



Helena College of Technology goal planning program for academic probationary college students  
by Judy Louise Hay

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Education in  
Education

Montana State University

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Abstract:

The Helena College of Technology of The University of Montana (HCT) is a small, two-year, technical institution in Helena, Montana. The problem for this study was that the leadership at the College did not know whether students on academic probation were helped to persist at a higher rate through the use of the Goal Planning Program (GPP) as an intervention during their probationary semester. The research questions were: Does the GPP have a positive effect on the grades and persistence to their next semester of the students who participate in it? Do the students who participate in the GPP improve their grades more and persist to graduation at a higher rate than the probationary students who do not participate in the Program? The GPP was developed by Dr. Henry Reiff at Western Maryland College. The present study is a replication of Dr. Reiff's initial study, in which students' grades and persistence were enhanced significantly.

Two groups were examined: participants in the GPP and a comparison group (probationary students who did not participate). The researcher compared mean fall and spring GPAs and three-year graduation rates of participants and the comparison group. Because the results did not parallel Reiff's results, other relationships with GPP participation were investigated such as, whether student age was a factor in choosing to participate, and whether student age was related to graduation rate. No relationships were found in these additional investigations.

Study results suggest that students on academic probation who participate in the GPP are more likely to graduate than those who do not. Other trends were evident in the results that, taken together, indicate a generally positive influence that the GPP had on participants. Participants performed better than the comparison group in numbers and percents of students who increased their GPAs, avoided dismissal, and graduated.

The final recommendations from this study are to continue the GPP as part of an institutional retention plan, and institute many of the Program's elements early in students' enrollment at HCT.

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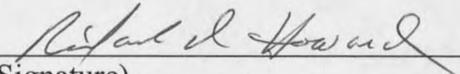
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This thesis has been read by each member of the thesis committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

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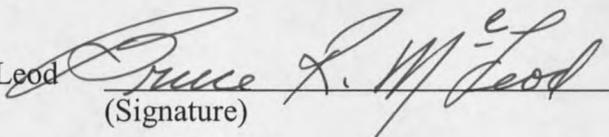
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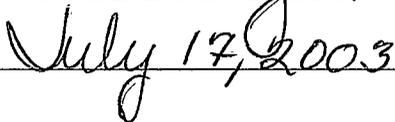
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## ABSTRACT

The Helena College of Technology of The University of Montana (HCT) is a small, two-year, technical institution in Helena, Montana. The problem for this study was that the leadership at the College did not know whether students on academic probation were helped to persist at a higher rate through the use of the Goal Planning Program (GPP) as an intervention during their probationary semester. The research questions were: Does the GPP have a positive effect on the grades and persistence to their next semester of the students who participate in it? Do the students who participate in the GPP improve their grades more and persist to graduation at a higher rate than the probationary students who do not participate in the Program?

The GPP was developed by Dr. Henry Reiff at Western Maryland College. The present study is a replication of Dr. Reiff's initial study, in which students' grades and persistence were enhanced significantly.

Two groups were examined: participants in the GPP and a comparison group (probationary students who did not participate). The researcher compared mean fall and spring GPAs and three-year graduation rates of participants and the comparison group. Because the results did not parallel Reiff's results, other relationships with GPP participation were investigated such as, whether student age was a factor in choosing to participate, and whether student age was related to graduation rate. No relationships were found in these additional investigations.

Study results suggest that students on academic probation who participate in the GPP are more likely to graduate than those who do not. Other trends were evident in the results that, taken together, indicate a generally positive influence that the GPP had on participants. Participants performed better than the comparison group in numbers and percents of students who increased their GPAs, avoided dismissal, and graduated.

The final recommendations from this study are to continue the GPP as part of an institutional retention plan, and institute many of the Program's elements early in students' enrollment at HCT.

## CHAPTER 1

## INTRODUCTION

Academic preparation, student goals, and use of campus resources are just three of the components that can impact students' progress and success in college (Noel, Levitz, Saluri, & Associates, 1985; Tinto, 1993; Yorke, 1999). Colleges routinely attempt to assess students' readiness to attend college academically through entry requirements of ACT and SAT scores; placement exams for math, English, and reading; written essays; and personal interviews. In the end, however, there is no magic formula that accurately predicts student success in college., even with high marks on all of the above. Students leave college at rates that are quite troublesome. For fall 1997 entering freshmen, the first-year attrition rate for American four-year public institutions was 28.1%, and for two-year public institutions, it was 47.5% (1999 ACT Survey). The rates include students who transferred to other institutions as well as students who dropped from school altogether. The national trend has gone down only slightly since 1992 when those percentages were 28.3% and 47.9%, respectively (Tinto, 1993, p. 14).

It is not realistic for an institution to have an attrition rate of zero, because, as James I. Fisher writes in *Reducing the Dropout Rate*, "There are significant numbers of students for whom college is not a realistic possibility, whom all the remediation in the world will not help, but who are being encouraged to enroll" (1978, p. 65). However, an institution should not be satisfied with an attrition rate as high as those presented above. Rather, institutions should be engaged in identifying and analyzing their own individual problem areas, proposing solutions, and assessing the effectiveness of those solutions,

once instituted. Effective student retention programs do not promise that all admitted students can be retained, but do require an ongoing “commitment of the institution, of its faculty and staff, to the education of its students” (Tinto, 1993, p. 212).

### Background Information

Helena College of Technology (HCT), a small, public, technical college of approximately 800 students, located in Helena, Montana has seen a steady climb in enrollment from a 1992 level of 433.33 full-time equivalent students (FTE) to 710.87 FTE in the fall of 2000 (HCT Fifteenth Day Enrollment Reports, 1992, 2000).

Commitment to students on a personal level is evident at HCT, as recorded in a 1999 Noel-Levitz Student Satisfaction Inventory. However, as with many two-year institutions, HCT does not have a record of identifying specific student retention issues or of ongoing efforts to study and address them. The 1999 Noel-Levitz inventory was the first of these efforts.

To begin to identify strengths and weaknesses in its work with students, HCT staff surveyed students with the Student Satisfaction Inventory (SSI). This first survey revealed high satisfaction with academic support systems; but also showed students somewhat dissatisfied with academic advising, among some other non-academic related items. Though the survey indicated some general areas HCT staff could investigate further in order to understand what, specifically, students were satisfied or dissatisfied with, no follow-up was done. The students originally surveyed in the SSI were no longer at HCT to engage in focus groups or other activities that would clarify points of

satisfaction or dissatisfaction in the SSI when this study was done. Plans were made by HCT leadership to survey students again with the SSI in two or three years.

After the first SSI was administered, an effort was initiated to improve HCT's record of probationary students being removed from academic probation and continuing in their studies. The Montana University System's, and HCT's, academic policy states that students whose grade point averages fall below 2.00 on a 4.00 scale will be placed on academic probation for one semester. A student is suspended from HCT if his/her grade point average remains below 2.00 for two consecutive semesters (2000-2001 HCT catalog). HCT staff had never tracked the success of its probationary students in moving off probation and back into good standing before, but knew that between 40 and 62 students were listed as probationary for the spring semesters since 1998 (Spring 1998 – 2001 HCT Fifteenth Day Enrollment Reports). The HCT Assistant Dean for Student Services, the Learning Center Director, and the Academic Counselor all agreed that the academic probationary population of students was large enough to merit some study and intervention.

Prior to this time, Henry Reiff developed a program for students on academic probation that grew from his and others' work with college students with learning disabilities (Gerber, Ginsberg, & Reiff, 1992; Reiff, 1997). Their theory was that strategies that help students with learning disabilities succeed in college would help academically at-risk students in general. Reiff, Gerber, and Ginsberg (1997) developed the Goal Planning Program (GPP) and used it with students at Western Maryland College. It is the model adopted for use at HCT in the fall of 2000 to help students on academic probation successfully move off academic probation and continue their

educations. This study is an attempt to measure the success of the GPP, as instituted at HCT, in accomplishing its goals with students who participated in it.

### Problem, Purpose, and Research Question

#### Statement of the Problem

The problem addressed in this study was that the leadership at the Helena College of Technology did not know whether students on academic probation and participating in the Goal Planning Program (GPP) were helped to persist at a higher rate than those who did not participate. The Goal Planning Program was first piloted at HCT in the fall of 2000. The leadership was interested in early evaluation of the value of the program to the college and its students. Understanding whether the program improved HCT's practice with students on probation would help leaders at HCT decide whether to continue, alter, or discontinue the program. Further, other similar colleges in Montana may be interested in the outcomes as they consider options for addressing retention of students in academic trouble on their campuses.

#### Statement of the Purpose

The purpose of this action research study was to investigate whether an adaptation of Henry Reiff's Goal Planning Program (GPP), which had demonstrated success at Western Maryland College and Mount Saint Mary's College, improved HCT students' grade point averages during their academic probationary semester.

#### Statement of the Research Questions

The questions this researcher answered in this study were:

1. Did the Goal Planning Program, as practiced at the Helena College of Technology, have a positive effect on the grades and persistence to their next semester of the students who participated in it?
2. Did the students who participated in the GPP improve their grades more and persist to graduation at a higher rate than the students on academic probation who did not participate in the program?

### Introduction to the Study

Students on academic probation are at a crossroads in their education. After at least one semester of poor academic performance, they are in a position to attempt to improve their performance, or continue to do poorly and be suspended at the end of the semester. A myriad of factors make up the picture such as whether they intend to complete a degree; whether they feel committed to the degree they have chosen and the institution; what outside factors are at play in their lives with family and work; and whether they have the requisite academic skills to do the level of work the program demands of them. Depending on these and other factors, students will be successful and persist, or they will depart the institution altogether at the end of the semester.

It is in the best interest of students and colleges that students be offered help in navigating that probationary semester so that those students who desire to improve their grades and continue to completion of their degrees are enabled to do so. Since the Helena College of Technology instituted the Goal Planning Program as one way to both help students on academic probation and understand the factors that contribute to academic success or failure of these students, understanding its effectiveness is the

logical next step for this institution. Further, this researcher hopes to contribute to the body of knowledge regarding factors that hinder or aid student success in college through this study.

### Importance of the Study

Retention of students in college has economic implications for both students and colleges. Men ages twenty-five and older with one to three years of college had a median annual income of \$36,393 in 1998, college graduates with an associate degree made \$40,274, and college graduates with a baccalaureate level degree of the same age group reported a median annual income of \$51,405 (Digest of Education Statistics, 1999, Table 386). Institutions that are tuition-driven are impacted immediately when enrollments or completion rates decline. They lose new tuition when students do not choose to attend for the first time, and also when students drop out of school before completion of their degrees.

Individual colleges and universities must strive to understand the reasons students choose to stay or depart before completing degrees. When students are qualified and choose to attend a certain college, it is incumbent upon that institution to provide those students "with sufficient opportunities and resources to complete their courses of study should they so wish" (Tinto, 1993, p. 205). This study can help HCT better understand the difficulties students on academic probation face in persisting in their studies. The study may also contribute to HCT's understanding of what services and resources might help future students. The study will have limited generalizability to other colleges, but

may be helpful to other small colleges with similar academic probation policies and problems.

### Design of the Study

Immediately before the start of spring semester 2001 at Helena College of Technology, students whose grade point averages were below 2.00 on a 4.00 scale at the end of fall semester 2000 received a letter from the Assistant Dean for Student Services. This letter detailed the academic probation policy at HCT and informed the student that he/she was on academic probation and under threat of suspension if the student's grades continue to be below the 2.00 level by the end of spring 2001 (Appendix A). This letter also recommended to the students that they see one of two academic advisors to participate in the Goal Planning Program for assistance in getting off of academic probation.

This researcher examined the grades of the students who chose to participate in the GPP and compared them to the students who were on academic probation but chose not to participate in the GPP. The grades from the semester before academic probation and grades from spring 2001 for both groups of students were compared to see if there was a positive difference in grades for students who worked with the advisors on the Goal Planning Program. This comparison follows the system of assessment the developer of the GPP, Henry Reiff, used to assess the GPP at Western Maryland College (1997).

### Definition of Terms

The following terms are used in this study:

Academic Probation. A student taking six or more credits whose semester grade point average falls below a 2.00 on a 4.00 scale will be placed on academic probation for the following semester (HCT catalog, 2000-2001).

Academic Suspension. Students at HCT are suspended from if their semester grade point averages fall below 2.00 on a 4.00 scale for two consecutive semesters. Suspended students must sit out one semester before applying for readmission to HCT. Academic suspension cannot be appealed at HCT (HCT catalog, 2000-2001).

Program. At HCT, the term program refers to the student's major area of study. This is similar to what is typically called a major at a university, but the programs at HCT are designed to be completed in four to five semesters of full-time college enrollment. At the time of this study, HCT offered twelve different programs of study including three options for Associate of Science degrees, ten options for Associate of Applied Science degrees, and seven options for certificates (HCT catalog, 2000-2001).

#### Assumptions, Limitations, and Delimitations

The researcher carried out the study with the following assumptions, limitations, and delimitations:

##### Assumptions

1. All students on academic probation for spring semester 2001 received a letter informing them of the Goal Planning Program at HCT and strongly recommending that they participate and take advantage of the program.

2. The Goal Planning Program components were followed consistently by both academic advisors who worked with students in the program.

### Limitations

1. The researcher's involvement in the Goal Planning Program. It is to be noted that the researcher in this study was one of the two advisors students in the study could meet with to participate in the program. She met with 20 of the 34 students who participated in the Goal Planning Program as they worked through the semester. Because of concern about objectivity and consistency, the two advisors met regularly to ensure as much as is possible that they were conducting the elements of the program in the same way. Comparisons of notes from student meetings and products of student record keeping were consistent to the satisfaction of the two advisors and the Assistant Dean for Student Services, who acted as an objective third party.

2. The voluntary nature of student participation in the GPP.

3. The small number of students who participated in this study makes it difficult to generalize to other colleges.

4. Differences in the demographics of the study groups from Reiff's (1997) and Gibbon's (2000) studies. While Reiff and Gibbon both studied groups at four-year liberal arts colleges, with predominantly traditional aged college students, this study's population consisted of a population with an average age of 27.6 years and a standard deviation of 9.9 years, enrolled at a two-year technical college.

5. Because of a changeover from an old student data management system at HCT, data before spring of 2001 (the first semester on the new system) was difficult to

compare due to different data collection and management between the two systems. The old data exist only on paper now, and may have been collected using different criteria from the present system.

### Delimitations

1. The choice of semester to study. Though the Goal Planning Program was piloted in the fall of 2000, this study focused on the spring semester 2001 students on academic probation. This was done in order to have a larger pool of students to study. The number of students on academic probation is typically larger in the spring semesters, as compared to fall semesters (HCT Academic Probation Reports, 1998-2001). Students who do poorly academically in a fall semester would typically be placed on academic probation for the spring semester as a second chance to improve their grades.

2. The academic advisors involved in the study chose to leave the choice of advisor to the students on academic probation. Since the program was to be largely voluntary, the advisors hoped it would increase the numbers of students participating if they got to choose their own advisor. It is not known if this helped or not.

### Chapter Summary

The problem, purpose, and research question of this study were presented in this chapter. Some background information, the importance, and the design of the study were discussed to establish a basis for understanding the context of the study and its connection with retention efforts on the HCT campus. The current and historical literature related to the retention issues in this study will be reviewed in the next chapter.

## CHAPTER 2

## REVIEW OF THE LITERATURE

Introduction

This chapter is a review of the literature regarding student retention. Of primary interest was the literature dealing with the two-year college environment and specific programs for retaining students. Other topics included retention, academic probation programs, non-residential campus retention, retention programs for students on academic probation, and effective study strategies.

This study is an attempt to understand the persistence of students on academic probation at the Helena College of Technology. The problem addressed in this study is that the institution's leadership does not know whether students have been helped to persist at a higher rate through the use of the Goal Planning Program as an intervention with these students. This literature review is an examination of the current state of the literature on the subject of student persistence in two-year colleges with the goal of applying that understanding to the Helena College of Technology's problem.

Synthesis of the LiteratureCriteria for Selection of the Literature

The literature search for this study was focused on retention of students in two-year, nonresidential college environments. Of specific interest was the issue of retention of students on academic probation. This narrow focus yielded few applicable sources.

Because most studies done in two-year institutions typically used a very limited sample of students from a single institution and obtained relatively low response rates, the search was widened to include the more general themes of retention and attrition. Effective study strategies as a theme was included when it became clear that programs for students on academic probation generally had a study strategies focus.

Though some literature dating back to the 1970s was cited, it was generally in corroboration of more recent literature. This review includes mainly literature from the 1990s and later, with a few exceptions for some of Vincent Tinto's early work and several mid-1980s studies that helped lay some groundwork for later research.

#### Retention and Attrition Literature

Much of the literature on retention and attrition had themes similar to Tinto's (1975) social interaction theory, which centered on student development and leaving college. In his *Leaving College: Rethinking the Causes and Cures of Student Attrition* (1993), Tinto discussed the many student and institutional reasons why students leave college. Astin (1975, 1984, 1985), Ramist (1981), Tinto (1975, 1985, 1986), Noel (1985), Pascarella and Terenzini (1991), Cross (1981), and Chickering (1993) are other primary sources informing this study and laying the foundation for understanding student retention in general.

In the search for two-year college retention studies, some were found, but few were very comprehensive or could be applied to other institutions because they addressed very specific problems at individual colleges. National quantitative information about two-year colleges and students is available from sources such as Educational Testing

Service, American College Testing Program, and the United States Department of Education. However, because similar retention information was not available for the Helena College of Technology at the time of this study, the specific usefulness of the national data to the current understanding of HCT's situation overall is limited.

The literature on student persistence in college over the past twenty years has been remarkably consistent in regard to the findings. Though this researcher concentrated on literature of the past ten to fifteen years, older literature was also consulted for historical and foundational purposes. Study after study confirms Tinto's view that persistence models are specific to individual institutions and to the time period being examined. "The key to successful student retention lies with the institution, its faculty and staff, not in any one formula or recipe." (Tinto, 1993, p. 4) Tinto's model of student integration forms the central theme for much of the current student persistence research (Baron, 1997; Gillespie & Noble, 1992; Noel et. al., 1985; Sydow & Sandel, 1998; Yaworski et. al., 2000). Tinto (1997) emphasized integration and commitment as key elements in understanding student departure. Students' background characteristics, their initial commitment to the goal of college completion, and their initial commitment to the institution they attend all influence students' intellectual development and academic performance, as well as their peer group and faculty interactions; thereby determining their integration into the campus community. Reiff, Gerber, and Ginsberg (1997) found these commitments to be important factors as well. In their study, students who had clear goals for college attendance were more successful than those who were unsure of their educational goals. Students who knew of and used institutional resources were more successful than students who did not. Students who had formed significant

relationships with at least one faculty member were more likely to persist than those who did not.

Earlier literature from the 1970's and 1980's was not particularly contradicted by more recent literature, so was used in this review as foundational to the topic of retention. Some more recent literature, especially Braxton (2000), however, is beginning to refine and question long held assumptions in the retention literature. In *Reworking the Student Departure Puzzle* (2000), edited by John M. Braxton, scholars look at why, after all that is known about student departure, still nearly half of the students who enter two-year schools and more than a quarter of those who enter four-year schools depart at the end of their first year (p. 1). Braxton himself recommends further refining of Tinto's integration theory, while others he mentions, specifically Tierney (1992, 1998) and Attinasi (1989), advocate development of completely new theories (Braxton, 2000, p. 258). These newer directions in the research on retention did not relate to this investigation into academic probationary students, so will not be discussed further here.

#### Academic Probation Related Literature

To focus specifically on the context of the problem being addressed in this study, this researcher looked for literature dealing specifically with students who drop out or are suspended from college for academic reasons. Most of the studies found on this theme centered on the effectiveness of particular intervention programs at individual colleges. The Goal Planning Program, developed by Henry Reiff at Western Maryland College (1997), and loosely replicated at Mount Saint Mary's College in Maryland by Thomas C. Gibbon (2000), was the result of Reiff, Gerber, and Ginsberg's earlier work that looked at

what set successful students with learning disabilities apart from the students with learning disabilities who failed a semester of college (Reiff, Gerber, & Ginsberg, 1992, 1997). Weinsheimer's work pointed out similar characteristics of students in academic trouble, but did not specifically address students with learning disabilities (1998). Both Reiff and Weinsheimer found that the strategies used by successful students helped struggling students significantly. The key was that most students with learning disabilities, and lower performing students in general, needed to be taught many of the strategies.

Baker, Borland, Howard, and Johnson (2001) looked at the degree completion rates of students who had been suspended for poor academic performance, and recommend not merely academic suspension, but also academic intervention aimed at improving the students' preparation for college coursework upon their return from suspension. Baker, Borland, Howard, and Johnson recommended strengthening counseling, remedial, and developmental programs as possible elements that could improve the completion rates of students who had been suspended from the university. The literature regarding academic probationary students seems to point in the direction of specific, intentional intervention with students to target their individual deficits or barriers to progress.

Batzer (1997) and Oklahoma State Regents (1993) looked at the effects of remedial courses on probationary and other academically at-risk students. Though these studies examined different courses, in general both found that remedial courses helped retain students who may not have otherwise been successful in the beginning. Oklahoma

State Regents, in particular, encouraged mandatory placement into remedial courses for entering students with low placement scores.

### Two-Year College Retention Literature

In the two-year college setting the issue of retention of students takes on a slightly different connotation than in four-year college settings because of the niche in American society that the two-year colleges fill of providing easy access to education for anyone desiring it. Studying student attrition at a two-year college becomes difficult because these institutions regard accessibility among their greatest virtues. "It is difficult for an institution built on the theme of easy access to limit easy exit." (Cohen & Brawer, 2003, p. 66) This statement can certainly be applied to the Helena College of Technology's situation, and underscores the need to take a college's mission, as well as other characteristics, into account when examining student attrition at a specific school. ACT reports degree completion, for example, according to the selectivity (from open to highly selective) of a school's admissions policies, public and private funding structures, two-year and four-year colleges, and more. Tinto takes these factors and adds campus characteristics such as residential or commuter to the list of institutional characteristics that can affect student retention (Tinto, 1993). Further focusing on what might be happening on two-year college campuses, the 2002 National Center for Educational Statistics study, *Nontraditional Undergraduates*, by Susan Choy (2002), it was found that "nontraditional students seeking an associate's degree were less likely than their nontraditional peers to earn the degree," and "among nontraditional students, those seeking an associate's degree were more likely than those seeking a bachelor's degree to

leave without a degree.” It would appear that students entering two-year colleges may be less committed to the goal of earning a degree than their four-year counterparts.

Other common characteristics of two-year colleges that complicate the retention picture are that they have a much higher percentage of nontraditional aged students and part-time students than the four-year colleges (Tinto, 1993, p. 9-11). Horn (1996) and Horn and Premo (1995) cite seven characteristics associated with nontraditional status that generally are related negatively to persistence: “financial independence, part-time attendance, delayed enrollment, full-time work, dependents, single parenthood, and lack of high school diploma.” It could be expected, then, that two-year colleges with large populations of nontraditional aged students would have lower degree completion rates than either four-year colleges or two-year colleges with mostly traditional aged students.

Along with Tinto’s interactional theory, Pascarella and Terenzini, in *How College Affects Students* (1991, pp. 640-644) examine the record of two-year colleges over a span of twenty years of research. They are quite harsh in their criticisms of how two-year colleges affect students’ persistence to a baccalaureate degree, but they do point out that these colleges provide access to higher education for individuals who are first-generation college students at a much higher rate than four-year institutions do. Students who enter a baccalaureate degree program through a two-year college, Pascarella and Terenzini say, are at very high risk for dropping out. The authors advocate for more intensive remedial programs in reading, writing, math, and general learning skills, and more effective academic and personal support programs for transfer candidates at two-year colleges.

Two-year commuter colleges, have unique retention challenges because of reduced opportunities for students to form relationships on campus. “Nowhere then is the

importance of involvement more apparent than in the classrooms of the college' (Tinto, 1993; p. 92). Tinto advocates for cooperative and collaborative learning opportunities in classrooms so that students will form relationships with one another. He also says that there is "no substitute for periodic personal contact between students and faculty." (p. 194.) For nonresidential students, a personal demonstration of commitment of the institution to its students is necessary in order for students to form commitments to the institution. With students who traditionally are only on campus for the courses they are registered for, a college has little chance outside the classroom to create connections such as Tinto describes. Retention efforts must be concentrated on the academic interface the college has with students, cultivating an environment in which faculty and staff are intentional about their educational and personal commitments to students.

Tinto describes his "principles of effective implementation" of retention efforts:

1. "Institutions should provide resources for program development and incentives for program participation that reach out to faculty and staff alike.
2. Institutions should commit themselves to a long-term process of program development.
3. Institutions should place ownership for institutional change in the hands of those across the campus who have to implement that change.
4. Institutional actions should be coordinated in a collaborative fashion to insure a systematic, campus-wide approach to student retention.
5. Institutions should act to insure that faculty and staff possess the skills needed to assist and educate their students.
6. Institutions should frontload their efforts on behalf of student retention.

7. Institutions and programs should continually assess their actions with an eye toward improvement.”(Tinto, 1993, pp. 149-153)

While all elements of implementation are necessary for change to take place and be maintained, Cohen and Brawer (2003, p. 44) and Cross (1981, p. 7) underscore the sixth element, *Institutions should frontload their efforts on behalf of student retention* (emphasis added) especially in the two-year college setting. Cohen and Brawer cite the fact that, generally, the majority of community college students come from the lower half of their high school classes academically and socioeconomically. Because of this, they believe that two-year colleges should ensure that the academic and social supports students need are available from the first day. First year programs, counseling and advising, and early warning systems are examples of intentional college supports that Upcraft and Gardner (1989) and Tinto (1993) cite as effective, echoing Pascarella and Terenzini’s recommendations above. Put another way, intervention with individual students should be both “developmental and intrusive” to be effective with students at risk for dropping out (Noel, Levitz, Saluri and Associates, 1985, p. 449).

Another significant trend in the two-year institution student profile is the fact that the percentage of students who attend two-year colleges only part-time has risen from 47% in 1970 to 64% in 1997 (National Center for Education Statistics, 2001b). Many factors are at play in making that happen, including the decline in the number of eighteen year-olds, an increase in the number of women attending college, and an increase in the number of students combining work and study (Cohen and Brawer, 2003, p. 41). The authors discuss the difficulty two-year colleges face in understanding retention on their campuses when so many students may take breaks from study to spend more time on

work and parenting. The term "stopping out" is used in the literature often to describe the student who takes a break for a semester or more, and returns to the institution eventually to finish his or her degree. This differs from what is commonly known as "dropping out," which often has the connotation of student academic failure attached to it. This point became important in understanding the persistence of students who were on academic probation at HCT, since some who are placed on academic probation are returning after a "stop out" of a semester or more, and may not require as many academic interventions as do students who are on probation due to low earned grades. This is another aspect of the necessity of individualizing approaches to retention.

### Evaluation of the Literature

Student retention has been an issue of interest on most American college campuses over the past twenty years and more, if judged only by the sheer volume of literature generated over that time on the subject (Astin, 1975, 1984, 1985, Cohen and Brawer, 2003, Braxton, 2000, Cross, 1981, Noel, 1978, 1985, Pascarella and Terenzini, 1991, Ramist, 1981, Tinto, 1975, 1985, 1986, 1993). Since education of students is probably a central theme in all college mission statements, it stands to reason that retention of those students would be a concern of all units of most colleges.

### Review of Methodologies Used to Study Student Retention

Making the case for putting institutional effort into retaining students in college currently is not difficult to do. Tinto makes this case in terms of institutional economics by urging schools to look at the costs associated with recruiting new students, adding to

that the losses of tuition, fees, and state support (in public institutions) when a student leaves. Individuals also suffer costs associated with their own dropping out, including financial setbacks, personal disappointment, and lowered career and life goals. Tinto goes further to make the case for retention efforts in terms of declining birthrates since the baby boom years and the fact that our society is an aging one (Tinto, 1993, pp. 7-15). There are simply fewer college-age students than there were in the 1970s. With a shrinking pool of traditional aged students for colleges to recruit, it makes logical sense to put efforts into keeping the students who are already enrolled. The next step, of deciding what should be done to keep students, is less clear, but the literature has much to offer in terms of how to approach retention of college students in general, and what data will help in assessing progress.

In 1981 Leonard Ramist looked at graduation rates as a measure of student persistence (1981, pp. 1-3). He went on to examine student demographic, academic, motivational, personal factors, college programs, policies, and services and their influence on student leaving patterns. His study pointed colleges to some specific actions that could assist in retaining students, such as financial aid, quality orientation programs, quality faculty-student interaction, quality academic programs, advising, and a variety of student services. He advocated for similar attention to all of these issues at the two-year college level as well, acknowledging the higher attrition rates of these largely commuter campus environments (pp. 4-30). Astin (1975), Tinto (1975, 1993), and Bean (1980, 1982, 1990) concur, and it is along these lines that Tinto's theory of student retention addresses the various interactions students and institutions have with each other that can result in a student's commitment to the institution and completion of a degree, or leaving.

Common measures of retention in these studies include semester-to-semester persistence and fall-to-fall persistence, as well as graduation rates.

Studies that dealt with students on academic probation, as stated earlier, were few. The work mainly used as the model for Helena College of Technology's academic probationary program was Henry Reiff's Goal Planning Program (GPP). Reiff's approach to studying the impact of the program on students at Western Maryland College included qualitative information in the form of student interview notes, and the more quantitative elements of Grade Point Averages (GPAs). Reiff looked at mean GPAs for students the semester before they were put on academic probation and the semester they participated in the GPP. Reiff used GPA, postulating that an overall increase in GPA concurrent with the use of the GPP would provide a degree of empirical support for the program (1997).

This comparative method provided Reiff with internal validity for his study. When Gibbon (2000) used Reiff's GPP with students, replicating it as closely as he could at Mount Saint Mary's College, some external validity was also established. Since GPA is central to college policies for academic standing overall, it was the most commonly used measure in evaluating success of academic probation programs (Reiff, 1997; Reiff, Gerber, & Ginsberg, 1992, 1997; Gibbon, 2000; Weinsheimer, 1998; Batzer, 1997).

### Summary of the Review

The review of literature for this study provided this researcher with a view of how interrelated the issues of students' leaving or persisting in college are. Reasons students persist in college are many, and often have to do with the student's goals for being in

college, their academic preparation, the student's commitment to the institution, and the significant relationships formed between student and faculty (Astin, 1993; Beal, 1982; Gerber, et. al., 1992; Tinto, 1993). This researcher attempted to discern the unique challenges two-year colleges face in retaining students on academic probation and found that, though two-year colleges do have challenges that set them apart from their four-year counterparts, their students share many of the characteristics of four-year college students when it comes to what makes students succeed academically in college. Gerber, Reiff, and Ginsberg (1992) found that successful students with learning disabilities used much the same academic strategies as other college students who are successful academically in college. Those same study strategies can be taught to other students, with or without disabilities to help them become more successful in college.

#### Overall Strengths of the Literature

Studies that specifically addressed student retention in two-year colleges were difficult to find, and not often generalizable to other situations because of their specificity to a problem at a particular college. There are, however, many studies that address problems of student retention in general (Attinasi, 1989; Baron, 1997; Bean, 1990; Gillespie & Noble, 1992; Noel, Levitz, Saluri, & Associates, 1993; Tracy-Mumford, 1994; York, 1999). The literature was consistent in pointing to many similar themes institutions should look for to lower attrition rates. Provision of comprehensive academic advising, orientation, academic support systems, and significant contact with faculty both in and outside the classroom, were common suggestions. Measuring progress of retention efforts also follows some common strands. The measure of persistence from

the first to the second year of college is a benchmark used in postsecondary education and national studies of postsecondary institutions. There are historical data dating back nearly twenty years that colleges can compare their student retention to. Knowing that American two-year colleges, on average, lose close to half of their students in this timeframe each year (ACT, 1999) helps make a strong case for studying retention in two-year colleges, and as Tinto (1993) puts it, discovering "the causes and cures of student attrition." Each context is, however unique in many ways, so colleges must find the keys to successful retention programming through their own institutional research.

#### Overall Weaknesses of the Literature

The focus on academic probationary students specifically as a definable cohort in need of intervention at the two-year college level yielded few results. Looking at students in academic trouble in general, however, did reap some helpful results. Gerber, Reiff, and Ginsberg (1996), Reiff, Gerber, and Ginsberg (1992, 1995, 1997), Reiff (1997), and Weinsheimer (1998) showed that students with academic goals, who can use time management, note taking, and other study strategies well tend to be successful in college. They found that students who find themselves in academic trouble in college often lack competence in these areas and benefit from being taught how to use them. There were not a large number of studies dealing with academic probationary students, though the few found were quite consistent in their approaches and findings. More research linking the different characteristics of two-year college students and academic success are needed, as separate from those done in the four-year setting. Many two-year

college studies were too particular to the campus and population studied to be helpful in understanding retention in general, in the two-year setting.

The risk factors for persistence that nontraditional aged college students often face, unfortunately, are mainly beyond the control of most colleges (Horn, 1996). More can be found out, however, in terms of creative delivery systems for degrees, student services, academic support needs, and educational goals of nontraditional students that may clarify the current understanding of the ability of two-year colleges in retaining these students.

#### Avenues for Further Inquiry

Though students in academic distress may be an avenue in need of further research, it may be more important to monitor numbers of students who go on academic probation as a secondary measure of the success of other retention-focused activities in colleges. Theoretically, the numbers of students on academic probation should fall if earlier retention interventions are working well. By the time students are on academic probation, it might be too late for some students. They may decide not to persist even to their probationary semester because of the stigma of being on probation, or any number of other reasons. It might be more important to investigate questions such as: Is it important for a college to survey students' entry-levels of study skills, just as they do academic achievement? How do various academic policies affect student persistence? What types of early-interventions are effective in developing student study strategy competence? What are the key study strategies needed for success in college? What sub-groups of nontraditional students that would be helpful to identify for retention

intervention efforts? These are just some of the questions that could provide opportunities for further inquiry.

### Chapter Summary

In this chapter this researcher reviewed the state of the research on the topics of student retention and attrition, academic probationary student persistence, and persistence in two-year colleges. Two-year colleges have retention challenges related to their missions, and to the fact that they are often non-residential. Though most of the literature focuses on programs and systems at colleges to prevent students from academic trouble, several studies pointed to some specific interventions that could be effective in helping students on academic probation return to good academic standing.

The methodologies of academic probation studies were quite consistent, comparing grade point averages of students the semester before probation and then in the actual probationary semester. Chapter 3 continues this discussion and provides a description of the methodologies used in this study.

## CHAPTER 3

## METHODOLOGY

Introduction

The methodology used to study the problem of the leadership at the Helena College of Technology not knowing whether students on academic probation were helped through their participation in the Goal Planning Program (GPP) is described in detail below. The rationale for using a quasi-experimental design in this action research project is also discussed in full. An overview of the statistical tests used to analyze the data from this study is provided to help answer the questions posed in the study: (1) Did the Goal Planning Program used at Helena College of Technology in the spring of 2000 have a positive effect on the grades and persistence to the next semester of the students who participated in it? (2) Did the students who participated in the GPP improve their grades more and persist to graduation at a higher rate than the students on academic probation who did not participate in the program?

ParticipantsPopulation

Participants in this study were full-time students whose grade point averages (GPA) in the fall semester of 2000 placed them on academic probation at Helena College of Technology (HCT) for spring semester of 2001. According to the Montana University System's and HCT's academic policies, any student whose grade point average (GPA)

for the semester falls below 2.00 on a 4.00 scale is placed on academic probation for the following semester. This allows the student a semester to raise his/her GPA above the 2.00 level. If the student's GPA falls below 2.00 for two consecutive semesters, he/she will be suspended from the college (HCT catalog, 2000-2001).

Of the 796 students enrolled in the fall of 2000, 103 students were placed on academic probation for spring semester 2001. Of those 103 students, 61 enrolled in classes for spring 2001 (HCT fall 2000 and spring 2001 Banner enrollment and grade reports). While the number of students placed on academic probation seems large in comparison to the number of students who enrolled the next semester, the former number represents students who attended classes, tried, and yet earned a GPA below 2.00 and also students who, for various reasons, quit attending classes early in the semester and received all failing grades because of no effort or extremely poor attendance (Suttorp, L., Assistant Registrar, personal interview, January 29, 2001). These students' GPAs for the semester would be reflected as 0.00. Ms. Suttorp indicated that those students who rarely attended classes often do not enroll the next semester. Of the 61 students who enrolled on academic probation for spring 2001, 13 had 0.00 GPAs for fall 2000 (HCT fall 2000 Banner grade reports).

The number of students who began the spring semester of 2001 on academic probation was slightly higher than what would be expected based on previous years. In the previous three spring semesters 55 (1998), 51 (1999), and 41 (2000) students started the semester on academic probation (Spring 1998, 1999, and 2000 HCT 15<sup>th</sup> Day Enrollment Reports). Overall enrollment at HCT had risen in these years and may

account for the somewhat higher number of students on academic probation in spring 2001.

### Selection of Participants

In applying the Goal Planning Program used at Mount Saint Mary's College and Western Maryland College, it was not possible to mandate participation in the GPP at HCT, as had been done in Reiff's (1997) and in Gibbon's (2000) studies. The population studied at HCT was a subset of the general population of students on academic probation at Helena College of Technology for the spring semester of 2001. At the beginning of the semester all students who had been placed on academic probation were sent a letter from the Assistant Dean for Student Services, notifying them of their probationary status and encouraging their meeting with the researcher or HCT's Academic Counselor to begin participation in the Goal Planning Program (GPP). Not all of these students followed the advice, however. Only 34 of the 61 students who were on probation made the decision to participate. The participant group, therefore, is a volunteer group since it is neither the whole group of academic probationary students nor a random sample of that group. The reasons some students decided to participate and others did not are not known at this time, though there were some slight demographic differences in the groups. The characteristics of the students in general differed more from those of the students in Reiff's (1997) and Gibbon's (2000) studies. These differences are discussed below.

### Demographics

Table 1 illustrates the demographics of the participant group and the comparison group, which was the group of students who were on academic probation for spring semester 2001, but chose not to participate in the study. The 34 participants in the GPP

consisted of 14 men and 20 women. Academic programs represented in this group were Office Technology, Computer Technology, Diesel Technology, Electronics Technology, Automotive Technology, Accounting Technology, Practical Nursing, and Associate of Science. The largest numbers of students were in Computer Technology (11) and Office Technology (8), with the other programs represented by from one to four students in this study. Fifteen of the students were of non-traditional college age (over 23) and nine were of traditional college age (18-23). Spring of 2001 was the second semester of college for all but two of the study participants. Those two were beginning their third semesters. The average fall 2000 grade point average (GPA) of all students on probation was 1.04, but the participant group had a higher average of 1.25.

Table 1. Demographic differences between HCT's participant and comparison groups.

HCT Academic Probationary Students, Spring 2001		
	GPP Participants	Comparison Group
Males	14	16
Females	20	11
Average GPA Fall 2000	1.25	0.78
Average GPA Spring 2001	1.45	0.88
Traditional Age (<24)	15 (44%)	16 (59%)
Nontraditional Age (>23)	19 (56%)	11 (41%)
Mean Age	29.26	25.56
College Program		
Traditional Trade AAS degree (Auto, Diesel, Construction, Metals)	4 (12% of participants)	8 (30% of comparison group)
Technical/Health AAS degree (Computer Tech, Electronics Tech, Accounting Tech, Office Tech, Nursing)	26 (76% of participants)	14 (52% of comparison group)
Transfer (Associate of Science)	4 (12% of participants)	5 (18% of comparison group)

The comparison group consisted of 27 students who were on academic probation, but decided not to participate in the Goal Planning Program. The group included 16 men and 11 women. The college programs represented were the same as the participating group, with the addition of one student in Protective Services. The largest numbers of students were in Construction (5) and Associate of Science (5). The other programs were represented by from one to three students. In general, the comparison group was younger than the group of participants, with 59% of them in the traditional age range. The average fall 2000 grade point average of the comparison group was 0.78, which was lower than that of the participating group.

As stated, it is not known why the students in the comparison group chose not to participate or why those who chose to participate made their decisions. A more in-depth look at this issue may lead to a better understanding of the retention risks of both groups. For the purposes of this study, however, the focus was on the group who chose to participate in the GPP and whether the program may have played a significant role in their academic performance. As illustrated in Table 2, study participants possess many of the seven characteristics typical of nontraditional students Horn (1995) found that are also generally related negatively to persistence in college.

Table 2. HCT participants with the characteristics of nontraditional students that Horn (1995) found to be negatively related to college persistence.

Characteristics	Financially Independent	Part-time Student	Delayed Enrollment	Work Full-time	Dependents	Single Parent
# of Participants	19	0	27	6	15	10

Early in the study, it was apparent to the advisors in the program that the issues that were interfering with students' academics were quite different from those discussed in Reiff's study. The issues participants in this study had of family, work, health, and financial problems were not seen as often in Reiff's description of student issues. For this reason, the researcher decided to examine the differences between the population in this study and Reiff's, to better understand the impact the the differences might have on study outcomes. A fundamental difference between participants in this study and participants in Reiff's (1997) and Gibbon's (2000) studies was age. Both of the other studies were primarily comprised of traditional aged participants. Another difference was in the type of academic program the participants were enrolled in. Table 3 shows a comparison between Reiff's (1997) population and HCT's.

Table 3. Comparison of known demographics of Helena College of Technology and Western Maryland College Goal Planning Program participants.

Comparison of HCT and WMC Populations		
	HCT GPP Participants (Spring '01)	WMC GPP Participants (Spring '95)
Participants	34	78
Average GPA prior Fall	1.25	1.69
Average GPA Spring	1.45	2.23
Traditional Age (<24)	15 (44%)	74 (95%)
Nontraditional Age (>23)	19 (56%)	4 (5%)
College Program		
Traditional Trade AAS degree (Auto, Diesel, Construction, Metals)	4 (12% of participants)	0
Technical/Health AAS degree (Computer Tech, Electronics Tech, Accounting Tech, Office Tech, Nursing)	26 (76% of participants)	0
Transfer (Associate of Science)/ Bachelor's degree	4 (12% of participants)	78 (100% of participants)

As Table 3 shows, the population studied at HCT was quite different demographically from the participants in Reiff's (1997) study. Though these differences, coupled with the characteristics in Table 2, may help explain some of the discrepancies found between Reiff's (1997) study and this study, further inquiry would be needed to establish their influences.

### The Study

#### Goal Planning Program Components

The Goal Planning Program the probationary students at HCT participated in has five essential elements. These elements are: (a) Previous semester evaluation; (b) Setting of long and short-term goals; (c) Use of applicable study strategies; (d) Tracking of present semester grades; and (e) Regular meetings between an advisor and each participating student. Forms to guide each step of the process were identical to the forms Reiff (1997) developed and Gibbon (2000) used. Both of the advisors in this study used the forms for meetings with the participants and recorded dates and meeting notes in efforts to carry out each element as consistently as possible. These forms may be viewed in Appendix B. In addition to the use of standardized forms for execution of the GPP with students, the advisors obtained grades for students from the college's Banner Student Information System. Grades from the students' previous semester and the semester they participated in the GPP were collected. Meeting notes were kept by both advisors detailing each student's attendance patterns in classes, assignment grades, referrals the advisor made to campus resources, and any issues that came up for the student over the course of the semester.

### Validity

Validation in an action research study such as this one is an important part of understanding results of the study (Gay and Airasian, 2000, p. 600). This researcher included several elements in the study to enhance the validity of the study overall. First, the study was a general replication of studies done by Reiff (1997) and Gibbon (2000), but using it on a different type of population. Second, standard forms and interview protocol were used by both advisors who worked with participants in the study on the Goal Planning Program. Third, standard data were gathered for all participants in the study, including GPA and graduation as the main quantitative measures available, and meeting notes from all meetings with participants over the course of the semester. Students also kept their own grade records in a standard format used by all participants. The objective grade data, and the use of outside comparison data, according to Gay and Airasian (2000), contribute to the validity of an action research study such as this.

While not indicating a cause and effect relationship, using grades as a measure of whether the GPP helped the students or not, was consistent with Reiff's (1997) and Gibbon's (2000) methodologies. Using the same measures would lend some external validity to Reiff's and Gibbon's research, and give this study an external comparison as well. Program completion, or graduation, was also recorded for this study, though not an element of Reiff's or Gibbon's studies.

### Development

The main tools used in the study were developed by Henry Reiff (1997) and were used in their original form. Reiff developed them through his work with Gerber and

Ginsberg as they studied what techniques and support successful students with learning disabilities used, as opposed to students with disabilities who were unsuccessful in college. The tools included a student contract, previous semester evaluation, goal planning forms, and a grade tracking sheet (Reiff, Gerber, & Ginsberg, 1992). Each is described briefly below, with samples included in Appendix B.

Contract. Explains the components of the GPP and contains a place for the participant to sign that he/she understands the components and intends to participate diligently.

Previous semester evaluation. Questions to guide the initial session with the student so that the interviews were consistent. The questions include the student's overall reaction to the previous semester, what was good about it, what was bad about it, ways the student can improve, and ways the student has been successful in the past.

Goal planning form. This form provides the avenue for planning specific grade and performance goals with the student for college in general, and then specifically for the courses he/she is taking currently. The form helps the student and the counselor estimate the time that may be required of the student per week in study and in class to accomplish the grade goals the student sets. It also provides space to identify strengths and weaknesses the student has in regard to their ability to meet the goals, thus identifying the campus support systems that may be necessary for the student to utilize.

Grade tracking sheet. This form is used by the student to identify how he/she will be graded in each course, and also to keep track of all grades received throughout the

semester. These sheets are kept by the student and brought to each meeting with the advisor.

Graduation. At the end of spring semester of 2003, all participants' and comparison group members' academic records in the Banner system were checked for completion of the requirements of a program of study and application for graduation.

Along with using Reiff's tools for working directly with GPP participants, this researcher also followed Reiff's (1997) evaluation model. Reiff compared the mean GPA of all students with less than 2.00 semester GPAs (and were therefore placed on academic probation) with the mean GPA at the end of the following semester (the one they participated in the GPP). This researcher did the same for all HCT GPP participants for spring semester of 2001. The GPP results at HCT could then be compared to Reiff's results.

Further, comparisons between participation in the GPP and gender, age, GPA, and graduation were made. Gender and age were investigated because of the perceived demographic differences between Reiff's (1997) population and the participants in this study.

### Research Design

#### Rationale

This action research project used a quasi-experimental design that was modeled in method after the projects at WMC and MSMC in Maryland by Reiff (1997) and Gibbon (2000), respectively. In both of those cases, and at HCT, the researcher was involved in the studies personally as one of the advisors who met regularly with students on

probation. In the HCT project, all 61 students on academic probation who were enrolled in the spring semester of 2001 were eligible to participate in the project, though 27 choose not to. In Reiff's and Gibbon's studies all students eligible to participate did participate, so they simply compared their participants' grades from one semester to the semester they participated in the GPP using a dependent t-test. HCT's Assistant Dean for Student Services chose not to require participation in the GPP beyond a strongly worded letter to each student urging him or her to participate (Doney, M, Hay, J., Williams, A., business meeting, October 13, 2000). The group felt that students should not be required to participate before the institution knew whether or not the program would benefit them. For this reason, this researcher was able to compare the participants' grades in the two semesters, as well as to compare them with the group who chose not to participate.

#### Invalidity and Minimization

As with any action research, questions arise about the validity and reliability of the study when the researcher is involved in the work being studied. This study was no different, except for some characteristics that were designed to minimize the effects of the researcher's personal involvement. As stated earlier, the study was carried out as a replication of two similar studies at two other small colleges (Reiff, 1997; Gibbon, 2000). The element that was not replicated was the environment the GPP was carried out in. The students and institution type are both different from the original study's. To ensure that this study replicated those studies as closely as possible, however, the researcher used the same forms, data collection techniques, and comparison data as the studies done by Reiff (1997) and Gibbon (2000). Even though the number of participants

in the study was low, another academic counselor worked with some of the students so that the researcher was not the only advisor working with students.

A common element that can affect validity in action research that is related to the researcher's involvement in the study is that often the researcher can be in the position to bias the quantitative measures for the study. In this study, that was not a factor. The quantitative element measured was student GPA, and neither the researcher nor the other advisor working with the GPP participants graded the students in any course they were enrolled in. Instructors who graded students did not know which students in their classes were participating in the GPP.

Two potential problems in the study were the low numbers of students available to participate and the voluntary nature of their participation. A total of 61 probationary students were enrolled at HCT spring semester of 2001, and only 34 of those participated in the study. This translated to a small number of students participating in the study and also a small number of students to compare to. The sample of students in the study was not randomly selected, so again, the generalizability of the study could be called into question. Because this was anticipated, due to the trend of academic probationary student numbers over the previous years at HCT, the researcher compared her results to both Reiff's (1997) and Gibbon's (2000) results. The difficulty in comparing results of this type of study from one college population to another became apparent when the comparisons were made, illustrating the problems of generalizing the study to a population different from the original study's. As illustrated earlier in this chapter, the population at HCT was quite different in age and institution type.

### Procedure

This study was conducted closely adhering to Reiff's (1997) research design. A list was generated from HCT's student information system of all students placed on academic probation as a result of low GPAs from fall semester 2000. This list was checked against the students who then enrolled for classes for spring semester, 2001. A total of 61 students enrolled on academic probation for spring 2001. Before classes began a letter was sent to each of the academic probationary students informing them of their probationary status and strongly urging them to meet with either this researcher or the counselor the first week of the spring semester to begin the Goal Planning Program. 34 students met with the recommended staff and participated in the GPP for the semester.

Throughout the semester, students met with one of the advisors regularly, kept records of their own grades as courses progressed, and worked through the GPP. The advisors worked with individual students to strengthen study skills, make scheduling adjustments, and refer on to campus or community resources as needed. At the end of spring semester, 2001, official grades were again collected from the Banner system for other students on academic probation for that semester.

Comparisons of semester GPAs were made between participating students and all students who were on academic probation at HCT spring semester 2001 (the comparison group). Semester GPAs from fall 2000 were compared to the GPAs of the same students for spring 2001. An overall increase in GPA concurrent with use of the Goal Planning Program would provide a degree of support for the program. The mean GPAs were examined, as well as the numbers of students whose GPAs either increased or decreased in the probationary semester. In Gibbon's (2000) study, dependent t-tests were

performed to test the statistical significance of the differences between GPAs of the students in the semester before the probationary semester and the semester they were on probation and participating in the GPP. The same was done in this study.

### Analysis Strategy

In order to understand whether the Goal Planning Program improved participating students' GPAs, the data collected from this study were analyzed following Reiff's (1997) and Gibbon's (2000) strategies. The individual fall 2000 GPAs of the students on academic probation during spring semester 2001 were compared with their GPAs for spring 2001. Also, the mean GPAs for these students the semester before their academic probationary one (fall 2000) were compared with the mean GPA for their probationary semester (spring 2001). The participants' mean GPA was also compared with the mean GPA of the comparison group. In these comparisons, a t-test was performed to assess the significance of the differences in the means, using .10 as the level of significance sought.

The same procedure was used to compare GPP participants' ages with the comparison group's; participants' gender with the comparison group's, and participants' completion of an academic program with the comparison group's. For example, a significant rise in mean GPA of study participants would indicate the GPP may offer some benefit to students who participate. Comparing the GPAs of participants against non-participating students on academic probation could also offer some indication of whether or not the GPP benefits students who participate. Though these comparisons could prove to be indicators one way or the other of the GPP's relative value to those who participate and those who do not, this study cannot prove causality.

### Timeframe

A pilot semester of the Goal Planning Program was in progress when the researcher decided to approach studying it for this thesis. Fall 2000 was the pilot semester for the program, and few students participated in it. As stated earlier, there are traditionally fewer students who enroll on academic probation during the fall semesters at HCT. The researcher wanted to study a larger pool of students, so chose to study the students who were placed on academic probation for spring 2001. The timeframe for the study, then, was from late fall 2000 through May 2001, with data collection and analysis following. Later, at the end of spring semester of 2003, graduation information was also collected for both the comparison group and the participant group. With spring 2001 being the first semester HCT was on the Banner system, it took more time than expected to obtain reports from the system. Staff were still learning the system, and reporting was one of the later tasks to be instituted with the program. Some of the reports were not available until well into the 2002 academic year.

### Chapter Summary

As an action research study with a quasi-experimental design, this study's methodology was chosen because it would help the Helena College of Technology find out whether students on academic probation were helped through the use of the Goal Planning Program. The researcher's direct involvement in the study was necessary because of her job at HCT, and because the staff is so small that for her not to be involved would have put an undue burden on coworkers. Further, the study was a

general replication of studies done by Reiff (1997) and Gibbon (2000), who were also involved in their studies. This methodology seemed to fit the study well, because the outcomes measured by the study (student grades and program completion) were not items the researcher had any control over, thus lessening researcher bias of the data.

Grade point averages and graduation rates are generally the measures of student success or failure in college. If the Goal Planning Program turns out to help students who participate in it to improve their grades, students can be helped to persist in college and to accomplish their individual goals for attendance. An examination of the findings of this study will help clarify whether this was true at HCT.



















































































