED IN THE STUDY

Grace Cameron	Student Records Supervisor Lane Community College Eugene, Oregon
Robert W. Chick	Dean of Students Oregon State University Corvallis, Oregon
Helen Lowrey	Research Specialist Survey Research Center Oregon State University Corvallis, Oregon
Robert G. Mason	Professor of Sociology Oregon State University Corvallis, Oregon
James Meinert	Director, High School/College Relations Portland State University Portland, Oregon
Richard J. Pizzo	Director, High School Relations Chancellor's Office Oregon State System of Higher Education Eugene, Oregon

APPENDIX D

Jewell Manspeaker
3768 Kermit Ct., N.E.
Salem, Oregon 97303

November 7, 1975

Dr. George Moore
Coordinator, Institutional Development
Chemeketa Community College
Salem, Oregon 97308

Dear Dr. Moore:

I would like to request permission to conduct research on the Chemeketa Community College Campus. Specifically, I would like permission to administer some questionnaires to a sample of students and educators from Chemeketa. I would mail the questionnaires to the educators and administer the questionnaires to students in approximately five classes selected at random. The questionnaires take approximately ten minutes to complete; they do not require that a person disclose any personally identifiable information; and participants will be informed that their participation is voluntary.

I have talked with Gary Edelbrock about the study I am conducting and am enclosing a fact sheet which describes what I will attempt to determine. I will also be happy to meet with you to discuss the study and find out how I might make it more useful to you.

I will appreciate your consideration of my request.

Sincerely,

Jewell Manspeaker

Enclosure

APPENDIX E

Jewell C. Manspeaker
3768 Kermit Ct., N.E.
Salem, Oregon 97303

December 4, 1975

Mr. Jim West
Dean of Students
Umpqua Community College
Box 967
Roseburg, Oregon 97470

Dear Jim:

I would like to ask you to complete the enclosed questionnaire and return it to me. The questionnaire should take no more than fifteen minutes to complete, and a stamped and addressed envelope is attached to it, so that you can return it with a minimum of fuss.

Your responses will help me complete a study I am conducting of the practice of granting academic credits to students for prior off-campus learning. In this study, I am investigating the use and need for such options as credit-by examination, accreditation of non-college training programs, and articulation agreements between colleges and other educational agencies. Thus, the views which professional educators hold toward these options are crucial to my study.

As you might expect, I am being motivated to conduct this study by a personal commitment I have made to complete a doctoral dissertation. I am also sincerely concerned about the needs of non-traditional students who are entering our community colleges and believe that this study can help pinpoint some of those needs.

I have received official permission from your college administration to solicit your participation in this study and have also cleared the study through the Oregon Community College Assembly. Leo Crisman was very good about helping me with my students' questionnaire and approved this one; thank you for your assist.

I do plan to pass the results of my study to as many people as possible. I am scheduled to present my findings at the next meeting of the Oregon High School/College Relations Council and have agreed to pass copies of my findings to each of the community college contact people with whom I am working and to the Task Force for Able and Gifted

Programs at the Oregon Department of Education. I will also be happy to send you a copy of my findings if you let me know that you would like one.

I will truly appreciate your help at this time.

Sincerely yours,

Jewell C. Manspeaker

Enclosure