AN ABSTRACT OF THE THESIS OF

Carl L. Rawe, Jr., for the degree of Doctor of Education in Education presented on November 24, 1997. Title: A Case Study to Investigate Retention Efforts at Mt. Hood Community College.

Redacted for Privacy

Abstract approved: _____ Sam Stern

This case study describes and analyzes the experiences of Mt. Hood Community College (MHCC) in its implementation of four retention interventions. Each of the four interventions are described in detail. Discussion is framed within the context that retention is a by-product of institutional renewal brought about by implementing interventions that have campus-wide impacts. Discussion and analysis probe the interventions to reveal their benefits to the college, addressing the question as to whether MHCC is being effective in its retention planning.

Discussion and recommendations are framed around three insights discovered in the course of the case study. These three insights are seen as key factors in retention intervention. Each of the insights is followed by recommendations intended to mitigate gaps in retention planning that the insights discovered. The insights and recommendations are:

1. Intervention needs to be holistic. Two recommendations were suggested to strengthen the holistic approach. The first of these is a mentoring program, both peer and faculty. The second recommendation is to strengthen faculty-student-staff relationships outside the classroom by an intervention such as the establishment of learning communities.

2. Intervention needs to use high quality information. Recommendations were to pay more attention to less than full-time students, to develop a formal withdrawal policy and process, and to collect additional student intention data.

3. Intervention needs to track points of student economic impact. The single recommendation for insight three is to thoroughly track and analyze the points where students interact economically with the college. This is thought to be crucial as the areas of economic contact play an active not passive role in enrollment and retention.

The case study found that MHCC's experiences with intervention are consistent with literature findings, have been effective for MHCC, and the insights and recommendations may be helpful to other community colleges in retention planning.

A Case Study to Investigate Retention Efforts at Mt. Hood Community College

by

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A THESIS

submitted to

Oregon State University

in partial fulfillment of
the requirements for the
degree of

Doctor of Education

Completed November 24, 1997
Commencement June 1998

Doctor of Education thesis of Carl L. Rawe, Jr., presented on November 24, 1997

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

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Carl L. Rawe, Jr., Author

ACKNOWLEDGMENTS

I first want to congratulate myself for conceiving, believing, and achieving this lifelong professional goal. I truly found the biggest challenge of my professional career in the process of completing this dissertation. I had to bring a lifetime of professional experiences to bear in this process and I found out that even at middle age, frustration tolerance thresholds had to be widened. I wish to thank, too, my parents, Carl and Eva, for instilling in me my desire to achieve and the perseverance skills that it took to relentlessly stay with the dissertation process until it was completed.

I wish to especially thank my major professor, Sam Stern, for his mentorship, guidance, and reassurance to me that I would complete this thing called a dissertation. His friendship and encouragement throughout the process was much appreciated. Thank you also to my committee members, Dr. Lance Haddon, Dr. Jon Hendricks, Dr. Gretchen Schuette, and Dr. John Keyser. My committee was there for me when I needed them.

I would also like to thank the members of Cohort 3 who shared the many individual and group experiences with me in this program. I found and established new friendships that will last a lifetime.

I would like to thank my instructors in the program for all they taught me and thanks, too, to Dr. Dan Walleri, director of Research and Planning at Mt. Hood Community College for providing me access to MHCC data, to Skip Paynter for his assistance with graphics, and to the administration at MHCC for approving a sabbatical leave for me to draft my dissertation.

Lastly, a special thanks to my daughter Tia for her love, support, and for putting up with me through a relentless process when she thought that I did not have any type of life beyond the writing of this dissertation and work.

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To my daughter Tia,
My mom,
And the loving memory of my dad.

A Case Study to Investigate Retention Efforts at Mt. Hood Community College

CHAPTER I

THE RESEARCH PROBLEM

Introduction

Retention intervention strategies are designed to keep students at the community college long enough for them to realize their educational goals. Since their inception, community colleges have been both praised and criticized for their mission statements and strategic plans that aim at being all things to their constituents. Even though accrediting agencies in recent years have criticized colleges for having *mission creep* (mission statements that do not match economic or resource reality), colleges still seem to want to maintain this ideal. Likewise, community colleges are known for having what many term excessive attrition, particularly when compared with traditional 4-year higher education institutions. The answer, in large part, for the criticism that community colleges receive regarding their high attrition rates rests with the manner in which *success* is measured at the community college. As DeHart (1985) stated, it may be inappropriate to judge success at the community college by one measure, degree or certificate completion, since degrees measure so little of what community colleges do.

It is clear, however, that students are dropping out in large numbers and colleges are struggling to develop stay-in-school strategies that yield the kinds of results they need in order to remain fiscally sound and at the same time meet their primary missions. According to Deegan, Tillery, and Associates (1985), "We need to know what works and what does

not, under what conditions, and at what cost" (p. 323). The issue is, given the students that community colleges have, what can be modified, changed, or developed in our educational processes so that the students achieve their personal goals? Educational emphasis can no longer be education for all, rather, the focus must be on education for *each* (Cross, 1976).

Early studies dealing with college dropouts focused on attrition. Since the 1970s, the focus has shifted to retention, or keeping students enrolled (Shanley, 1987). Research data continue to mount in this area as the numbers of new high school graduates has been declining due to the fact that the offspring of the post-World War II generation have not yet hit our colleges. This leveling off in new high school graduates is expected to continue its decline until the late 1990s (Noel 1985, Taylor 1996). This predicted loss, or at least not a large increase, coupled with the decreases in funding that higher education is experiencing, is creating a new found urgency among community colleges to determine who dropouts are or might be and then find ways to retain them.

Making judgments about the nature of attrition requires precise knowledge of student intent. For example, two students may enroll for the first time and may both leave at the end of the term. However, both may not represent an attrition problem. One student is employed as a machinist and is taking a computer aided design (CAD) class to upgrade skills. This student's educational goal is to take one or two classes. The other student is a full-time student pursuing a transfer program in architecture with an educational goal to achieve a degree. Although neither returns the next term, the machinist met his educational goal to upgrade skills and should not be counted as an attrition statistic. The architecture student simply dropped out without completing his educational goal and should be counted as an attrition statistic. While neither returns and both are headcount losses to the institution, only the student not meeting his/her educational goal should be counted as a

true attrition loss. The machinist never intended to return a second term as his or her skills were upgraded in that first term. The architect student that did not return the next term could be an attrition problem because their educational goal was not achieved, but only more information from the student can clarify into which category the student would fall.

Increasingly, something very different is happening in the community college world, as students are being viewed much like repeat customers are viewed in the business world. This perspective was evidenced in a summary by Astin (1975a) in his reference to emphasizing the importance of paying attention to attrition and retention in the college community, when he concluded that overall, retention may be more cost-effective than recruitment.

A current challenge to higher education is the development and implementation of programs and services designed to meet the educational needs of a growing population of students with divergent and ever-changing characteristics. These variations are noted in many demographic categories but are particularly apparent in academic skill levels among students. This skill diversity, along with the evident high rate of adult illiteracy in the United States (Richardson, Martens, & Fisk, 1981), indicates that the academically under-prepared student is, and will continue to be, a significant segment of the higher education population (Hodgkinson, 1983). Even allowing for projected declines in the numbers of available students (El-Khawas, Carter, & Ottinger, 1988), any surge of new enrollment is expected to consist of under-prepared students who according to research studies have the highest attrition rate of any group in American higher education (Astin, 1975b; Cross, 1971, 1981; Roueche & Kirk, 1973; Zwerling, 1980). According to El-Khawas, Carter, and Ottinger (1988), community college students, on the average, are much more poorly prepared to attend college than those who attend 4-year schools. Research continues to

show that attempts to remedy academic deficiencies and reduce high attrition rates for community college students are among the most complicated, time-consuming, labor-intensive, and costly objectives that higher education and specifically community colleges have undertaken (Cohen & Brawer, 1982).

Community colleges have invested great resources to attract, enroll, and educate both traditional and nontraditional students. These students include minorities, returning women, older adults, and students from lower socioeconomic backgrounds. Colleges are finding that these students are likely target groups and are being sought after in order to sustain transfer and occupational education programs. In many cases, strong and intensive recruitment activities have succeeded in maintaining enrollment, but these nontraditional students are less likely to persist to the completion of their educational goals. As a result of this finding among community colleges, there is a proliferation of research concerning retention of college students and the variety of interventions that are used to retain them (Upcraft & Gardner, 1989). These interventions must be well planned and inclusive in nature. As Noel (1978) noted, to be effective, "a genuine concern about student retention and a commitment to develop and implement retention strategies must be visible at all levels of the institution" (p. 87).

The first national study in the United States on retention was done by McNeely (1938) in which he surveyed 25 universities. His results showed a dropout rate from higher education of 45%. Iffert (1958) surveyed 149 colleges and reported that 50% of new cohort freshman would cease being enrolled and would not graduate by the end of 4 years. Becoming even more precise in assessing attrition with his longitudinal data and definitions of withdrawing from college, Tinto (1987) reported that the true overall national attrition rate was 34% for 4-year colleges and 54% for 2-year colleges. According to Tinto, these

rates have not changed to any significant degree during the 20th century. It seems clear that attrition is a continuing problem, and one can further conclude that apparently very little has been done to effectively improve retention for at least 60 years since the first national study on retention was conducted.

Purpose of the Study

The purpose of this qualitative study was to describe and analyze the experiences of Mt. Hood Community College (MHCC) in its implementation of four interventions over a 16-year period from 1980 to 1996 to determine their impact on retention. More specifically, this research study addressed five research questions:

1. What does the literature say about retention intervention?
2. What were four major retention interventions implemented by MHCC?
3. What did MHCC learn through these interventions?
4. Were MHCC's experiences consistent with the literature?
5. What was learned about retention intervention through this study.

The setting for this study was MHCC, a medium-sized comprehensive community college located on the periphery of a large metropolitan area, serving primarily a white, middle-class suburban population. The average age of the over 26,670 annual unduplicated student population (7,272 annual FTE) is 31. Nineteen percent attend full time, 81% part-time, 57% are female, and 62% work full or part-time (Mt. Hood Community College, 1993-1996).

Typically, as many as 50% of all entering students enrolling for nine or more credits test below established college standards on the initial skills assessment inventory (the College Placement Test), resulting in mandatory advising and placement. The enrollment

options of these students are restricted to developmental education classes (Guided Studies) and a few selected courses identified by the faculty as appropriate for students with some or all identified academic deficiencies. Successful completion of the prescribed remedial courses allows the student to move into *regular* student status. Failure to remediate academic deficiencies within two or three terms can result in academic probation and eventual suspension from the college. Students enrolling for one to eight credits are not required to take the placement test.

This study consisted of conducting a secondary analysis case study of selected retention interventions that MHCC has developed and put in place from the early 1980s to 1996. Each intervention is described and analyzed as to its intended effect on retention. Additionally, reflections from the literature show what the research data say about each of the interventions. The secondary analysis was conducted on four interventions. The research question being asked was: What is the effect of the interventions on student retention at Mt. Hood Community College?

Mt. Hood Community College provides a rich opportunity for the study of interventions because it is a stable institution with a long history (30 years), and it can demonstrate a diversity and variety of planned interventions applied over the past 16 years to promote retention. Studying this problem is important because:

1. Institutional effectiveness is significantly impacted by high attrition.

2. Colleges must know what effects their interventions are having in order to intervene to decrease their attrition.

3. High true attrition (students leaving before completing their intended educational goal) may be a primary indicator that colleges are failing to assure that many students achieve their educational goals.

4. High attrition rates have a negative impact on the morale of students, faculty, staff, and administration.

5. Attrition undermines the fiscal stability and health of the College.

6. In social terms, the community at large is impacted by having an under-educated populace and workforce that cannot meet the educational needs and standards of business and industry.

So far, little attention has been paid to the fiscal consequences attrition has for both the institution and the individual student as a result of enrolling students and then failing to supply the kinds of academic, non-academic, and social support that are necessary to maintain enrollment. There are increasing demands for accountability from higher education for the dollars institutions are receiving. Community colleges need to accept this accountability challenge as there is mounting evidence that community colleges know how to help high-risk students to succeed; schools must decide whether to apply this knowledge and accept the responsibilities that go with it (Stodt, 1987).

Increasing the numbers of students both full-time and especially part-time that have access to higher education is important. Although resources to provide instructional and student support services are becoming increasingly scarce, colleges need to continue to find ways to more efficiently and effectively leverage their available funds. A trend that is being seen in the community college is that even though enrollment in headcount is edging up, fewer students are completing their educational goals. These dropouts, as they are being called, are using up valuable resources without acquiring employable skills to be productive taxpaying citizens. This seems a terrible waste of both institutional and human resources. More simply put, colleges are not getting the outcomes needed, nor is society, in turning out an educated populace that both our local and national governments have determined is

necessary. McCabe (1984) and others sounded the clarion that in an educational climate that requires quality, accountability, and fiscal restraints, there is a threat to the inclusiveness and egalitarian goals central to the community college mission and symbolized by the open door. Community college leaders, prestigious commissions, and governing bodies have asserted that the open door must be accompanied by appropriate interventions that can better assure students will persist in acquiring skills and that they will receive appropriate assistance. What is needed are better systems, processes, and retention plans that work for individual colleges, so they can significantly exert some degree of control over their enrollment and retention of students.

Background and Setting

Mt. Hood Community College is a comprehensive 2-year, public college dedicated to providing educational and occupational training opportunities to an academically diverse student population. The college offers certificates, associate degrees and a wide variety of career training programs, transfer subject areas, continuing education courses, basic skills training, business employee development programs, and more.

MHCC's occupational instructors are in touch with labor-market trends and job requirements to assure students get the education needed for success in their chosen career field. MHCC's strong ties with local business and industry ensure students gain the skills that local employers are seeking. MHCC also has the kinds of infrastructures, programs, and processes that students need to succeed — highly qualified instructors; state-of-the-art equipment; hands-on learning opportunities; flexible scheduling; tutoring; one-on-one advising; and small, personal class sizes.

Intervention Strategies

At MHCC, the focus on high-risk students over the past 16 years has resulted in the implementation of many different interventions, each with a common goal: to better ensure retention and student success. These interventions included the Student Success Task Force that carried out the planning and implemented infrastructure programs that resulted in or supported the development of a series of additional retention interventions that all built upon each other. Student success is tied directly to retention and *vice versa*. Parnell (1990) wrote that access and retention can be measured by the number of students who enter and achieve their educational goals. MHCC began to address the issues surrounding retention in 1980-1981 and the focus on student success and institutional effectiveness continues in 1997. For the purposes of this study, the four MHCC interventions studied were:

1. *Student Success Task Force*. In 1980-1981, a College Student Success Task Force was formed under the leadership of the college vice president of administration. The 54-member task force was comprised of representatives from management, faculty, support staff, and students. The task force was charged with reviewing all institutional policies affecting student progress and with making recommendations for improvements that might increase the possibilities of student success.

2. *Guided Studies*. In the Fall of 1984, MHCC implemented a Guided Studies program that included for the first time mandatory assessment placement testing. This program emphasized five major procedures to guide high-risk entering students: (a) mandatory assessment placement testing for students enrolling for nine credits or more; (b) identified courses in which students with reading, writing or mathematics deficiencies would not be successful, as well as courses in which students with one or more deficiencies might still be successful; (c) established a system to guide students to enroll in only

appropriate developmental work and/or courses they could successfully complete; (d) a Special Students Committee to work on standard operating procedures with Advising and Counseling, Admissions and Records, special letters to *guided students*, monitoring reports, and progress and appeal processes; and (e) a system to allow identified *guided students* who rejected the recommended guided program to be put in a special category for monitoring purposes but permitted them to enroll in courses of their choice.

3. *Intensive Academic Advising of General Studies Students*. In 1994, MHCC received funding under Title III of the Higher Education Act to improve retention at the college. One of the activities of the Title III grant was an Intensive Academic Advising pilot study. The students who participated in this pilot study were to be first-time-in-college students drawn at random from a pool of students who had a general studies major, an advising and counseling staff member as their advisor of record, and were enrolled in a College Success (HD 100) class during Fall term 1995. These students were considered to be at-risk of dropping out since they had not declared a specific major. Each participating advising and counseling staff member was expected to contact his or her list of approximately 10 students on three occasions during each of three terms for the academic year 1995-1996. Staff spoke with students by telephone or in-person to assist with educational planning, to discuss academic progress, and to help with any school related concerns.

4. *Evaluation of Advising and Registration Workshops and College Success Class (HD 100)*. In 1994, MHCC received funding under Title III of the Higher Education Act to improve student retention. One of the activities of the Title III grant was to review and evaluate the orientation process for new students.

During Fall 1995, MHCC offered 43 Advising and Registration workshops. First-time-in-college students enrolling at MHCC were encouraged to sign up for one of these sessions before registering. The 3-hour workshops included: (a) a 20-minute large group presentation; (b) a small-group academic advising session for interpreting placement test scores, developing a class schedule, and discussing the role of the academic advisor; and (c) individual registration time. The large group session was designed for transfer students, disabilities services students, and ENL students, as well as those students who were staying for the small group sessions. During the large group session, students received the MHCC Catalog, the Student Guide, handouts on the registration process, information on the college's certificate and degree programs, and tips for being a successful student.

Also during Fall 1995, MHCC offered 22 sections of the College Success Class (HD 100). The class is designed as a student-centered experience, and information is communicated via activities and visits to various campus locations, as well as through brief lectures. The class is offered in a variety of formats that includes Saturdays, concentrated weekdays, each day for 2 weeks, or 3 days per week for a month. In addition, certain sections of the class are intended for similar types of students in order to group students with similar needs such as student athletes, international students, or students receiving financial aid. In actual practice, however, students self-selected themselves into mixed groups of students rather than separate. Regardless of the format, the class met for a total of 10 clock hours for a term and students earn one credit for the class. Students can take the class as pass/fail or for a letter grade.

Limitations of the Study

The limitation of this study was that it was a single case. However, Yin (1984) cited several instances in which a single case study is justified. Using MHCC as the single case can be described as what Yin (1984) called a critical case. The college is unusual and worthy of in depth study because of its planning interventions over a long period of time. It is also well known for its innovation and its emphasis and leadership in the areas of assessment and student success. This is evidenced by Mosher (1996) when she wrote that the Consortium for Institutional Effectiveness and Student Success in the Community College was founded by MHCC president Dr. Paul Kreider and a number of CEOs throughout the country in October of 1988 to assist community colleges in meeting the challenges of the national assessment movement, a reform effort sweeping through American education in the mid-1980s dealing with student success. Further prominence of MHCC was illustrated when in 1993, Dr. Paul Kreider received the prestigious national Association of Community College Trustees Marie Y. Martin CEO of the Year Award. Criteria for nomination of the award addressed seven areas of leadership at the community, state, or national level and are summarized by Mosher (1996).

The interventions in this case study represent an attempt to extend this leadership and innovation at MHCC into the student persistence and retention area as well as add to the body of community college retention literature. While the reasons given by many schools regarding barriers to successful implementation of retention strategies is the unwillingness of staff to innovate and properly implement and assess outcomes, MHCC has found this to not be a barrier for moving forward. It would appear that if what MHCC is doing in the retention intervention area can be validated and supported by the literature, discussions of what will or will not work in the retention intervention area will be

broadened and MHCC can possibly be a model for other community colleges to follow in adding to the retention literature. MHCC seems to be meeting all the criteria (Yin, 1984) required to meet a single case test.

Definition of Terms

Attrition. Attrition for the purposes of this study is an institutionally defined and measured term that refers to the loss of a student's enrollment from term to term.

Dropout. Dropouts are students who leave college voluntarily or are forced to leave because of poor grades or for disciplinary reasons before accomplishing their educational goals.

High-risk student. High-risk students are minorities, the academically disadvantaged, the disabled and those of low socioeconomic status (Jones, Watson, & Collier, 1990).

Learning Organization. An organization skilled at creating, acquiring, and transferring knowledge and at modifying its behavior to reflect this new knowledge and insight (Christensen, Garvin, & Sweet, 1991).

Nontraditional student. Nontraditional student is a reference to the changing profile of students over the years since the late 1960s and early 1970s as a result of demographic and sociopolitical change. Nontraditional students typically include older adults, minorities, and individuals of low socioeconomic status. Some nontraditional students are not high-risk students and, conversely, some high-risk students are traditional students (Jones, Watson, & Collier, 1990).

Optout. Optouts (Bonham & Luckie, 1993) identified students who accomplish their self-defined goals (goal attainment) without graduating or transferring. Lenning, Beal and Sauer (1980) defined these types of students as *attainers*.

Persister. Persister is a descriptive term used to describe those students who maintain continuous enrollment until they meet their educational goals. From the student development perspective, persistence is a more student-oriented term to use than attrition, which is an institutionally oriented term.

Regular Student. A regular student is defined as a student who is enrolled in course work leading to a degree or certificate (Mt. Hood Community College Catalog, 1996-97).

Retention. Retention is a descriptive term used from an institutional perspective that means to maintain continuous term enrollment until a declared educational goal is met. Also see student success below.

Stop-out. Stop-outs (Grosset, 1993) are students who have not accomplished their goals but plan to do so in the future either returning to the same or another college.

Student Success. Students meeting their stated educational goals and maintaining a grade point average (GPA) of 2.0 or better. Also see retention above.

True Attrition. True attrition refers to attrition that is measured term to term after accounting for student intentions and student goal attainment. Students achieving their stated educational goals who then leave the college are not counted in the college attrition statistic. True attrition is the unnecessary attrition that retention interventions should be targeted to reduce. True attrition also takes into account the voluntary leaving of students.

CHAPTER II

REVIEW OF THE LITERATURE

Overview

Dropping out of college is a little like the weather: something everyone talks about but no one does anything about it (Astin, 1975b). There seems to be a predisposition for talk versus action, and it is reflected in much of the research literature on retention of college students. The focus tends to be on counting, describing, and classifying students who drop out rather than on seeking solutions to the problem.

College student attrition is a problem that has received a great deal of attention from many researchers (Astin, 1975b; Beal, 1979; Beal & Noel, 1980; Bean, 1986; Hossler, 1991; Pascarella & Terenzini, 1991; Tinto, 1975). In spite of the many research studies on the topic, students continue to drop out in greater numbers than educators desire. Tinto (1987) concluded from his review of the literature that attrition rates had not changed to a significant degree in 100 years. McNeely (1938) conducted the first national study on retention and found that the drop out rate from higher education in the United States was 45%. While the literature is clear that attrition rates vary among the various segments of post-secondary institutions, community colleges have demonstrated a much higher rate of attrition than 4-year colleges, having remained consistently between 50-60% (Astin, 1975b; Cope & Hannah, 1975; Grubb, 1989).

The costs of student attrition to the college are fairly obvious and have been detailed in the preceding chapter. Less clear are the costs to the individual and to society at large when a student decides to leave college. This is so because we cannot view all departures on the part of the student as being negative. Some of the reasons that students

depart college are not attrition problems if viewed from both the perspective of the student and the perspective of the college when student intents are considered. Not all students have the ability nor the inclination to earn a degree, so we must realize that success at retention must be measured in ways other than just certificates and degrees. As Tinto (1989) said:

> Although keeping students in college is a natural by-product of a successful [retention] operation, such programs focus first and foremost on ways to insure that all students, not just some, have an opportunity to learn as much as possible while they are in college, regardless of whether they decide to stay or leave. (p. B2)

Walleri (1981) contended that determining if a college had an attrition problem should be done by looking at retention defined in terms of achievement of educational goals or personal objectives rather than in terms of graduation. He felt that this is, "most appropriate at the community college level since students often take courses in order to obtain skills needed for employment rather than seeking a degree" (Walleri, 1981, p. 23). Walleri goes on to say that the high percentage of part-time students at community colleges is a reason for high attrition, since education is low on their list of priorities. Lenning, Sauer, and Beal (1980) also recognized the importance of colleges clearly defining for themselves what true attrition is, when they noted, "some students become official attrition statistics because they do not earn a degree or certificate even though they successfully design and complete informal programs of their own" (p. 8).

The preceding chapter framed the directions that colleges are moving to address the various attrition problems they are encountering. This direction includes the employment of retention intervention strategies. Each individual institution's concept of attrition is driven by that specific institution's perspective rather than the perspective of the customer or student. There is a vast amount of literature related to student attrition, persistence, and

retention, but the majority of it is centered on the analysis of the variables that might impact attrition versus the study of retention intervention strategies that have been used to successfully impact persistence. This study attempts to limit the literature review to retention intervention and studies most related to this case study.

An on-line search of the literature dating back more than 20 years revealed many studies that focused on retention in higher education and many specific to community colleges. Most studies (Brooks-Leonard, 1991; Daniels, 1990; Grosset, 1989; Voorhees, 1987) evaluated factors from a primarily single variable perspective and sometimes two factors at a time were related to persistence or attrition rates. This type of approach helps to provide a listing of influential factors but does not identify which ones may be more important and which ones may not contribute uniquely to retention/attrition.

Persistence in college is an old issue with new focus in the 1990s. In the past, the term most often used was *attrition*, and the focus was upon students dropping out, implying deficiencies in the selection process. Beginning in the late 1970s, the word *retention* started to be used to describe the problem, and implicit in that change was a change in focus from the student to the institution. More recently, in the 1990s, the term *stop-out* is being used (Grosset, 1993; Bonham & Luckie, 1993). Stop-out refers to the student who comes in and out of the community college with the idea of continuing and completing their education versus the *dropout*, who has just given up. A more recent term, *optout,* is now being used (Bonham & Luckie, 1993) referring to the student who may have met their intent or goal and just left, very satisfied. The issue colleges are now looking at is: Given the students enrolled, what can be modified in the educational process so that these students will be retained to achieve their educational goals? What is found in the literature is at least two very different perspectives. One perspective is that there may be certain preexisting factors

that characterize students who are more likely to drop out. This perspective differs from a model like Tinto's (1975) whereby retention of students is attributed to factors operating within the college environment that occur after the student has been enrolled. In all cases, however, regardless of the terms used, most studies tend to describe dropping-out behavior, but few explain it. The mission of the community college and the type of students admitted (or who attend) are, in many cases, substantially different from 4-year schools. Thus, it might be expected that the factors associated with attrition/retention might operate differently. What is clear is that in the span of less than two decades, higher education has moved from an emphasis upon education for the selected who can meet institutionally imposed standards, to the necessity for many institutions to adapt their policies, practices, and procedures to the educational needs of a wide diversity of students.

In the past, when there was an oversupply of students, retention was mainly an ethical issue involving questions concerning equal opportunity and access to higher education, loss of talent, and student waste of time and effort. Today, the pool of traditional-aged students has diminished and will continue to do so through 1997 (Noel, 1985; Taylor, 1996), and retention has become a practical issue involving the economic survival of many institutions of higher education. Unlike the prior two decades, if a student drops out they may not be replaced by another student. Along with a limited number of students, there is a shortage of resources, which makes cost a primary determinant of education (Astin, 1975b). The loss of students has always been a loss to higher education, but in the past, with relatively large numbers of potential students available, the impact was qualitative rather than quantitative. Qualitative changes are usually subtle and more easily overlooked and although attrition meant the loss of potential talents of students, the existence of the institution was not threatened.

Since about 1980 and more seriously since about 1985, student attrition has been perceived in quantitative terms in relation to supply/demand factors. It would appear as students become more of a means to ensure survival of institutions, they may become an end within themselves. Institutions of higher education will likely have to respond better to student needs in order to maintain enrollments, the *customer focus*. Although the major motivation of retention efforts may have been quantitative goals to increase student enrollments, the most important changes may be qualitative in terms of improving educational services. As Lenning, Sauer, and Beal (1980) pointed out, "rather than improving retention *per se*, the primary goal should be to better meet student needs and to provide a more meaningful educational experience" (p. 16). It needs to be pointed out, however, that a number of investigators (Dietsche, 1989, 1990; Pascarella & Chapman, 1983) have also shown that the variables influencing attrition vary according to institution and student type, so that individualizing approaches to reducing attrition by type of institution is an important variable that needs to be considered.

The purpose of this research study was to learn as much as possible about retention, persistence, and attrition. Most specifically, the research inquiries centered on retention intervention strategies, especially in the community college but also in higher education in general, as literature findings indicate that intervention strategies do cross over into the different segments. The same interventions if appropriately planned, implemented, and assessed are effective in all segments. Of particular interest was what factors need attention in retention planning and what seems to be effective and working. While historically there is noticeably less reporting of this type of research in the literature specific to the community college, increased research has been appearing since the mid-1980s.

Retention research has been described as large in volume, poor in design, and limited in scope (Astin, 1975b). A review of the research over the period of time from the late 1960s to 1996 demonstrated that not a whole lot seems to have changed. During the last decade particularly there has been substantial growth in interest regarding student persistence in higher education. However, most of the research being done has been replications of theories and findings of researchers that began persistence research in the 1970s. This interest has been driven partly by practical considerations of student recruitment and maintaining enrollments, and partly by more academic motivations to develop and test theories about student persistence. As is often the case in higher education research, most theories and empirical research focus on traditionally aged college students, usually at selective, residential institutions. Yet, many students do not fit the traditional student profile. For example, the majority of college freshman are enrolled in 2-year commuter institutions, and more than 6 million adults study for college credit every year, almost always on a part-time basis. Grubb (1991) profiled the typically nontraditional community college student as entering late in the semester, part-time enrollment, working in addition to attending school and stopping-out for one or more semesters. Regarding the community college itself, Brint and Karabel (1989) attributed the large growth of the community college movement since the 1970s to the enrollment of nontraditional students. Early writings were generally demographic studies, while later work has centered on the examination of characteristics of students related to attrition; more recently, interest has been in the interaction of these students' characteristics in an environmental context replicating and adding to Tinto's (1975) findings. Despite all the studies that have been completed in the retention area, Tinto (1982a) stated that the rate at which students leave college has not changed appreciably in 100 years. Additionally, the methodological

problems in retention research can still be grouped according to the findings of Kohen, Nestel, and Karmas (1976) who pointed out the following problems: (a) the scarcity of sequential, longitudinal studies, (b) the problem of defining drop-out, (c) deficiencies in data bases from which studies originate, and (d) failure to control the influences of confounding variables. Additional problems have been (a) generalizability of results (Astin 1975b; Celio & Sedlacek, in press), and (b) the lack of a theoretical base from which to explain results (Tinto, 1975; Terenzini & Pascarella, 1977).

The literature concerning student persistence/attrition, or retention in higher education, is voluminous and reported outcomes are often contradictory and ambiguous. This latter finding is repeatedly reinforced by Pascarella and Terenzini (1991) in their review of the retention literature in their book *How College Affects Students*.

The literature this study reviewed can be grouped into three categories as identified by Bers and Smith (1991): (a) applications or *prescriptions* for reducing student attrition; (b) theoretical discussions of factors associated with persistence/attrition; and (c) empirical studies testing various hypotheses about persistence and attrition. Furthermore, it seems that at a more simplified and basic level, most of the research can be grouped into two camps: those who think the reasons for attrition are external to the institution and those who believe attrition has to do with sociopsychological interactions between the characteristics students bring with them to college and the nature of their experiences while they are enrolled (Tinto, 1975). It is this latter belief that is at the root of the practice of colleges focusing on within-college retention interventions.

Retention seems to be a fairly simple concept; it is re-enrollment. Institutions articulate it something like this: "Student, we got you to our campus. Now, what shall we do to keep you until you can achieve your educational goal?" (Not: "Now what shall you do

to stay?") Stating the problem precedes solving it, and there are many ways of conceptualizing retention. What seems to be occurring is that colleges are trying to *fit* the institution to the student and the students are trying to *fit* themselves to the institution. This study addresses the former, how one institution is trying to fit the institution to the student.

A review of the literature revealed that there are few studies that have evolved from a theoretical base, although there are notable exceptions such as Astin (1970), Kamens (1971), Pascarella (1985), Rootman (1972), Spady (1970), Tinto (1975), and more recently Weidman (1989). It is an observation that new attempts at retention theory tend to be mostly offshoots of Tinto (1975, 1986) and other already existing theory, much like most early psychological theory was an offshoot of Freud. One particularly interesting replication study by way of example was by Nora, Attinasi, and Matonak (1990) who utilized a community college population to test qualitative indicators of pre-college factors in Tinto's attrition model. In short, the study results supported the constructs in Tinto's model that state attrition has to do with sociopsychological interactions between the characteristics students bring with them to college and the nature of their experiences while they are enrolled. This was significant as most of the research using Tinto's model has been done on non-community college populations. The study also reinforced the increasingly consistent findings in retention research that what occurs after the student gets to college, within the college environment, seems to be most important in terms of student persistence.

Over the past two decades, and into the 1990s, the expanding volume of literature on retention has suggested numerous approaches to help identify the variables that may lead students to drop out of college. However, little agreement exists concerning policies and activities that can effectively reduce attrition on our nation's campuses. What is concluded or agreed upon time and again by researchers such as Grossett (1989) is that there is no

generalized, all-purpose attrition model applicable to all institutions. In fact, Grosset (1989) suggested additional effort needs to be initiated within the community college to better clarify what may be unique to attrition in this setting. This latter reasoning is supportive of this case study of what is happening at one community college in particular. This study also adds to the kinds of community college research found to be lacking in the literature. As such, this study has attempted to limit the literature review to looking most specifically at within-college effects of retention intervention.

Retention Intervention

Most of the research on student attrition and retention looked at for this study tended to fall into three categories. The first type is often *home based*, not widely published, is descriptive of the institution it is representing, and is very theoretical in nature. This type of research is typically a reporting of retention intervention strategies that specific institutions have tried in their attempts to positively impact attrition. A second type of research attempts to identify a given variable or set of variables that may be reliably utilized to predict who will drop out. This research is intended to target the most likely or highest probable dropouts so that specific strategies may be applied to this group(s). In the community college, these would be labeled the high-risk students that we want to get to early, in order to enable us to help them persist until they achieve their educational goals. It is for this group of students that we most often target the development of the intervention strategies. The third type of study found in the literature is one that evaluates the effectiveness of specific interventions in terms of their effects on attrition rates. This study is primarily a combination of the above categories and will utilize a case study format in

reviewing four retention interventions that Mt. Hood Community College (MHCC) implemented over a period of 16 years.

Several difficulties arise when it comes to attempting to compare research on college attrition. These difficulties are:

1. A good deal of the early research was done by focusing on one variable at a time. It is now a more popular thought that the behavior of the dropout is multi-dimensional and multi-causal and heretofore too complex for us to use univariate techniques (Pantages & Creedon, 1978)

2. Researchers typically study either persisters or dropouts, but not both.

3. Most of the early studies were cross-sectional rather than longitudinal, which could give a clearer picture of the complexity of the behavior.

4. Perhaps the most serious problem with the literature is that studies have been based on widely different assumptions and may actually deal at times with different phenomena as a result (Pantages & Creedon, 1978).

5. Studies usually measure the behavior of full-time, traditional-age residential students, which raises some questions of their suitability as a reference point for community colleges whose students are most often part-time, older, and commuters.

The above limitations and concerns of the research literature created a challenge to find a way to go about organizing and reporting interpretation of the research findings. The literature itself was little help as there were few common or agreed upon ways to follow or use as a model. Being left with that dilemma, what emerged was to look at retention from two points of view. The first is a grouping or framing perspective where retention intervention success would be viewed not only from the perspective of if the right interventions were being implemented, but additionally, were these interventions the kinds

and types that have a total systems renewal effect. Secondly, are they addressing what the literature has found to be the pattern areas that colleges need to be paying attention to as they develop retention plans. The pattern areas that this study utilized were found in the literature and identified by Stodt (1987). However, these same types of patterns are also apparent in overall findings discussed in the same context, but framed a bit differently. Pascarella and Terenzini (1991), for example, advocated in their summarization of within-college interventions that colleges needed to be paying attention to a lot of smaller areas and systems across campus, doing a lot of small changes and improvements versus looking for that one big improvement that will solve the problem. The message that came clear to this researcher was the importance of dealing with subsystems within the entire college system and recognizing that each part impacts the other.

The synergism that develops among quality education, student development, and retention as goals for an educational institution, provided the impetus for a group of colleges and universities to form a consortium (Stodt, 1987). This group of 12 institutions addressed crucial retention issues and did so from the perspective that retention is primarily a by-product of educational excellence, a belief that this researcher, too, is committed to and believes in as a root philosophical basis for the development of retention intervention. Although in the 2 years this consortium existed they were unable to acquire enough symmetry of institutional research among the 12 institutions to present empirical evidence of their outcomes, certain obstacles and solutions emerged consistently enough to suggest patterns of applicability (Stodt, 1987). These pattern areas fit the 2-year school community college as well as the 4-year segment. Based on the general literature findings and the 28 years of experience this researcher has had in both 2-year and 4-year colleges, segmental lines appear to be fading and we as institutions (the different segments) are in many ways

becoming more *like* each other than *unlike*. Many of the differences are either perceived differences or perhaps real differences that are barriers which need to come down in the best interests of the students. The pattern areas drawn from this consortium around which literature synthesis and discussion will be considered are: (a) partnership, (b) the role of the chief executive, (c) the role of institutional research, (d) faculty-student relationships, (e) academic advising, (f) student development programs, and (g) communication. These categories can be identified and capture the essence of common and consistent intervention factors that appear in the literature related to this study: programs and services which take a personal interest students, financial aid and financial support, adequate orientation programs, appropriate counseling and advising services, and support systems that make students feel a part of or connected to the college community.

Numerous studies (Kinnick & Ricks, 1993; Lenning, Sauer, & Beal, 1980; Noel, 1987; Ramist, 1981; Pascarella & Terenzini, 1991) support looking at the intervention process from an institutional renewal perspective that sees widespread campus improvements to many areas more important than a narrow focus in just one or a few areas. Lenning, Sauer, and Beal (1980) summarized this line of thinking quite well when they noted, "rather than improving retention *per se*, the primary goal should be to better meet student needs and to provide a more meaningful educational experience" (p. 16). For the purposes of this study the following pattern areas are identified.

Pattern Areas

Partnership

The literature indicated that the preeminent requirement for successful student retention is cross-campus cooperation, especially between academic and student affairs

domains. One of the most significant and influential publications found that reinforced this requirement was *Involvement in Learning* (National Institute of Education, 1984, cited in Stodt, 1987). This report by the National Institute of Education made a number of recommendations to improve undergraduate education. Of the 27 recommendations 5 were particularly relevant to the retention issue:

1. College administrators should reallocate faculty and other institutional resources to increase service to first and second-year undergraduate students (which are the most crucial years for survival as a student). It should be noted that throughout the literature it is demonstrated that if students persist through their freshman year their chances for completing college are sharply increased.

2. The faculty should make use of active modes of teaching and require that students take more responsibility for their learning (learning versus a teaching environment).

3. All colleges should offer a systematic program of guidance and advisement that involves students from matriculation through graduation, and all should participate in the system.

4. Academic and student services should provide adequate fiscal support, space, and recognition to existing co-curricular programs and activities for the purposes of maximizing student involvement, including part-time and commuter students.

5. College officials responsible for faculty personnel decisions should increase the weight given to teaching, and they should improve the means of assessing teaching effectiveness.

Astin's *Achieving Educational Excellence* (1985) reinforced the conclusion that educational excellence represents the pursuit of intellectual and personal development of

students. This perspective is not new, but emphasized that both student affairs and the academic sides of the institutions were essential to an excellent education and to the kinds of satisfaction and support that would encourage students to persist through college and/or until they had met their educational goals.

Within the consortium institutions addressed by Stodt (1987), it was found that administrators and faculty members from both the academic and student development areas were at first unaware that the same factors which produced quality education also promoted retention. Because of this lack of connecting quality education and retention factors, CEOs often promoted one of three courses: (a) assigned a retention coordinator or enrollment manager to be responsible for developing and implementing retention strategies at the institution; (b) designated the student affairs staff as the responsible persons for retaining students; and (c) established a task force to study the problem and make recommendations (notice this is not viewing retention as everybody's job nor as a system-wide concern). The good news was that some forms of this pattern were found at all institutions so they were at least aware that retention was an issue. The biggest problem was that regardless of the retention intervention chosen, those charged with the retention functions could not apply sanctions or hold others accountable because they were without authority. Other findings were that within institutions, student affairs and other separate retention groups, from institutional staff and faculty, were often working in parallel formation with little if any collaboration.

In Stodt's (1987) study, to remedy this problem once it was identified, a few presidents moved quickly to appoint retention task forces with institution-wide representation. This collective responsibility produced more comprehensive and active retention intervention and established joint accountability between the academic and student

affairs domains as a foremost step toward improving retention. It was also a concrete sign of progress when on most of the consortium campuses, partnership-style retention committees had evolved by the second year of the consortium's existence. The importance of these types of *starting point* committees has been supported by Noel (1984), and Kinnick and Ricks (1993) in their writings regarding mobilizing a campus for retention efforts. It needs to be mentioned, however, that some of the schools made the efforts but did not achieve the results that true commitment brings.

Concomitantly, the institutional community has to recognize and buy-in to the concept that retention is everybody's job. No one can really succeed unless everyone performs their services and responsibilities with a high degree of quality, and a customer service orientation and perspective is achieved and maintained.

In *Student Retention: Moving from Numbers to Action*, Kinnick and Rick (1993) described how the development of a retention task force at an urban public university identified problems that were barriers to student success or that contributed to student departure. This college developed a successful retention plan by moving through a process that began by answering two basic questions: (a) Do we have a retention problem? and (b) If we have a retention problem, what should we do about it? By establishing partnerships within the institution, they were able to define the problems, listen to student and staff voices, and then expand their data gathering and implement pilot projects/retention strategies designed to retain more students.

Mabry (1988), in a study related to enrollment management within the institution and how retention strategies are developed, stressed the need for cooperation, collaboration, and coordination in all enrollment management efforts. Implicit in this approach is the recognition of the creative synergy that develops within a team approach.

While the study does suggest a possible model to follow, it most importantly emphasizes that there is no ideal retention intervention plan or model nor an ideal or fix-all strategy, since in a variety of ways each institution is unique and must develop what works best for them and their populations. The nature of any given school's enrollment management structure will evolve over time, with a committee likely to appear such as an Enrollment Systems Planning Committee, an operationalized institutional committee at MHCC. Mabry (1988) quickly moved to a discussion of enrollment management at 2-year public institutions which emphasizes implicit retention guidelines. Mabry's statements seem to indicate that 2-year colleges are aware that they are facing enrollment and retention problems and that they have begun to identify why problems exist. He referenced information and materials developed from his peers, citing specific examples. Mabry concluded by citing implications for 2-year institutions and a charge to develop more enrollment management processes and structures. Implicitly stated, Mabry (1988) charged educators to view their enrollment and retention from a systems perspective wherein everything is interactive with each part of the system impacting and affecting the others.

Role of the Chief Executive

Mostly implicit but sometimes explicit throughout the literature is the tenet that the leadership of the chief executive in a college needs to be one of action, with the CEO being consistently visible and verbal regarding retention issues. Retention has to be high and visible on the CEO's agenda and on the agenda of a college, and there must be a specific retention agenda. Retention cannot be an issue only when enrollment or retention is down and attrition is high, it must be ongoing and consistent, a way of doing business. Without this perspective, the movement of retention issues and actions within the institution will not take hold and operate in fluid ways that can be successful and sustained. It is not enough

for a college president to just recognize, charge, or empower the academic and student services sides of the institution to be accountable for retention efforts. College presidents must consistently speak out, with, and to, their college community about the significance of retention and its various impacts on the institution, that range from the fiscal and curricular ramifications, and the impacts on students and society, to the needs for data collection, and the bottom line requirement to meet the educational goals and needs of the students. The literature was clear that there was not simply a casual relationship between successful and unsuccessful retention plans as it related to the active CEO. Rather, the correlation was very high between advocacy of the president and the institution's progress in both educational excellence and student retention. Other factors affecting institution retention efforts such as staff morale and willingness to be a part of the retention efforts and to whom enrollment management staff report were significantly tied to a proactive stance of the chief executive. This close connection between the intervention itself and the CEO was seen in all the MHCC interventions. This is an important finding as Stodt (1987) found in her study of 12 consortium institutions that when it came to retention planning and implementation, "retention must be high and visible on the agenda of the president of the institution in order for movement to occur with the institution" (p. 22). Stodt (1987) went on to say that, "the most concerted and widespread efforts and the highest institutional morale seemed to derive from this kind of stance by the chief administration" (p. 22).

Institutional Research

To verify with empirical evidence and to data drive retention plans and outcome decisions is at the base of quality enrollment management and retention planning efforts. Retention efforts must have a high priority within the institutional research area. Dietsche (1995) stated that while campus involvement in several areas is critical to the success of

retention efforts, institutional research is the most important of these. The research literature in the retention area is clear in its statements that the features of a retention strategy depend on the type of institution and student. Students leave in different ways and for different reasons. According to Dietsche (1995), community colleges need to assess, analyze, and then utilize data and information on: (a) the nature and causes of student departure, (b) the nature of student educational outcomes more generally, and (c) the role of institutional processes (culture, structure, and function) in determining these outcomes. It is only then that research results may be used to create efficient and effective retention initiatives, and ultimately to increase quality from an outcomes perspective. Claggett and Kerr (1993) recommended a five-step process for institutions new to enrollment management retention efforts who want to initiate quality research initiatives: (a) review the literature on college choice, student-institutional fit, and student retention; (b) construct longitudinal cohort tracking files; (c) develop a performance monitoring indicator system; (d) identify patterns in aggregate student behavior; and (e) conduct survey and focus group research to better understand student decision-making. Kinnick and Ricks (1993), in their development and successful utilization of a retention committee to turn around attrition problems at their public urban university, concluded that their case study had five major implications for the field of institutional research:

1. Institutional researchers must increase their awareness of how their organizations function politically. Their positioning in the organization is critical if they are to know what problems to pursue and what institutional efforts to be involved in in terms of problem-solving. What is strongly emphasized in this area is the importance of the research manager or leader to be able to have direct affiliation with the institutional policymakers and be able to move among the overall staff with ease. It is also suggested that research

staff participate in cross-functional teams and to consider not being a member of the retention committee itself. This approach allows the researcher to spend energy on research initiatives rather than becoming tied up with committee busywork.

2. Participation in organizations such as the Association for Institutional Research and the Society of College and University Planning were recommended so that researchers are involved in and know about the overall information utilization processes. They emphasized the importance of giving more attention to training and involvement that moves researchers from numbers to action plans and policy development.

3. The use of multiple strategies for gathering information to address issues of retention is imperative. Qualitative approaches along with inter-institutional comparative data can prove especially helpful in the early stages of inquiry. They emphasized that retention cannot be reduced to pure numbers when educational improvement is the aim. Qualitative methods may provide an understanding of local intervening variables that taken together affect the nature and quality of the student's educational experience.

4. As values shift in U.S. higher education placing more importance on the customer, listening to and faithfully representing the student voice to policymakers is an increasingly important function for institutional research. Students view such efforts positively and want to become more involved but must be asked to participate. As students become more involved, the gap between the researchers and the objects of their research narrows and informed problem-solving increases. Client-centered and client-responsive research approaches are also compatible with the growing total quality management (TQM) movement in higher education.

5. They encouraged institutional research colleagues to use case study approaches such as theirs to reflect on practice within one's own institution. Such case

analyses can serve to examine the usefulness of current theory in light of practice and to contribute to the development of theory about the information utilization process. They also emphasized that findings presented as organizational cases can help to develop better theory to guide the practice of institutional research.

Pascarella and Terenzini (1991), in their book *How College Affects Students*, have done a comprehensive review of the last 20 years of research on the influences of college on students. This work has direct implications for retention/attrition research. They discuss conceptual and methodological recommendations for enhancing future assessment and college impact studies. In their attempts to help improve the quality of future student outcomes research on individual campuses, they concluded there were eight specific tasks that needed more attention: (a) differentiating changes that occur *during* college from those that are *due* to college (so that current claims about the benefits of college attendance might be supported); (b) estimating the magnitudes of college effects (so that the educational and administrative, as well as statistical, significance of results might be evaluated); (c) examining not simply whether change occurs but also when it occurs (so that more tailored and effective programs and policies might be designed); (d) exploring and measuring indirect, as well as direct, collegiate effects (so that the magnitude of college's effects will not be underestimated); (e) the study of college effects that may be conditional on student characteristics such as race/ethnicity, age, and gender (so that important variations in college's effects might be better understood and more effective programs and policies might be designed); (f) making greater use of qualitative research methods (so that important information inaccessible with quantitative methods will not be lost); (g) expanding the theoretical perspectives that guide research and assessment study designs (so that theoretically myopic studies might be avoided); and (h) focusing greater attention on the

effects of the academic program and the teaching-learning process, the experiences of minority and older students, and the dynamics of students' interpersonal contacts with peers and faculty members (so that the educational experiences might be maximized for all students).

The implementation of a student-oriented institutional research program can provide community college administration/faculty/staff/students with valuable information that they presently do not possess — information on what is actually happening to students within their institution. The use of this information in planning and decision-making can provide the means for reducing unnecessary attrition and failure and is at the floor of data-based decision-making.

Faculty-Student Relationships

The institutional factors that appear in the literature most frequently as contributors to satisfaction with college and to student involvement and persistence are student interaction with faculty and staff (especially faculty), the formation of student friendships and residence on campus. In considering why there was not more student-faculty interactions, without exception the major reported deterrent to faculty involvement in this process was the lack of some reward system for faculty time spent with students beyond the contracted requirements. Even given contracted requirements, the literature was flavored with the sense that many faculty do not see activities beyond actual teaching to be a part of their responsibilities, nor do they appear to want it to be (Stodt, 1987). Furthermore, many institutions do not enforce contractual requirements that state that academic advising is an integral and required part of the instructor responsibilities and duties. Advising is often left to faculty volunteers, counselors, or a cadre of faculty that receive extra pay to advise students. Heretofore, colleges themselves have not understood retention well enough to

develop a good explanation or plan to involve faculty, and in other cases, administration themselves simply do not enforce existing faculty contract requirements and therefore faculty are not held accountable for their defined job responsibilities. One of the major outcome findings and recommendations of Pascarella and Terenzini (1991) in their review of more than 20 years of research was the need for colleges to focus greater attention on the teaching and learning process and the dynamics of students' interpersonal contacts with peers and faculty members. It was in this area that they felt the educational experience for students might be maximized.

Astin (1975b) and a number of other theorists have posited that strong involvement in academic and other social activities is a determiner of student persistence. There is also strong evidence (Terenzini & Pascarella, 1980) that both the frequency and quality of faculty-student interaction outside of class are positively related to student retention. In a later study of a specially designed living-learning center at an institution studied earlier, however, Terenzini and Pascarella (1980) found that the quality not the frequency of the faculty-student interaction was significantly related to student retention. Endo and Harpel (1982) found that informal contact, in which faculty members develop more friendly relationships with students and exhibit a personal and broad concern with their emotional and cognitive growth, has more influence not only on students' personal and social outcomes, but also on their intellectual gains.

The power of on and off campus friendships and interactions with faculty and the importance of caring attitudes by the faculty and staff were indicated in research long ago (Bolton & Kammeyer, 1967; Chickering, 1974; Heath, 1968). These findings have been corroborated with massive data by the Cooperative Institutional Research Program (CIRP) over the past two decades. Moreover, these conditions were found to correlate positively

with student retention (Aitken, 1982; Astin, 1975b; Beal & Noel, 1980; Noel, 1978; Noel, Levitz, Saluri, & Associates, 1985). Research has also shown that learning support groups (that include faculty) for students have had a significant positive effect on student retention. These centers have shown results in keeping poorly prepared students in college, not only because they assist with academic skills, but also because they provide emotional support (Astin, 1984; Kemerer, Baldridge, & Green, 1982). These trends seem to be continuing from the perspective of Stodt (1987) as she found that dialogue among teachers both about the responsibility to motivate students and about more active teaching models is happening. It is important to note that faculty-student interaction also emerged in early research (Feldman & Newcomb, 1969) as a leading factor in student satisfaction with colleges and has appeared again and again as a powerful retention factor (Pascarella & Terenzini, 1977, 1980; Beal & Noel, 1980).

In another study to investigate the pattern of relationships between different types of student contact with faculty as they related to retention, Pascarella and Terenzini (1977) tested Tinto's (1975) theoretical model of attrition. The purpose of their study was to look at different types of informal contacts with faculty during the freshman year while controlling for the effects of gender, academic aptitude, and personality needs. The findings suggested that some institutions may be able to take steps which will positively influence the frequency of student-faculty interaction independent of initial student characteristics. Furthermore, the study suggests that helping a student develop an interest in ideas and intellectual concerns which extends beyond the classroom may be key factors that affect a student's social and academic integration in the college environment. Both components have been shown to positively impact student persistence in college.

Academic Advising

Throughout the literature, poor academic advising emerges as a leading reason given by students for dropping out of college. The faculty academic advising program seems to be one of the most important yet the most difficult to develop, work with, and treat in terms of being a solid quality retention strategy. The research on interactions between students and faculty, and students and their peers suggests that advising conducted by faculty and/or peers is desirable, but only if the relationship is one of quality (which suggests the need for careful selection and training of advisors). Furthermore, effective advising would be expected to contribute to the student's self-confidence and sense of where they are going in their college careers. A student's self-confidence has been found to be related positively to retention. Evidence concerning the influence or quality of academic advising on persistence and educational attainment was synthesized by Bean and Metzner (1985), and Metzner (1989). They concluded that the research results are mixed in terms of statistically significant positive links between advising and measuring persistence. Pascarella and Terenzini (1991) concluded, however, that high-quality advising did have a statistically significant positive indirect effect on persistence transmitted through its positive impact on such variables as grades and satisfaction, and its negative effect on intent to leave the college. In the *What Works in Student Retention (WWISR)* study (Lenning, 1980), 2,469 accredited undergraduate colleges and universities in the United States were polled in the advising area. The study confirmed that, inadequate academic advising was reported by campuses to be the most important reason for attrition, and high quality of advising was ranked fifth in importance as a contributor to student retention. Furthermore, advising as an action program (retention strategy) for improving retention had been implemented by 61 institutions in their study and, more often than not, had been found to contribute to

retention. Where the programs were the most successful in improving retention, the advisory staff consisted of carefully selected and trained faculty or professional advisors. In some cases an advising center was set up, but more often than not the program was not centralized in that manner. Of particular note was that the literature demonstrates that special advising programs that tend to positively influence retention were usually long-term and ongoing. This finding supports other findings that all retention efforts, to be successful, must be *planfully* executed over time, with appropriate campus-wide support.

Much has been written about advising over the past two decades but little seems to have changed in terms of agreement among successful reported outcomes. Kesselman (1976) found in a survey of deans that although 95% of undergraduate students consider dropping out at one time or another, only one out of three seeks advice from professors. This suggests that getting students to use the advisory program can be a problem and one that needs to be addressed in constructing a retention strategy in this area. Beal and Noel (1980) found that students name poor academic advising and boredom with courses as the leading reasons for dropping out.

In a more recent study by Duckwall and Vallandingham (1995), the long-term effects of mandatory counseling (advising) were investigated. This study looked at the aspect of a strategy known as *intrusive counseling*, although it was not called that in the study. The study focused on under-prepared students entering a community college for the first time and assigned them to groups that received mandatory counseling to varying degrees over a given amount of time. At the end of the first semester, the experimental groups had higher GPAs, earned more hours, felt they knew more about the services offered by the college, and felt they had made more progress toward their goals than did students in the control group. As a result of this finding, the college initiated mandatory

counseling programs for all students under-prepared in reading and writing. Interestingly enough, however, by the end of the Spring semester, many of the differences found seemed to vanish between the groups. This finding started a lot of questions being asked regarding the longer term gains of mandatory counseling. The question was whether students perceived their college experiences differently if they were being applied in other areas or in courses that were deemed at-risk or for under-prepared students. Outcomes of interest were whether degrees were completed at a higher rate, whether their educational goals had changed over time, or whether the effects of mandatory counseling were only recent while the students were reporting to their counselors.

One of the more interesting findings was that the number of visits that students had with their counselor was not as important as the fact that the students in the experimental groups had someone at the college that they could talk to when problems arose. This latter finding is consistent with many reported studies in the literature of this type that emphasize the importance of connectedness to the college as an important retention variable. Lopez, Yanez, Clayton, and Thompson (1988) also utilized an *intrusive advising* approach with a number of special student populations, including educationally disadvantaged students, minority students, learning disabled students, and severely economically disadvantaged migrant students. Their findings were that the intrusive advising was an effective tool in increasing the retention and overall academic performance of a variety of high risk special student populations. Nevertheless, they concluded that intrusive advising itself is not totally responsible for the enhanced academic performance of these students. They felt strongly that the other services made available to students who received the intrusive advising are likely most responsible for the students' enhanced academic success and retention.

Interestingly enough, that is a similar conclusion found in studies related to utilizing orientation courses or seminars as retention strategies.

Student Development Programs

Nearly all effective and sustainable retention interventions are fundamentally about the development of programs and services that systematically address the needs of students in holistic ways. The intermediate goals of satisfaction with college, involvement, a balance of challenge and support, and perception of payoff can be used as gauges by which we measure the non-academic programs and services that we offer students (Stodt, 1987). These kinds of programs are extensive and are represented by orientation programs, mentoring programs, freshman seminars, financial aid and fiscal support programs, early warning programs, intensive advising programs, student activity programs, and various types of systems that assess and track the progress of students and provide interventions when needed. The paramount feature of these programs is that they need to attend to both the cognitive and affective development of the students.

According to early research by Feldman and Newcomb (1969), Heath (1968), and Wallace (1966) student friendships are a leading influence on student satisfaction and involvement with college. Lacy, (1978), Spady (1970), and Terenzini and Pascarella (1980) all identified peer interactions as a strong factor in students' intellectual and personal development. Chickering (1969) identified seven vectors of change when he stated:

> A student's most important teacher is another student. Friends and reference groups filter and modulate the messages from the larger student culture. They amplify or attenuate the force of the curriculum, faculty, parental rules, and institutional regulations. They can trump the best teacher's ace and stalemate the most thoughtful or agile dean. These relationships with close friends and peer groups, or subcultures, are primary forces influencing student development in college, and all seven vectors of change are affected. (p. 253)

According to Astin (1977, 1984, 1985) and others, a second positive force is heavy participation in some college activity, not just studies, but clubs and organizations, student government, and athletics. Anything that brings students to campus often, keeps them on campus, and connects them with persons of mutual interests — whether faculty, students, or staff — promotes student satisfaction with college.

Participation in college orientation class has been found to positively impact retention. A common theme underlying most orientation programs is the facilitation of the students' successful integration into a new and unfamiliar academic and social setting. These types of classes, workshops, or seminars are strategies that have evolved as a means of filling the gap and dealing with a multitude of transitional difficulties that students have as they begin college life. The courses are based on a student development philosophy and emphasize enhancing the students' experiences in college that have been found to correlate positively with student persistence, including improving grades (Astin, 1975b; Bean, 1983; Pascarella, Duby, Miller, & Rasher, 1981), significant relationships with others (Lenning, Sauer, & Beal, 1980; Noel, 1978; Ramist, 1981; Tinto, 1975), involvement in learning and extracurricular activities (Lenning, Sauer, & Beal, 1980), and social interaction (Terenzini, Lorang, & Pascarella, 1981; Tinto, 1975). The findings of Pascarella and Terenzini (1991) found that the most consistently effective program format appeared to be a first-semester freshman seminar that meets as a regular class with an assigned instructor. The purpose of the seminar is to orient the student to the institution and its programs and to teach important academic survival skills. Glass and Garrett (1995) investigated just such a class. Their study was aimed at getting results that would validate the orientation class as a bonafide retention tool. They predicted that the inclusion of such a course in the students' curriculum would not only increase their persistence but would also positively impact their GPA. Their

findings indicated that the completion of an orientation course during the first term of enrollment appears to promote the retention and improve the grades of community college students. This finding is consistent with many replications of Tinto's (1987) findings in this area. The implications for all community colleges is that based on the body of literature in this area and the results of this study that validate the prior literature, they would be well advised to experiment with offering this type of course. Nelson (1987) indicated that starting an orientation course can be quite a challenge (cited in Stodt & Klepper, 1987). He found one of the bigger challenges was to simply get the course approved to be offered and had to develop a sound rationale for approval. Faculty sometimes feel that this type of course is not an academic endeavor and object to its being given academic credit (Caple, 1964). Nelson (1987) finally got his course approved for a pilot year program. Outcome evaluations at the end of the course showed positive feedback from students about their successes and feelings about what they had gotten out of the course. Academically, the students in the program obtained a GPA of 2.74 for their first year, which was higher than college staff had predicted it to be at 2.32. The staff found that the students in what staff called their New Student Seminar did, in fact, out-perform the control group in terms of exceeding their predicted GPA. Further research is needed to identify which of the components in the orientation courses contribute to student success and persistence.

Another common student development program is the use of entrance assessment exams for the purpose of placement into recommended remedial courses. In a study conducted by Sinclair Community College (1993), the college decided to study this issue to determine the effects of remedial course work on student retention and academic performance. Of particular interest were two questions: (a) Did students who took recommended remedial courses stay in school longer than those who did not? and (b) Did

students who took recommended remedial course work perform differently than those who did not? Students were divided into groups of those who chose to take all of the recommended developmental courses, those who chose to take some of the recommended developmental courses, those who chose to take none of the recommended developmental courses, and those for whom developmental courses were not recommended. Results of their study clearly demonstrated positive retention results in the two areas studied. There was a 40% retention rate overall for the 3-year period studied, with students majoring in programs within the Extended Learning and Human Services Division retaining the greatest number of students. Students who took all recommended developmental courses tended to stay in school longer than those who took some or no recommended courses and also had a higher retention rate than those students who did not have any developmental courses recommended. In the area of performance, students who took all recommended course work tended to have a higher ratio of credit hours earned to credit hours attempted than those who took some of their recommended developmental courses, but a lower ratio than those who chose to take none of the recommended developmental courses or those who needed no remediation.

In general, students who took recommended developmental courses performed at a satisfactory level in their subsequent college level course work, though not better than those groups with higher placement tests scores initially. Their first finding regarding student major supports retention research of Simpson (1987) whose model is simple and intriguing and addresses one important question regarding persistence: To what extent do students persist not only at one institution, but within a given major or department? Simpson suggests that colleges would do well to look at student major changes as they proceed throughout the institution as a way to plan at the institutional and department level for both

enrollment and retention. Bers (1988) adapted Simpsons (1987) model to a community college. A number of Bers' (1988) findings pertinent to community college students and research in community colleges were derived from or corroborated by Bers' study. The results of the study indicated there are differences in students' persistence within majors. Bers (1988) suggested replications of her study will provide data to ascertain trends and outcomes of various advisement and retention strategies that might be employed to help students select majors and succeed in their chosen fields.

Regardless of the type of institution, Bean (1986) indicated the "certainty of a major" was critical to persistence. He went on to state there are multiple advantages of declaring a major (versus a declaration of undecided or general studies): "Students acquire an identity, can share values and fit in with a social group and have a career direction which links course work with later employment" (Bean, 1986, p. 54).

Rice (1983), in a retention study on a 2-year computer campus, found that students with undecided majors were more likely to drop out after initial enrollment than students with decided majors. Others, such as Lewallen (1993) in his study of 18,461 students attending 433 colleges with only 2% of those in the study being community college students, found that being initially undecided about major or career choice did not put students at risk of not persisting.

Mentoring programs for students is another seldom-reported intervention in the literature, yet the existing research suggests that when mentoring programs are successfully implemented they show positive retention results. This type of intervention again emphasizes the student development approach that helps to connect students to each other and the college, and thus makes the college experience more meaningful. Thomas Miller (1987) reported on just such a program at a small liberal arts college (cited in Stodt &

Klepper, 1987). The program was designed to assist students that were falling through the cracks by providing systematic attention to the matter. It was intended to enhance the relationships of new students with faculty members and administrators, as well as with each other (both a faculty and student mentoring program). Specific goals and objectives for the program were laid out, and mentors were recruited from all segments of the faculty and administration. Since half of the new student population was in the mentoring program and half was not, simple contrasts between the two groups provided information about the impact of the program. Since the college also engaged in an early warning system for students whereby students who were in danger of failing got deficiency notices, they were able to compare the performance of students getting these notices who were in the mentoring program with those not in the program. The differences were dramatic. Of the students not in the program, 39.1% received deficiency notices, while only 17.7% of the mentored students received such notices.

At the end of the first semester, academic performance of the two groups was analyzed. Students in the mentoring program were almost 50% less likely to attain a GPA below 2.0. The most important contrast in many ways came from an analysis of students who left the institution. Non-mentored students dropped out at a rate consistent with the first semester attrition figures for the previous 4 or 5 years (10.6%). However, students from the mentoring program dropped out at a much lower rate (2.7%).

Student tracking programs designed to track student performance in a variety of ways in order to better understand them is also an increasingly common intervention program that is being developed within institutions. It has been found that merely applying a perceived remedy (retention strategy) without being able to assess or measure outcomes is not fruitful and provides no basis on which to make decisions or program improvements.

Clagett and Kerr (1993) emphasized that a prerequisite for operating within an enrollment management model is an understanding of the forces that influence persistence in college. Their research as well as research by Palmer (1987) explained how colleges can set up the information tracking that is necessary to support enrollment management efforts so that retention-based decisions are founded upon solid information. As stated by Claffey and Hossler (1986), "the single most critical element of all of this effort is accurate, timely, usable information. Our ability to influence our enrollments to any degree is a direct function of the information . . . available" (p. 106). While it is recognized in the literature that tracking of student development programs is important, the literature is also abundantly clear that many colleges are weak in this area. Dolence (1989-90) reported that more than half the institutions that try to establish enrollment management programs fail because they lack a solid information infrastructure to support their efforts.

Often infrastructure support systems within retention programs and plans are overlooked because colleges do not see the overall retention plan from a systems perspective. In actuality, each aspect of the plan from the development of the strategies, to the action plans themselves, to the evaluation of impacts and assessment of outcomes is important, with each area being a vital cog in the wheel. Hossler (1985) pointed out that enrollment management and retention involves the entire campus. Hossler (1985) further pointed out that those responsible for management or planning enrollment and retention efforts must have direct responsibility for two areas — (a) student marketing and recruitment, (b) pricing and financial aid — and be able to exert a strong influence upon (c) academic and career advising, (d) academic assistance programs, (e) institutional research, (f) orientation, (g) retention programs, and (h) student services.

What is worthy of emphasis is that it is the student tracking systems that provide the data that demonstrate the need or reasons for retention strategies to begin with. Short of data-based decision-making, colleges are at loss (albeit anecdotal information, feelings, and opinions seem to be some institutional leadership's ill-conceived preference) to be able to measure in various ways the effects that various retention strategies may be having on their enrollment and attrition concerns, and they would be at a loss to actually measure their types of attrition.

The experience of Hossler's (1985) types of student development programs encompass students' needs at college more than any others. They are best able to involve students, to challenge and support them, and to help them see the advantages they are gaining from attending college.

A major problem in promoting retention within an environment of significant fiscal constraints is the efficient use of limited funds. The ability to identify those students most likely to drop out can greatly improve the targeting of retention interventions (and supporting resources) to those who need the specific programs or services the most. The development of an early warning system is an example of a strategy that is reported on very little in the literature, but when reported, it receives high marks for positively impacting retention. Given that the literature is very clear that faculty advising programs have been shown to be very effective in promoting persistence (Beal & Noel, 1980; Noel, Levitz, & Kaufmann, 1982), an early warning system can be used to match advisors and institutional resources (retention strategies) to students who could benefit the most from this type of support. Leon (1975, cited in Lenning, 1980), in a small study of Chicano students, discovered that they went through four phases in developing a dropout rationale, and that intervention by the college, to be effective, should occur in as early a phase as possible and

certainly before Phase 4 (the adoption of a rationale for withdrawing). Chickering and Hannah (1969) discovered there was minimal interaction with institutional personnel during the entire withdrawal process. Instead, peers and parents were reported to be the withdrawing students' confidants. Nearly all the early warning system literature has been from the prediction perspective rather than on follow-up of a strategy being applied and then identifying and reporting the outcomes. The validity of more research and discussions of early warning seem appropriate and is supported by outcomes of the *What Works in Student Retention (WWISR)* (Beal & Noel, 1980) study of 2,459 accredited undergraduate colleges and universities in the United States. It was found that the early warning system ranked fourth in terms of a reported action program positively impacting on retention.

For the majority of high-risk students, low abilities or skills in both cognitive and affective areas is almost a given. What this case study found noticeably lacking in the literature were examples of programs designed to treat the whole person and designed to in some ways go beyond the *one course, one term, quick fix*. The literature frequently addressed the need and desire for a more comprehensive retention program, but examples of such programs were seldom reported. An example of one study that was moving this direction was by Woodruff (1987), where she reported on what she called an Academic Intervention Program. This particular program was designed as a group-counseling outreach program developed to assist the academic underachiever to improve academic performance through personal awareness. What it did not combine with the program (at least it was not reported within the study) was required remediation of the basic skills identified via an entrance assessment test so as to deal with the *whole person*. This program did, however, have some success. Of the 380 students reported on, 80% raised their semester GPA above the 2.0 level during the semester of *treatment*, as compared to 25%

for the control group. The results support the contention that more long-term programs are needed including ongoing outcomes assessments. Another example of a program moving in the more holistic approach was Lopez et al. (1988) reported earlier. This program, although notably small, concluded that it was the variety of services made available to the high-risk student that was most likely responsible for their success and retention, not any single intervention treatment. Others, such as Stodt (1987), emphasized that effective retention strategies must deal with both the cognitive and affective aspects of student development.

Financial aid and pricing are also finding a consistent high priority at the top of the reported list of strategies that impact persistence, especially since the mid 1980s. In many cases, depending on the cost of education at the school, this area of concern is at the top of the list because it is first and foremost an access issue. The literature in this area is prolific, but like all the literature, the results are inconsistent. Terkla (1985) addressed the issue of what the relationship was between receipt of financial aid and student persistence. Her study demonstrated, as do many others, that even after controlling for all other variables, students receiving financial aid were more likely to complete their degrees than those individuals who did not receive aid. Her path analysis results showed that the receipt of financial aid had the third strongest direct effect in persistence. The only two variables which had stronger direct effects were high school GPA and degree level goal. In another study, Saarnitt (1985) investigated implications of reduced financial aid on student enrollment. This research has strong implications for community colleges as typically many high-risk students lose all or part of their aid for poor or low academic performance at the end of their first term. Saarnitt (1985) found that reduced aid did create attrition problems. Most significant, however, as he points out, is that institutions should be prepared to offer

support services which will enable students to deal more efficiently with their finances. The study also highlighted the need for counselors to be sensitive to the fact that money-related problems may be the primary source of stress for students who come for counseling on academic or personal problems, a point in favor of using more intrusive or intensive counseling techniques when dealing with students at risk of dropping out. Other studies, however, many of which controlled for similar variables as the above, report the receipt of general financial aid had only trivial or at best small and marginally significant influence on persistence (Bergen & Zielke, 1979; Jensen 1980, 1981, 1983, 1984; Stampen & Cabrera, 1986).

Although the findings are mixed, the weight of evidence indicates students who receive financial aid are as likely to persist in college as those who do not receive such aid (Pascarella & Terenzini, 1991). Although the findings with respect to the relative impact of different forms of financial aid are also mixed, the weight of evidence does suggest that scholarships have the strongest positive influence on persistence. Also of significance are the findings of Herndon (1982) who found student work programs such as the federal work study program were more effective than other forms of aid in discriminating persisters from dropouts. Astin (1975a) found similar results for the positive effects of work study aid.

Communication

The value and function of communication is implicit in all areas of dealing with student retention and is stated so often that many feel to even mention it is cliché. However, its importance needs to be singled out because as a pattern area, campus-wide communication has been found to be one of the most important factors that holds the rest of the six patterns together: (a) partnership, (b) the role of the chief executive, (c) the role of institutional research, (d) faculty-student relationships, (e) academic advising, (f) student

development programs, and (g) communication. According to Stodt (1987), the benefits of the best retention strategies, carefully executed institutional research, and the desire for all college staff to be involved will be greatly diminished if each of the players is unrecognized within the campus community. The ongoing flow of information throughout the institution at all levels regarding all phases of the retention plan is crucial. Reporting on obstacles overcome and barriers encountered needs to be equally known among all staff. Achievements need to be celebrated. This approach, according to Stodt (1987) and Stodt and Klepper (1987), creates an openness and a synergistic aspect to the whole campus community and promotes collaboration, high morale, and success for everyone.

Communication must always be at least a two-way multi-dimensional process that includes listening to student voices and sharing information with them. Kinnick and Ricks (1993) demonstrated throughout their case study the value and need for communication with students and staff. In fact, what is often found is that the real problems associated with attrition boil down to being out of touch with the student populations. Students must be at the center of all retention intervention efforts from the point of conceptualization to the fulfillment and assessment of the action plan.

Noel, Levitz, and Saluri (1985), in their ten steps to mobilizing a campus for retention action, emphasized that the key to successfully implementing a retention plan is getting collaboration and communication among staff. This collaboration develops a creative synergy and everybody benefits from the collective wisdom that resides, develops and, grows throughout the campus.

CHAPTER III

METHODOLODY

Rationale

This case study describes one college and four intervention strategies implemented over a 16-year period to improve retention: (a) student success task force, (b) guided studies, (c) intensive academic advising of general studies students, and (d) evaluation of advising and registration workshops and college success class (HD 100). At the time Mt. Hood Community College (MHCC) began its initial intervention (1980-81), annual full-time equivalent (FTE) and unduplicated headcount was at nearly 6,000 and slowly growing — a satisfactory level as far as the college was concerned, as the college is built to handle 7,000 FTE. The college was in a continual growth cycle, but it was also experiencing increasing numbers of students dropping out. Being sensitive to the fact that more students were not succeeding and wanting to address that issue, there was a feeling among the college leadership that MHCC needed to embark on an intervention process that would look at college policies and processes with the idea of seeing where student success might be positively impacted. Although the college had actually begun moving in this direction as early as 1976 with a new system of orienting students, it was not until 1980-1981 that a more focused and formal planning for change initiative emerged with the establishment by the college president of the Student Success Task Force.

The charge of the Student Success Task Force was to review all institutional policies and procedures affecting student progress and make recommendations for improvements. From this beginning, the task force made a number of recommendations

that set MHCC on a course that would result in the implementation of more than a dozen interventions over the next 16 years that were designed to have positive impacts on student success and retention. This study focuses on four of those interventions.

As MHCC set about the systematic study of student success, it placed a strong emphasis on the assessment aspect of the various interventions as they were considered for implementation. This is important because the measure of success of any strategy must be a college's ability to assess in some manner and to some degree whether the strategy is properly implemented and then gauge its ongoing effect. Too often colleges find that strategies are thought to be poor or unsuccessful when in actuality they are either poorly implemented and assessed, or not assessed at all and therefore no unequivocal conclusions can be drawn from the exercised plan.

There is much literature describing how colleges can, through data-based decision-making, impact their enrollment and retention of students. A variety of intervention strategies are described in the literature, most of which are presented from the perspective of higher education in general or the 4-year college or university, with lessor volumes of literature directly discussing their applications to the community college. This supports the position that there has been less research and reporting specific to the community college. The retention intervention findings show the same or similar types of interventions and results for both the 4-year and community college data bases (Pascarella & Terenzini, 1991; Walleri, 1991). The focus seems to be mostly on student persistence and goal attainment and how to better assure these things take place, and not on segmental differences related to what works and does not work in terms of intervention. Exceptions to this finding (Pascarella & Terenzini, 1991; Tinto, 1987) emphasize that some interventions work more or less effectively on resident versus commuter college students. Differences

are on where colleges need to place the intervention emphasis, not that certain interventions simply do not work within one segment or the other. The literature states there is no one retention plan that is easily generalizable nor a plan that can simply be modeled upon with an assurance of success. Rather, researchers emphasize the need for colleges to develop retention plans and interventions that work for them. The literature findings demonstrate a consistency of what interventions seem to have positive impacts across all of higher education.

This study looked at four of the interventions MHCC implemented. The four interventions that were selected for the study because they were major interventions and they have six characteristics in common:

1. Each of them lasted 2 or more years and they continue. One of them, the Student Success Task Force, does not continue by name, but its outcome interventions do.

2. Each involved all areas of the campus from the planning stages through implementation and assessment of outcomes.

3 Each addressed student needs in a holistic manner

4. Each had as a substantive intent the lowering of attrition

5. Each intervention's actions influenced or created the development and continuance of programs that promoted student success and retention.

6. Each intervention utilized high quality information from the college student data base from which to make its decisions and measure its outcomes.

The discussion and recommendations attempt to look beyond what the findings mean for just MHCC. This qualitative study is not designed nor intended to be generalizable beyond the MHCC populations on which the study is based; however, there may be implications for all community colleges interested in student success and retention.

The study also adds to the body of knowledge reported in the literature about what is being done at a community college to successfully address student success with retention interventions.

Intervention Defined

Access change advocates such as McCabe (1984), and Roueche and Baker (1987) called for systems of student success, as well as active intervention, to ensure student success. Intervention is defined by Morrill and Hurst (1980) as an active approach with an overriding focus on the development of students, "with the interventions designed to enhance their ability to utilize available environments for growth, and intervention in environments to make them more conducive to human development" (p. 86). The purposes of interventions from the student development perspective are remedial, preventive, or developmental, and emphasize educating both the cognitive and affective human components. Examples of interventions from a student development perspective would be intensive academic advising of general studies students and orientation programs of various types and lengths. Examples of interventions from a student success perspective include assessment and reporting systems, developmental education, student tracking systems, and other retention strategies.

Methodology

The methodology chosen was a case study using a lessor mode of analysis called Case Survey: Secondary Analysis Across Cases (Yin, 1984). The study is descriptive in nature for the purpose of exploring how MHCC retention interventions impacted retention. This is done by a three-step process with each MHCC intervention: (a) describing each of

the MHCC based interventions; (b) describing what the literature has to say about the soundness of these types of interventions; and (c) based on the analysis of (a) and (b), what effects have they had at MHCC and what has been learned. The case survey is an approach to cross-case analysis and is not the same as the quantitative analysis that might be conducted of an embedded unit within the same case. Secondly, as in cross-case analysis, the case survey has limitations because it is unlikely to achieve either theoretical or statistical generalization. In his discussion of case study methodology as a research strategy, Yin (1984) argues in favor of the use of the case survey secondary analysis:

> The case survey is a relevant technique when the research objective is explicitly that of a secondary analysis — for example, to determine "what the existing literature says" about a certain topic. In such situations, the case survey is in fact preferred over other modes of "reviewing the literature," which generally reflect subjective judgments in the selection of the relevant studies and the amount of attention given to each. The case survey technique can minimize these biases and is the desired technique if it is applicable. (p. 118)

Data Collection and Analysis

The emphasis of this paper is qualitative research: review of documents and archival records, description, and analysis. This study seeks to describe and explore MHCC intervention experiences, to determine if the strategies that one college is using are consistent with or have positive reflections in the literature findings, and then to discuss what MHCC has learned from its intervention efforts. For the purposes of this study, positive enrollment and retention effects are viewed as the by-product of successfully implemented, exercised, and assessed interventions. Explored is what MHCC has learned from its experiences and whether MHCC is paying attention to the pattern areas which the research literature has found to be most important in terms of retention planning. Data gathered and produced by or through the Research and Planning Office of MHCC, MHCC

raw data such as minutes, unpublished reports and manuscripts, and similar data produced by various consultants and vendors working on behalf of the college on selected interventions form the major portion of the data base. Examples of such data were published articles by the MHCC President and other faculty members and administrators, end of term reports, documents that described Guided Studies and Standards of Academic Progress, research reports, and minutes and memos of the various MHCC student success committees and task forces.

Since a case survey secondary analysis was conducted, generalizability from the theoretical and statistical perspective was not a concern. The use of this methodology is consistent with the findings of Yin (1984) who stated that case studies do have a distinctive place in evaluation research and that they have at least four different applications: (a) to explain; (b) to describe; (c) to illustrate; and (d) to explore. This study is not designed to look at quantitative enrollment data that would measure, on a student by student basis, the impact or outcomes through the use of any given retention strategy; that would be another study.

There seems to be a consensus in the literature that retention is a big and important problem for community colleges and that colleges can have positive ongoing effects on retention through the use of carefully planned and well executed retention interventions of various types (Pascarella & Terenzini, 1991).

The four selected MHCC interventions were implemented over a period of time from 1980 to 1996. Three of the interventions continue to be in successful operation, and continue to positively impact MHCC retention efforts. The first intervention, the Student Success Task Force dissolved as a task force in March 1983, but many of its initiatives continue in the form of interventions that came out of its efforts.

This case study process reveals how one community college's retention interventions worked for it, the impacts they had, and their fit within the literature findings. The study does the following:

1. Frames the context in which the interventions are described and analyzed and discussed.

2. Defines operationally why the four interventions were chosen and what is meant by an *intervention* for the purpose of this study.

3. Profiles four MHCC interventions to give the reader an analysis of each intervention and how it was utilized. Each intervention is explained, described, illustrated, and explored in detail from the MHCC perspective to give the reader a clear picture of what the intervention meant to MHCC.

4. Collects and reviews literature on retention intervention. Attention was paid to academic and non-academic interventions which were student development and student success oriented.

5. Provides discussion and recommendations in the final chapter are framed around three insights that emerged out of the study.

Throughout the study, collection of research information was continued on the retention intervention strategies by reviewing bibliographies from the information already collected. This was done to broaden the research literature data base. Primary motivation to do this was that questions kept coming out of new information through discovery or thought processes which needed answers. One place answers were found or insights gained was in prior research. When the researcher sensed something new, different, or conflicting, information needed to be resolved so more literature was reviewed to get more perspectives.

Data were reviewed on all relevant published and unpublished articles, including those by the MHCC President and other staff, end of term reports, MHCC Fact Books, college brochures, research reports, and other college documents that had any bearing on the MHCC intervention strategies.

In summary, Yin's (1984) three principles of data collection were followed: using multiple sources of evidence, creating a case study data base, and maintaining a chain of evidence. The multiple sources of evidence included observations, documents and archival records, and physical artifacts from MHCC. Yin (1984) maintains that: "The opportunity to use multiple sources of evidence far exceeds that in other research strategies [and] "allows a researcher to address a broader range of historical, attitudinal and observational issues" (Yin, 1984, pp. 90-91). This helps make the conclusions more "convincing and accurate." Construct validity is also addressed in this manner "because the multiple sources of evidence essentially provide multiple measures of the same phenomenon" (Yin, 1984, p. 91).

Using multiple sources of evidence and corroborating and augmenting the various sources of evidence helped build a chain of evidence that Yin (1984) indicated to be critical to any case study. Establishing a chain of evidence was aided by the abundance of research data that MHCC had developed and retained, and the fact that the study researcher had direct access to the MHCC Research and Planning Office.

Modes of Analysis

Several modes of analysis were used including questioning, pattern matching, explaining, describing, illustrations, and exploring. Through the use of inductive and deductive thinking and reasoning based on the data base and the related literature, analysis

examined causal conditions by asking who, when, what, how, and how much of strategy and implementation. Causal-comparative methods (Borg, Gall, & Gall, 1993) were used to identify possible causes or effects. This method did not, however, provide incontrovertible evidence that one of the variables studied actually caused any of the others. Rather, it was a useful tool for exploring possible causal relationships and causal connections without conducting an experiment. Also used was the constant comparative method (Glaser & Strauss, 1967) as the study looked at what MHCC had done and what the literature had to say about their processes and procedures. While theory development is often an intended outcome of the constant comparative method, this study was a secondary analysis and thus not concerned with theory development. Those who formulated the constant comparative method (Glaser & Strauss, 1967) suggest their approach is applicable to any kind of data. It was used in this study to help analyze the data.

CHAPTER IV

DESCRIPTIONS OF INTERVENTIONS

Overview

The purpose of this study was to describe and analyze the experiences of Mt. Hood Community College (MHCC) with four retention interventions implemented over a 16-year period from 1980 to 1996. Through the implementation of these interventions, MHCC addressed its student dropout problem in positive ways to more strongly assure student persistence. MHCC began its focused intervention process in the early 1980s, when the college identified increasingly higher student dropout rates.

Lenning (1978) discussed three ways for an institution to maintain enrollments: (a) obtain a larger pool of traditional prospective students; (b) enroll more students from nontraditional population groups; and (c) increase retention. MHCC was interested in improving in all three areas, but the first two created more philosophical and practical problems and the idea of retention was becoming an increasingly attractive strategy.

By 1980, MHCC, like many colleges, was increasingly sensitive to attrition and felt the need to begin a systematic process of reexamining what access to college meant and how student persistence could be improved. College statistics showed a decline in students from the 1978-79 school year after over a decade of continual enrollment increases (Kreider, 1991). Although this was in part due to deliberate budgetary cutbacks, the late 1970s and the early 1980s was a pivotal period when MHCC moved from a new and growing community college to an established institution with different types of problems that required different planning strategies and solutions.

The college recognized that students were dropping out, their educational goals were not being met, and something needed to be done. The college just did not know what that something was. College officials also knew that making decisions that require compromise, cooperation, and a close examination of accepted college values would not be easy, nor would it be done quickly. According to Clark (1980), the conflicting values of equity, competence, and individual choice have to be dealt with by individuals who have their own conflicting values about what equity and what competence are, and what the limits of student choice are. Birnbaum (1989) found that institutional systems are, "supported by mixtures of bureaucratic, collegial, political and symbolic elements, each responding to certain institutional needs and posing a constraint on the others" (p. 226). According to Birnbaum (1989), both individuals and organizations impose philosophic and structural constraints to college-wide planning.

Community colleges often have to plan and implement new strategies within existing resources when budgets are tight. While lack of funds is often used as a reason why new intervention cannot be planned or implemented, it is important to note that limitation of funds need not be an excuse for taking action. This was demonstrated at Prince George Community College (PGCC) in Largo, Maryland. At PGCC, a college-wide retention subcommittee was given the task of establishing a set of realistic criteria for the development of interventions. The expectation was that they would focus on prevention rather than prediction (Engleberg, 1981). With their criteria established as focused on prevention, the committee established a realistic process for structuring their retention effort, stressing that any program "must fit the mission and resources of the college" (p. 31). Engleberg (1981) reported, "at PGCC, the action selection process helped create a

productive atmosphere in which further retention program development can strengthen as well as maintain the integrity and objectives of the college" (p. 31).

The planning cycle for MHCC to begin addressing student success and retention can be traced to 1976 when the college first started examining its student orientation process, but organized formal planning began in October 1980 when the vice-president for administration, four deans, three faculty representatives, three classified, four students, and the director of research and planning formed a Coordinating Council on Student Success to begin to address attrition on the MHCC campus and to begin planning for student success. The objective of this council was to develop recommendations that would go to the president describing how MHCC should begin to address, in a campus-wide manner, student success and attrition. The council met weekly during October and November of 1980. On December 8, 1980, their recommendations were presented to the college president. These recommendations were that a task force for student success be established by the president and that the task force appoint subcommittees to study three specific areas. In a December 8, 1980, memo to the MHCC president, Kreider (1980-1983), chair of the Coordinating Council, recommended a Student Success Task Force be appointed that would consist of three committees:

1. A committee on retention was to recognize retention from a campus-wide perspective involving all programs, services, and environments. Research on retention was to be reviewed and utilized to develop new MHCC process. The committee was to study factors relating to student entry, curricular prerequisites, structures and sequence of curriculum, learning environments, instructional methods, student outcome factors, physical facilities, and responsiveness of staff to students.

2. A committee on advising was to review and define the scope and definition of advising, recommend the improvement of the advising program and advising strategies, and seek ways to develop staff more fully in the use of effective advising skills.

3. A committee on orientation and learning styles was to study the process of orientation and recommend practices to enhance program success for students.

The committee of the whole was also to focus upon the MHCC learning environment, reviewing college efforts relating to learning styles, instructional methods, and the impact of the leaning process upon students. Further, the council recommended that membership on this task force include cross-campus representation.

Making these recommendations was the first formal action MHCC took to begin a focused look at the various issues and concerns surrounding the success and retention of students. The action of this coordinating council is the point of departure for this study to begin to discuss and analyze four retention intervention strategies that MHCC implemented over a 16-year period beginning in 1980 when this council first issued its recommendations. These descriptions are intended to give the reader a clear perspective regarding the specific interventions MHCC has implemented to address issues and concerns that surround attrition in an effort to better assure student success and retention.

Context

Over a 16-year period from October 1980 through 1996, MHCC has implemented more than a dozen interventions to address attrition and student success issues on the MHCC campus. The four interventions for this case study were selected after a review of the attrition and retention literature and after reviewing available information on MHCC activities related to attrition and retention over the time period mentioned. The MHCC

information internal to the college reviewed by the researcher included: research reports, published and unpublished articles, minutes of meetings, memos, and other college documents that had any bearing on the efforts the college had taken to address student success and retention since 1980. Once this review was completed, interventions selected were those that stood out as the more significant in terms of MHCC's emphasis on them as impacting student success and attrition issues. They were also selected because they had six common characteristics, which are outlined in Chapter III (p. 55).

While the interventions of this case study are clearly the unit of analysis, they could not always be discussed alone, as they would not present the bigger picture, tell the story, nor convey the understanding of the MHCC processes that the researcher intended for this study. Various actions discussed within the interventions are felt to be an important and crucial part of the interventions under which they are discussed. Table 1 provides a visual picture for the reader to follow the sequence of this study's intervention events over time. The descriptions that follow are framed around four of the interventions. The four interventions studied were: (a) student success task force, (b) guided studies, (c) intensive academic advising of general studies students, and (d) evaluation of advising and registration workshops and college success class (HD 100).

Student Success Task Force

On December 11, 1980, as a result of the actions and recommendations of the Coordinating Council on Student Success described in the overview of this chapter, the MHCC president established a formal Student Success Task Force (see Appendix A). The appointments to the task force were formal and were for a 2-year period. The coordinating council was charged by the president to remain as the guiding agency and a sounding board

TABLE 1

TIME LINE OF INTERVENTION EVENTS AT MHCC

Strategy	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Evaluation of College Success Class																		
Class Eval. - Advising & Regis. Wrkshps																		
Intensive Academic Advising																		
Enrollment Systems Planning Committee																		
Title III Planning																		
No New Initiatives																		
Social and Academic Integration Study																		
Tracing and Follow-up System																		
Guided Studies																		
Student Intent Reporting System																		
Stds of Satisfactory Academic Progress																		
Transcript Analysis																		
Special Student's Committee																		
Student Success Task Force																		
Coordinating Council on Student Success																		

for the task force. The membership of the task force was composed of 54 persons with representation from management, faculty, classified, and students.

The MHCC president wrote in a December 1980 memo to the vice-president of administration (Nicholson, 1980), "We believe this may be one of the most significant activities the college will initiate during the 1980-81 academic year" (p. 1). The task force workings have had a sustaining impact on retention intervention over the years. As MHCC has moved forward each year with its student success and retention initiatives, each new initiative owes credit, in some manner, to the groundwork that was laid by the Student Success Task Force in the years 1980-1983. This tie is especially evident when it comes to the guided studies program and the various strategies that continue to assist and be developed for academically under-prepared students. The intent of the reporting system and other follow-up systems, standards of academic progress, the college orientation class, and the foundation for an academic advising program also find their beginnings in the task force planning and outcomes.

In the Fall of 1980, after the Student Success Task Force was established, the task force members conducted a college-wide forum that invited all staff and board members, and was held to initiate a renewed campus focus on student success. The forum participants were divided into three discussions groups on three topics. The topics were those areas that the president had charged the task force to study: (a) retention, (b) advising, and (c) orientation and learning styles. Each of the three topic groups submitted a report from this forum. From these reports, a list was compiled that highlighted the resulting outcomes in terms of ideas, questions, and problems as seen through the eyes of the participants. The report was distributed campus-wide and served as a stimulus for the staff to think about and discuss student success issues. These three topic areas remained the focus of the task force

for the next 2 years, with the task force establishing, as directed, subcommittees in retention, orientation and learning styles, and advising, each chaired by a dean. The subcommittees consisted of 17 to 18 members each, including faculty, support staff, students, and administration. The larger task force membership assured that ample numbers of members would be at each meeting, recognizing everyone would not be able to attend all meetings.

During the first organizational year (1980-81) of the task force, MHCC hosted the first Oregon-wide conference on at-risk students: *Practices and Strategies That Work.* This conference provided a forum to begin gathering ideas regarding attrition and retention, and to promote student success among Oregon's community colleges. About half of the MHCC task force members were able to participate in this conference. The significance of this conference, in addition to its content, was that it was hosted by MHCC, which demonstrated to the MHCC staff and others, the college's commitment to student success. It was also the first attempt that MHCC made to create a collaborative process to begin addressing student success and retention issues across Oregon community colleges in a collective and collaborative manner. This conference — called the Student Success Strategies Conference of Oregon and Washington Community Colleges — continues as an annual event held each February in Portland, Oregon.

The Student Success Task Force members met bimonthly throughout the Spring of 1981, and detailed minutes of these meetings were taken and circulated widely throughout the campus. Many ideas, changes, and policy reviews emerged from the subcommittee's recommendations, including improved procedures for selection and placement of students in writing classes, plans for improving the student handbook (developed out of the counseling and student activities areas), improved ideas about campus signing, review of

the philosophy on student advising, review of financial aid policies and procedures, evaluation of the effectiveness of the existing student orientation class, and a review of existing reports on student retention and dropouts. At the end of the year, the task force annual report cited its accomplishments and made recommendations for further considerations during the next academic year (Kreider, 1980-1983). In the annual report it was cited:

> The Task Force through its three committees and the coordinating council, continued to emphasize a positive attitude toward self improvement, a persistent pursuit of excellence, and a strong commitment to improvement through experimentation and innovation. (p. 2)

The report went on to conclude:

> The Task Force has continued to serve as an effective forum for dealing with significant issues relating to student success, student advising, learning styles and orientation, and retention. The overall emphasis of the Task Force will continue to be a quest for excellence while providing opportunity for broad participation by members of our educational community in the establishment of standards and in the process of achieving institutional goals and purpose. (Kreider, 1980-1983, p. 4)

During the following academic year, 1981-82, the task force members were encouraged to attend and participate in many state and national activities related to student success and to gather information and data regarding what other colleges were doing related to the retention and success of students. The year began with the task force agreeing that in 1980-81, they had opened communication across campus regarding student success and retention issues and had developed an institutional model for open, broad-based dialogue among campus constituents, focusing on the principal goal of the task force which was "the success of our students" in the broadest sense, from recruitment and enrollment to graduation or goal attainment. In the annual report for the first year, the coordinating council recommended that the same task force subcommittee structure continue the second year (Kreider, 1982). Their charge was: "We have completed one year and two terms. It is

our recommendation that the Task Force continue its efforts with an increased focus for 1982-83 upon advising, standards of progress, student outcomes research, curriculum, and quality circles" (Kreider, 1982, p. 4). Each of the three subcommittees developed specific goals for the year that were based on the issues and concerns developed from the previous year.

The Coordinating Council on Student Success maintained its role as a guide for the Student Success Task Force, emphasizing the importance of information and communication flowing across campus and that cooperation among all segments of the college was crucial, especially among the academic, student development, and institutional research divisions. At the December 1981 meeting of the coordinating council, it was announced by the vice president of administration that MHCC had received a grant funded by the National Center on Higher Education Management Systems (NCHEMS) and the Kellogg Foundation. The purpose of this grant was to focus on student follow-up data and the decision-making processes related to that data. It was the opinion of the college administration that this grant, "came to Mt. Hood, at least in part, because of the work we have been doing in student success and retention" (Kreider, 1980-1983, p. 1) and was secured primarily because of the actions and intervention work that was being done at MHCC in the areas of student success and retention.

In the Fall of 1981, the retention subcommittee, one of the three subcommittees established by the task force, was involved in making changes to the selection processes for limited-entry programs and were planning for a follow-up study to determine the effects of these changes. Also being reviewed by the retention committee were the advising and early alert practices at Miami-Dade Community College in Florida. In the Winter term of 1982, six members of the task force representing each of the retention, orientation, and learning

styles and advising subcommittees, including the chairman of the task force, visited Miami-Dade and viewed firsthand the various retention interventions that Miami-Dade was involved in at that time. The California Longitudinal Study (Sheldon, 1981) had just been released and was also reviewed by the retention committee. At that point it was unclear how the Miami-Dade and the California data might be used, but it was felt that the new NCHEMS/Kellogg grant project might be a helpful tool to address and clarify the issues and potential influences.

By 1982, issues and concerns of academically under-prepared students entering MHCC were of particular concern to the task force. MHCC concerns were magnified by the growing perception that the community college open door policy had in actuality become a revolving door. The college had in place since 1979, a placement testing program that assessed incoming students' basic skills, but this assessment program was purely voluntary on the part of students. The perceptions of MHCC faculty, administration, and staff as to the magnitude of the problems created by or surrounding the way assessment was being done and its impact on the students was widely mixed. A strong perception of many was that student attrition was being negatively impacted by students enrolling into classes that they were not prepared to handle, even though many were being assessed and recommendations for appropriate placement were being made. In general, staff perceptions were that students were being set up to fail, and when they were indeed unsuccessful, they simply dropped out of the college.

MHCC decided to focus initial intervention efforts on the early experiences of new students. This positioning of initial intervention efforts is a recommendation that recurs consistently throughout the retention literature (Duckwall & Vallandingham, 1995; Lopez,

et al., 1988; Raushi, 1993; Sinclair Community College, 1993) as it is at initial intervention where students are first identified as being in academic trouble, or get into trouble.

To address these growing campus concerns about the academically under-prepared student, a Special Students Committee was formed by the task force in January 1982 to oversee a study of the Developmental Education Division. This committee was chaired by the student development dean and membership included eight members of the task force, some of whom were also members of other committees. The specific charge of this committee was to oversee an evaluation of the Developmental Education Division and, based on the assessment data, to explore and develop ways to better serve students with poor academic preparation. Since the MHCC concerns, issues, and perceptions surrounding the academically under-prepared students were opinion and anecdotally based, data were needed in order to move forward with the evaluation.

To develop an empirical data base on which to address this issue, it was decided by the Special Students Committee and the institutional research office that a transcript analysis would be conducted by the research office on developmental education students as one part of an overall evaluation of the Developmental Education Division. The purpose of this transcript analysis was threefold: (a) to determine if students were following the advice of their counselors or advisors with regard to enrollment in developmental education courses based on their placement test scores; (b) to determine whether the remediation was successful for those students who did follow placement recommendations; and (c) to determine the degree to which students were successful in subsequent college level classes.

The student data base for the developmental education evaluation was based on students attending MHCC Fall 1979. A total of 2,035 students (21% of the Fall term headcount) was identified as having taken the Comparative Guidance Placement Test (CGP)

in Fall 1979. Of the 2,035 students, 1,685 had student records on file. Of those, 289 students were identified as students who needed developmental education classes. These 1,396 students made up groups one and two of the six subgroups of the MHCC student population from Fall 1979. For the developmental education groups, 566 students were identified. Of these, 289 (51%) had CGP scores on file. GROUP ONE was comprised of those students who did not need referral to developmental education on the basis of their CGP scores. GROUP TWO included those whose scores indicated developmental education was needed but did not enroll in the division in Fall 1979.

The third, fourth, and fifth groups were composed of those students who enrolled in at least one of five specified courses in the developmental education areas of reading, writing, and mathematics in Fall 1979. GROUP THREE included those students who, on the basis of their CGP scores, needed remedial assistance in reading, writing, and mathematics. GROUP FOUR needed assistance in at least one area but not all three. GROUP FIVE were those students enrolled in developmental education in Fall 1979 but had no CGP scores on file or their scores indicated that remedial work was not needed.

GROUP SIX was based on a random sample of 500 students selected by the research office and attending MHCC Fall 1979, of which 60 (12%) had CGP scores on file. Groups one, two, and six were selected for control purposes. The groups were unduplicated except for group six, which, because it was purely random, may have included students found in the other groups.

The results showed that the average number of terms MHCC students enrolled in developmental education was 1.5. Almost 70% of the students enrolled for only one term. About 36% of the students were vocational majors compared to 64% lower division collegiate (this proportion was representative of the MHCC student body as a whole at that

time). Almost 80% of the students enrolled concurrently in courses for their major. This latter finding made it clear that students with clearly identified academic deficiencies were being allowed to enroll in college-level courses that required the use and actual application of the very skills they lacked. In terms of success in developmental education, 45.5% of the students were successful, 22.0% were partially successful, and 32.5% were unsuccessful. Success was defined as course completion with a term GPA of 2.00 or greater.

The retention rate for the successful developmental education students was considerably higher than for the unsuccessful students. In fact, the retention rate of the successful students compared favorably with the rate for students who did not need developmental work. As one would expect, group one, those not needing developmental education as identified by placement test scores, had the highest retention rate with almost 50% of the students attending through Spring 1981. Excluding the randomly selected group of students (group six), groups three and five had the highest rate of attrition with retention rates of 26% and 24%, respectively. A statistically significant correlation was found between success in developmental education courses and overall academic success. Of the students successful in developmental education, 73% had a cumulative GPA of 2.00 or better, compared to 41% of the partially successful students and 18% of the unsuccessful students.

The findings of this study suggested to the Special Students Committee that a review of the policies in the developmental education division was needed especially in terms of standards of student progress. The relatively short period of time spent in developmental education, the tendency to enroll in only a limited number of courses, the tendency to enroll in college level courses concurrently with developmental education, and the failure of students to follow recommended course sequence, all indicated that greater

control was needed with regard to placement and course selection. The findings also suggested that it might be helpful for the students to enroll in a study skills course in addition to the basic remedial courses.

Based on these findings, the Special Students Committee worked with faculty and staff in the developmental education division, advising and counseling, admissions and records, and other relevant academic divisions to develop a plan which would identify students with scholastic deficiencies. Once identified, staff intervened in their educational programming up-front, at the time placement testing occurred and before the failures begin to happen. What they proposed was a guided studies program to serve students deficient in eight categories: (a) reading; (b) writing; (c) mathematics; (d) reading and writing; (e) reading and mathematics; (f) writing and mathematics; (g) reading, writing, and mathematics; and (h) students declining to participate. The proposal, which included procedures for guiding high-risk students, emphasized (a) continuing to use the Comparative Guidance Placement (CGP) test to identify and categorize student deficiencies; (b) requesting faculty to identify courses in their disciplines in which students with reading, writing, or mathematics deficiencies would not be successful, as well as courses in which students with one or more deficiencies might still be successful; (c) establishing a system to guide students to enroll only in appropriate developmental course work and/or only in courses they can complete successfully based on their current skill level; (d) having the Special Students Committee work on and develop standard operating procedures in the areas of counseling, registration, letters to guided students, monitoring reports, and progress and appeal processes that would support these students; (e) allowing identified guided students who reject the placement recommendations to be put in a special category for grade monitoring purposes, but permit them to enroll in courses of their

choice. The committee also recommended that the existing voluntary placement testing program become a mandatory testing and placement program for all entering students seeking to enroll for nine or more quarter hours or for a student enrolling in a writing or mathematics course (Japely, Kennedy, & Walleri, 1987).

The Special Students Committee presented its proposal to faculty curriculum committees, the student executive board, and the deans council for their reactions, input, suggestions, and recommendations. After revisions which included the input from the reviewing entities and then a final review and approval by the Special Students Committee, the report and recommendations were submitted to the MHCC president in July 1982.

In the 1981-82 annual report of the Student Success Task Force, progress toward goals is recorded and accomplishments were listed by Kreider (1981), the then vice president of administration at MHCC and the Student Success Task Force chair:

> 1. The retention committee worked with the developmental education and the NCHEMS student outcome project in an attempt to study persistence/attrition outcomes in developmental education. The California Longitudinal Study was reviewed to determine its utility for studies to be undertaken by the college.
> 2. Initiated a plan regarding standards of progress to be implemented fall term 1982.
> 3. Provided input on a student planning guide to be used in new student orientation/registration beginning Fall 1982.
> 4. Provided input on the developed up-to-date, two-year curriculum guides for lower division collegiate students.
> 5. Assisted in a more comprehensive definition of academic advising and assisted in planning for strengthening the academic advising program.
> 6. Provided input on a flyer illustrating steps for enrolling at MHCC.
> 7. Revised the trial schedule.
> 8. Reviewed the program for learning styles/guided design study skills and added two presentations on learning styles.
> 9. Reviewed MHCC planning guide and made recommendations for improvements to counseling.
> 10. Reviewed MHCC student handbook and forwarded recommendations to student activities.

11. Conducted discussions regarding MHCC's approach to general education.
12. Discussed the value of an early alert system to determine the feasibility of a more structured process.
13. Reviewed the policy on late registration and add policy to determine the impact upon students.
14. Conducted an assessment of results due to changes in the placement of students in writing courses.
15. Appointed a steering committee to study the feasibility of developing quality circles at MHCC. (Kreider, 1981, pp. 3-4)

The progress in refining research practices and the concept of measuring student success and retention, as stressed in the California Longitudinal Survey (Sheldon, 1981), was being handled by another task force of MHCC staff members and two consultants involved in the NCHEMS/Kellogg student outcomes project. In June 1982, the advising subcommittee submitted a plan for institutional standards of academic progress to the coordinating council. This plan had been put together with input from admissions and records, counseling, developmental education, financial aid, student government, the instructional council, the faculty senate, the student development council, and the retention and orientation/learning styles subcommittees. These new standards were implemented for the first time at MHCC in Fall 1982 (see Appendix B).

The early alert system in place at Miami-Dade received mixed support from the retention committee upon their return from visiting that college. The intervention strategy that was operational at Miami-Dade included policies that gave midterm warnings to students who were failing or in danger of failing a class. According to Wesley (1981) the retention committee members felt that, "their approach to early alert systems doesn't at first glance appear to be the approach best suited to Mt. Hood's needs" (p. 1). They felt that early alert was already occurring between instructors and students at MHCC and, therefore, the formalizing of such a system was unnecessary, at least at that time.

According to the July 20, 1982, minutes of the retention committee, the magnitude of their studying the structure and sequence of curriculum, identifying prerequisites for programs, and designing placement standards to ensure high success rates,

> Simply overwhelmed us, especially in view of the amount of work that was being done at the division level during fall and winter quarters to develop the 1982-84 catalog information concerning curricular and course prerequisites. (Wesley, 1982, p. 4)

No progress at all was recorded in the minutes for the retention committee actually reviewing the MHCC approach to general education. In the July 20, 1982, minutes of the retention committee, it was stated that the committee felt existing placement standards did have a review process in place and that the issue of general education would continue to be studied. Little progress in this area was made for several years. The 1981-82 annual report of the task force mentioned that course prerequisites still needed to be resolved and the MHCC approach to general education needed to be reviewed.

The 1981-82 final report (Kreider, 1982) again commented on the effectiveness of the task force as a forum. It recommended that, "the efforts continue for 1982-83 with increased focus on academic advising, standards of academic progress, student outcomes, research, curriculum, and quality circles" (p. 4). In the words of Kreider (1980-83), who chaired the Task Force:

> The overall emphasis of the Task Force will continue to be a quest for excellence while providing opportunity for broad participation by members of our educational community in the establishment of standards, and in the process of achieving institutional goals and purpose. (pp. 3-4)

The coordinating council recommended for the second year that the task force continue its quarterly meetings and the three subcommittees of the task force should continue to meet regularly, on a schedule demanded by the various tasks they were working on. It was recorded that the advising subcommittee had met a total of nine times in

the first year. The two other subcommittees did not record their number of meetings. Wesley (1981) recorded in the October 22, 1981, minutes of the Coordinating Council:

> The success of this effort supports its continuation, so the Coordination Council recommends that the same structure be used for the current Task Force, i.e., three committees of staff representing all areas of campus with the charge to study retention, advising, and learning styles. (p. 1)

In the Fall of 1982, the task force reunited to review overall accomplishments and their stated goals, to get an update on the NCHEMS/Kellogg project, talk about quality circles, review committee plans and structure, and review current issues. The same three subcommittees continued to be functional and their focus was as follows: The retention committee was focusing on the information from the California Longitudinal Study (Sheldon, 1981); the advising committee was monitoring and evaluating the Standards of Academic Progress; and the learning styles and orientation committee was evaluating Psychology 111, MHCC's orientation class. A quality circles steering committee had been formed and that committee reviewed and discussed their progress with the Student Success Task Force. The primary action of this committee was to study the feasibility of developing quality circles at MHCC.

Issues at the Fall 1982 meeting of the Student Success Task Force were diverse and included topics such as institutional ethics, enforcement of standards of excellence, development of graduation standards, slowing down the increasing numbers of new courses, preparing for new technologies, encouraging professional growth and scholarship, generating better and more valid data, assisting students with career choices, consideration for differentiation of tuition charges, informing students of options and of transfer requirements, articulation with 4-year colleges and universities, dealing with the *open door* in the context of limited resources, and many other issues and concerns. The issues being

addressed represented the breadth and complexities involved in dealing with student success, attrition, retention, and attempting to manage open access.

The importance of having information on student educational goals became quite evident when MHCC wanted to measure student attrition. The recognition of this need was clear in the Student Success Task Force concerns in 1983 as it addressed attrition issues. Reasons for attrition on the part of a student can vary and because colleges cannot use the mere absence of continued enrollment as the single determinant of attrition, the task force was prompted by the college's recent declining enrollment (see Appendix C) to seek and examine reasons why students were attending the college. In MHCC's case, enrollment decline began in 1983 after more than a decade of continuous or relatively stable growth. With the traditional and nontraditional market populations of students becoming limited, based on the enrollment trends, the focus on retaining existing students became even more important than it had previously been and seemed like a natural alternative to continuously relying on enrolling more and more students each term in an attempt to compensate for attrition. The task force served to directly focus attention on enrollment patterns and, through its subcommittees, began to identify ways to counter attrition from within the college systems. Looked at from the perspective of retaining existing students to reduce attrition, the needed goals and objectives became much broader, demonstrating a need for going beyond just maintaining recruiting and enrollment levels. The MHCC perspective began to shift from an admissions or enrollment model that attempts to compensate for attrition by enrolling more new students, to an enrollment management model that emphasizes retention of existing students. The concept of an enrollment management model did surface, the name did not.

The Student Success Task Force had began its work by wanting to focus on helping students attain their educational goals. However, MHCC still did not know what those goals were and was continuing to assume that any loss of a student before they completed a certificate or degree was an attrition problem. The college realized that in focusing on the students' goals and helping students attain them, they could at least influence rising political pressures for accountability that come about from wasted dollars and wasted human potential that results when students do not achieve their educational goals.

As the task force first began to deal with attrition, they had to first define what attrition was going to mean for MHCC. The college had reached a point in its maturity where they were feeling that graduation, while of value to college staff, might not hold the same value to students and that perhaps measuring student success from the institutional perspective might be inappropriate. Consider the example of two individuals who enroll for the first time. One is an established administrative secretary taking a few computer courses to upgrade her job skills. The other is a recent high school graduate who enrolls full-time, wanting to be an architect. Although neither returns Winter term, each represents attrition from a general statistical perspective but one or both of these students do not necessarily represent true attrition, the type of unnecessary attrition the college needs to focus upon.

The secretary may have never intended to return a second term, having updated necessary skills in the first term. This does not represent an attrition problem; the student may or may not return occasionally for additional courses (a *stopout*). However, if the aspiring architect does not return the following term, there could be an attrition problem. In any case, MHCC knew that making judgments about the nature of attrition requires precise knowledge of student intent. Lacking specific student declared intent data, student outcomes can only be evaluated on the basis of instructional or institutional statistical goals rather

than student goals. The Student Success Task Force concluded that what MHCC needed was a systematic collection of information on student intentions. To test this supposition the college decided to collect the missing data elements, student-declared intent, from the student data base.

Investigative research by MHCC found that results of a 1980 California Longitudinal Study (Hunter and Sheldon, 1980) provided a useful starting point for developing a viable means of collecting the intent information. A source for funding, to begin work on this project, came about as a result of the college being a member of a national project entitled "Using Student Outcomes Information in Program Planning and Decision-Making" (Ewell, 1983). Given the funding of the NCHEMS/Kellogg Student Outcomes Project, a Student Outcomes Project Steering Committee was formed consisting of the four deans, the vice-president of administration, an assistant to the president, the director of research and planning, and the research associate to oversee the development of a prototype *Persistence Reporting* system. In July 1983 a consultant was hired to develop an automated intentions reporting system and by the end of September 1983, the consultant's final report indicated, "I have left Mt. Hood with a fully-functioning Intent Report System" (Meyer, 1983, p. 1).

Starting Fall term of 1983, the admissions and records office staff began soliciting educational intent data from all enrolling students. By the end of Fall 1983 registration, this represented 10,577 students. Because there was missing data on some students, 9,510 of the total number of students ended up with complete enough data to use with a future follow-up study. For the first time in its history, MHCC had student declared intent data on its students (see Appendix D for the original 1983 intent questions and those used in 1995-97). At this time the data collection process is operationalized into the registration process

and is updated each term when a student registers. This data collection includes all students, both full and part-time, including those enrolled in noncredit courses. The information collected is brief, thus minimizing the impact on the speed of on-line registration. Six items are collected and updated on a term-by-term basis:

1. *Ethnic data* (not an intent question but requested for analysis purposes): American Indian/Native American, Asian/Pacific Islander, Black, Non-Hispanic, Hispanic, Non-U.S. Citizen, unknown, White, Non-Hispanic.

2. *High school completion*: Adult high school diploma, GED, high school graduate, did not complete, still in high school, unknown.

3. *Highest degree level*: None, other (short term training), 1-year certificate from community college, 2-year degree from community college, Bachelor's Degree, Master's Degree, Ph.D., or Professional Degree.

4. *MHCC educational goal*: 1-year certificate or 2-year degree, high school diploma or GED, none, undecided, no response.

5. *General intent*: Take classes, transfer to a 4-year college, learn skills to get a job, improve job skills, explore career or educational options, take classes to finish high school or GED, improve skills (writing, reading, or math), learn English, personal interest/enrichment, other, no response.

6. *Employed while in attendance*: Full-time (35+ hours per week), part-time (5-34 hours per week), not employed.

Using this information and after the first week of instruction when the majority of class add and drop activity had been processed, an individualized course profile report was generated and distributed directly to the instructor of each course. Using this same information, the institutional research office distributed student intent reports summarized

by discipline, division, and total enrollment to middle managers, deans, and program heads (see Appendix E). Besides providing summary statistics for the intention and background questions described above, each course profile included the average GPA of returning students in the class, the five most often occurring student-declared majors, the average age of students in the class, and other demographic data. This class *snapshot* enabled many faculty members to tailor the class to the students' unique needs and interests. One of the most important uses of these data was for program planning and evaluation. The data also allowed faculty and managers to review and analyze their own discrete programs, courses, and student profiles through individual disciplines, versus merely getting a broad overview of all instructional areas.

The college-wide intention reports present a clearer picture of who attends MHCC and why they say they are attending. The data are also useful for scheduling, marketing, comprehensive planning purposes, and understanding attrition. Additionally, the data are useful in college-wide analysis and present opportunities for generating *ad hoc* reports of various types.

Collecting of the intent data and analysis of the college reporting systems helped MHCC fill a gap in the college information system and then prompted the research, and admissions and records office staff to fill that gap by collecting student intent data. Given more complete intentions data, the college has a truer picture of intentions from the student perspective.

By analyzing the student intent data and combining it with data collected through annual follow-up studies, results reveal how well student-defined needs and goals are being met and attained. What this did for MHCC is produce percentages of students graduating, student persistence, and student outcomes that can be measured and explained with greater

precision and sensitivity. In turn, the availability of these types of data allow the college administration to respond to demands for accountability without making mere assumptions about student objectives and/or attrition.

In February 1983, the Learning Styles/Orientation Committee voted to disband and hand-off their tasks to appropriate divisional areas to review, analyze, and develop specific policies and procedures. In voting to disband, the committee reviewed its accomplishments and stated their goals had been accomplished (see Appendix F). The Retention Committee members held a similar meeting in March 1983 to review its accomplishments and to recommend further work needed in the academic advising process. They indicated they were impressed with how successful the overall task force had been and with how many of the ideas discussed and nurtured in their committee had become a part of the fabric of the college. Their strongest final recommendation was that there needed to be more improvement in the student advising process. The Advising Committee held its last formal meeting on March 7, 1983. They too cited their accomplishments and made recommendations regarding further work that needed to be done. All three subcommittees stated that their efforts had been worthwhile and that the across campus dialogue and communication was the key factor in putting ideas in place and in raising ongoing issues and concerns to a level that got staff involved and needed actions.

At the concluding meeting of the Student Success Task Force in the Winter of 1983, the vice president of administration and the task force chair summarized the work of the task force by saying:

> Academic excellence is directly related to instructional resolve regarding curriculum and instructional support. The Task Force on Student Success has greatly contributed to a comprehensive understanding of factors directly impacting student outcomes. (Kreider, 1983, p 3)

Guided Studies

The President's Council decision in 1983 to begin a guided studies program at MHCC in the Fall of 1984 resulted from the recommendations of the Special Students Committee (discussed under the Student Success Task Force intervention). These recommendations came about as a result of the transcript analysis conducted by the MHCC research office, and also from other concurrent evaluations conducted on the developmental education division.

Although placement testing was occurring prior to Fall 1984, there was no formal effort being made to restrict student course enrollment choices. In fact, concurrent enrollment in remedial courses and college level courses which presumed prior remediation was common. The guided studies program was designed to restrict student course enrollment until academic deficiencies can be erased through successful completion of courses in developmental education, and in particular, to implement a comprehensive program of counselor and academic advisor intervention for those students failing to meet MHCC standards of academic progress.

A real strength of this intervention is its timing, occurring up-front when the student first enters the college. This is the best point for remediation to occur as it sets the stage for all of a student's academic and personal success while at the college and defeats failure before a lack of satisfactory academic progress erodes a student's motivation and self-esteem. Similar intervention programs (Duckwall & Vallandingham, 1995; Seybert, Kelley, & Stoltz, 1992) support this guided studies approach and have been successfully implemented, recognizing that under-prepared students are a continuing problem for community colleges. One example of just such a program is called *The Crossover Program* (Michels, 1986), which is in place at Milwaukie Area Technical College (MATC). Much

like the MHCC guided studies program, the Milwaukie crossover program is based on the concept that students who lack basic skills and have inadequate career goals are at high risk for dropping out. The MATC program stresses identifying the high-risk student by assessment testing. Then, appropriate individual educational plans are created for each of the students to take remedial courses in the areas of communication skills, reading and study skills techniques, mathematics, and social sciences. Their experience is that students spend one to two semesters in the remedial programs, which is also a common finding at MHCC where students experience an average of two terms.

After a process of review and final approval of recommendations by the Special Students Committee and approval by the President's Council, the guided studies program was implemented in Fall 1984. The program started with 563 students (7% of Fall term enrollment); 167 completed all of their skills, 48 did not complete or did not re-register, and 348 continued the next term. In Winter 1985, 103 new students were added to the program, and in Spring 1985, another 97 students were added. By the end of the first academic year of its implementation, 763 students had participated in the program (5% of the total year headcount). The program continues in 1997 having served thousands of students since its 1984 beginning. The guided studies program requires placement testing for all students enrolling for nine or more credits and as of 1997 is examining dropping this requirement to six or more credits. Each student wishing to enroll for that number of credits is tested and then identified as a guided studies student from their placement test scores. Based on their scores, they are then assigned to a counseling staff member and a faculty program advisor.

During quarterly orientation and advising, students are guided to enroll in appropriate developmental courses to correct identified deficiencies and into other specific

courses corresponding to their abilities. All classes these students wish to take require approval from a counseling staff member. This approval is accomplished by requiring a staff signature on the registration form before the student can actually register. This process includes approval of class adds and drops after the initial registration. Every course offered is computer coded with the faculty assigning success/difficulty ratings and every identified guided studies student is computer coded by specific deficiency. With the coding system built into on-line registration, students are able to register for only those courses which match their skill level. If a mismatch occurs, the student is not permitted to register for the course and is referred back to a counselor. For example, a student coded as a low-level reader would not be permitted to register for a psychology class coded as requiring a reading competency above that of the student. Counselors retain the prerogative to override any mismatch, if special consideration seems reasonable or appropriate.

Students that are categorized as guided studies have to earn a passing grade in the recommended developmental course work to be reclassified as regular students. Reclassification means the student must demonstrate the same skill level as students admitted on a regular basis. Students enrolled in developmental courses who show improvement at the end of one term but are not ready for reclassification to regular status receive a grade of *K*, signifying continuing progress. These students are then required to continue their developmental studies and register again for the same course the following term to complete it.

Students who receive the *K* grades in the same developmental course for two terms in a row are not able to enroll in the same course for a third term without special faculty intervention and approval. Disapproval can be appealed through an academic progress review committee, but if denied, the student is suspended from the college. Also, students

on veterans' and financial aid benefits can demonstrate continuing progress for two terms without affecting their assistance. In essence, the *K* grade for a first term is built into the satisfactory academic progress standards for both of these areas as a nonpunitive grade, but the student must complete the course with a final letter grade at the end of the second term. If approval is received for a third term, the developmental work has to be taken in addition to the number of credit hours the student has declared as their class load in order to continue their benefits.

As a first step to making the guided studies intervention work, the developmental education faculty made a commitment to eliminate the use of the *S* (satisfactory) grade for guided studies students unless they were ready to be moved to college level classes. The second step was the need to establish three lists of courses that could be considered safe courses: (a) a list of courses that did not require minimum reading skills; (b) a list of classes that did not require writing skills; and (c) a list of courses that did not require mathematics skills. These lists are prepared by the faculty. An unexpected bonus to the institution came out of this original process, as each and every course syllabus, catalog description, and prerequisite had to be examined by the faculty. The outcome was that new prerequisites were added, some were deleted, and much needed campus dialogue took place surrounding curricula. This process does continue as an operationalized part of the guided studies program.

It is important to note that for occupational program safe lists, it is important that the courses be identified that only the specific majors can take after meeting the admissions criteria (already above the skill level of guided studies students, as well as restricted programs and adult education classes). Paying attention to these specific areas makes the resulting lists of classes quite manageable.

After the safe lists are rated, a 1 through 7 code is assigned to each of the courses on the course master in the computer according to the faculty determinations. This allows the system to match student restrictions against course restrictions. A student and course that do not match results in a message appearing on the registration screen which reads "Student does not meet prerequisite." Since the beginning of the guided studies processes, any new course approved has a guided studies status determined by the faculty prior to approval. Each year, as the published scheduled of classes is created, faculty reexamine these codes to affirm their appropriateness. The guided studies student is registered only after the categories for deficiencies of the student are established (GS 1 to GS 7), the ability level required for each course is established, the testing and identification has taken place, and safe lists established.

In Fall 1985, a two-term limitation on skill building classes was implemented and at the same time removed the penalty from veterans, co-curricular eligibility, and financial aid for repeating a class. A student may attempt a third term only with a recommendation from the developmental education faculty, but the third term must be beyond the 12 credit hours required to be considered full-time for eligibility.

Also in Fall 1985, a contingency acceptance category was added to the program. If a student's skill level is only slightly below the required score, or if their deficiency will not impede their beginning a program, they are allowed to start a degree program with a written agreement that they will also enroll in the required skill classes simultaneously with their program core classes.

Beginning in Fall 1986, any student who had not successfully completed their skill level classes became automatically suspended from the guided studies program and has to

appeal to be reinstated. If the appeal is not approved, the student is restricted to safe list courses only, based on their skill level.

At the end of the term, a report and an advising transcript for each student is generated for all guided studies students by each category indicating grades earned in their remedial classes and the number of terms the remedial classes were attempted. These students are evaluated individually and the outcomes are varied and complex.

Since the monitoring of the grades for guided studies students must be done immediately after grades are posted and before the first day of instruction so that written notification can be sent to students and to the counselor or faculty member, grade monitoring is done by the admissions and records staff. Also, since the student could be in jeopardy under institutional Standards of Academic Progress as well as guided studies standards, it is important that these two monitoring functions take place simultaneously to get a clear and complete picture of the student status, avoiding the sending of multiple letters to the student. The process is also done this way to provide timely advisor or counselor intervention to help the guided studies student.

Finally, students who have completed their guided studies prescriptions are sent a separate personalized letter advising them of their new status. Their status is also changed in the computer. Within these categories — students who have not attempted to complete any of their remedial classes; those who attempt but do not complete; those who have attempted and failed for the first time; those who have attempted twice, failed, and are suspended; and those who failed twice and have been recommended by the faculty for a third time on an exception basis — students are separated by those who have pre-registered for the next term, both correctly and incorrectly based on grades just posted, and those who have not pre-registered. After all stratification's have been determined, sorted, and actions

taken, new advising transcripts are run for both the admissions and records office, and the advising and counseling office. On the new transcripts, handwritten notations are recorded to explain any and all actions that have been taken on behalf of the student.

At MHCC there are two levels of intervention strategies for those students in academic jeopardy. A student's GPA determines the level of intervention applied. Beginning Fall 1986, faculty intervention was initiated for students with a 1.50 to 2.00 GPA with the already established counselor intervention for students whose GPA is below a 1.50.

After grades are posted for a term, a computer generated report indicates to staff those students enrolled in 12 hours or more whose GPA is between 1.99 and 1.50. Student advising transcripts, created at that time as an unsatisfactory progress report, are hand-stamped with an *AD* (Advisor Intervention) legend. Concurrently, this AD code is attached to the student's record in the computer. Personalized letters that speak specifically to their situation are then created and sent to the students. This is important as the student may have already registered and now needs to come in and adjust their schedule based on the grades just posted. Other important information is also conveyed to the student through the individualized letters, such as the need for an advisor's signature on all registrations and add/drop activities.

Advising transcripts and a second report are generated for those students whose GPA has slipped to a 1.49 or less. These transcripts are hand-stamped *Code 7* (Counselor Intervention) and this code is also attached to the student's computer record. A Code 7 restriction requires the student to see a full-time counselor or counseling advising specialist; seeing their faculty advisor will not suffice.

A personalized letter is created specifically for the Code 7 student. This letter informs the student that they have been placed on academic probation and have to appear in the advising and counseling office immediately. The student is also told their records have been locked; if they have pre-registered for the next term, their registration is temporarily invalid, and if they have not registered, they are not allowed to do so until after a counselor has signed them off. Signing off a Code 7 includes a one-on-one visit, at which time an Individualized Educational Plan (IEP) is developed and signed by both the student and the counselor. From that point on, the counselor has to approve any and all registration transactions for the student.

MHCC has found increased persistence of students who have completed the guided studies program. However, the program is labor intensive and requires a major philosophical commitment on the part of the institution. The implementation of the program received strong administrative and staff support but continues to require college-wide involvement and participation. While the guided studies program was having positive persistence results, some MHCC students were still not being successful, and MHCC wanted to know more about their students in hopes of learning new information which might help to identify ways to better serve student needs. In 1987, 3 years after the program started, a more definitive description of the institutional factors that contributed to student success or failure was needed to provide guidelines for future decision-making regarding utilization of the guided studies program as an effective intervention strategy.

An action that MHCC carried out in 1987 to learn more about its guided studies students was to conduct a study to gather more data on guided studies students' reasons for staying or leaving the college. This was a study on the social and academic integration of a population of guided studies students who had left MHCC. This action was undertaken to

add to the kinds of data MHCC already collected, and specifically, to gather data on social and academic integration of a MHCC student population. MHCC wanted to measure and understand the reasons for the success and failure of identified high-risk students from an attitudinal and behavioral view, based on the perceptions of students several years after their classroom experiences. Particular focus was on case studies conducted to ascertain the impact of academic and social integration similar to the findings of Tinto (1975) in terms of success as defined by both the students and by institutional standards.

Tinto (1975) specifies that students entering college bring with them a variety of attributes and characteristics that influence the expectations they have toward the college experience. These characteristics change over time and lead to different levels of commitment during the student's stay in college, which are a direct result of the student's integration into the academic and social systems of that institution. Tinto (1975) holds that the level to which a student integrates into those systems is the primary determinant of choosing to stay and meet objectives or to drop out of the institution. A major implication of Tinto's work on levels of student satisfaction with the institution is not only the comprehensive nature of the variables influencing student persistence, but the significance of relationships between students; between students and faculty; and between students, faculty, and institutional systems. The purpose of this MHCC study on social and academic integration was to test the Tinto (1975) model using a MHCC population.

The social and academic integration study was conducted in 1986-87 by the director of the MHCC research and planning department and a doctoral student (Peglow-Hoch & Walleri, 1990). The data base was 563 students that were first-time Fall 1984 students who were the first to be placed in the newly created guided studies program. These students were tracked through Spring 1988 (Walleri, 1987).

During 1986-87, a follow-up survey was conducted on these 563 students and 173 of the students responded to the survey. Of particular concern to MHCC was that of these 173 respondents, fewer than 50% indicated that they had achieved their personal and academic goals while attending MHCC. These same students had responded inconsistently when linking goal attainment with success or failure. Analysis of student records and transcripts of these respondents did not clearly identify which factors the students were associating with success and failure.

The goal then of this social and academic integration study was to develop more in-depth information to test Tinto's (1975) model within the MHCC environment to learn more about why MHCC students were not being successful. The 173 respondents were divided into four groups based on a combination of college-defined success variables and student-defined success variables as reported from the 1987 follow-up survey. Group one consisted of 83 students, group two had 44 students, group three had 37 students, and group four had 9 students. Since it was not feasible to conduct personal interviews with all the students, a stratified random sample of 20 students was selected by Peglow-Hoch and Walleri (1990) to participate in the interviews.

Using the case study method and following the approach recommended by Yin (1984), four sources of evidence were collected to form the study data base: (a) archival data and student records on each respondent from the follow-up survey the college conducted in 1986-87; (b) individual survey results; (c) a standardized questionnaire measuring social and academic integration; and (d) structured interview sessions.

Considering all four sources of information that the study gathered, the research findings indicated that success or failure at MHCC was, in large part, based on (a) the interactions between faculty and students, (b) the perceptions, attitudes, and values of the

students regarding their experiences at the college, and (c) student goals and intentions for attending college.

From the social and academic integration data collected by MHCC, students in their own words identified with the college variables that made a difference. Students reported benefits from their experience at the college far beyond the narrow parameters imposed by the quantitative study done by MHCC as a standard follow-up to graduation (follow-up study done in 1986-87 which included the 1984 population who first entered the guided studies program). However, the institution had no vehicle by which to be appraised of those positive benefits and, therefore, remained unable to reinforce them. Moreover, if students were negatively impacted by aspects of their college experience, the institution had no way of knowing and taking corrective action.

This study provided insights and stimulation for further analysis. Out of this action came a renewed interest in the quality of student interactions with faculty, counselors, and advisors. In turn, this interest merged comfortably with and supported two other institutional initiatives that were going on at this same time: (a) a focus on faculty development and the relationship between faculty effectiveness in the classroom and student success and retention; and (b) enhancing the faculty and counselor advising processes. The outcomes and results from this study stimulated discussion across campus on these and other issues. The study also pointed up the importance of qualitative research as it clarified that a lot can be learned from students by simply talking to them.

Overall, findings of the guided studies program are that more students who initially test into the program are succeeding and reaching their educational goals, and persistence of these students is higher than those who do not choose to go through the program even though recommended to do so. The importance of this type of program that seeks to

facilitate the academic adjustment into college of the poorly prepared student continues to be consistent with the literature regarding impacts of within-college retention interventions. Pascarella and Terenzini (1991), in their review of retention literature, identify four types of programs similar to MHCC's: (a) instruction in academic skills, (b) advising and counseling programs, (c) comprehensive support services, and (d) remedial or developmental studies. In all these areas they found there were statistically significant, overall positive retention effects on student persistence by offering interventions in these areas.

Title III Grant Strategies

In 1994, MHCC received funding under Title III of the Higher Education Act to carry out several intervention activities to improve retention. One of the retention activities of the grant was to review the orientation processes for new students, another was to develop and pilot test an intensive academic advising system. The orientation process is based on the idea that involving students in the total academic environment is an important means of enhancing student persistence (Astin, 1975b). Students involved in intensive academic advising, for example, are expected to benefit not only from an orientation process, but also from deliberate and supportive interactions with faculty-staff. Interactions with students, faculty, and staff are considered crucial to developing a student's sense of belonging, which in turn increases the likelihood that he/she will remain in school (Tinto, 1987). Three retention interventions that were planned and implemented during 1994-1996 as a result of the funding of this grant are described below. The three interventions are: (a) Intensive Academic Advising of General Studies Students; (b) Evaluation of Advising and

Registration Workshops; and (c) Evaluation of College Success Classes (HD 100). Each of these three interventions included an evaluation of outcomes.

To avoid repeated citations and to give appropriate credit, the data for the three interventions discussed below, unless otherwise noted, will come from evaluation reports submitted to the college for each of the interventions by RMC Research Corporation (1996a, 1996b, 1996c).

Intensive Academic Advising of General Studies Students

In the Fall term of 1995, the planning stage for the implementation of a pilot study for the Intensive Academic Advising (IAA) of general studies students had been completed and implementation began. The original sample of students selected to participate was 75, but 9 of the students dropped out of college early in the Fall 1995 term. The sample number of 75 was an arbitrary number determined by the advising and counseling staff to be the maximum number of students they could handle for this pilot implementation. Therefore, 66 students actually participated in the intervention (.01% of Fall 1995 enrollment). The sample of 75 was determined by and drawn at random by project staff and the MHCC research office personnel from students who (a) attended MHCC Fall 1995; (b) had a general studies major, with an advising and counseling staff member as their advisor of record; and (c) were enrolled in a college success class (HD 100) during Fall term 1995. These students were considered to be at risk of dropping out since they had not declared a specific major. Rice (1983), Bean (1986), and others have found that students with undecided majors are more likely to drop out than students with decided majors. Of the 66 students who participated, only 43 were first-time-in-college students. Because this intervention was new to MHCC, a thorough assessment process was built into the initial phase of the program. Each of nine advising and counseling staff members involved in this

intervention were expected to contact their list of approximately 10 students on three occasions during each of three academic terms. The purpose of this intervention was to see if providing general studies students with intensive advising would improve their retention.

This group of students were considered at high risk of dropping out since they had not declared a specific major. Studies that have explored the relationship between student degree-level goal and persistence have generally shown that the higher the goal, the greater the likelihood of continued persistence (Ramist, 1981). Undecided and general studies majors are viewed in the literature to be low level goals. The literature on attrition consistently documents that post-secondary students who have not made a commitment to a career plan or major are significantly more likely to drop out than those who have a career commitment (Rice, 1983; Bean, 1986).

Ongoing data were collected through the academic year 1995-96 for assessment purposes. First, contact logs were maintained by advising and counseling staff each time they made contact with their assigned students. These logs were used to determine the number of contacts staff made with the students and the topics discussed. Second, the MHCC computer services staff provided demographic and academic performance data on all credit hour students who enrolled Fall term 1995. These data were supplied at the end of each of the 1995-96 academic year terms. Third, advising and counseling staff evaluated the project during focus group sessions in May of 1996. Fourth, RMC Research Corporation (1996a, 1996b, 1996c) staff telephoned each of the Intensive Academic Advising students at the end of Spring term to obtain student input on the intensive advising project.

The sample of first-time-in-college (FTIC) students were divided into four groups. The first group was made up of the 43 students in the IAA pilot study. The second group

consisted of 126 students who were not in the IAA study but who were general studies majors and had taken the HD 100 class. The third group of 1,560 students were general studies majors who had not taken the HD 100 class. The fourth group of 2,068 were all other first-time-in-college students. The purpose of the study was to analyze these four groups. For the analysis of the hours attempted, hours earned, and GPA, only those students who had attempted a least one hour were included. This excluded students who had a zero GPA (because they were taking guided studies or other pass/fail courses).

In general, results indicated IAA students were similar to other FTIC general studies students who had taken the HD 100 class, but were not similar to general studies students who had not taken HD 100, nor were they similar to other FTIC students who were not general studies majors. It was the similarities and differences between these first two groups that was of greatest interest. This was consistent with the intent of the study, in that the comparisons between these two groups highlights the differences which may be attributed to the IAA.

The demographic characteristics of the four groups showed that like other MHCC students, IAA students were generally white (88%). However, IAA students were much more likely to be female (72%) than MHCC students in general. The IAA students were also much more likely to be in the 18 to 22 year age range (91%) than MHCC students in general, but this percentage was essentially the same as that for the comparison group of general studies students who had taken the HD 100 class.

IAA students were intent on earning their certificate or 2-year degree at a higher rate (77%) than students in the other three groups. A similar pattern was seen in terms of students' general intent (61% of the IAA students intended to transfer to a 4-year college or university). Two-thirds of the students in the IAA group were enrolled on a part-time basis.

This was a somewhat higher percentage than other general studies students who had taken HD 100, but a lower percentage than other general studies students who had not taken the HD 100 class (as well as other students who were not general studies majors). Also, more than three-quarters of the students in each group were employed. Just over half of the students in the IAA group were employed on a part-time basis as compared to 67% of the general studies students who had taken HD 100, 47% of the general studies students who had not taken HD 100, and 38% of the students who were not general studies majors. Students in the latter two groups were more likely than IAA and HD 100 students to be employed full-time.

Of those students who were in the IAA group, 26% had a guided studies code indicating that their placement test scores required them to enroll in developmental education in at least one subject area. This percentage was somewhat higher than other general studies/HD 100 and those students who were not general studies majors. In other words, students in the IAA group were less academically prepared for college than students in the other three groups.

Analysis of entry-level test score results, credit hours attempted, credit hours earned, and GPA demonstrated that while there were some differences between all groups, they were not significant between the two groups of greatest interest (the IAA students and other general studies students who had taken HD 100). General studies students who had taken HD 100 attempted and earned more credit hours during Fall term than general studies students who had not taken HD 100. The analysis suggested some effects of the HD 100 class, but this difference could have also been due to the differing demographic characteristics that showed more students in the HD 100 group than the non-HD 100 group who where enrolled on a full-time basis and employed on a part-time basis.

Regarding academic outcomes, there were occasional differences among the four study groups. However, there were no differences between the two groups of primary interest for comparative purposes (between IAA students and other general studies students who had taken HD 100). In Winter term, GPA showed no significant differences between the IAA group and the other three groups. Spring term results showed the IAA performance was not statistically different from students in the other three groups. In terms of cumulative GPA Spring term, there were no significant differences between IAA students and students in the other three groups. When considering cumulative hours attempted and cumulative hours earned, IAA students and general studies students who had taken HD 100 were not different from one another, although the HD 100 students attempted more credits than general studies students who had not taken HD 100 and other FTIC students who were not in general studies.

For Fall term, the number of advising sessions IAA students received was not related to the number of Fall terms hours they attempted (14%) or earned (24%), nor was it related to the GPA they earned for the term (8%). Similarly for Winter term data, the cumulative number of advising sessions (Fall plus Winter) was not correlated with the term GPA (-.003%). For the Spring term data, the cumulative number of advising sessions was also not correlated with the term GPA (-0.7%). All of this was not surprising given the low number of advising sessions students received. However, for Spring term data, the number of advising sessions IAA students received was related to the cumulative number of credit hours attempted (43%) and the cumulative number of hours earned (41%). The number of advising sessions was not correlated with the cumulative GPA (16%).

While not statistically significant, it is of interest that eight IAA students who received no advising sessions had a retention rate from Fall to Winter term of 50%, which

was lower than the rate of 13 students who received one session (85%) or for 22 students who received two or more sessions (82%). This suggests there may be some value to IAA especially if it is more fully implemented with all students receiving maximum advising sessions. The trend seen here, although not statistically significant, is consistent with the findings of Pascarella and Terenzini (1977), and Endo and Harpel (1982) who found increased persistence was positively related to increased advising contacts with faculty-staff advisors.

The purpose of this strategy was to see if providing general studies students with IAA sessions improved their retention in college. Outcomes demonstrated that almost three-quarters of the IAA students were still enrolled as of Spring term 1996. This was somewhat higher than the percentage for other general studies students who had taken the HD 100 class but had not received the IAA (65%). The students in these two groups outperformed the general studies students who had not taken HD 100, as well as students who were not general studies major. MHCC findings are consistent with the work of Pascarella and Terenzini (1991), Rice (1983), Bean (1986), and others who have also reported on the impact of orientation and advising services on student persistence and educational attainment and found that interventions with this group of students does in fact result in positive impacts on persistence.

Evaluation of Advising and Registration Workshops and College Success Class (HD 100)

MHCC has had well established and operationalized advising and registration workshops since 1971, but up until 1995, they had never included an advising video as a part of the process and had never been formally assessed from the perspectives of the students attending and the staff involved. This intervention was designed to both carry out enhancements to the workshops and then to build upon the MHCC ongoing assessment of

all of its intervention processes by thoroughly assessing these workshops and their activities. Assessment was conducted through the use of student evaluation questionnaires, meetings of the advising and counseling staff, focus groups with faculty and staff outside the advising and counseling office, and individual telephone interviews with some staff who could not attend the focus groups. Additionally, the admissions and records office staff was interviewed in a small group meeting to get their input since they actually register the students.

During Fall term 1995, MHCC offered 43 advising and registration workshops. FTIC students enrolling at MHCC were encouraged to sign up for one of these workshops before registering for classes. The 3-hour workshops included: (a) a 20 minute large group presentation; (b) a small-group academic advising session for interpreting placement test scores, developing a class schedule, and discussing the role of the academic advisor; and (c) individual registration time. The large group portion of the workshop was designed for transfer students, disabilities services students, and English as a Second Language (ESL) students, as well as for those students who were staying for the small group sessions. During the large group time, students received the MHCC catalog, the Student Guide, handouts on the steps to the registration process, information on the college's degree programs, and tips for being a successful student.

The advising and registration workshops were attended by 1,410 students, (75% of those that actually signed up to attend, and about 13% of the total Fall term enrollment). At the end of the small group session and before registering for classes, students were asked to complete a brief evaluation form (see Appendix G) which was completed by 824 of the attending students (58% response rate).

As a result of their participation in the advising and registration workshops student evaluations revealed:

- 87% said they understood their college placement test (CGP) scores.
- 75% said they had an understanding of the college success course (HD 100).
- 70% said they knew what types of degrees were available at MHCC.
- 90% said they could use the MHCC catalog to look up course descriptions.
- 89% said they could use the quarterly schedule of classes.
- 70% said they understood the role that their academic advisor plays in their educational goals.
- 88% said that they could fill out a trial schedule.
- 71% said that they understood the registration process.
- 66% rated the advising and registration workshop as extremely helpful in preparing them to begin their MHCC experience.

Students were asked to indicate, on a scale of *Not at all useful* to *Extremely useful* how useful they thought the information in the large group presentation was. One out of five students rated this information as not very useful, half the students rated the information as somewhat useful, and 25% rated the information as extremely useful. Seventy-five percent said information in the small-group presentations was extremely useful.

Students were also provided an opportunity to express what they thought was good about the workshop in narrative form. A total of 431 students made written comments. The majority (55%) of these comments were that students found the workshop to be informative and helpful. The next most common response (21%) to this question was that students thought the one-on-one advising sessions were a good part of the workshop. The remainder

of the comments were generally positive about the workshop itself, the friendly staff and atmosphere, the increased level of confidence students had as a result of the workshop, and that specific questions students had were answered during the workshop.

Students were also provided with an opportunity to say what they thought could be better about the workshop. A total of 267 students made comments about how the workshop could be improved. The most common comment (33%) was "nothing." Twenty-three percent said that the workshop could be improved by having more individual attention and smaller groups, and a handful (fewer than 10%) commented that the workshop was too long, that they did not like the large group presentation, or that the workshop did not cover information of specific interest to them.

During Winter and Spring terms of 1996 MHCC offered 16 and 12 advising and registration workshops, respectively, with 132 and 117 students attending. Of these, 92 Winter term students and 58 Spring term students completed the evaluation forms. Very similar results to those reported for Fall term were found in both of these following terms.

Faculty and staff who participated in the advising and registrations workshops were also asked to evaluate the sessions. These evaluations were gathered through meetings of the advising and counseling staff, focus groups with faculty and staff outside the advising and counseling department, and individual telephone interviews with some staff who could not attend the focus groups. In addition, a small group of staff from the admissions and records office were interviewed since this office is responsible for completing the actual student registration process.

Faculty and staff cited several strengths of the workshops. The primary strength they saw was the opportunity for one-on-one interactions with students in the small group. Advising and counseling staff also noted that the color-coded brochures and calendars

worked well, the evening workshops were a good idea, and the small groups seemed more consistently grouped by guided studies codes and academic goals.

With a few notable exceptions (e.g., Banzinger, 1986; Wilkie & Kuckuck, 1989), the most consistently effective orientation program format to positively impact retention appears to be a first-term or first-semester seminar that meets as a regular class with an assigned instructor (Bean & Metzner, 1985; Cartledge & Walls, 1986; Fidler & Hunter, 1989; Jones, 1984; Pascarella & Terenzini, 1991; Stupka, 1986). MHCC had had just such a class since the late 1970s and wanted to assess its value to students coming to MHCC to determine its effectiveness in meeting student needs.

During Fall term 1995, MHCC offered 22 sections of the college success class (HD 100). This class as described in the MHCC catalog (MHCC, 1996-97) is:

> Designed for new students to enhance student success by developing self-understanding and identity with the college community. Course topics include college services, policies and procedures, goal setting, time management, short-term and long-range educational planning, and student responsibility for his/her success. (p. 181)

The HD 100 class is designed as a student-centered/oriented experience, and information is communicated by engaging in various outcome oriented activities and visits to various campus locations, as well as through formal lecture materials. The class is offered in several different formats (e.g., class sessions may take place on 2 consecutive Saturdays, or 2 consecutive weekdays, or each day for 2 weeks, or 3 days per week for a month). Additionally, and by design, certain sections are intended for similar groups of students such as guided studies students, international students, students receiving financial aid, and student athletes. Most typically, however, the groups tend to be mixed. Each class is for one credit and meets a total of 10 clock hours. Students have the option of taking the class as pass/fail or for a letter grade.

At the completion of the class, students were asked to complete an evaluation of the class (see Appendix H). This evaluation provided the students an opportunity to indicate how helpful the course was to them in a variety of areas, identify areas and topics they found least helpful, and suggest ways to improve the class. Additionally, they were asked if they would recommend the class to a friend. This study represents the results of 273 students who completed an evaluation Fall term 1995. This sample represents 60-70% of the students that were enrolled in the HD 100 classes (the other 30-40% chose to not complete an evaluation).

Students reported on 18 questionnaire topics as to whether they were *very helpful* or *somewhat helpful*. The informational topics reported by students as most helpful were:

- Goal setting (84%).
- Time management (85%).
- Locating support services on campus (82%).
- Completing the IEP sheet (82%).
- Computing their GPA (80%).
- College expectations and how college differs from high school (73%).
- College policies and procedures (75%).
- Completing term and weekly schedules (79%).
- Standards of academic progress (74%).
- Solving problems which interfere with college success (71%).

The informational topics students reported least helpful included:

- Living on one's own (30%).
- Money management (30%).
- Diversity issues and discussion (38%).

These latter topics were optional and were not covered at all sessions nor to the same extent or degree across all classes. Both core and optional topics are not always emphasized in the same manner in all classes. The *personality* of the class often determines at least some of the directions and emphasis of the class. Overall evaluations would indicate that the course is a success. Nearly 75% of the students reported that they would either *strongly recommend* or *recommend* the class to a friend. For the purposes of this assessment, *recommend to a friend* was seen as a strong positive indicator the class was meeting the needs of students. Only 1 out of 20 students stated that they would not recommend the class to a friend.

Attendance in class was rated highly by the students themselves with 88% saying their attendance was *excellent* or *above average*. Participation was rated at 63% and completion of assignments at 76%.

Since the class was offered in different formats, an additional analysis was done to see if students who experienced different formats responded differently to the evaluation questions. Statistical results were not compiled for this question as sample sizes were very small and this made the results suspect. For example, only 23 students who took the course in the *1 week* format completed the evaluation forms.

Faculty who taught HD 100 classes during Fall term were also invited to participate in one of three evaluation focus groups conducted by RMC Research Corporation (1996a, 1996b, 1996c). Ten faculty outside of advising and counseling and seven staff within advising and counseling participated. Each group was asked a series of questions concerning the strengths and weakness of HD 100 along with their suggestions for improvements to the course. Strengths cited by faculty were:

- Completion of the IEP.

- Tour of the campus (only for classes held before the term started or early in the term).
- Time management.
- Success strategies (attendance, note-taking, scheduling, taking responsibility).
- Financial aid and scholarships.
- Resources for tutoring.
- Other campus resources and services.
- Student rights, responsibilities, and problem resolution.
- Building relationships.

The class segment on career exploration was also viewed as a strength, but it received mixed support from the faculty. Some found it useful while others noted that many students had already completed the self-directed search (a personal computer-based career search tool available in the advising and counseling, and career planning and placement offices) and found that staff did not have adequate training to interpret results and answer questions relevant to this assessment instrument. Some faculty suggested replacing the career topic with a learning styles topic. The grading system was also controversial with some staff feeling letter grades resulted in better attendance and, therefore, should be the only option, while others thought the pass/fail system was more appropriate.

Overall, the HD 100 class seemed to be well received. Students found many topics covered in the course to be valuable to them especially those related to personal performance and MHCC procedures. Faculty and staff also felt that an analysis of the results will help MHCC refine the class to better meet the interests, needs, and goals of students.

The highly positive evaluation that MHCC received on the orientation classes and student experiences is consistent with the many positive research studies that support these types of experiences. Blum and Spangehl (1982) suggest that all college students, and high-risk students especially, need a support system to help them persist until graduation or goal attainment. Among factors that affect student persistence in college, Astin (1975b) says that none is more important than the student's level of involvement in the total academic and student development environment. Specifically, a student must have interactions with faculty, staff, and other students if the student is to develop a sense of fit and remain in college (Tinto, 1987). Providing this support system, opportunity for interaction, and encouragement to get involved in their own education is what the design of the MHCC college success class is all about.

Research has also shown that students completing an orientation course have lower attrition rates and higher GPAs than those who do not take such a course (Cartledge & Walls, 1986; Cohen & Jody, 1978; Gardner, 1986; Shanley, 1987; Stupka, 1986; Upcraft & Gardner; 1989, Wullner, 1989). The high quality information produced and used at MHCC found results consistent with the research literature. In the IAA intervention of general studies students, the sample of students in the pilot study included those taking and those not taking the college success class (HD 100). Superior retention of 75.4% at the end of Spring term was found for the general studies students that were taking HD 100. For those not taking the course, the retention rate was 62.1%. In this study, the differences in retention of the IAA students could not be unequivocally linked to the increased assistance the IAA students received from the college because the intervention was not totally implemented. However, according to placement test scores, this group of IAA students (those taking HD 100) were also less well-prepared academically for college work than

students in the other three groups. Since students were not randomly assigned to each of the four groups in the study, differences among the groups could be attributed to differences in background factors of the participants or to the choice to take HD 100. Regarding academic outcomes, the data MHCC collected for the IAA study showed that in terms of their cumulative GPA (Spring term), there were no significant differences between IAA students and students taking or not taking the HD 100 class. In all cases, the cumulative GPA was 2.20 or higher. The fact that the students taking HD 100 persisted to a high degree and achieved a GPA greater than 2.00 demonstrated student success by MHCC's definition (see definitions in Chapter I).

A 4-year study of 44 public and private colleges and universities conducted by the ACT National Center for the Advancement of Educational Practices recommended that an orientation course for new students was one of the six best strategies to ensure student success (Forest, 1982). Titley (1985) went so far as to say that an orientation course is the single most effective intervention technique available to colleges for enhancing freshman success. MHCC's experiences with the HD 100 class are consistent with these research findings. Retention rates are higher for students taking the course. Self-reported satisfaction with the course, and evaluations reveal that nearly 75% of those that attend would *strongly recommend* or *recommend* the class to a friend. Only about 1 out of 20 students state that they would not recommend the class to a friend. Additionally, information reported earlier in this chapter regarding student satisfaction with the HD 100 course indicates that the course is well received and students find many of the topics covered in the class to be valuable to them. MHCC continues to review evaluation results and uses that data to refine the class to more closely meet the interests and needs of students.

CHAPTER V

DISCUSSION AND RECOMMENDATIONS

The purpose of this study was to describe and analyze the experiences of Mt. Hood Community College (MHCC) as it implemented four interventions over a 16-year period from 1980 to 1996. The results of the analysis pointed to three insights that may be helpful to community colleges interested in retention intervention. The three insights related to retention intervention are that it needs to: (a) be holistic; (b) use high quality information; and (c) track the points of student economic impacts.

Intervention Needs to Be Holistic

In this sense, holistic means intervention needs to be a vital part of the learning process by providing access and a system of support in the development of the *whole* person. Both the instructional and student development staffs plus the administrative units that affect students need to be composed of individuals working as an interactive and highly functional team. The purpose of this team is to:

- Ensure access to education for students and the community.
- Support and be a vital part of the learning process.
- Be the *Gate Keepers* for students coming into the college.
- Educate the heart and soul (body not separate) — whole person development.
- Be an *invisible* system — no barriers to students.
- Promote a conscious link to the community.

In their pursuit of retention, community colleges have two primary goals: quality education and student development. The attainment of these two goals depends mainly on

two components being addressed in the teaching and learning process: cognitive and affective student development through a holistic process. The general theoretical advice that retention efforts be holistic with broad campus involvement of both a cognitive and affective nature is supported by numerous researchers (Aitken, 1982; Astin, 1975b; Bean, 1980; Spady, 1970; Tinto, 1975; Tinto, Love, & Russo, 1996). Faculty need to utilize a variety of active modes of teaching; colleges need to offer a systematic program of guidance and advising from initial entrance to college through graduation, and both academic and student services need to provide adequate fiscal support, space, and the recognition to existing co-curricular programs and activities. According to Stodt (1987), research studies of student retention show that the pursuit of the goals of retention, quality education, and student development reveal that factors that encourage persistence in college also increase the benefits of a college education, and these conditions also foster student development. Noel (1978) stressed the holistic approach when he noted, "to be effective a genuine concern about student retention and commitment to develop and implement retention strategies must be visible at all levels of the institution" (p. 87).

At MHCC, the holistic approach is evidenced from the beginning of its interventions efforts with the Student Success Task Force which was established by the president of the college on December 11, 1980. The membership of the task force was composed of 54 persons with representation from management, faculty, classified, and students, representing both academic and non-academic areas of campus. Also supporting a holistic approach within the task force was the establishment of three subcommittees in the areas of retention, learning styles, and orientation and advising. Each of these subcommittees also had representation from faculty, administration, support staff, and students. The task force workings have had a sustaining impact on retention at MHCC over

the years, with most of the initiatives that were started by the task force still being in place in one form or another, and with most of the interventions that have followed the task force, being spin-offs of initiatives started in the early 1980s. Examples are the guided studies program, the college success class (HD 100), satisfactory academic progress standards, and an academic advising program. All of these intervention outcomes were grounded in the work of the task force. The insistence on students beginning college with a quality educational experience in guided studies is a strong example of how the academic and non-academic sides of the campus came together. This intervention was designed to restrict student course enrollment until academic deficiencies could be erased through successful completion of courses in developmental education.

In the Fall of 1980, after the task force was established, a college-wide campus forum that invited all staff and board members was held to initiate a renewed campus focus on student success. Also during the first organizational year of the task force, MHCC hosted a conference on at-risk students. This conference provided a forum to begin the sharing and gathering of ideas regarding retention and to promote student success among Oregon's community colleges. In addition to reaching out beyond its own walls, this conference demonstrated to MHCC staff and students the college's commitment to student success, and its willingness to be all inclusive in its retention planning.

The emphasis on a holistic approach to retention was again seen at MHCC with the intervention of Intensive Academic Advising (IAA) of general studies students. Planning for this intervention came about through the cooperative efforts of both the academic and student development areas of the campus, along with extensive interaction with the college research office that supplied student demographic data. This intervention tested the impact of student success and retention related to IAA sessions given by academic advisors and

faculty. The importance of these types of holistic approaches are stressed by Terenzini and Pascarella (1980), and again buy Endo and Harpel (1982) who stated that, "our study confirmed the general thrust of Terenzini and Pascarella's (1980) work, which showed that the frequency and quality of student-faculty interaction has a positive impact on personal, intellectual, and academic outcomes" (p. 132).

The holistic approach was again demonstrated at MHCC with the college's intervention that centered on the evaluation of advising and registration workshops and the HD 100 class. The holistic aspects in this intervention involved first of all the workshop and course content being diverse and inclusive of what the college experience would entail and the instruction itself being offered by both academic and non-academic staff. Further, the holistic approach was shown through the use of student evaluation questionnaires, meetings of advising and counseling staff, focus groups with faculty and staff outside the advising and counseling office, and also interviews and input from classified support staff that are greatly involved in both the advising and registration processes. MHCC's holistic emphasis and its emphasis within one intervention centering on a term-long class directed at orientation to college is very important. With few exceptions, the most consistently effective orientation program format to positively impact retention appears to be a first-term or first-semester orientation class, or seminar that meets as a regular class with an assigned instructor (Bean & Metzner, 1985; Cartledge & Walls, 1986; Fidler & Hunter, 1989; Pascarella & Terenzini, 1991). HD 100 is just such a class.

In each of the four MHCC interventions studied, the college involved student, instructional, and administrative services, and recognized the central roles that other people play in a student's life. The MHCC holistic approach to retention planning and implementation added to the character of the learning environments college staff created

and the nature and the strength of the stimulation their interactions provided for learning and change of all kinds. As evidenced especially in the guided studies, IAA of general studies students, and the advising and registration workshops, MHCC demonstrated the potency of students' efforts and involvement in the academic and non-academic systems of the college. The greater the effort, personal investment, and commitment to succeed a student makes, the greater the likelihood of educational and personal returns on that investment across the spectrum of their college experiences.

Dealing with students holistically extends to being more inclusive with interventions at all levels of enrollment. The interventions studied at MHCC as well as those reviewed in the literature suggest that intervention can be successful whether students are full or part-time. In fact, this study found students shared similar kinds of needs in their quests to fulfill educational goals. The challenge most evident for MHCC was the need for the college to implement interventions for all students, whether they were enrolled full or part-time and regardless of their enrolling in the day, evening, or weekend courses. Lacking any specific data that would document differing student needs and the need for additional or different interventions, MHCC must assume the factors that effect student persistence are similar across the enrollment perspective. When one views the factors that positively impact person-environmental fit and social integration into the college environment, there does not appear to be a difference in terms of the factors that impact persistence based on the data currently at MHCC and within the literature. If MHCC were to look carefully at its part-time students, it might learn new things about student persistence and discover intervention insights that would increase both the enrollment and retention of this group of students.

To fill a gap that appears in holistically nurturing student needs, the following recommendations are offered:

Mentoring program. It is recommended that a mentoring program for students be developed. The literature most strongly supports faculty and staff mentoring as positively impacting persistence (Dunphy, Miller, Woodruff, & Nelson, 1987; Luna & Cullen, 1995) versus peer mentoring, but both types of programs have been shown to increase persistence. Chickering and Hannah (1969) discovered there was minimal interaction with institutional personnel during the entire withdrawal process. Instead, peers and parents were reported to be the withdrawing students' confidants. This type of intervention is especially successful the first year of a student's enrollment and often makes the difference to succeeding the first term when so many students wash out of college.

Faculty-student-staff relationships outside the classroom. It is recommended that interventions be implemented to strengthen faculty-student-staff relationships outside the classroom to increase the sense of connectedness that students feel toward the campus. An intervention such as integrated studies, most commonly called learning communities in the literature, is an example of this type of intervention. Mentoring programs are another example. The current works of Tinto, Love, and Russo (1996), and Spence and Campbell (1996) are valuable resources for the learning communities intervention. Sources for mentoring programs include Luna and Cullen (1995), and Dunphy et al. (1987).

Intervention Needs to Use High Quality Information

In this sense, high quality information refers to having effective data gathering systems that provide accurate, easily accessible information to support the decision-making processes. Additionally, it refers to having communication systems that ensure a timely, effective, efficient, and consistent information flow among all budget units.

Community colleges do not routinely have research departments, although the need for developing information systems and a thorough student tracking system is well documented and supported in the literature (Dietsche, 1995; Lolli, 1991; Palmer, 1987; Stodt, 1987). Dietsche (1995) stated, "Student-oriented data gathering by means of an integrated program of institutional research can serve as the foundation for improved retention and success" (p. 431).

MHCC began its commitment to information systems early in its retention planning when in December of 1981 it was announced by the vice president of administration that MHCC had received a grant through the National Center on Higher Education Management Systems and the Kellogg Foundation (NCHEMS). The purpose of this grant was to focus on student follow-up data and the decision-making processes related to that data. The primary outcome of this grant was that in the Fall term of 1983, for the first time, MHCC admissions and records office began soliciting educational intent data on all enrolling students, a process that is updated quarterly. Using the data collected, the MHCC research office developed student intent reports and distributed them to deans, middle managers, program heads, and faculty. The reports contained statistical data summarizing the intent questions asked of all students. These data enable faculty members to tailor their classes to the students' unique needs and interests because the data told the faculty what the students' education intent was for being at MHCC. It also allowed faculty and managers to review and analyze their own discrete programs, courses, and student profiles, versus merely getting a broad overview of all instructional areas.

The use of community college research both local and national helped MHCC into and through its change process. In seeking to create changes in attrition, Miami-Dade's experiences were followed closely and the California Longitudinal Study (Sheldon, 1981)

provided preliminary data for planning during the early years of the Student Success Task Force. The college's participation in the Kellogg/NCHEMS project provided planning resources and assistance, and the MHCC research department's studies of the impact of policies of various guided studies on students provided the college and its staff the information and courage to act and be willing to risk change.

Commitment to using quality data in its decision-making process was again evident at MHCC when in January of 1982 the college had growing concerns about the academically under-prepared student. A Special Students Task Force was established to oversee a study of the developmental education division at the college. What became evident very quickly was that the concerns were mostly anecdotal on the part of MHCC staff, and empirical data were lacking on which to base any decision-making. To address this lack of information and to develop an empirical data base, the MHCC research department conducted a transcript analysis as a part of the overall evaluation of the developmental education division. This was done to determine if students were following the advice of their counselor or advisor. That was whether the remediation based on placement test scores was being successful for those following the advice of the placement recommendations, and to determine the degree to which students were successful in subsequent college level classes. The findings of this study suggested to the special students committee that a review of the policies in the developmental education division was needed especially in terms of standards of student progress. The findings also suggested that it might be helpful for the students who tested into remedial courses to enroll in a study skills course. Based on all these findings, the committee worked with faculty and staff in the developmental education division, advising and counseling, admissions and records, and other relevant academic divisions to develop a plan and program that would identify

students with scholastic deficiencies and intervene in their educational programming up-front, at the time placement testing occurred, before the failures begin to happen.

The importance of early information systems at MHCC was captured in a concluding report, when the Student Success Task Force disbanded in March of 1983. All three of the task force subcommittee stated that their efforts had been worthwhile and that the across-campus dialogue, information systems, and communication were the key factors in putting ideas in place and to raising ongoing issues and concerns to a level that got staff involvement and the needed actions.

The recommendations that came out of the information gathered through the evaluation of the developmental education division led to the development of the guided studies program at MHCC in the Fall of 1984. Although placement testing had occurred prior to Fall 1984, there was no formal effort made to restrict student course enrollment choices. The student tracking system in place at MHCC allows the guided studies students to be tracked and facilitates appropriate changes to information systems and adjustments to student educational plans.

The MHCC guided studies program is successful and research results from follow-up studies have found increased persistence of students who have completed the program. In 1987, 3 years after the program was started, a more definitive description of the institutional factors that contributed to student success or failure was needed to provide guidelines for future decision-making regarding utilization of the guided studies program as an effective intervention strategy. To address this issue, the MHCC research department conducted a study on social and academic integration of its guided studies students. This study is reported in Chapter IV. It provided the college with valuable data regarding success and failure of identified high-risk students from an attitudinal and behavioral view

based on the perceptions of students several years after their classroom guided studies experiences. The study provided data on which to base changes in the intervention, and it provided insights and stimulation for further analysis.

At the root of the MHCC interventions funded through the Title III grant were strong assessment processes which were built into all phases of each intervention. These interventions are discussed in Chapter IV. The purpose of the IAA for general studies students was to see if providing them with IAA improved their retention in college. Because of the positive impacts on persistence and the evaluation results reported by this intervention in its initial implementation, MHCC continues to pursue this intervention as an active retention strategy. This is also true of the orientation class and seminar represented in the evaluation of advising and registration workshops, and the HD 100 class. At the completion of these seminars and classes, students were asked to complete an evaluation of the class. Information and data were also collected from faculty who taught the seminars and classes, and from support staff who were involved in the various activities.

The highly positive evaluation that MHCC received on its orientation classes and student experiences feeds right into the many positive research studies that support these types of interventions. Blum and Spangehl (1982) suggest that all college students, and high-risk students especially, need a support system to help them persist until graduation or goal attainment. The research data both at MHCC and the in literature has shown that students completing an orientation course have lower attrition rates and higher GPAs than those who do not take such a course (Cartledge & Walls, 1986; Cohen & Jody, 1978; Stupka, 1986; Upcraft & Gardner, 1989; Wullner, 1989). It is because of the knowledge of the overall community college attrition rate and MHCC's own research on attrition that

showed higher persistence with those taking the college success class that extensive efforts continue to be put into an orientation course.

MHCC has collected very little data on its less than full-time students and it tends to focus its within-college research (while the student is enrolled) efforts and its after-college research (when the student has left the college) predominantly on the full-time student who comprises only 19% of their enrollment (Mt. Hood Community College, 1993-1996). When attrition data are reviewed, it is the less than full-time student that accounts for the highest degree of attrition. More high quality information is needed as to why the less than full-time students are withdrawing or leaving the college so that specific intervention can be targeted to that group of students to better help them meet their goals. At minimum, MHCC needs data on its part-time students to determine if their leaving is a true attrition problem for the college. MHCC has insufficient evidence to support or deny that full and part-time student needs are different. Identifying why these students are leaving MHCC and tying these reasons to what the student needs to stay in school, from the perspective of the student, is the first step to providing successful intervention for this target group of students. At present, MHCC should sample equally all enrollment groups including those taking non-credit courses.

To fill an information gap that appears in the student data base at MHCC the following recommendations are offered:

Less than full-time students. It is recommended that more research be conducted on the less than full-time student and a plan developed to assess and follow-up with part-time students. This stronger emphasis to include part-time students in assessment processes is a paradigm shift in thinking and process from current practices. This change is needed as part-time students comprise in excess of 75% of most community college enrollment. For

example, part-time students comprised 81% of the MHCC enrollment for Fall term 1996 (Mt. Hood Community College, 1993-1996). Information at MHCC and from the literature review of retention indicates that community colleges know very little about their less than full-time students. Attention needs to be paid to student satisfaction surveying, placement testing, and determining other needs of the less than full-time students. Attention also needs to be paid to those students who enroll in non-credit classes, typically represented by the personal enrichment courses. These students categorically represent a large overall opportunity for increased enrollment and retention intervention success.

Develop a formal withdrawal policy and process. It is recommended that a formal withdrawal process be developed to collect and use both quantitative and qualitative information on why students are leaving college. Colleges need to know why full-time and part-time students are dropping out of college in order to be able to effectively and efficiently develop interventions to address this problem. This process needs to include all students, not just the full-time students which is the most familiar paradigm. It is recommended that within this process be built a personal telephone call to the withdrawing student from a staff member within 1 to 2 weeks of the student's formal withdrawal, to discuss the withdrawal and to inquire how the college might be of assistance to get the student re-enrolled. It is further recommended that contacts be made with those who withdraw informally (dropout). Colleges might also consider the use of letters or postcard mailings on a weekly basis having identified who is dropping out or not attending classes. This process will take the cooperation of all staff (especially faculty) who will need to report nonattendance.

Additional student intentions data. It is recommended that MHCC devise some way to collect data to address another intent question. The question needing to be asked is:

Based on the goal you have indicated, do you intend to complete this goal with consecutive terms of enrollment, without a break and without transferring to another college? This type of data would help MHCC determine the true attrition and better identify an account for the stopout student. The data would assist in determining if attrition at MHCC is positive, negative, or neutral.

Intervention Needs to Track the Points of Student Economic Impacts

Included in the many facets of retention planning must be the consideration of its economic impacts. This is not a new concept, but it is one often ignored. Astin (1975a) identified this factor when he stated that along with a limited number of students there is a shortage of resources, which makes cost a primary determinant of education. Despite enrollment pressures within the community college, there is little evidence that most campuses have marshaled any type of concerted, campus-wide enrollment management system or plan. While the MHCC Strategic Plan addresses fiscal concerns, deliberate planning to assess economic impacts of retention are addressed in global terms, which appear to be limited to staff opinions and anecdotal observations. Most of the action is limited to fine-tuning the admissions office and the advising and counseling services as they relate to enrolling first-time students.

As MHCC moved into the 1980s and beyond, the lack of funds available to continue the philosophy of *build it and they will come* changed the expectations of college leadership to a focus on prevention of losing the enrolled students and, more importantly, a new philosophy began to emerge that was captured by Engleberg (1981) when he wrote that, "a realistic process for structuring retention efforts must fit the mission and the resources of the college" (p. 31). The recognition at MHCC that students were dropping

out in larger numbers and that something needed to be done first occurred in October of 1980 when the vice-president of administration at MHCC convened what was called a Coordinating Council on Student Success to begin addressing attrition at the campus. It was this committee that in December of 1980 recommended to the college president that a Student Success Task Force be established. In addition to simply recommending to the president that a task force be established, the coordinating council recommended the three specific areas that the task force would center on: retention, advising, and orientation and learning styles.

Beginning about 1980, MHCC statistics were showing a decline in students (Kreider, 1991, p. 6), and this decline coincided in part with deliberate budgetary cutbacks. The tie of student enrollment and retention to the fiscal health of the college and the decision to deliberately begin to address what this was all about led the MHCC president to establish the Student Success Task Force (Nicholson, 1980). In establishing this task force the president stated, "We believe this may be one of the most significant activities the college will initiate during the 1980-81 academic year" (Nicholson, 1980, p. 1). The driving force to create this task force was a decline in both student success with the currently enrolling students and the fiscal decline of the college due to lower enrollments and dropouts. This attitude of the MHCC president and staff regarding retention and student success interventions since 1980 has persisted. MHCC continues to evolve in its attempts to address retention as it impacts the fiscal health of the college. Evidence of this, in addition to ongoing retention interventions, is seen in its budgeting that assumes a 1% increase in enrollment per year and a strategic plan that includes enrollment and retention goals and activities for every budget unit. This is also evidenced in the last 3 years when renewed campus efforts through the Title III grant interventions have been used to focus

and evaluate MHCC interventions in order to strengthen enrollment and retention, and to use the outcome information to make these programs more cost-effective and efficient while at the same time enhancing their content to better meet customer needs.

Attrition has two negative financial consequences for an institution, students, and society: direct loss in revenue and recruitment and image costs.

Direct Loss in Revenue

Whether the money is generated from tuition or subsidized by public agencies, a drop in enrollment because of attrition causes a loss in operating revenue. According to Baldridge (1982), "college finances are almost always enrollment driven" (p. 37). In both the public and the private sectors of higher education, attrition means the institution loses a substantial part of the money that accompanies each student. The research of Baldridge and Others (1982) found that more than two-thirds of a student's tuition or subsidy is lost when a student leaves.

Dropouts also hurt auxiliary revenue as well, such as food services, the bookstore, and residence halls. With the decline in auxiliary income, the service itself suffers if replacements for the leaving students are not found. This erosion in the quality of the service, whatever it may be due to, further discourages the use of these facilities, which in turn can cause even further loss of revenue. The dropping out of an enrolled student can and often does create a vicious cycle according to Mingle and Norris (1981): dropouts, lower revenue, poorer services, more dropouts.

Within this complex environment of increasing and changing demands, severely constrained resources, and new and more rigid demands for accountability and higher expectations, there is a requirement for state as well as local college policymakers to rethink their approaches to funding education. MHCC is addressing these renewed fiscal

pressures through its continued retention efforts carried forward from the 1980s, but more recently through its Title III grant interventions that are specifically designed activities to impact retention. Within these interventions the college is examining and reassessing its campus-wide enrollment and retention practices, policies, and procedures. MHCC is attempting to remodel its processes to fit a new way of doing business that Senge (1990) identifies as being a process that requires institutions to look again at their mission and make a few carefully planned and calculated choices among their mission goals to determine what they will and will not do. Fiscal constraints no longer allow MHCC to attempt to be all things to all people.

At MHCC there is an ever increasing emphasis on being able to establish direct ties between fiscal concerns, enrollment and retention activities. To address this issue, MHCC has recently reviewed its mission and goals, establishing a revised mission and goals and establishing, for the first time, institutional values. MHCC has also modified the strategic planning process and the divisional program/function review process to more closely determine cost and benefit analysis relationships. The college has also developed a college-wide Enrollment Systems Plan (ESP) and extended its program evaluation processes utilizing Title III funding.

To make the necessary changes to more focus on the economic issues surrounding retention, colleges must examine their economic policies related to how they enroll and retain students. Economic policy options that colleges must considered seem to be of three generic types. The first option is by reducing demand or limiting capacity. The possibilities seen are to reduce the number of students supported by state subsidy or reduce the level of state subsidy provided (per student) to a constant, or increasing the number of students. The MHCC president continues to participate in state-wide debates to establish an equitable

funding formula for Oregon community colleges. A second approach to limiting, focusing, or redirecting demand is through tuition and financial aid policies, by approaches such as having high tuition-high aid approaches. MHCC has historically chosen to not focus on financial aid as a retention variable. Recently, however, in early 1997 steps have been taken to change this obvious oversight. The clearest and most obvious change is that a new concept has been introduced to MHCC and that is one of an enrollment services model. In an administrative reorganization, financial aid, admissions and records, and student recruiting/marketing have been put under the same management area. This new collaborative working relationship is beginning to evolve into a much stronger enrollment management unit with this change in leadership focus. Among other positive strengths, this change will allow MHCC to more centrally budget for student enrollment, recruiting/ marketing and some retention activities, so the college can begin to get a clearer picture of the real costs and benefits associated with these college functions. Yet another alternative is to link aid policy to student performance expectations. MHCC did address this issue when it instituted satisfactory academic progress standards as an outcome of the Student Success Task Force and the guided studies interventions in 1983-84.

Another way to accommodate increase in demand is to limit the impact that each student places on the system in which he/she is enrolled. Possibilities to do this include reducing the number of credit hours required for the degree and taking steps that allow students to come to college having already accumulated college credits. This latter approach encourages an increase in the types of programs MHCC has in place. These are programs within high schools where college credits are earned through programs such as "2+2 Tech Prep" and other early collegiate opportunity programs. MHCC also provides non-traditional credit through the College Level Entrance Examination Program (CLEP),

course challenges, and Advanced Placement Program (APP) and Experienced-Based Credit (EBC) programs. A maximum of 45 non-traditional credits can be applied toward an MHCC degree.

A second economic policy option is by increasing capacity. This solution is very resource-intensive and requires considerable capital investment in addition to ongoing operational expenditures.

A third policy option, is to create efficiencies — do more with less. This alternative seems to be the most popular out of necessity. Suggested alternatives fall into three categories. First, the traditional approaches to tightening things up; second, changing approaches within traditional practices; and third, making fundamental changes. MHCC is addressing all three suggested alternatives and has been since 1980 when the college established the Student Success Task Force to address issues surrounding students who were dropping out. Two fundamental changes evidenced were the establishment of the guided studies intervention, targeted at assuring the success of the academically under-prepared student, and the IAA for general studies students, which was one of the interventions implemented through the Title III grant. Perhaps most significant at MHCC is that the foundation for these and many more fundamental changes was laid in 1980-83 by the Student Success Task Force and the three subcommittees it created in the areas of retention, advising, and orientation and learning styles. The impacts of this task force are reported in Chapter IV.

Recruitment and Image Costs

High attrition has several serious effects on recruitment. First, recruitment expenses are substantially increased, often costing an institution a substantial amount of a new student's first year of tuition when all recruiting costs are figured into the equation.

Secondly, high attrition often forces schools to dip lower into applicant pools. In the community college segment this is seen in limited and restricted entry programs. This at times creates a greater *right to fail* philosophy, that MHCC and most other community colleges abandoned, when students with marginal skills are allowed to enter college level programs they are not prepared to handle. Third, high dropout rates become a public relations and image problem for the college especially within the local high school. Returning adults, too, who oftentimes hesitate to return to school anyway, need the confidence to know that the college they are electing has a strong image and reputation for getting students off to a good start and through their programs.

A final impact worthy of mention is that attrition creates individual consequences. These individual consequences are often at the root of eroded self-esteem that leads to failure. The dropout usually has fewer chances for employment and in many cases is stigmatized by personal failure that seriously erodes self-esteem. The community college is often the last chance opportunity for many students and only through the open access opportunity door that is primary to the community college mission have many students even been able to dream about a possible college or vocational education. Attrition for these students is especially devastating and reflects negatively on the college as failing to meet at least a part of its primary mission. These same students become unhappy or disgruntled alumni that spread negative news about the college. Never mind some of the real reasons for their failure, that might have been such things as poor attendance or failure to follow a prescribed remedial program or lack of involvement in class activities, bad news shared with family and friends can seriously impact college enrollment. Also, in personal terms, high attrition has a negative impact on the morale of students, faculty, staff, and administration. MHCC is mitigating these kinds of concerns through all the interventions

reviewed in this study, especially guided studies, IAA of general studies students, advising and registration workshops, and the college success class (HD 100) which in at least part are designed to get a student properly and positively oriented to the college campus and to get them connected to college staff and services.

Research continues to show that attempts to remedy academic deficiencies and reduce high attrition rates for community college students are among the most complicated, time-consuming, labor-intensive, and costly objectives that higher education and specifically community colleges have undertaken (Cohen & Brawer, 1982). It is because of this finding that MHCC must know what its many services cost to deliver. This is especially important in making tuition, marketing, and recruiting decisions, as it is these areas where attrition costs are felt the hardest. Fiscally, the most costly aspects associated with attrition are loss of direct tuition revenue and the increased costs in recruiting and image building. However, the concerns go beyond these more obvious student contact points. For example, MHCC knows it is more cost-effective to enroll one full-time student and provide full services to that student versus having to enroll four to five students at the part-time level to get the same results (currently the average MHCC less than full-time student enrolls for 1-3 credits per term). In this latter case, the college is providing the same services four to five times for the same FTE revenue. Other services throughout the college experience similar increased demands as more students are served.

Better understanding the needs and costs of all students regardless of whether they are full or part-time would allow MHCC to make better educational and fiscal decisions. It is therefore important that MHCC track the economic impacts of its less than full-time students as well as those attending full-time. Cost-benefit-analysis needs to extend beyond the more global department level. Analysis needs to look at the micro-levels of instruction,

student services, and other administrative services and needs to look at the who, what, when, where, how, and why of each offering. MHCC needs data to justify its offerings and then ascertain the costs associated with these offerings. These data should then be a part of the decision and policy setting processes. Example of areas to look at would be: (a) food services, (b) bookstore; (c) activity and athletic programs; (d) service area hours of operations; (e) recruiting and marketing costs which include a per student recruited cost (tracking recruiting and marketing contacts and comparing the data to the actual enrollment data would begin to give the college actual results of its recruiting and marketing efforts; (f) types of programs and services offered by the college; and (g) services currently being offered for a fee and/or those that could potentially be fee based.

To fill an information gap that appears in addressing the economic impacts of retention the following recommendation are offered:

Tracking student economic impacts. It is important that college research look at and track areas where students interact economically with the college and then use that data for cost-benefit-analysis and decision-making. Examples of this interaction are student transactions in the admissions and registrar office, the financial aid office, the bookstore, residence halls, and food services. Providing educational services both in and outside the classroom is fundamentally a business proposition which must be cost-effective. A classic example of neglect in this area are financial aid offices where poor customer services in the form of providing timely financial aid to students is often the rule. For example, noticeably absent from the MHCC retention interventions was an emphasis on financial aid to address financial barriers that students and families find in their pursuit of post-secondary education. It is recommended that a student economic impact task force be established to study the effects of the above offices/services in the context of enrollment and student

persistence. Data do exist in the literature that suggest strong connections between retention and student economic issues. A number of studies in community colleges have found a positive relationship between student financial difficulties and attrition or between financial aid receipt and retention (Aiken, 1968; Brendel, 1985; Pascarella & Terenzini, 1991; White, 1971). The greatest impact of financial aid appears to come at the point of entry into higher education, and affects the decisions to enter and to attend a particular college rather than to stay once enrolled (Jackson, 1978; Jackson & Weathersby, 1975; Tierney, 1980). What this research suggests, is that financial aid and the type of aid awarded impacts both enrollment and retention.

What the research further suggests is that financial aid processing and awarding practices, policies, and procedures need to be consistent whether students enroll for part-time or full-time. That is, when it comes to financial aid, less than full-time students have the same kinds of needs for timely awarding of financial aid as do the full-time students. MHCC would do well to immediately consider targeting additional scholarships and tuition waivers to the less than full-time students to entice them to enroll, since this type of practice (and type of aid) has been shown in the literature to get students to enroll who might not ordinarily enroll. An example might be to offer every student that completes a GED at MHCC a tuition waiver for one 3-credit class. This would provide an enrollment incentive to the student and then the college would have the opportunity to retain them, advise them, and perhaps convince them to enroll for more credits each term.

REFERENCES

Aiken, J. (1968). *A comparison of junior college withdrawees.* Palatka, FL: St. Johns River Junior College. (ERIC Document Reproduction Service No. ED 023 389)

Aitken, N. (1982). College student performance, satisfaction, and retention. *Journal of Higher Education, 53,* 32-50.

Astin, A. (1970). The methodology of research on college impact (I). *Sociology of Education, 43,* 223-254.

Astin, A. (1971). *Predicting academic performance in college.* New York: Free Press.

Astin, A. (1975a). *Financial aid and student persistence. (HERI Research Report No. 75-2).* Los Angeles: Higher Education Research Institute.

Astin, A. W. (1975b). *Preventing students from dropping out.* San Francisco: Jossey-Bass.

Astin, A. (1977). *Four critical years: Effects of college on beliefs, attitudes, and knowledge.* San Francisco: Jossey-Bass.

Astin, A. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel, 25,* 297-308.

Astin, A. (1985). *Achieving educational excellence: A critical assessment of priorities and practices in higher education.* San Francisco: Jossey-Bass.

Astin, A. W. (1993, September 22). College retention rates are often misleading. *The Chronicle of Higher Education,* p. A48.

Baldridge, J. V. (1982). *Enrollments in the eighties: Factors, actors, and impacts.* Washington, DC: American Association for Higher Education.

Baldridge, J. V., & Others. (1982). The enrollment crisis: Factors, actors, and impacts. Washington, DC: American Association for Higher Education. (ERIC Document Reproduction Service No. ED 222 158)

Banzinger, G. (1986). *Evaluating the freshman seminar course and developing a model of intervention with freshman.* Unpublished manuscript, Marietta College, Marietta, OH.

Beal, P. E. (1979). Student retention: A case study of an action approach. *NASPA Journal, 17*(1), 9-16.

Beal, P., & Noel, L. (1980). *What works in student retention.* Boulder, CO: American College Testing Program (ACT) and National Center for Higher Education Management Systems (NCHEMS).

Bean, J. P. (1980). Dropouts and turnover: The synthesis and test of a causal model of student attrition. *Research in Higher Education, 12,* 155-187.

Bean, J. P. (1983). The application of a model of turnover in work organizations to the student attrition process. *Review of Higher Education, 6,* 129-148.

Bean, J. P. (1986). Assessing and reducing attrition. *New Directions for Higher Education, 53*(14), 47-61.

Bean, J., & Metzner, B. (1985). A conceptual model of non-traditional undergraduates student attrition. *Review of Educational Research, 55,* 485-540.

Bergen, M., & Zielke, D. (1979). Educational progress of basic education opportunity grant recipients compared to non-recipients. *Journal of Student Financial Aid, 9,* 19-22.

Bers, T. H. (1988). Student major choices and community college persistence. *Research in Higher Education, 29*(2), 161-173.

Bers, T. H., & Smith, K. E. (1991). Persistence of community college students: The influence of student intent and academic and social integration. *Research in Higher Education, 32*(5), 539-556.

Birnbaum, R. (1989). *How colleges work: The cybernetics of academic organization and leadership.* San Francisco: Jossey-Bass.

Blum, M. E., & Spangehl, S. D. (1982). *Developing educational programs for the high risk secondary student.* New York: Columbia University.

Bolton, C., & Kammeyer, K. (1967). *The university student: A study of student behavior and values.* New Haven, CT: College and University Press.

Bonham, L. A., & Luckie, J. A. (1993). Taking a break in schooling: Why community college students stop out. *Community College Journal of Research and Practice, 17,* 257-270.

Borg W. R., Gall, J. P., & Gall M. D. (1993). *Applying educational research: A practical guide* (3rd ed). White Plains, NY: Longman Publishing Group.

Brendel, R. G. (1985). A study of the influence of selected institutional and subject variables on the retention of students at Walla Walla College (Doctoral Dissertation, University of Denver, 1985). *Dissertation Abstracts International, 51,* 2236A.

Brint, S., & Karabel, J. (1989). *The diverted dream.* New York: Oxford University Press.

Brooks-Leonard, C. (1991). Demographic and academic factors associated with first-to-second-term retention in a two-year college. *Community/Junior College, 15,* 57-69.

Caple, R. B. (1964). A rationale for the orientation course. *Journal of College Student Personnel, 6,* 42-46.

Cartledge, C. M., & Walls, D. G. (1986). *The freshman experience: Staying alive.* Columbus, GA: Columbus College Department of Educational Foundations.

Celio, M. B., & Sedlacek, W. E. (in press). *Predicting student retention: Counseling Center research report.* College Park: University of Maryland.

Chickering, A. (1969). *Education and identity.* San Francisco: Jossey-Bass.

Chickering, A. (1974). *Commuting versus resident students: Overcoming educational inequities of living off campus.* San Francisco: Jossey-Bass.

Chickering, A. W., & Hannah, W. (1969). The process of withdrawal. *Liberal Education, 55,* 551-558.

Christensen, C. R., Garvin, D. A., & Sweet, A. (1991). *Education for judgment: The artistry of discussion leadership.* Boston: Harvard Business School Press.

Claffey, M., & Hossler, D. (1986). An integrated enrollment management system: Managing college enrollments. *New Directions for Higher Education, 14*(1), 103-106.

Clagett, C., & Kerr H. (1993). Tracking and understanding your students. *Planning For Higher Education, 22,* 9-15.

Clark, B. (1980). The "cooling out" function revisited. *New Directions for Community Colleges, 8*(4), 15-32.

Cohen, R. D., & Jody R. (1978). *Freshman seminar: A new orientation.* Boulder, CO: Westview Press.

Cohen, A., & Brawer, F. B. (1982). Transfer and attrition points of view: The persistence issues. *Community College Review, 9,* 17-23.

Cope, R., & Hannah, W. (1975). *Revolving college doors: The causes and consequences of dropping out, stopping out, and transferring.* New York: John Wiley & Sons.

Cross, K. (1971). *Beyond the open door: New students to higher education.* San Francisco: Jossey-Bass.

Cross, K. (1976). Beyond education for all, toward education for each. *College Board Review, 99*, 5-10.

Cross, K. (1981). *Adults as learners: Increasing participation and facilitating learning*. San Francisco: Jossey-Bass.

Daniels, G. (1990, October). *Student intention and retention in a community college setting*. Paper presented at the North East Association for Institutional Research, Albany, NY.

Deegan, W. L., Tillery, D., & Associates. (1985). *Renewing the American community college: Priorities and strategies for effective leadership*. San Francisco: Jossey-Bass.

DeHart, A. R. (1985). Counterpoint. *Community and Junior College Journal, 55*(7), p. 71.

Dietsche, P. H. J. (1989). *Describing and predicting freshman attrition in a college of applied arts and technology*. Unpublished doctoral dissertation, University of Toronto, Toronto, Ontario, Canada.

Dietsche, P. H. J. (1990). Freshman attribition in a college of applied arts and technology of Ontario. *Canadian Journal of Higher Education, 20*, 65-84.

Dietsche, P. H. J. (1995). Attrition research: Implications for quality in community college education. *Community College Journal of Research and Practice, 19*, 423-436.

Dolence, M. (1989-90). Evaluation criteria for an enrollment management program. *Planning for Higher Education, 18*(1), 1-13.

Duckwall, J. M., & Vallandingham, D. (1995). *Long-term effects of mandatory counseling on underprepared students*. Paper presented at the 35th Annual Forum of the Association for Institutional Research, Boston, MA.

Dunphy, L. , Miller, E., Woodruff, T., & Nelson, E. (1987). Exemplary retention strategies for the freshman year. *New Directions for Higher Education, 60*, 39-60.

El-Khawas, E., Carter, D. H., & Ottinger, C. A. (1988). *Community college fact book*. New York: Macmillan.

Endo, J. J., & Harpel, R. L. (1982). The effect of student-faculty interaction on students' educational outcomes. *Research in Higher Education, 16*(2), 115-138.

Engleberg, I. N. (1981). Whom are we trying to retain? *Community and Junior College Journal, 52*(4), 28-31.

Ewell, P. (1983). *Information on student outcomes: How to get it and how to use it.* Boulder, Colorado: National Center for Higher Education Management Systems.

Feldman, K. A., & Newcomb, T. M. (1969). *The impact of college on students.* San Francisco: Jossey-Bass.

Fidler, P., & Hunter, M. (1989). How seminars enhance students success. In M. Upcraft, J. Gardner, & Associates, *The freshman year experience: Helping students survive and succeed in college.* San Francisco: Jossey-Bass.

Forest, A. (1982). *Increasing student competence and persistence.* Iowa City, IA: American College Testing Program.

Gardner, J. N. (1986). The freshman year experience. *College and University, 61*(4), 261-274.

Glaser, B., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies fro qualitative research.* Chicago: Aldine.

Glass, Jr., J. C., & Garrett, M. S. (1995). Student participation in a college orientation course, retention, and grade point average. *Community College Journal of Research and Practice, 19,* 117-132.

Grosset, J. M. (1989). *A conceptual framework for describing the causes of student attrition.* Philadelphia: Pennsylvania Office of Institutional Research, Philadelphia Community College. (ERIC Document Reproduction Service No. ED 310 819)

Grosset, J. M. (1993). A profile of community college stop-outs. *Community College Review, 20*(4), 51-58.

Grubb, W. N. (1989). *Access, achievement, completion, and "milling around" in postsecondary education.* (Report No. 143). Washington, DC: National Assessment of Vocational Education. (ERIC Document Reproduction Service No. ED 315 548)

Grubb, W. N. (1991). The decline of community college transfer rates. *Journal of Higher Education, 62*(2), 194-217.

Heath, D. H. (1968). Growing up in college: Liberal education and maturity. San Francisco: Jossey-Bass.

Herndon, S. (1982). The efficacy of student financial aid: Are the proposed funding reductions and program limitations warranted and in the best interests of America's citizenry. *Journal of Student Financial Aid, 12*(2), 37-44.

Hodgkinson, H. L. (1983). Guess who's coming to college: A demographic portrait of students in the 1990s. *Academe, 69*(2), 13-20.

Hossler, D. (1985). Managing enrollments for institutional vitality. *The College Board Review, 137,* 26-29.

Hossler, D. (1987). Enrollment management: Institutional applications. *Journal of the American Association of Collegiate Registrars, 62*(2), 106-116.

Hossler, D. (1991). Evaluating student recruitment and retention programs. *New Directions for Institutional Research, 70.*

Hunter, R., & Sheldon, M. S. (1980). *Statewide longitudinal study (parts I-III).* Woodland, CA: Los Angles Pierce College.

Iffert, R. E. (1958). *Retention and withdrawal of college students.* Washington, DC: U.S. Government Printing Office.

Jackson, G. A. (1978). Financial aid and student enrollment. *Journal of Higher Education, 49,* 548-574.

Jackson, G. A., & Weathersby, G. B. (1975). Individual demand for higher education. *Journal of Higher Education, 28,* 323-340.

Japely, S. M. , Kennedy, M. J., & Walleri, R. D. (1987). Assisting success through an improved student information system. *College & University, 62,* 117-125.

Jensen, E. (1980). *Persistence in college: The impact of financial assistance to students.* Paper presented at the annual meeting of the American Educational Research Association, Boston, MA.

Jensen, E. (1981). Student financial aid and persistence in college. *Journal of Higher Education, 52,* 280-293.

Jensen, E. (1983). Financial aid and educational outcomes: A review. *College and University, 58, 287-302.*

Jensen, E. L. (1984). Student financial aid and degree attainment. *Research in Higher Education, 20*(1), 117-127.

Jones, D. J., Watson, & Collier, W. (1990). *"High risk" students and higher education: Future trends.* Washington DC: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED 321 726)

Jones, S. (1984). *Evaluating the impact of freshman orientation on student persistence and academic performance.* Fort Lauderdale, FL: Nova University. (ERIC Document Reproduction Service No. ED 241 085)

Kamens, D. (1971). The college "charter" and college size. Effects on occupational choice and college attrition. *Sociology of Education, 44,* 270-296.

Kemerer, F. R., Baldridge, J. V., & Green, K. C. (1982). *Strategies for effective enrollment management.* Washington, DC: American Association of State Colleges and Universities.

Kesselman, J. (1976). *Stopping out: SA guide to leaving college and getting back.* New York: M. Evans & Co.

Kinnick, M. K., & Ricks, M. F. (1993). Student retention: Moving from numbers to action. *Research in Higher Education, 34*(1), 55-69.

Kohen, A. I., Nestel, G., & Karmas, C. (1976). *Success and failure in college: A new approach to persistence in undergraduate programs.* Columbus, OH: Ohio State University Center for Human Resources Research.

Kreider, P. E. (1980-1983). *Minutes of student success task force.* Gresham, OR: Mt. Hood Community College.

Kreider, P. E. (1981). *Report on task force for student success.* Gresham, OR: Mt. Hood Community College.

Kreider, P. E. (1982). *Annual report: Task force on student success.* Gresham, OR: Mt. Hood Community College.

Kreider, P. E. (1991). *President's report 1991: Celebrating 25 years of service to the community.* Gresham, OR: Mt. Hood Community College.

Lacy, W. (1978). Interpersonal relationships as mediators or structural effects: College student socialization in a traditional and an experimental university environment. *Sociology of Education, 51,* 201-211.

Lenning, O. T. (1978). Assessing student educational progress. *AAHE College and University Bulletin.*

Lenning, O. T. (1980). *Retention and attrition: Evidence for action.* Boulder, CO: NCHEMS.

Lenning, O. T., Beal, P. E., & Sauer, I. (1980). *Retention and attrition, evidence for action and research,* Boulder, CO: National Center for Higher Education Management Systems.

Lenning, O. T., Sauer, K., & Beal, P.E. (1980). *Student retention strategies.* George Washington University: ERIC Clearinghouse on Higher Education.

Leon, D. J. (1975). Chicano college dropouts and the educational opportunity program: Failure after high school. *High School Behavioral Science, 3,* 6-11.

Lewallen, W. (1993). The impact of being "undecided" on college persistence. *Journal of College Student Development, 34*(2), 103-112.

Lolli, A. (1991). Creating an environment in which evaluation-oriented student information systems can successfully compete for resources. *New Directions for Institutional Research, 70,* 21-32.

Lopez, M., Yanez, M., Clayton, E. R., & Thompson, D. A. (1988). Intrusive advising with special student populations. *NASPA Journal, 25*(3), 195-201.

Luna, G., & Cullen, D. L. (1995). *Empowering faculty: Mentoring redirected and renewed.* ASHE-ERIC Higher Education Reports No. 95-3.

Mabry, T. N. (1988). A case study in enrollment management: An ERIC review. *Community College Review, 16*(1), 47-53.

McCabe, R. (1984). Shaping the future: New requirements for community college leaders. In J. E. Rouche & G. A. Baker, III. (Eds.), *Community college leadership for the 1980s* (pp. 8-16). Washington, DC: American Association of Community and Junior Colleges.

McNeely, J. H. (1938). *College student mortality*. Washington, DC: U.S. Office of Education.

Metzner, B. (1989). Perceived quality of academic advising: The effects on freshman attrition. *American Educational Research Journal, 26,* 422-442.

Meyer, J. (1983). *Project culmination report for Jeff Meyer.* Gresham, OR: Mt. Hood Community College.

Michels, L. (1986). *Milwaukie area technical college: The crossover program.* Salem: Oregon Department of Research, Planning and Development.

Mingle, J. A., & Norris, D. M. (1981). Institutional strategies for responding to decline. In J. A. Mingle (Ed.), *Challenges of retrenchment* (pp. 47-68). San Francisco: Jossey-Bass.

Morrill, K. P., & Hurst, J. C. (1980). *Dimensions of intervention for student development.* New York: Wiley.

Mosher, S. A. (1996). *A reflection upon the professional accomplishments of Dr. Paul E. Kreider Mt. Hood Community College 1980-1996.* Unpublished manuscript, Mt. Hood Community College, Gresham, OR.

Mt. Hood Community College. (1993-1996). *MHCC fact books*. Gresham, OR: Mt. Hood Community College.

Mt. Hood Community College. (1996-1997). *Mt. Hood Community College Catalog*. Gresham, OR: Author.

Nicholson, S. (1980). *Student success task force memo.* Gresham, OR: Mt. Hood Community College.

Noel, L. (1978). First step in starting a campus retention program. In L. Noel (Ed.), *New Directions for Student Services, No. 3* (pp. 87-98). San Francisco: Jossey-Bass.

Noel, L. (1984). Steps for mobilizing a campuswide retention effort: Implementation Guide. Iowa City, IA: National Center for Advancement of Educational Practices, American College Testing Program.

Noel, L. (1985). Increasing student retention: New challenges and potential. In L. Noel, R. Levitz, D. Saluri, & Associates, *Increasing student retention* (pp. 1-27). San Francisco CA: Jossey-Bass.

Noel, L. (1987). *Increasing student retention.* San Francisco: Jossey-Bass.

Noel, L., Levitz, R., & Kaufman, J. (1982). *Organizing the campus for retention.* Iowa City, IA: American College Testing Program National Center for the Advancement of Educational Practices.

Noel, L., Levitz, R., Saluri, D., and Associates (1985). *Increasing student retention: Effective programs and practices for reducing the dropout rate.* San Francisco: Jossey-Bass.

Nora, A., Attinasi, L. C., & Matonak, A. (1989). Testing of qualitative measures of precollege factors in Tinto's model of student attrition. *Review of Higher Education, 13*(3), 337-335.

Palmer, J. (1987). Implementing student tracking systems: Concepts and issues. *Community, Technical, and Junior College Journal, 62*(4), 14-19.

Pantages, T., & Creedon C. F. (1978). Studies of college attrition: 1950-1975. *Review of Educational Research, 48,* 49-101.

Parnell, D. (1990). *Dateline 2000 the new higher education agenda.* Washington, DC: The Community College Press.

Pascarella, E. (1985). College environmental influences on learning and cognitive development: A critical review and synthesis. In J. Smart (Ed.), *Higher education: Handbook of theory and research, Vol. 1.* New York: Agathon.

Pascarella, E. T., & Chapman, D. W. (1983). A multi-institutional, path analytic validation of Tinto's model of college withdrawal. *American Educational Research Journal, 20*(1), 87-102.

Pascarella, E., Duby, P., Miller, V., & Rasher, S. (1981). Preenrollment variables and academic performance as predictors of freshman year persistence, early withdrawal, and stopout behavior in an urban, nonresident university. *Research in Higher Education, 15,* 329-349.

Pascarella, E. T., & Terenzini, P. T. (1977). Patterns of student-faculty informal interaction beyond the classroom and voluntary freshman attrition. *Journal of Higher Education, 48*(5), 540-552.

Pascarella, E., & Terenzini, P. (1980). Student faculty informal contact and college outcomes. *Review of Educational Research, 50,* 545-595.

Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students.* San Francisco: Jossey-Bass.

Peglow-Hoch, M., & Walleri, D. (1990). Case studies as a supplement to quantitative research: Evaluation of an intervention program for high-risk students. *The Association for Institutional Research, 35,* 1-8.

Ramist, L. (1981). *College student attrition and retention.* College Board Report, 81-100. New York: College Entrance Examination Board.

Raushi, T. M. (1993). Developmental academic advising. *New Directions for Community Colleges, 82,* 5-19.

Rice, R. L. (1983). *USC-Lancaster: A retention study for a two-year commuter campus.* Lancaster, SC: University of South Carolina. (ERIC Document Reproduction Service No. ED 231 440)

Richardson, R. C., Martens, K. J., & Fisk, E. C. (1981). *AAHE-ERIC/Higher Education Research Report, 3: Functional literacy in the college setting.* Washington DC: American Association for Higher Education.

RMC Research Corporation. (1996a). *Evaluation of advising and registration workshops.* Gresham, OR: Mt. Hood Community College.

RMC Research Corporation. (1996b). *Evaluation of college success classes (HD-100).* Gresham, OR: Mt. Hood Community College.

RMC Research Corporation. (1996c). *Intensive academic advising of general studies students: Evaluation report.* Gresham, OR: Mt. Hood Community College.

Rootman, I. (1972). Voluntary withdrawal from a total adult socialization organization: A model. *Sociology of Education, 45,* 258-270.

Roueche, J. E., & Baker, G. A., III. (1987). *Access and excellence: The open door college.* Washington, DC: The Community College Press.

Roueche, J. E., & Kirk, R. W. (1973). *Catching up: Remedial education.* San Francisco: Jossey-Bass.

Saarnitt, M. (1985). Implications of reduced financial aid on student enrollment. *Journal of Student Financial Aid, 15*(2), 14-23. Washington, DC: NASFAA.

Senge, P. (1990). *The fifth discipline.* New York: Doubleday.

Seybert, J. A., Kelly, L. H., & Soltz, D. F. (1992). *Assessing the outcomes of developmental courses.* Paper presented at the annual meeting of the Association for Institutional Research, Atlanta, GA.

Shanley, M. G. (1987). An exploratory longitudinal study of retention, persistence, and graduating rates of freshman seminar course participants and non-participants at the University of South Carolina during the period 1979-1986 (Doctoral dissertation, University of South Carolina, 1987). *Dissertation Abstracts International, 48*(4), 847A.

Sheldon, S. (1981). *Statewide longitudinal study: 1978-1981 final report.* Woodland Hills, CA: Los Angeles Pierce College.

Simpson, W. A. (1987). Tracking students through majors: Methodology and applications. *Journal of Higher Education, 58,* 323-342.

Sinclair Community College, Office of Institutional Planning and Research. (1993). *The impact of developmental education on student progress: A three year longitudinal analysis.* Dayton, OH: Author.

Spady, W. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. *Interchange, 1,* 64-85.

Spence, C. C., & Campbell, D. F. (1996). Building learning communities. *Community College Journal, 67*(2), 24-27.

Stampen, J., & Cabrera, A. (1986). Explaining the effects of student aid on attrition. *Journal of Student Financial Aid, 16,* 28-40.

Stodt, M. M. (1987). Intentional student development and retention. Increasing retention: Academic and student affairs administrators in partnership. *New Directions for Higher Education, 60,* 15-26.

Stodt, M. M., & Klepper, W. M., (Eds.). (1987). Increasing retention: Academic and student affairs administrators in partnership. *New Directions for Higher Education, 60,* 5-13.

Stupka, E. J. (1986). *Student persistence and achievement: An evaluation of the effects of an extended orientation course.* Unpublished manuscript, College Success Program, Sacramento City College, CA.

Taylor, R. A. (1996). Washington State community colleges brace for "baby-boom echo." *Community College Week,* 12. *[needs volume number, or if this is volume number, needs page numbers]*

Terenzini, P. T., Lorang, W. G., & Pascarella, E. T. (1981). Predicting freshman persistence and voluntary dropout decisions: A replication. *Research in Higher Education, 15*(2), 109-127.

Terenzini, P. T., & Pascarella, E. T. (1977). Voluntary freshman attrition and patterns of social and academic integration in a university: A test of a conceptual model. *Research in Higher Education, 6,* 25-43.

Terenzini, P., & Pascarella, E. (1980). Student/faculty relationships and freshman year educational outcomes: A further investigation. *Journal of College Student Personnel, 21,* 521-528.

Terkla, D. G. (1985). Does financial aid enhance undergraduate persistence? *Journal of Student Financial Aid, 15*(3), 11-18. Washington, DC: NASFAA.

Tierney, M. (1980). The impact of financial aid on student demand for higher education. *Journal of Higher Education, 51,* 527-545.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45,* 89-125.

Tinto, V. (1986). Theories of student departure revisited. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research, 2,* (pp. 359-384). New York: Agathon Press.

Tinto, V. (1987). Leaving college: Rethinking the causes and cures of student attrition. Chicago: University Press.

Tinto, V. (1989). Misconceptions mar campus discussions of student retention. *The Chronicle of Higher Education, 36,* B2.

Tinto, V., Love, A.G., & Russo, P. (1996). *Building learning communities for new college students.* A Summary of Research Findings of the Collaborative Learning Project. Paper presented at the 11th AAHE Assessment and Quality Conference. National Center on Postsecondary Teaching, Learning and Assessment. School of Education, Syracuse University, New York.

Titley, B. S. (1985). Orientation programs. In Noel, L., Levitz, R., & Saluri, D. (Eds.). *Increasing student retention: Effective programs and practices for reducing the dropout rate.* San Francisco: Jossey-Bass.

Upcraft, M. L., & Gardner, J. N. (Eds.) (1989). *The freshman year experience: Helping students survive and succeed in college.* San Francisco: Jossey-Bass.

Voorhees, R. A. (1987). Toward building models of community college persistence: A logit analysis. *Research in Higher Education, 26*(2), 115-129.

Wallace, W. (1966). *Student culture.* Chicago: Aldine.

Walleri, R. D. (1981). Student retention and attrition in the community college: A review and research design. Gresham, OR: Mt. Hood Community College.

Walleri, R. D. (1987). *A longitudinal study of guided studies students.* Paper presented at the 27th annual forum of the Association for Institutional Research, Kansas City, MO.

Walleri, R. D. (1991). Book review: *How college affects students* by E. T. Pascarella and P. T. Terenzini. *Community College Review, 19*(3), 8-10.

Weidman, J. (1989). Undergraduate socialization: A conceptual approach. In J. Smart (Ed.), *Higher education: Handbook of theory and research, Vol. 5.* New York: Agathon.

Wesley, R. (1981). *Minutes of student retention committee.*Gresham, OR: Mt. Hood Community College.

White, J. H. (1971). Individual and environmental factors associated with freshman attrition at a multi-campus community college. (Doctoral Dissertation, George Washington University, 1971). *Dissertation Abstracts International, 32,* 3709A.

Wilkie, C., & Kuckuck, S. (1989). A longitudinal study of the effects of a freshman seminar. *Journal of the Freshman Year Experience, 1,* 7-16.

Woodruff, T. (1987). The academic intervention program. Increasing retention: Academic and student affairs administrators in partnership. *New Directions for Higher Education, 60,* 49-53.

Wullner, K. S. (1989). Succeeding in college: the relationship of college orientation classes to persistence and college grade point average (Doctoral dissertation, Claremont Graduate School and San Diego State University, 1988). *Dissertation Abstracts international, 49*(11), 3260A.

Yin, R. K. (1984). *Case study research.* Beverly Hills, CA: Sage.

Zwerling, L. S. (1980). Reducing attrition at the two-year colleges. *Community College Review, 8*(2), 55-58.

APPENDIXES

APPENDIX A

ESTABLISHMENT OF THE STUDENT SUCCESS TASK FORCE

MT. HOOD COMMUNITY COLLEGE
Office of the President

TO: *Paul Kreider* DATE: *Dec. 11, 1980*

FR: *Dr. Nicholson* CC:

RE: *Student success task force*

We are pleased to establish a task force on student success. We believe this may be one of the most significant activities the college will initiate during the 1980-81 academic year. After extensive consideration, you have been nominated for service on one of the committees, and I would be pleased if you would accept my appointment to the committee as a very special trust and unique responsibility which affords an opportunity to improve the college.

RSN/mag
Enclosures

STUDENT SUCCESS TASK FORCE

Student Success Task Force on Retention

This committee will recognize retention from a campus-wide perspective involving all programs, services, and environments. Research will be reviewed and developed relating to the education process. The committee will study factors relating to student entry, curricular prerequisites, structures and sequence of curriculum, learning environments, instructional methods, student outcome factors, physical facilities and responsiveness of staff to students.

Student Success Task Force on Advising

This committee will review and define the scope of advising, recommend the improvement of the advising program and advising strategies, and seek ways to develop staff more fully in the use of effective advising skills.

Student Success Task Force on Orientation and Learning Styles

This committee will study the process of orientation and recommend practices to enhance program success for students. The committee will also focus upon the MHCC learning environment, reviewing our efforts relating to learning styles, instructional methods, and the impact of the learning process upon students.

12/11/80
mag

TASK FORCE ON STUDENT SUCCESS

Coordinating Council

Paul Kreider, Chairperson
Jack Miller
John Keyser
Bob Wesley
Gleason Eakin
Maxine Watson
Mike Stevenson

3 faculty reps
3 classified reps
3 student reps

Retention Committee

Faculty:
David Dunham, science
Tecla Thiman, allied health
Don Cook, math
Gary Grimes, math
Truman Grandey, lit. & comp.
Maxine Olson, soc. science
Bill Wright, business

Administration:
Bob Wesley, Chair
Marilyn Kennedy
Alan Goodell
Jeff Roehm

Classified:
Dan Walleri, research
Diane Baldrica, comm. services
Jean Erickson, A & R

Students:
Nancy Edwards
Wally Johnson
Virginia Kremer

Learning Styles & Orientation Committee

Faculty:
Pam Arsenault, dev. ed
Don Smith, industrial
Donna Forell, Maywood
Lou Herkenhoff, counseling
Dale Stebbins, PE
Paul Sunset, science
Larry Wise, soc. science

Administration:
Maxine Watson, chair
Lyle Lapray
Lee Matthews
Chuck Abshire

Classified:
Louise Moffit, fin. aid
Nancy Getch, allied health
Neva Copper, library

Students:
Loreen Giese
Barbara Cochran
Laurie Gratton

Advising Committee

Faculty:
Ed Sawyers, business
Gil Albelo, science
Gary Lovejoy, soc. science
John Hawthorne, technical
Barbara Nydegger, counseling
Hal Malcolm, perf. arts
Ralph Ahseln, communications

Administration:
Gleason Eakin, chair
Carl Rawe
Marilyn Zook
Terry Schulz

Classified:
Vivian Coles, counseling
Shirley Cruickshank, A & R
Sandra Wilson, lit. & comp.

Students:
Lori Vandenbos
Julie Sagger
Sandy Johnstone
Ed Pamer

12/11/80

APPENDIX B

1982 STANDARDS OF ACADEMIC SUCCESS

MT. HOOD COMMUNITY COLLEGE

TO: John Keyser

DATE: June 14, 1982

FR: Gleason Eakin

CC:

RE: Standards of Academic Progress

The purpose for proposing standards of academic progress is for the college staff to better advise and serve students with academic difficulties. Most students who attend MHCC do make satisfactory progress. However, for those who experience academic difficulty, these standards of academic progress would alert them and the college staff so to correct academic weaknesses at the earliest possible point of their college career.

The proposal has been reviewed by the counseling staff, student government, instructional council, the faculty senate, student relations council, and the dean's council. All felt this is a positive step in aiding students.

The dean's council recommends approval of the standards of academic progress by the president's council.

GE/bmg

MT. HOOD COMMUNITY COLLEGE

STANDARDS OF ACADEMIC PROGRESS

I. Purpose of a Standard:

A Standard of Academic Progress will assist the student in accomplishing his/her academic goal by:

A. Alerting the student and the college of academic difficulties or deficiencies in satisfactory academic progress.

B. Providing the opportunity for the college to be of a greater assistance to the student in setting and achieving said goals.

C. Assisting the student in utilizing the facilities and personnel of the college.

D. Creating an atmosphere in which the student may become successful in his/her pursuit of an education.

II. Academic Standard and Referral:

A. Twelve or more credit hours completed per term with less than a 2.0, but more than 1.5, cumulative grade point average.

Referral: Academic advisor intervention

B. Twelve or more credit hours completed per term with less than a 1.5 cumulative grade point average.

Referral: Counselor intervention

C. Completion of one half or less of twelve or more attempted credit hours.

Referral: Counselor intervention

D. Enroll in at least 12 credits and complete 6 or less credit hours with a grade point average between 1.5 and 2.0 for three consecutive terms.

Referral: Academic Progress Review Committee

E. Enroll in at least 12 credits and complete 6 or less credit hours with a grade point of less than 1.5 for two consecutive terms.

Referral: Academic Progress Review Committee

F. Enroll in at least 12 credits and complete 6 or less credit hours for two consecutive terms.

Referral: Academic Progress Review Committee

III. Purpose of Referral:

A. Academic Advisor will re-evaluate the student's transcripts and his/her academic goals. As a result the student may be advised:

1. to adjust his/her schedule
2. to seek developmental/tutorial assistance
3. to meet with instructors of his/her courses
4. to alter his/her academic goals

B. Counselor Intervention:

1. The Associate Dean of Advising and Counseling will assign the student an appropriate counselor.
2. The counselor will contact the student by mail or phone and schedule an academic intervention session with the student.
3. During the intervention session, the counselor and student will:
   a. review the student's academic records, test scores, and career goals.
   b. review and/or develop an Individualized Education Plan (IEP) to be signed by both the student and counselor.
   c. make adjustments in the IEP for necessary remedial work.
   d. determine if the student is to be referred to the Student Academic Progress Committee.

C. Student Academic Progress Review Committee:

1. Composition of the Student Academic Progress Review Committee:
   The Committee shall consist of three persons appointed annually by the college president on his/her designee:
   a. One manager from instruction.
   b. One manager from student relations.
   c. One representative from developmental education.
2. Purpose:
   The purpose of the Student Academic Progress Review Committee is:
   a. To provide a hearing board for the student who has not achieved satisfactory academic progress.
   b. To take action regarding the student's status.
3. Definition:
   Satisfactory academic progress is defined as:
   a. Having attempted twelve or more credit hours per quarter with at least a 2.0 cumulative grade point average.
   b. Having completed more than one half of the attempted twelve credit hours per quarter with a 2.0 accumulative g.p.a. or above.

4. Procedures for the Committee:
   a. The Committee shall review in a closed session the academic records of each referral.
   b. The student will be requested to meet with the Committee to present his/her circumstances and position regarding academic achievement. The student may be accompanied by the intervention counselor and or advisor, if desired.
   c. The Committee shall complete its deliberation in executive session and render its decision.
   d. The Committee's decision shall be one of the following:
      1. Confirm the student's continuation as a full-time student.
      2. Define any limitations that may restrict the student's college activities.
      3. Reduce the number of credit hours for which the student may enroll.
      4. Develop an academic program that will be followed by the student until satisfactory academic progress is achieved.
      5. Suspend the student for one or more quarters until such time as the student demonstrates to the Committee his/her ability to achieve satisfactory academic progress and/or has made circumstantial changes that indicate to the Committee that such progress can be achieved if given the opportunity.

5.. Timelines:

The Student Academic Progress Review Committee will hear each student referral within five business days from the time the committee recieves the referral.

1. Based on the student's availability, the committee shall immediately notify the student of its decision.
2. The Committee shall prepare a written statement of its decision by the following day.
3. The Committee's statement shall be mailed or hand delivered to the student by the third business day following.

APPENDIX C

HISTORY OF MT. HOOD COMMUNITY COLLEGE ENROLLMENT

HEADCOUNT TO FTE RATIOS

Year	Annual FTE Old Formula	New Formula	Final Unduplicated Headcount	Headcount per FTE Old Formula	New Formula
1970-71	3,968.4		14,198	3.6	
1971-72	5,048.1		16,472	3.3	
1972-73	5,145.2		16,856	3.3	
1973-74	5,433.0		17,627	3.2	
1974-75	6,113.9		20,860	3.4	
1975-76	6,449.4		19,563	3.0	
1976-77	5,844.4		19,162	3.3	
1977-78	6,123.4		19,870	3.2	
1978-79	5,578.7		21,881	3.9	
1979-80	5,757.5		21,802	3.9	
1980-81	5,962.7		21,101	3.5	
1981-82	6,017.2		20,433	3.4	
1982-83	5,997.6		19,062	3.2	
1983-84	5,489.6		17,539	3.2	
1984-85	4,850.6		17,040	3.5	
1985-86	5,061.1		21,007	4.2	
1986-87	5,388.5		23,191	4.3	
1987-88	5,625.9		25,517	4.5	
1988-89	6,180.3		26,826	4.3	
1989-90	6,191.1		27,113	4.4	
1990-91	6,103.2		27,146	4.4	
1991-92	6,502.9	8,163.0	29,632	4.6	3.6
1992-93	6,336.3	8,021.6	27,209	4.3	3.4
1993-94	6,351.6	7,999.5	26,758	4.2	3.3
1994-95	5,806.7	7,282.5	25,532	4.4	3.5
1995-96	5,761.7	7,271.9	26,670	4.6	3.7

Prepared by: JoyLynn Woodard
Source: CARS Information System
Update: Fall 1996
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APPENDIX D

STUDENT INTENT QUESTIONS

FALL 1983

STUDENT INTENT QUESTIONS & REGISTRATION

A concise definition of the Student Intent Data (SID) questions and Suggestions for gathering SID during Registration

Beginning in the fall of '83, Mt. Hood Community college is asking students four questions during registration; these questions are used to collect Student Intent Data (SID), which is used to determine students' backgrounds and reasons for attending MHCC. These questions are multiple choice; the possible answers, and their respective entry codes, should be taped to the registration computer terminal. During in-person registration (i.e. not over the phone), it is very helpful to allow the student to view the answer list, so that he or she can better determine the correct answer. This also insures the validity of the answers, and reduces the chance of involuntary "coaching" by admissions personnel. The four questions are listed as Motive, Duration, Education level, and Employed. Each of these questions will be fully defined below; examples will be given, and question guidelines will be introduced.

MOTIVE

1 Get a Job
2 Keep a job
3 Get a better Job
4 Earn 2 year Degree
5 Earn 1 Year Certificate
6 Earn GED
7 Earn 4 year Degree
8 Personal Enrichment
9 Other

I. MOTIVE: *Motive is the reason the student is attending MHCC at this time.* There are three basic categories of answers for this question: Job interests (answers 1 - 3), Earning a degree (answers 4 - 7), or other (answers 8 & 9). This category is fairly self-explanatory; the only case which might cause confusion is where the motive is both to earn a degree and job interests/personal enrichment. In this case, the degree earning Motive takes precedence.

EXAMPLE: A student comes in who is earning a 1 year certificate so that she can improve her current job. Her Motive is earning a 1 year certificate, but it is also getting a better job. Earning a degree, however, always comes first, so enter 5/Earn a 1 year certificate.

EDUCATION LEVEL

1 Less than High School
2 GED
3 Graduated High School
4 2 years of College with no degree
5 3 years of College with no degree
6 Posesses 1 year Certificate
7 Posesses AA degree
8 Posesses Bachelor's degree
9 Posesses Masters degree or PhD

III. EDUCATION LEVEL: *Education level is the highest level of education that the student has achieved at the time of registration.* This category is also self-explanatory, except for options 4 & 5, college time without degree. This is the credit hours the student has accumulated at various colleges, not the actual time the student spent at college. Also, remember that if the student has less than 2 years college credit, the next lowest category must be chosen.

EXAMPLE: A student has attended Reed College for 2 1/2 years. However, he has only taken one course per semester, and has only 1 year of college credit. Therefore, the next lowest option is chosen -- 3/ if he graduated High School, 2/ if he earned a GED, or 1/ if he never graduated High School.

Also, if the student has more than 2 years college credit, but less than 3, pick the lower 2 years credit option.

EMPLOYED

1 Employed Full-time (35+ hours/week)
2 Employed Part-time (5 - 34 hours/week)
3 Not Employed

IV. EMPLOYED: *The employment status of the student during the quarter being registered for.* This category is very obvious; only remember that it is for the quarter being registered for. This is particularly important during early registration -- make it clear that it is the student's employment status while he or she is attending MHCC! If the student doesn't know, put option 3) Not Employed.

DURATION

1) 1 quarter only
2) 2 quarters
3) 1 year
4) 2 years
5) 3 years
6) More than 3 years

II. DURATION: *Duration is the amount of time the student plans to study at MHCC, from the time of registration on.* This is in actual time attended, not credit quarters or years.

EXAMPLE: A student comes in during Fall registration who plans to take one course per quarter for the next three quarters (Fall, Winter, Spring). The answer for duration would be 3/one year.

EXAMPLE: The same student comes in next quarter, for Winter registration, and his plans have not changed. However, Duration is measured from the time of registration, so the Duration answer is now 2/two quarters (Winter, Spring). The amount of time the student has spent at MHCC already does not count!

In the case of a student planning to spend an amount of time between two of the Duration options (e.g. 1 year & 2 quarters), pick the lower of the two.

EXAMPLE: A student comes in who plans to spend 2 and 1/2 years at MHCC. The answer for Duration is 4/2 years.

A special case is the person who checks the course catalog each quarter, and registers for any he or she likes. The person plans to do this for a while, but can never know if he/she will enroll or not until the next catalog comes out. This person would have duration answer 1/1 quarter; while they may attend MHCC for some time, they can only be certain about the coming quarter.
Also, if the student has absolutely no idea how long they will be attending MHCC, enter code 0.

The student can decide not to answer any of these questions; in this case, enter 0 as the option. Only enter 0 if the student abstains from answering the question (or if, in the Duration question, the student has no idea at all how long he/she will be attending MHCC). The student may very well ask what the data will be used for. MHCC is using the Student Intent Data only for statistical purposes at this time; a students SID answers are never accessed individually, and are unaccessible without the student's mother's maiden name. The statistical data will be used to help MHCC determine how its curiculum can best serve the student body and the communtity. For instance, if a large percentage of the students in a class are employed full-time, it would indicate that this course might be better if scheduled during the evening or the weekend. Most students will probably not ask you what the data is for, but if they do, please explain its purpose.

There is an additional instruction sheet on collecting SID data over the phone during phone registration... please examine this if applicable.

STUDENT INTENTIONS DATA
(Unduplicated Headcount)

	Fall 1994	%	Fall 1995	%	Fall 1996	%	Fall 1997
COMMUNITY COLLEGE DEGREE GOAL:							
Cert/Degree	5,292	46%	4,776	41%	4,689	35%	
HS Diploma or GED	336	3%	341	3%	528	4%	
None	3,604	31%	3,723	32%	3,956	29%	
Undecided	624	5%	799	7%	1,104	8%	
No Info	1,657	14%	2,068	18%	3,160	24%	
TOTAL # respondents	11,513		11,707		13,437		
GENERAL INTENT:							
Trans to 4yr	3,472	30%	3,152	27%	3,064	23%	
Get a job	1,564	14%	1,440	12%	1,451	11%	
Improve Job Skills	1,474	13%	1,506	13%	1,733	13%	
Explore Ed Options	886	8%	1,000	9%	1,001	7%	
Finish HS or GED	243	2%	223	2%	365	3%	
Improve Rd/Wr/Math	72	1%	79	1%	125	1%	
Learn English	339	3%	490	4%	646	5%	
Personal Enrichment	1,732	15%	1,887	16%	2,080	15%	
Other	363	3%	439	4%	631	5%	
No Info	1,368	12%	1,491	13%	2,341	17%	
TOTAL # respondents	11,513		11,707		13,437		

Note: Beginning Fall 1994, MHCC has converted to a new student intentions reporting system consistent with statewide reporting under the Oregon Community College Unified Reporting System (OCCURS)

Prepared by: JoyLynn Woodard
Source: CARS Information System
Update: Fall 1996
m:\data\excel5\fctbk.xls

STUDENT INTENTIONS DATA (continued)

	Fall 1994	%	Fall 1995	%	Fall 1,996	%
HIGH SCHOOL COMPLETION:						
HS Grad	8,870	77%	8,899	76%	9,708	72%
GED	652	6%	656	6%	806	6%
Adult HS Diploma	54	1%	256	2%	303	2%
Did Not Complete	625	5%	665	6%	1,000	7%
Still in HS	588	5%	537	5%	584	4%
No Info	724	6%	694	6%	1,036	8%
TOTAL # respondents	11,513		11,707		13,437	
CURRENT COLLEGE DEGREE:						
CC Certificate	343	3%	265	2%	1,098	8%
CC 2Yr Degree	661	6%	630	5%	345	3%
Bachelor's	924	8%	976	8%	725	5%
Master's	242	2%	290	2%	1,090	8%
PHD or Prof Degree	46	0%	52	0%	357	2%
No Info	8,745	76%	8,387	72%	9,751	73%
Other	552	5%	321	3%	71	1%
TOTAL # respondents	11,513		11,707		13,437	
EMPLOYMENT:						
Part time	3,716	32%	3,623	30%	3,645	27%
Full time	3,880	34%	4,050	35%	4,744	35%
Not employed	2,761	24%	2,869	25%	3,846	29%
No Info	1,156	10%	1,165	10%	1,202	9%
TOTALS # respondents	11,513		11,707		13,437	

Note: Beginning Fall 1994, MHCC has converted to a new student intentions reporting system consistent with statewide reporting under the Oregon Community College Unified Reporting System (OCCURS).

Prepared by: JoyLynn Woodard
Source: CARS Information System
Update: Fall 1996
m:\data\excel5\fctbk-96.xls

APPENDIX E

STUDENT INTENT REPORTS BY COURSE, DIVISION, AND COLLEGE

FOR FALL 83 9/23/1983

** ## COLLEGE REPORT ## **

A

** RHCC COURSE DATA **

1 >>>TOTAL RHCC COURSES: 8

2 CREDIT TYPE BREAKDOWN:
Vocational 6
Transfer 2
Other 0

3 GRADED/UNGRADED BREAKDOWN:
Graded 7
Ungraded 0
both 1

4 FULL-TIME/PART-TIME/TEMPORARY INSTRUCTOR RATIO: 8 / 0 / 0 5 COURSES TAUGHT BY INSTRUCTORS WITHIN RESPECTIVE DIVISIONS: 37.5%

B

COLLEGE REPORT
DIVISION OR DIVISION SUMMARY

PAGE 1

1 DIVISION	2 RESPONDING TO MOTIVE	MOTIVE			DURATION			EDUCATION			EMPLOYMENT		
		Job-related	Earn Degree	Personal or Other	Less Than 1 year	1 or 2 years	3 years or more	High Sch. Equiv. or Less	2+3 yrs Coll., 1yr Crt 2yr Deg	Bachlr. Masters PHD	Employd Full Time	Employd Part Time	Not Employd
BUS/TECH	100%	63%	38%	0%	25%	13%	25%	25%	63%	13%	63%	13%	25%
COM/SOC SC	100%	100%	0%	0%	0%	0%	50%	50%	0%	50%	100%	0%	0%
SCI/HEALTH	100%	67%	33%	0%	67%	0%	33%	67%	33%	0%	0%	67%	33%
3 RHCC AVERAGE		69%	31%	0%	31%	6%	31%	38%	46%	15%	54%	23%	23%

DIVISION REPORT

FOR FALL , 1982 9/23/1983

DIVISION: BUS/TECH

A

** BUS/TECH COURSE DATA **

1 TOTAL BUS/TECH COURSES: 5

2 CREDIT TYPE BREAKDOWN:
Vocational 3
Transfer 2
other 0

3 GRADED/UNGRADED BREAKDOWN:
Graded 4
Ungraded 0
Both 1

4 FULL-TIME/PART-TIME/TEMPORARY INSTRUCTOR RATIO: 5 / 0/ 0

5 INSTRUCTORS WITHIN BUS/TECH DIVISION: 20.0%

B

DIVISION REPORT PAGE 1
DISCIPLINE BY DISCIPLINE SUMMARY

1 DISCIPLINE	2 RESPONDING TO OUTLINE	MOTIVE			DURATION			EDUCATION			EMPLOYMENT		
		Job-Related	Earn Degree	Person. or Other	Less Than 1 year	1 or 2 years	3 years or more	High S. Equiv. or Less	2&3 yrs Colle. 1yr Crt 2yr Deg	Bachlr. Masters PhD	Employd Full Time	Employd Part Time	Not Employd
OCCUP SAFETY &	100%	60%	40%	0%	40%	20%	20%	20%	60%	20%	60%	20%	20%
COMPUTER ED	100%	50%	50%	0%	0%	0%	50%	50%	50%	0%	50%	0%	50%
OCCUP SAFETY &	100%	100%	0%	0%	0%	0%	0%	0%	100%	0%	100%	0%	0%
3 BUS/TECH	AVERAGE	63%	38%	0%	25%	13%	25%	25%	63%	13%	63%	13%	25%

DISCIPLINE REPORT

FOR FALL - 1982 9/23/1983

** DISCIPLINE: ACCOUNTING **
** DIVISION: BUS/TECH **

A

** ACCOUNTING COURSE DATA **

1 TOTAL ACCOUNTING COURSES: 3

2 CREDIT TYPE BREAKDOWN:

Vocational	2
Transfer	1
Other	0

3 GRADED/UNGRADED BREAKDOWN:

Graded	3
Ungraded	0
Both	0

4 FULL-TIME/PART-TIME/TEMPORARY INSTRUCTOR RATIO: 3 / 0 / 0

5 INSTRUCTORS WITHIN BUS/TECH DIVISION: 33.3%

B

DISCIPLINE REPORT
COURSE BY COURSE SUMMARY

PAGE 1

1 COURSE	SEC	2 RESPONDING TO MOTIVE	MOTIVE: Job Related	MOTIVE: Earn Degree	MOTIVE: Personal or Other	DURATION: Less Than 1 year	DURATION: 1 or 2 years	DURATION: 3 years or more	EDUCATION: High Sch. Equiv. or Less	EDUCATION: 2o3 yrs Coll. 1yr Crt 2yr Deg	EDUCATION: Bachlr. Masters PhD	EMPLOYMENT: Employd Full Time	EMPLOYMENT: Employd Part Time	EMPLOYMENT: Not Employd
AC 0310	01	100%	50%	50%	0%	0%	50%	0%	0%	100%	0%	100%	0%	0%
AC 0020	01	100%	100%	0%	0%	100%	0%	0%	0%	0%	100%	100%	0%	0%
BA 0215	77	100%	50%	50%	0%	50%	0%	50%	50%	50%	0%	0%	50%	50%
3 ACCOUNTING		Av.	60%	40%	0%	40%	20%	20%	20%	60%	20%	40%	20%	20%

TEST DATA !

COURSE REPORT

FOR ACADEMIC TERM/YEAR FALL , 1983 — 9/ 8/1983

DIVISION: BUSINESS/TECH — ** COURSE AC 0010, SEC 1 ** — DISCIPLINE: ACCOUNTING

** COURSE DATA **

CREDITS: 4.00 — CREDIT TYPE: Vocational — GRADED/UNGRADED: Graded — RUNS 09/27 - 12/17

MEETS M W F AT RHCC ON CAMPUS ROOM AC 1001 1 FROM 09:00 TO 10:00

INSTRUCTOR: BERNARTH,LACY — INSTRUCTOR IS FULL-TIME — INSTRUCTOR'S DIVISION: BUSINESS

** STUDENT DATA **

TOTAL STUDENTS REGISTERED: 27 — AVERAGE AGE: 28.1 — MALE/FEMALE: 16 / 11

STUDENTS RECEIVING FINANCIAL AID OR VET BENEFITS: 4 — STUDENTS AUDITING COURSE: 2

AVERAGE RHCC GPA: 3.26

returning students: 20

new students: 7

5 TOP MAJORS

ACCOUNTING	13
BUSINESS MGMT	9
PEST MGMT	3
ENGLISH LIT	2

** INTENT DATA **

MOTIVE FOR ATTENDING RHCC		INTENDED RHCC DURATION		PREVIOUS EDUCATION		PRESENT EMPLOYMENT	
Getting a job	22%	1 quarter only	3%	Less than High Sch	6%	Full Time	13%
Keeping a job	8%	2 quarters	7%	GED	8%		
Getting better job	15%			High School	60%	Part Time	45%
		1 year	60%				
Earn 2 year Degree	40%	2 years	25%	2yrs college, No Deg	9%	Not Employed	33%
Earn 1yr Certificate	0%			3yrs or more, No Deg	2%		
Earn GED	2%	3 years	3%	Certificate	7%		
Earn 4 year Degree	7%	More than 3 years	0%	AA Degree	1%		
Personal Enrichment	1%			Bachelors Degree	1%		
Other	0%			Masters Deg. or PHD	0%		
No Response	4%	No Response	2%	No Response	3%	No Response	7%

APPENDIX F

STUDENT SUCCESS TASK FORCE SUBCOMMITTEE REPORTS

MT. HOOD COMMUNITY COLLEGE

TO: Dr. Paul Kreider

DATE: March 7, 1983

FR: Gleason Eakin GE

CC:

RE: Advising Task Force

The Advising Task Force met February 25 to review accomplishments and make recommendations to the Student Success Task Force.

ACCOMPLISHMENTS

1. Re-wrote the philosophy of academic advising.
2. Developed, reviewed, and implemented standards of academic progress fall 1982.
3. Developed a strategy for the implementation of mandatory placement testing fall 1982.
4. Wrote a Planning Guide for all new students. The booklet is in question and answer form and is available for use in the high schools.
5. Developed a flyer outlining the steps to be followed in enrolling in MHCC. The flyer was first used in May 1982.
6. Developed a checklist (two-year curriculum guide) that was approved by the four-year colleges for specific majors. The checklists were made available to students in July 1982. Presently we have checklists for 24 majors that will be updated annually.

RECOMMENDATIONS

1. MHCC should continue to discuss the issue of general education.
2. There should be continued dialogue on some form of early alert system.
3. Continuous efforts are needed in the development of an ideal academic advising system.
4. There is a need to review whether or not advisor signatures are needed for registration during 1983-84.
5. There is a need for continued study as to whether or not instructor signatures are desirable for drop slips.

The advising committee feels the efforts over the past two years have been very worthwhile. The participation of staff and students from across the college has provided opportunities that have not always been available for input. Many of the ideas of the committee have been implemented, while others are continuing to be explored.

MAR 7 1983

GE/bmg

DEAN OF ADMINISTRATION

MT. HOOD COMMUNITY COLLEGE

TO: Dr. Paul Kreider

DATE: March 10, 1983

FR: Robert Wesley

CC: G. Eakin
M. Watson
Committee Members

RE: Student Retention Committee Meeting, March 3, 1983

PRESENT: Diane Baldrica, Jean Erickson, Alan Goodell, Marilyn Kennedy, Maxine Olson, Jeff Roehm, Tecla Thiman, Bob Wesley

.....

Introduction

The Student Retention Committee met at 3 pm on the date noted to review the accomplishments of the committee during its tenure and to consider what tasks remain to be completed.

Review

As we began to review the original objectives of the Student Success Task Force and the accomplishments and changes which have occurred in the past two years, we were truly impressed with how successful the task force has been and with how many of the ideas discussed and nurtured in our committee's forum have become or are becoming part of the fabric of the college. Either directly or indirectly the members of the committee feel they have been able to contribute to changes in the registration process, the advising process and the grading process, to policies governing late adds, selection criteria and, course prerequisites, and to the development of programs designed to measure and reinforce student success. Further, they feel that it is important that the programs in place be supported and continued, that proper placement and standards of progress continue to be emphasized and that retention studies and course and program analysis are potentially capable of providing the insights needed to continue the growth and improvements noted in the past two years.

Final Recommendations

In addition to completing the tasks currently in work, the committee felt strongly that more work needs to be done to bring about campus-wide improvement in the advising process. The group felt that there needs to be more consideration for student needs in selecting and maintaining faculty office hours and in maintaining an open and responsive attitude to student needs throughout the quarter. The feeling was that on the whole the staff is responsive to the needs of the student, but that islands where improvement could occur may still exist.

They also felt that some of our part-time instructors are not familiar enough with college policies and practices and recommended that each manager make every effort to review the part-time instructor's handbook and all other pertinent materials with each instructor before classes begin.

In the same vein (i.e., improving communication) they recommended that efforts should continue to provide each student with specific course, program and curriculum information so that the whole learning process becomes more transparent and "user friendly."

Specifically, efforts need to continue to define and clarify the college's general education requirements and to make course descriptions and syllabi more accessible to our student body.

Final Thoughts

The following quotation from the minutes of our April 27, 1981 meeting probably best summarizes the thinking of this last meeting. "...regardless of the topic being discussed, the group has always circled back to the same idea - that retention is only indirectly impacted by policy, regulation and process. What happens to the student as an individual when he or she first comes to Mt. Hood is much more important than regulations or rules. To this end, the retention committee strongly recommends that ...(we) work towards developing a stronger, more humane and more accurate advising network."

The meeting adjourned at 4:15 pm - 25 months after the first retention sub-committee meeting (February 5, 1981) and 35 months after the initial planning began for a student retention task force (April, 1980).

RW:lb

MT. HOOD COMMUNITY COLLEGE

TO: Paul Kreider

DATE: February 21, 1983

FR: Maxine Watson

CC: G. Eakin
Dr. Wesley
Committee Members

RE: Learning Style/Orientation Committee Meeting
February 17, 1983 in Social Science Conference Room

PRESENT: L. Moffitt, L. Herkenhoff, L. Lapray, C. Abshire, M. Watson, (N. Getch was unable to attend but gave input)

Meeting Purpose

Learning Style/Orientation committee met Thursday, February 17, in the Social Science Conference Room to review accomplishments of the past year and one half and to make recommendations to the Student Success Task Force.

Review and Recommendations

Tasks assigned to the committee were addressed seriously and with enthusiasm. It was agreed that many of these tasks were "one time tasks", others that need continuation, and some (such as review of materials) that need third party review from time to time. It was further agreed that this committee has accomplished its goals and should be terminated. With the new organizational structure, many of the tasks that are "on-going" could have a review team or task force within that division or cluster to review/analyze/develop.

In addition, our recommendations are as follows:

1. Student Handbook, MHCC Planning Guide for Students, Advisor's Handbook - third party group. Funding must be provided for student handbooks to ensure distribution to new students, part-time faculty and all front-line staff. There remains a need for available maps indentifying rooms by number and location.

2. Continue to encourage faculty to explore new options/new learning opportunities/new directions with resources from faculty resource development board and additional monies provided for program development. It is also recommended that the inservice format be reviewed and that planning from the bottom-up be coordinated with the office of planning and development. It was also recommended that staff development be individually initiated!!! Again, a team approach in planning with focus on interests plus comprehensive plan.

3. Continue to review and upgrade what MHCC is doing for the undecided/exploratory student. This must be ongoing. Students are assisted through PSY 111, 112, 140 in learning about careers and making choices. The committee realizes that all students at MHCC are not in need of a "major". Through assistance in the counseling center (both individual and in small groups), through SIGI, and through materials available, students and potential students have access to materials and process.

4. Continue to provide PSY 111, 114, 115, OA 110 and other orientation and exploration classes. While PSY 111 provides students with an orientation to the college and program planning, emphasis is not on selection of a major or clarification of the major identified by the student. Students are put in touch with their academic advisor early in their college experience. The committee recommended that ideally, new students would register for the orientation to college class for the first five weeks and then transition into the orientation for computers, word processing, etc. the second five weeks. The problem still exists for an overload of credits for the vocational student who might have 17 or 18 units required their first term in school without an orientation class or two. PSY 111 classes and other orientation classes must cross divisions. The committee recommended that PSY 111 instructors continue to meet and evaluate (upon completion of Fall term offerings) to update materials and exchange ideas.

5. The committee recognizes that change is essential in tight monied times and in times of new technology. With the organizational change, opportunities will be provided for exchange of ideas, development of programs, cultural exchanges, etc. We agree that we must continue to develop new learning options--TV assisted instruction, independent study classes, computer assisted offerings. The committee recommends that with the number of options already offered and with the move toward more of these classes, consideration must be given to a testing center for students with full-time faculty (who receiving instructional load for the classes) directly involved. Support and security must be provided when staff are not available for the testing process (especially early morning, and late afternoon and evening.) Needs of the working community must be considered.

6. While selected entry programs such as allied health provide orientation sessions prior to application and/or acceptance to the program, it was suggested that all divisions of the college work in concert with the Student Development Division to provide answers to basic questions that high school and other prospective students might have. In addition, orientation sessions plus MHCC students serving as resource persons in feeder high schools might be considered.

MW:lr

APPENDIX G

EVALUATION FORM FOR ADVISING AND REGISTRATION WORKSHOPS

Advising and Registration Workshops

Discussion Questions

1. Were the students who attended your small advising group majoring in the subject area you teach?

2. What do you believe are the strengths of the current advising and registration workshops? (large group presentation, materials, small group activities, composition of small groups; time of day, duration, frequency)

3. What aspects of the advising and registration workshops could be improved? (large group presentation, materials, small group activities, composition of small groups; time of day, duration, frequency;)

4. What kind of training, if any, have you received for providing advising services?

5. What additional training, if any, do you feel you need to help you be a more effective academic advisor?

6. For what percent of the students you work with do you recommend HD 100?

7. To what extent do you think the Advising and Registration workshops increase the likelihood of student success at MHCC?

8. What other orientation or registration activities do you think would be helpful in improving the success rate for new students?

9. To what extent do the students find their placement test scores to be helpful? To what extent do you think the placement test scores are a barrier for students?

10. What improvements, if any, would you suggest for the placement testing process?

Appendix A
Advising and Registration Workshop Evaluation

Mt. Hood Community College
Advising and Registration Workshop Evaluation
Fall 1995

Your opinions are very important to us because we use them to make improvements to the services we provide to students. Please help us by completing this evaluation.

Please indicate your level of agreement with the following statements by circling the number that best represents your response.

As a result of participating in the Advising & Registration Workshop...

1. I understand my College Placement Test (CPT) scores.

1 Disagree | 2 Somewhat Disagree | 3 Somewhat Agree | 4 Agree

2. I understand what the HD100 (College Success) course is about.

1 Disagree | 2 Somewhat Disagree | 3 Somewhat Agree | 4 Agree

3. I know what types of degrees are available at MHCC.

1 Disagree | 2 Somewhat Disagree | 3 Somewhat Agree | 4 Agree

4. I can use the MHCC catalog to look up course descriptions.

1 Disagree | 2 Somewhat Disagree | 3 Somewhat Agree | 4 Agree

5. I can use the MHCC schedule of classes to find out what classes are offered this term.

1 Disagree | 2 Somewhat Disagree | 3 Somewhat Agree | 4 Agree

6. I understand the role that my academic adviser plays in my educational goals.

1 Disagree | 2 Somewhat Disagree | 3 Somewhat Agree | 4 Agree

7. I can fill out a trial schedule.

1 Disagree | 2 Somewhat Disagree | 3 Somewhat Agree | 4 Agree

8. I understand the registration process.

1 Disagree | 2 Somewhat Disagree | 3 Somewhat Agree | 4 Agree

(Please turn over. Questions continue on back.)

9. On a scale of 1 to 4, how helpful was the Advising and Registration Workshop overall in preparing you to begin your Mt. Hood Community College experience? (Please circle one.)

1	2	3	4
Not At All Helpful			Extremely Helpful

10. On a scale of 1 to 4, how useful was the information provided in the large group presentation? (Please circle one.)

1	2	3	4
Not At All Useful			Extremely Useful

11. On a scale of 1 to 4, how useful was the information provided in the small group presentation? (Please circle one.)

1	2	3	4
Not At All Useful			Extremely Useful

12. Please share your comments about the MHCC Advising and Registration Workshop in the space provided below.

What was good about the workshop?

What could be better about the workshop?

Thank you very much for taking the time to fill out this survey.

We greatly appreciate your effort!

APPENDIX H

EVALUATION FORM FOR COLLEGE SUCCESS CLASS (HD 100)

9/21/95

College Success Course Evaluation Form

Mt. Hood Community College is committed to providing high quality educational experiences to students. To help MHCC continue to improve the classes it offers, please take a few minutes to evaluate the College Success class you have just completed. We will make every attempt to keep your answers to the following questions confidential. In addition, we will never reveal individual evaluation results; we are only interested in the group results. If you have any questions about this form, please ask your instructor, or contact Cheryl Stoker in the Title III, Activity 1 office at x 7103.

The following is a list of topics that are covered in the College Success Course. **Please rate how helpful the information you received about each topic is.** Some of the topics are required, and some are optional. This means that your instructor has probably not covered all the topics listed. If you did not learn about a topic, please circle "NA" for "not applicable". Your instructor can help you if you do not remember whether a topic was covered in class.

How helpful was the information you received about ...

	Not at all helpful	A little helpful	Somewhat helpful	Very helpful	NA
1. Goal Setting?	1	2	3	4	NA
2. Time Management?	1	2	3	4	NA
3. Locating support services on campus?	1	2	3	4	NA
4. Completing the educational planning sheet?	1	2	3	4	NA
5. Computing your GPA?	1	2	3	4	NA
6. College expectations (how college differs from high school)?	1	2	3	4	NA
7. College policies and procedures?		1	2	3	4
8. Completing term and weekly schedules?	1	2	3	4	NA
9. Stress Management?	1	2	3	4	NA
10. Test taking strategies?	1	2	3	4	NA
11. Completing and interpreting a career inventory?	1	2	3	4	NA
12. Financial aid?	1	2	3	4	NA
13. Standards of academic progress?	1	2	3	4	NA
14. Solving problems that interfere with college success?	1	2	3	4	NA
15. Living on one's own?	1	2	3	4	NA
16. Money management?	1	2	3	4	NA
17. Diversity?	1	2	3	4	NA
18. Getting involved in college activities?	1	2	3	4	NA

(Questions continue on the reverse side.)

HD 100 Faculty Focus Group Questions

1. What do you think are the strengths of HD 100? What are the most important topics in the course outline?

2. What topics in the course outline are less important? What topics do you **not** cover in your class?

3. How do you think the HD 100 class could be improved? What topics should be added?

4. What handout materials do you think are most effective? What materials need improvement?

5. What proportion of the students do you think benefit from the course? For what types of students is the course most helpful?

6. What do you think students expect from the HD 100 class? What recommendations do you have for how the class is marketed to students?

7. Are there alternatives to HD 100 that might be equally or more beneficial?