

AN ABSTRACT OF THE THESIS OF

Joanne Truesdell for the degree of Doctor of Education in Education presented on
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Transfer Degree Students and Their Transitions to Baccalaureate Completion.

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The purpose of this study was to describe the transitions, support, and current activities of students who completed baccalaureate degrees after completing community college non-transfer degrees. The population was limited to students who earned an associate degree of Applied Science, Science, or General Studies from Oregon community colleges, and who completed a baccalaureate degree from Portland State University. A telephone questionnaire was used to collect descriptive data and anecdotal information.

At the time of community college entry, only 15% of participants identified "transfer" as their reason for attendance, yet each participant in this study did go on to transfer and complete a baccalaureate degree. Half began their community college enrollment after age 22 and excluding previous post-secondary education experience took 6-10 years to complete their baccalaureate degree. At the time of this study, a surprising 33% were enrolled in graduate study. Examining the transitions in retrospect from baccalaureate degree completion, the participants relied upon faculty, family, and employment networks to complement their personal goal-strength. In

addition, participants identified an initial reliance on student services for information, especially in maximizing credits used in transfer. However, more than half of the participants identified inconsistent information from services and therefore used their support network of faculty, family, and employment members to obtain information relating to academic success, transfer requirements, and degree completion.

The study concluded that no educational program is necessarily terminal, that community colleges cannot configure programs that meet all learner needs, and that the availability and quality of information are catalysts for student goal-achievement. The principle implication of this research is that readily accessible and reliable information of the baccalaureate degree structure is essential to students in community college non-transfer associate degrees programs.

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Experiences of Oregon Community College Not-Intended-for-Transfer
Degree Students and Their Transitions to
Baccalaureate Completion

by

Joanne Truesdell

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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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TABLE OF CONTENTS

	<u>Page</u>
CHAPTER	
I INTRODUCTION	1
Background and Setting	3
The Problem, Importance and, Research Questions	6
Problem	6
Importance	7
Research Questions	7
Statement of Theoretical Framework	8
Definition of Terms	9
II REVIEW OF THE LITERATURE	12
The Development and Delivery of Post-Secondary Education in the United States	12
What is Occupational Education?	13
Who Delivers Occupational Education?	14
Occupational Education in Community Colleges	14
The Development and Role of Transfer/Non-Transfer Degrees	16
Transitions/Transfer and Community Colleges	18
Educational Transitions: An Institutional Perspective	18
Transitions: A Student Perspective	24
Oregon's Public Post-Secondary Education	26
Overview of Public Post-Secondary Education	26
A Snapshot of Student Transfers	26
Basis for Theoretical Framework	28
Objectives-Oriented Evaluation	28
Goal-Free Evaluation Approach	29
III METHODOLOGY	31
Study Population	31

TABLE OF CONTENTS (Continued)

	<u>Page</u>
Delimitations	32
Collection of Data	32
Instrument Validity and Reliability	33
Analysis and Treatment of Data	33
Pilot Study	34
Contact Procedure	34
Screening Procedure	35
Questionnaire Administration	35
Response Rate	36
Changes in Instrument and Administration	37
Survey Administration and Participant Response Rate	37
IV REPORT OF FINDINGS	40
Research Question One	40
Gender	41
Ethnicity	42
Parents' Educational Level	44
Age	46
Length of Time to Complete Baccalaureate	47
Research Question Two	49
Enrollment at Community College	49
The Community College Experience	53
Completion of a Community College Degree and the Decision of Employment and Transfer	54
The PSU Experience	60
Patterns in Retrospect: Community College, Transfer, and PSU	62
Research Question Three	63
Goal Strength	64
The Role of Services Used	65
Support Person	69
Research Question Four	72

TABLE OF CONTENTS (Continued)

	<u>Page</u>
V DISCUSSION AND IMPLICATIONS FOR THE FUTURE	75
No Educational Program is Actually Terminal	75
Community Colleges Cannot Configure Programs That Will Meet All Learner Needs	78
Availability and Quality of Information is a Catalyst to Student Goal Achievement	80
Implications for the Future	83
REFERENCES	85
APPENDICES	89
A SURVEY QUESTIONNAIRE	90
B LETTER OF APPROVAL	98
C LETTER OF PARTICIPATION AND DATA SPONSORSHIP	100
D FEDERAL RIGHTS TO PRIVACY GUIDELINES	102

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	Public Secondary Schools Offering Occupational Education	15
2	Snapshot of Community College Transfers	27
3	Percentage of Participants Compared to Non-working Numbers by Degree Year	39
4	Participants By Gender	42
5	Ethnic Distribution by Participants When Compared to Ethnic Enrollment at PSU and Enrollment at Oregon Community Colleges	43
6	Most Frequent Credit Hours Taken per Term by Participants, in Percent	54
7	Participants' Transfer Standing at the Time of PSU Enrollment, in Percent	57
8	Most Frequent Credit Hours Taken per Term at PSU by Participants, in Percent	61

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1 Degree Types and Major Disciplines	5
2 Summary of Objectives-Oriented and Goal-Free Evaluation Methods	30
3 Population and Participants	38
4 Parents' Educational Level	45
5 Length of Time from Community College Entry to Baccalaureate Completion	47
6 Most Important Reason for Pursuing Education at Time of Community College Enrollment	51
7 Participants' Majors at Time of Community College Entry	52
8 Two Most Important Services Used During Community College Enrollment	66
9 Two Most Important Services Used During PSU Enrollment	68
10 Person Participants Identified as Important to Their Completion	69
11 Employment in Baccalaureate Field of Study	74
12 Participants Not Employed in Baccalaureate Study	74

**EXPERIENCES OF OREGON COMMUNITY COLLEGE
NOT-INTENDED-FOR-TRANSFER DEGREE
STUDENTS AND THEIR TRANSITIONS
TO BACCALAUREATE COMPLETION**

CHAPTER I

INTRODUCTION

According to the U.S. Department of Education, Office of Educational Research and Improvement (1994), 16 million students are enrolled in post-secondary education. Nearly half of them are enrolled at more than 1,000 public community colleges. Today's community colleges typically identify three primary purposes: general education, liberal arts transfer, and occupational education (Community College Roundtable, 1994). Students who enroll at a community college may take courses that are of personal interest, professional upgrade, or continuing education, and courses which transfer to 4-year institutions or are occupationally specific. The students enrolling in lower division transfer or occupationally specific course may also earn associate degrees signifying the completion of a 2-year program of study. These associate degrees are comprised of a prescribed set of transfer, occupational, or a combination of both transfer and occupational courses.

Two types of associate degrees are most frequently granted throughout the United States. The Associate of Arts and Associate of Science represent different 2-year degrees. The first, Associate of Arts, represents the first 2 years of lower division course work which is transferable and applicable to a baccalaureate program of study. The second, Associate of Science, generally identifies an occupationally specific program of study designed to prepare students for immediate entry into employment rather than transfer to a baccalaureate

program. The occupational orientation of an Associate of Science degree generally restricts the transferability to a senior institution.

The transferability or non-transferability to senior institutions of the Associate of Science degree is determined through articulation agreements, course numbering, equivalent offerings at the senior institution, and technically specific courses. It is important to note that while an Associate of Science degree does not transfer in its entirety representing the first 2 years of baccalaureate study, courses within the degree may transfer toward a baccalaureate degree. The term *non-transfer* is used in this study to describe students who complete associate degrees other than the Associate of Arts degree.

While distinction is made by community colleges between degrees which transfer and degrees which are not intended for transfer, this distinction is not as clear for the students. For many community college students the decision to earn an associate degree is actually made after the first year of study (Clagget, 1995; House, 1995; Robertson-Smith, 1988). According to McIntyre (1987), Palmer (1986), and Prager (1988), non-transfer students earn 57% of the total associate degrees in community colleges and subsequent transfer to baccalaureate programs is made by over one-third of those students. This number is comparable to the one-third of transfer degree students who actually transfer. Despite the comparable numbers of non-transfer students who transfer, they experience difficulty in their transition and completion of baccalaureate degrees. The purpose of this study was to describe the non-transfer student and his/her transitions and current activity from community college entry to baccalaureate completion.

BACKGROUND AND SETTING

Although Associate of Arts degrees are typically thought of as transfer degrees and Associate of Science degrees as non-transfer or *terminal* degrees, the distinction between the two degrees in Oregon community colleges is not at all clear. Associate degrees in Oregon represent a continuum of degree options where the delineation of transferability and non-transferability becomes complex.

Oregon community colleges offer four types of 2-year associate degrees. The Associate of Applied Science; Associate of General Studies; Associate of Science Transfer Degree; and Associate of Arts, Oregon Transfer Degree. A review of Oregon community college catalogs places these degrees on the continuum of non-transferability to complete transferability in the following manner:

1. The Associate of Applied Science degree is awarded to students in professional/technical programs, thereby designating it as not intended for transfer. Typically students earn 18 general education credits which are representative of the areas of arts and humanities, social sciences, mathematics, and life and physical sciences. Depending on the area of occupational concentration, the remaining hours are drawn from occupationally specific courses and thereby non-transferable.

2. The Associate of General Studies degree is specifically designed for students who desire to gain a broad education, rather than pursuing a specific college major or occupational program. This degree is considered more flexible and includes general education courses, but may also provide students with occupationally specific courses. The student is able to take a variety of college transfer courses combined with occupational courses to obtain a degree. Students desiring to transfer with this degree must seek the advice of the senior institution to which they will transfer.

3. The Associate of Science Transfer Degree is designed for students planning to transfer credits to a baccalaureate degree program within the Oregon State System of Higher Education. The caution noted in the catalogs are that this *transfer* degree does not guarantee that students will be accepted as having completed all lower division requirements for the baccalaureate.

4. The last degree on the continuum is the Associate of Arts Oregon Transfer degree which is the intended as providing the equivalent of the freshman and sophomore (lower division) requirements of a baccalaureate. The Associate of Arts Oregon Transfer Degree allows students to be admitted to Oregon State System of Higher Education (OSSHE) colleges and universities with junior status. The catalogs point out that specific majors may require specific courses and, therefore, they must see a community college advisor or an OSSHE institution advisor.

While the community colleges may find these degree types administratively clear, it is important to recognize that students create *educational packages* based on goals they have developed from information they have available and their personal, employment, and educational experiences (Robertson-Smith, 1988). The concept of educational packaging is consistent with a consumer orientation approach to education which takes into account age, educational background, family educational background, and employment status of students when making educational decisions (Scriven, 1966).

The complexity of associate degree types and their role in transfer is compounded with the complexity of students creating educational packages to meet their needs. To illustrate this complexity, all four associate degree types are available from one community college in the discipline of Business Administration. Table 1 shows the confusion students may encounter as they begin their community college experience. At the time of initial

enrollment at a community college, students are asked to declare a degree and/or major discipline intent. If a student declares an associate degree in accounting, this can be interpreted in several ways. The declaration may mean an Associate of Arts degree with a major in accounting, an Associate of Applied Science degree in accounting, an Associate of General Studies Degree with some technical and transfer accounting courses and other business courses, or an Associate of Science Business Transfer which may or may not transfer in its entirety to an Oregon State System of Higher Education college or university.

TABLE 1
DEGREE TYPES AND MAJOR DISCIPLINES

Degree Type	Major Discipline	Transfer Purpose
Associate of Applied Science: Associate of Applied Science Accounting Associate of Applied Science Management Associate of Applied Science Marketing	Not Applicable	Non-transfer
Associate of General Studies	Accounting Management Marketing Supervisory	Some credits may transfer. Degree not intended for transfer.
Associate of Science in Business Administration	Includes selections of Accounting, Management, and Marketing	Degree may transfer if college or university approves. Otherwise, on a course-by-course basis. Currently only one OSSHE university accepts this degree.
Associate of Arts, Oregon Transfer	Business Administration	Degree will transfer with lower division courses completed.

As can be seen in Table 1, although it is possible to declare a major in accounting in each of the associate degrees, there are very different implications for the respective degree's transferability. Since the Associate of Arts Oregon Transfer degree offers junior level standing at all senior institutions in the Oregon State System of Higher Education, students earning this degree are considered transfer students. This study identifies students earning associate degrees other than the Associate of Arts Oregon Transfer Degree as non-transfer students.

The assumption made by community colleges is that at the time of enrollment, students not only understand their options but also have made reasoned decisions about the type of degree, their major discipline, and the senior institution to which they will transfer. This assumption is not well founded. According to one recent study by House (1995), only 25% of certificate and degree completing students declared a certificate or degree goal at the time of initial enrollment.

THE PROBLEM, IMPORTANCE AND, RESEARCH QUESTIONS

Problem

Non-transfer students who do transfer and complete baccalaureate degrees experience difficulty in their transitions. While non-transfer students may earn an equal number of credits in their first 2 years of study, they do not earn junior-level standing. They, therefore, expend more time and money than those who complete a transfer degree. These expenditures are a burden which threatens the baccalaureate degree completion. Yet, despite the difficulty, the rate of non-transfer students who do transfer has steadily increased and is comparable to transfer student rates (Belcher, 1992; Cohen & Ignash, 1993).

Importance

Costs for students attending Oregon community colleges have risen 40% in the last 5 years. From the perspective of non-transfer students, the transfer status below junior level and the experience of changing from a community college to a 4-year college environment increases the opportunity costs, time, and money for students, thereby inhibiting their ability to pursue and complete their educational and economic goals.

From the perspective of community colleges and 4-year institutions, the occupational and non-transfer degrees are the most expensive programs to offer. In this study, participants' experiences are related to the recruitment, admissions, assessment, advising, faculty-student interactions, articulation agreements, and curriculum at both community college and university institutions. It is hoped that this research on non-transfer students will be used in further studies by comparing what is known about traditional transfer students with what is known, through this study, of non-transfer students. Effective strategies will maximize resources of educational institutions and students. Since education is a primary avenue for economic advancement, the students' ability to obtain a cost-effective education benefits society.

Research Questions

This study addresses the following research questions:

1. Who are the students who complete associate degrees not-intended-for-transfer, and who subsequently transfer and complete baccalaureate degree programs?
2. What transitions to these students experience?
3. What has contributed to the ability of these students to transfer and complete baccalaureate degrees?

4. What are these students doing now that they have completed baccalaureate degrees?

STATEMENT OF THEORETICAL FRAMEWORK

Cziko (1989) proposed that educational research take "as its primary goal and responsibility the dissemination of descriptive educational findings to other researchers, teachers, administrators, and policy makers in a form that is meaningful and useful" (p. 24). Cziko's proposal is seriously considered in this study by exploring the non-transfer students' experience toward baccalaureate completion. This exploration provides researchers, teachers, and administrators with a description of the journey, and thus a better understanding from the students' perspectives regarding transitions and completion of baccalaureate degrees.

The theoretical framework for this study is grounded in two evaluation approaches. The first is the objectives-oriented evaluation approach originated by Tyler (Madaus & Stufflebeam, 1989). The second, is the goal-free evaluation approach developed by Scriven (1966). Worthen and Sanders (1987) recognized that these two evaluation approaches differ in purpose, yet are not mutually exclusive in their use. This study draws from both evaluation methods and, in Chapter II, provides a discussion how each of the frameworks are used.

DEFINITION OF TERMS

The following terms are used throughout this study:

Adjustment calculation. (completed + refused + r not available + away for duration + other) ÷ (completed + refused + are not available + away for duration + other + non-sample).

Adjusted response rate. The adjustment made to compensate for the never-answered telephone numbers. The never-answered numbers consist of residential numbers that were not answered in any of ten calls made.

Adjusted response rate calculation. (completed ÷ completed + refused + are not available + away for duration + other) + (adjustment calculation)(never-answered).

Articulation. Agreement between two educational institutions that course work accomplished at one educational institution be acceptable and applicable to educational programs at the other institution. In some states (e.g., Florida) articulation among high schools, colleges, and universities goes far beyond courses for transfer, dealing as it does with all aspects of education, including facilities, data gathering, resources, and system-wide philosophy of higher education.

Associate of Applied Science degree. Awarded to students in occupational programs who complete approved course work in the major field and earn 18 credit hours of general education. The degree consists of at least 90 credit hours (term calculation) with stated limitations on transferring.

Associate of Arts, Oregon Transfer degree. An opportunity for students to complete lower division (freshman and sophomore) degree requirements at a community college and be admitted to Oregon public colleges and universities as having all lower division general education requirements completed for a baccalaureate degree.

Associate of General Studies degree. Awarded to students completing a broad education. Students may select courses from occupational or college transfer course areas. It may not fulfill requirements for transfer to a 4-year institution.

Associate of Science Transfer degree. Designed for students planning to transfer credits to a baccalaureate degree program at 4-year institutions of the Oregon State System of Higher Education. It allows more freedom of course selection than the Oregon Transfer degree, but does not guarantee that students will be accepted as having completed all lower division requirements for a baccalaureate degree.

Career track. Referring to students in community colleges pursuing occupational education programs. Assumes an immediate linkage to employment upon program completion rather than to additional post-secondary education then employment.

Liberal arts degree program. Refers to programs which offer lower division transfer work at the freshman and sophomore level at the community college which applies toward baccalaureate general education requirements.

Non-response. Members of the population who refused to participate in the telephone survey, had language barriers to participation, were unable to participate, were away for the duration of the study, were contacted but not available, other non-responses, and never-answered.

Non-sample. A member of the population who did not meet the requirements of the study.

Non-transfer student. Used in this study to describe students who complete associate degrees other than the Associate of Arts degree.

Occupational education. In its broadest sense, occupational education is that part of education which makes an individual more employable in one group of occupations than in

another (Evans, 1978). The infusion of federal dollars narrowed the term occupational education to include only instruction designed to enable people to succeed in occupations requiring less than a baccalaureate degree (Evans, 1978; U.S. Department of Education, Office of Vocational and Adult Education, 1993; U.S. Department of Education, Office of Educational Research and Improvement, 1994).

Response rate. The number of participants responding to the survey.

Transfer rate. The number of students who complete course work at a community college and change their educational institution. Common definition includes 12 credits of college level work and the change in institution to a 4-year college with at least one term or semester completed.

2+2 TPAD programs. Agreement between high school and 2-year colleges where students complete high school professional-technical specific programs and then continue to complete a 2-year degree program at the college. Also called *tech-prep*.

CHAPTER II

REVIEW OF THE LITERATURE

Contrary to general opinion, students who earn degrees not-intended-for-transfer do seek and complete baccalaureate degrees. The literature revealed the importance history plays in the development of multiple associate degree purposes and what has been studied about students who obtain these differentiated degrees. This literature review is divided into five sections. The sections include:

1. The history of the development of education in the United States.
2. The role that liberal arts transfer and occupational education non-transfer degrees play in distinguishing the community college from other post-secondary education institutions.
3. The complexity of transfer/transitions in community colleges from an institutional and student perspective.
4. The organization of public post-secondary education in Oregon.
5. The theoretical framework used to approach this study of students who earned degrees not-intended-for-transfer and who subsequently completed baccalaureate degrees.

THE DEVELOPMENT AND DELIVERY OF POST-SECONDARY EDUCATION IN THE UNITED STATES

The delivery of post-secondary education in the United States from the late nineteenth century to the early 1950s was shaped by the development of Land Grant colleges and universities through the Morrill Land Grant Act of 1862. Concurrently, the lack of development in secondary education, especially in the rural communities, created a need for

colleges and universities to offer pre-college education. During this same period, technical institutes focusing on teacher preparation, agriculture, and mechanics were developed. The junior college also appeared on the educational scene offering parallel curriculum to its university counterparts.

The development of education set the stage for the complexity of associate degree roles. Differing secondary and post-secondary approaches to education were the results of independent and mutually exclusive development. This independence also created the basis for how students moved through education. Originally, educational options were limited. Students moved from secondary schools to the work force, professional institute, junior college, or university dependent upon personal economics and proximity to educational opportunities. Limited movement existed between educational institutions. Because of the limited movement after secondary education, the criteria and curriculum used to judge the quality of students being served by secondary, technical institutes, and junior colleges, and any subsequent articulation of academic standards, were directed by 4-year colleges and universities.

Occupational education developed later. The industrialization of America, specialization of work-roles, and cyclical urban unemployment led to the development of federally directed and funded programs (U.S. Department of Education, Office of Vocational and Adult Education, 1993).

What is Occupational Education?

In its broadest sense, vocational education is that part of education which makes an individual more employable in one group of occupations than in another (Evans, 1978, p. 3). Evans' definition is inclusive of all educational endeavors leading to a specific occupational group (e.g., lawyers, doctors, linguists, welders). The infusion of federal dollars to support

occupationally specific education in secondary and post-secondary education narrowed the term occupational education to include only instruction designed to enable people to succeed in occupations requiring less than a baccalaureate degree (Evans, 1978; U.S. Department of Education, Office of Vocational and Adult Education, 1993; U.S. Department of Education, Office of Educational Research and Improvement, 1994). The term *occupational education* used in this study refers to vocational, technical, or professional education.

Who Delivers Occupational Education?

A large and complex group of institutions comprising over 33,500 public and private institutions in the United States (Figure 1) are involved in some level of occupational education. At the secondary level, occupational education is provided by 11,335 public secondary schools, 225 vocational high schools, and 1,395 vocational centers.

In the post-secondary sector, occupational education is provided by over 1,000 community colleges and 2,400 post-secondary proprietary schools. In addition, occupational education is provided by numerous employers, labor organizations, and federal programs such as the Job Training and Partnership Act, welfare-to-work programs supported by the Family Support Act, and in several states, state-funded training programs aimed at economic development (U.S. Department of Education, Office of Vocational and Adult Education, 1993).

Occupational Education in Community Colleges

Approximately 16 million people are enrolled in post-secondary education, with 5.8 million (35%) enrolled in occupational education programs. Over two-thirds of the students (3.8 million) enrolling annually in occupational education do so at approximately 1,072 community college campuses (U.S. Department of Education, Office of Educational

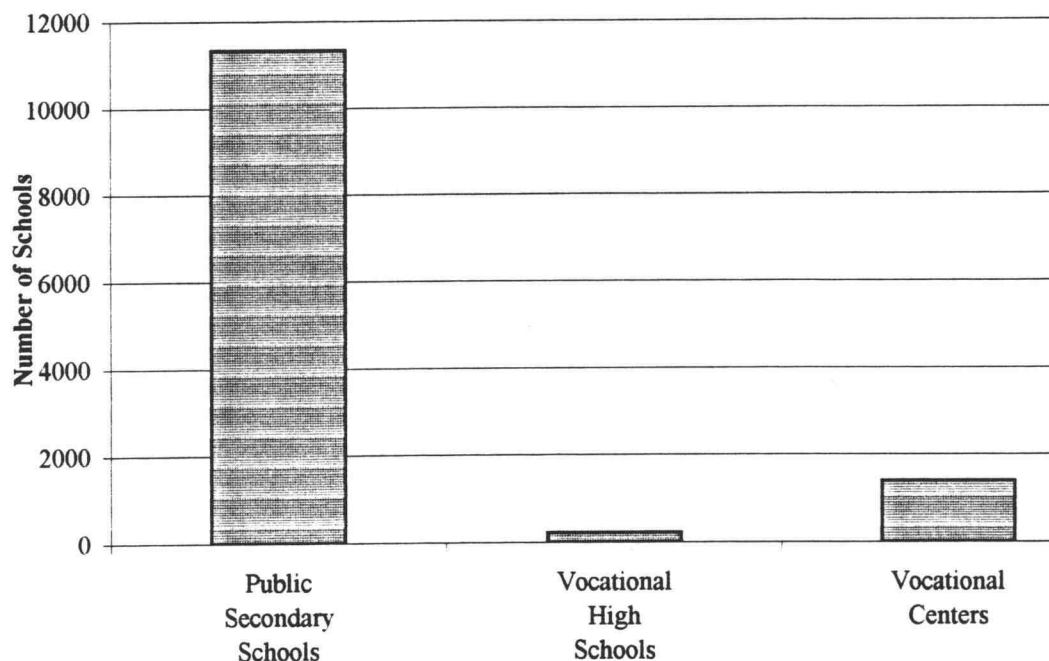


FIGURE 1

PUBLIC SECONDARY SCHOOLS OFFERING OCCUPATIONAL EDUCATION

Research and Improvement, 1994). Students enrolled in occupational courses account for over half of the student population at community colleges and were concentrated in three areas — business, health, and technical — with 29%, 22%, and 23%, respectively. These programs constituted 74% of the occupationally specific program enrollment at community colleges nationally. The remaining 26% included programs in service and trades. Associate degrees awarded in 1990 totaled 470,000. Of the 448,997 associate degrees awarded in 1989, 57% (255,928) were degrees not-intended-for-transfer. This information indicates that non-transfer degrees were awarded as frequently as liberal arts transfer degrees.

The completion of an associate degree, regardless of its transferability or non-transferability, provided economic benefits for its degree earners. According to U.S. Census information, median income for males with an associate degree was 26% higher than those

with a high school diploma, and 21 % less than those with a bachelor degree. For women, median income was 33 % higher with an associate degree than a high school diploma, and 16 % less than women with a bachelor degree (Bassett, 1996).

Occupational education developed to meet workplace needs in a rapidly increasing industrialized nation. Namely, it focused on developing a discrete set of professional skills required for jobs, but at less than a baccalaureate degree. Business and industry, including labor unions, supported this new venture in occupational education. Community colleges seeking an opportunity to establish a unique identity began to offer occupational programs with degree status labeled the Associate of Applied Science and Associate of General Science. Since these degrees were occupationally specific with immediate employment the goal, they were developed as non-transferable to baccalaureate degrees.

THE DEVELOPMENT AND ROLE OF TRANSFER/NON-TRANSFER DEGREES

Today's community colleges are the result of 100 years of educational innovation. Social, economic, political, and cultural forces served to shape the current associate degree design (Ratcliff, 1994). The struggle for developing community-based educational services and the need to meet community needs was evident in the development of junior colleges to community colleges. In 1922, the American Association of Junior Colleges defined themselves as, "An institution offering two years of instruction strictly at the college grade" (Bogue, 1950, p. 45). Within the same decade, the American Association of Junior Colleges added to their definition of a junior college: "The junior college may, and is likely to, develop a different type of curriculum suited to the larger and ever-changing civic, social, religious, and vocational needs of the entire community" (Bogue, 1950, p. 46).

The junior college wrestled with its identity. Desiring to be distinct from the secondary school system from which many began and not to be defined by the university or college system which served to set academic standards for the liberal arts transfer programs, the junior college sought opportunities to distance itself from traditional higher education. The infusion of occupational education into the mission of the community college was the deciding and distinctive feature. With this infusion, decisions regarding the structure of occupational education were required. The choice to be made was to either create a single structure which allowed fluid movement between occupational and transfer curriculum, or to create a separate structure. The final structure created a separate track which segregated occupational education from the transfer option. During the 1930s, junior colleges were criticized for their focus on college graduation. Of primary concern was the lack of dominion junior colleges had in their own course offerings. The demand for a unique community college identity facilitated the expansion and development of a single, distinct, and terminal occupational education curricula academics (Taylor, 1933; Weersing, 1931).

The GI Bill and the Truman Commission's emphasis on occupational and community-based education reinforced the concept of community colleges providing three primary purposes central to their mission: general education, liberal arts transfer, and occupational education. The effect of the broadened mission shifted the resources previously used to develop relationships with senior institutions to the development of relationships with business, industry, and community organizations. The outcome of this resource shift and new emphasis on occupational education diminished the focus on creating and sustaining transfer relationships. The effects of this resource shift is evident in the transfer-rate of community colleges. Transfer rates approximated between 60% and 70% in the 1950s and 1960s, and steadily declined until transfer rates stabilized at 26% to 30% in the 1980s.

TRANSITIONS/TRANSFER AND COMMUNITY COLLEGES

The *Webster's New World Dictionary* (Guralnik, 1986) defines the term *transfer* related to education as, "to withdraw from one school, college, program of study, etc. and be admitted to another" (p. 1509). Community colleges, unlike other educational institutions, meet all aspects of this definition. Community colleges experience students withdrawing or completing high school and attending community college; students withdrawing or completing community college programs and transferring to 4-year colleges; and, community college students withdrawing or transferring from one program of study to another across the community college curriculum. Studies related to transfer issues affecting community colleges and their students were concentrated in two categories: The liberal arts transfer degrees and the occupational degrees (Grubb, 1991; Mertes, 1986; McIntyre, 1988; Prager, 1988). These studies effectively provided data and recommendations for models and programs which would improve transfer success. However, the overwhelming research regarding community college transfer predominately focuses on the Associate of Arts degree.

Educational Transitions: An Institutional Perspective

The importance of institutional forces in facilitating the movement of students toward baccalaureate degrees has been under discussion since 1828 when Yale president Jeremiah Day and Professor James L. Kingsley wrote the Yale Report. In its essence, the report formalized the discussion regarding classical curriculum (regarded today as liberal arts transfer) to be required even for those students who were involved in mechanical and agricultural studies (regarded today as professional technical programs) (Zelenski, 1989).

With the development of 2-year programs by community and junior colleges in the early twentieth century, the friction brought by the distinction between the liberal arts and occupation oriented degrees solidified. This friction was noted by Berman and Weiler (1989, 1990) who suggested that institutional transfer performance was affected not only by institutional practices (e.g., coordination and planning), but also by how the practices are administered and by the leadership guiding the practices. Banks (1990) provided a comprehensive review of the transfer function and transfer performance of community colleges. Banks' conceptual model emphasized components of institutionalization of coherency, stability, and organizational climate as major aspects embedded in the transfer process, namely, strong academic advising, close articulation with senior institutions, and a general climate (attitude) which fostered an attitude toward transfer.

The system-to-system effects on students' persistence and success have been researched. For occupational degree students, the discussion regarding transfer was limited. Prager (1988) summarized studies from the New York (SUNY) programs over a 3-year period noting that transfers from the occupational degree population increased from 36% in 1979 to 51.7% in 1982. Several types of agreements between community colleges and senior institutions exist which try to engender transfer for occupational students, specifically, the Contract Major, Capstone, and 2+2 programs. The Contract Major provided a block transfer specifically for Associate of Science degrees, and for specific baccalaureate degree disciplines. The Capstone provided a broader approach allowing a baccalaureate degree in General Studies as opposed to a specific discipline. The 2+2 program, while allowing transfer opportunities, was school-to-school specific and varied within any university.

The literature clearly indicates that efforts have been made by community colleges and senior institutions to smooth transfer options to all students. Yet, with all the options, the

question remains unanswered: Who are the students completing degrees not-intended-for-transfer and what are their experiences in their transition to a senior institution and their completion of a baccalaureate degree?

Seamless approaches to the delivery of education to the public has been part of the history of education in the United States (Guthrie & Guthrie, 1988). Several current realities exist which hinder student progress in transfer. System issues between loosely connected high schools, community colleges, and 4-year institutions exacerbate attempts in providing seamless delivery of education to the public. The following is a discussion of the research conducted regarding the impact of system-to-system issues which affect the ability of students to transfer between the systems.

High school to community college system. When considering seamless education, articulation and dual enrollment programs between high schools and community colleges provide a beginning point. Studies conducted by a consortium of California community colleges and their respective feeder high school districts identified transfer issues from two complementary orientations (Mertes, 1986). The first were changes in high school demographics which subsequently influence program and service delivery within the high school and community college systems. Second were the identification of efforts which would strengthen the community college-high school relationship.

Mertes (1986) found that the number of high school students enrolling in community colleges was decreasing in California. The primary factors which resulted in this decline were the aggressive outreach by 4-year institutions, increased opportunities for employment, increasing dropout rates, reduced high school focus on vocational-technical education, and a changing demographic mix of the high school population. California was not the only state which addressed the high school to community college to 4-year institution articulation issue.

Florida developed legislation which created mandatory articulation agreements. While originally intended for liberal arts transfer students, these agreements affected positively the ability of occupational students to transfer (Palinchak, 1988). These agreements decreased the additional credit hours required by Associate of Science and Associate of Applied Science degree transfer students through common course numbering, common lower division curriculum, and described responsibilities for community college and the university systems in developing similar curriculum.

The implications for this research suggested the development of an aggressive articulation model between high schools and community colleges, not only in instruction, but also in student service programs.

In a 1988 follow-up report, five essential elements to enhance transfer were developed through a review of current articulation agreements, information exchanges, and special programs developed by high schools and community colleges. The five elements were orientation information, concurrent enrollment practices, feedback on student performance after transfer, development of cooperative technical-vocational programs, and joint institutional review of curriculum by high school and community college faculty (Mertes, 1986).

The involvement of high school students in concurrent enrollment programs was one major factor influencing the decision of high school students to continue their education at the community college level (Baser, 1992). High schools which were able to successfully facilitate their students to enroll at community colleges found that students encountered similar difficulties when moving from community colleges to 4-year institutions.

Community college to 4-year institutions system. The system issues reflected within the high school-community college relationship were present within community college and

4-year institution relationships. Transfer processes developed between community colleges and 4-year institutions faced several systemic problems. The lack of statewide articulation agreements between community colleges and 4-year institutions has required each community college to negotiate and sign articulation agreements between each 4-year institution and the individual schools within these institutions (Mertes, 1985). The major issue brought forward in these studies was the discrepancy of the definition of articulation. Definitions included course-by-course agreements, plus two degree program agreements, and general articulation agreements between community college and the general 4-year institution admissions requirements (Banks, 1992; Mertes, 1985; Swift, 1986).

The effects of multiple types of articulation agreements resulted in added financial and human resources needed to develop, monitor, and maintain each of these agreements. From a systems perspective, the sheer numbers of these agreements inhibited the development of a more comprehensive articulation agreement and/or the development of additional agreements. The inability of the community college system to develop plus two programs with 4-year institutions resulted in an accumulation of 6.33 to 62.55 additional credit hours taken by transferring community college students to complete baccalaureate degrees (Swift, 1986). Further, the knowledge by students that additional credit hours were required was one factor identified by McIntyre (1987) as a deterrent for community college enrollment and/or transfer.

Pennsylvania resolved the primary issue of student transfer by granting dual admissions. When students were admitted to the 2-year institution, they were also granted admission, concurrently, with the 4-year institution. Students have dual college rights, service, and consistent access to faculty advising (Woodbury, 1988). This arrangement was made to protect the integrity of the associate degree and to ensure community college

transfer students receive equitable treatment from the transfer college. New Jersey's 4-year colleges and universities responded to pressures of lower enrollments and began assuming their part in the articulation process within the occupational degree programs (Thomas, 1988).

New Jersey's Institute of Technology was the first to develop curriculum-by-curriculum agreements with nearly all of the state's community colleges. Extensive faculty contact among all participating colleges combined with data collection of student Grade Point Averages (GPAs) segregated by community college identified curriculum and college weaknesses.

Within the context of systems issues, the mission of the community college in providing a transfer function and the definition of transfer-rate success from an institutional perspective was reviewed. Studies which examined transfer-rate success varied in definition of which community college students should be identified as transfer students. The number of credit hours accumulated by community college students, the number of terms completed at a 4-year institution upon transfer, and the conferring of baccalaureate degrees by students were all considered as transfer success (California Department of Education, Community College Chancellor's Office, 1989; Clagget, 1990; Grubb, 1991).

While each study examined various definitions of who a community college transfer student was, there was agreement as to the importance of the transfer function that community colleges provide. The percentage of community college students transferring to 4-year institutions ranged from 23% to 45%, demonstrating that one of the major functions of community colleges was to provide access to baccalaureate degrees through both the academic transfer and the applied science degrees. While system issues and the mission of

community colleges has been researched, the resulting success of community college students who transfer was also explored.

Transitions: A Student Perspective

Characteristics of community college students. Community college enrollment averaged over six million in 1994-95. Part-time students comprised 64% of the total enrollment, and full-time 36%. This represented a decade increase of 19% part-time and 7% full-time. Community colleges played a crucial role in providing access to ethnic minority students and women. Ethnic minority students enrolled at a community college represented 45% of all minority students enrolled in higher education. Women represented 58% of the total enrollment in community colleges and earned 57% (145,879) of the degrees not-intended-for-transfer. Students with disabilities represented 12% (U.S. Department of Education, Office of Educational Research and Improvement, 1994).

Participation in education at a community college increases substantially for ages 25 years and older. Students 21 years and younger totaled 16% of the community college population, students age 22 to 24 totaled 9%, and students 25 and older totaled 46%. The remaining 29% were unidentified (U.S. Department of Education, Office of Educational Research and Improvement, 1994). Age also played an important role in the number of credit hours students enroll in. Younger students tended to enroll full-time while older students enrolled part-time.

The dependence on federal financial aid is evident for community college students. Students attending community colleges received 28% of the total financial aid awarded in the nation. Most importantly, financial aid provided more than half of the total financial support for these students. The characteristics of community college students were significant in

assessing the opportunity costs associated with occupational education and transfer. The age, part-time status, and dependency on financial aid support the importance of this study.

Transitions of community college students. Studies examining the success of community college students who transfer focused on completion of the first semester at 4-year institutions through a comparison of GPAs of community college transfers with native populations (House, 1989). *Transfer shock* was a term coined in this initial transition period of community college students to 4-year institutions and was reflected in the initial decline in GPA and the influence that first term GPA exerts on student persistence. However, when students persisted, GPA rose in later semesters to match those of native students.

Hughes and Graham (1992) further examined transfer shock in order to provide predictive demographic or academic experiences which influenced the decline in GPA and the continuation of students educational goals to completion of a baccalaureate. In their study, demographic or personal characteristics, previous academic experiences and preparation, student/faculty interactions, and academic advising experiences were examined. The study found course attendance significantly affected student GPAs and, therefore, their ability to persist and complete.

Thomas (1988) collected data from the engineering programs at 11 community colleges. The 312 students who transferred to the New Jersey Institute of Technology (NJIT) averaged a GPA decline of 14%. The data suggested that some community college engineering curriculum was more compatible with NJIT's engineering curriculum. The student GPAs upon exit from New Jersey's community colleges to NJIT's student GPAs after transfer ranged from 3.11 to 3.06 and 2.99 to 2.15, respectively.

These studies supported the ability of community college students to succeed in a transfer environment and the barriers which hindered the ease of transfer. Furthermore,

these studies demonstrated the role of community colleges in providing students with transfer opportunities and the system conflicts impeding the transfer process.

OREGON'S PUBLIC POST-SECONDARY EDUCATION

Overview of Public Post-Secondary Education

Oregon's State System of Higher Education, composed of eight colleges and universities and governed by a nine-member state board with a hired State Chancellor, and 16 Oregon community colleges locally controlled through respective locally elected boards, provides public post-secondary education. Each of the 16 community colleges provides lower-division transfer, occupational education, and general education, depending upon the need of their communities.

A Snapshot of Student Transfers

The Oregon State System of Higher Education (OSSHE) fall term undergraduate enrollment for 1994-95 was 46,861 with 13,519 (28.9%) enrolling as new undergraduates (Bassett, 1996).

Part-time undergraduate students were 20% of the total 9,477. The baccalaureate degree completion over a 10-year period grew from 8,673 in 1983-84 to 9,507 in 1993-94, an increase of 8.8%.

Community college transfers to OSSHE were 2,370 (17.5%) of total new participants. In 1995, community college transfers to OSSHE schools increased by 691 (29.1%). The OSSHE Institutional Research Office divides transfers into two categories: block transfers and other transfers. Block transfers were defined as those students from community colleges who transfer with an Associate of Arts Oregon Transfer degree. Other

transfers include Associate of Applied Science, Associate of General Science (occupational degrees), and non-2-year degree students (Bassett, 1996).

Community college block transfers numbered 353 (11.5%) of total transfers while other transfers numbered 2,708 (88.5%) (Figure 2). In examining the data, 2,164 (70.7%) students were in the other transfer category with sophomore or junior status at the time of transfer.

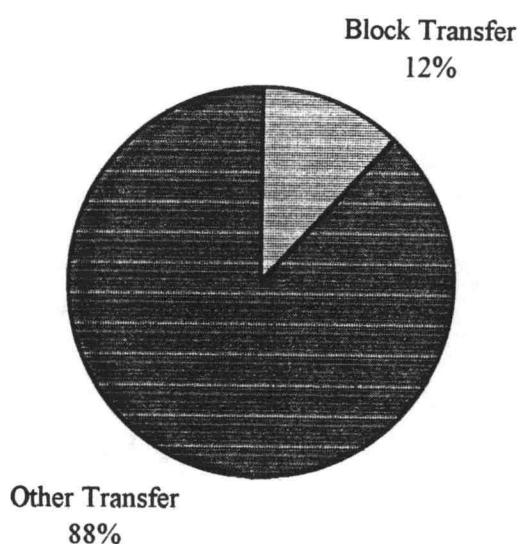


FIGURE 2

SNAPSHOT OF COMMUNITY COLLEGE TRANSFERS

Within the Oregon State System of Higher Education, Portland State University (PSU) represents the largest OSSHE school accepting community college transfers representing 32.79% of the total PSU undergraduate population. This represents 32.07% of the total transfer population from Oregon community colleges to the OSSHE system.

BASIS FOR THEORETICAL FRAMEWORK

Based on the Tylerian (1934) theoretical framework (as cited in Madaus & Stufflebeam, 1989) and Scriven's (1966) goal-free educational evaluation approach, the research design was *ex post facto*. Krathwohl (1993) asserts that while research is a creative act, types of research may be drawn on a continuum. Survey research lies between the extreme left of the continuum described as case study, and the extreme right of the continuum described as experimental research. "It usually attempts to provide an understanding of the group of people surveyed" (Krathwohl, 1993, p. 30). Consistent with Krathwohl, the research design of this study was descriptive in nature, utilizing a survey research instrument to solicit data to address the research questions. This design was also consistent with both evaluation approaches as it relates to this study and is discussed in the following sections.

Objectives-Oriented Evaluation

The objectives-oriented evaluation approach was used to specify an activity, and the evaluation focused on the extent to which those purposes were achieved. In using an objectives-oriented evaluation approach, the associate degree not-intended-for-transfer became the activity to be evaluated.

As presented in the Review of Literature, the non-transfer degree supports preparation for employment requiring less than a baccalaureate degree, yet one-third of the degree earners transfer to baccalaureate programs. The fact that a discrepancy exists between what actually happens when a non-transfer degree is earned and what a non-transfer degree is intended for is the type of evaluation provided through an objectives-oriented approach. In 1934, Tyler developed the objectives-oriented approach to identify

discrepancies between performance and objectives. Under this evaluation approach, the objective to be evaluated would be the non-transfer degree as it relates to employment purposes, not the non-transfer degree as it relates to the degree-earner's usage.

Goal-Free Evaluation Approach

In this study, the purpose of non-transfer degree as developed and currently exists in relation to employment goals was not the goal to be evaluated, but was a contextual consideration. It was not the purpose of this study to evaluate the occupational nature of the degree, but to describe a significant population earning non-transfer degrees and using it outside of the original context of the degree. The two research and evaluation models used in this study are summarized in Table 2. This study used the Goal-Free Evaluation approach developed by Scriven (1966) to develop the research design which described the actual outcomes and side-effects of students who complete degrees not-intended-for-transfer and their journey to baccalaureate degree completion (Worthen & Sanders, 1987).

TABLE 2

SUMMARY OF OBJECTIVES-ORIENTED AND GOAL-FREE
EVALUATION METHODS

Tylerian Objectives-Oriented	Scriven Goal-Free
Objective: Not-intended-for-transfer degrees	Objective: Set aside degree types.
Evaluation: Gain evidence which support the objective of non-transfer degree from an institutional perspective, e.g., employer satisfaction and student completion.	Evaluation: Explores the student within the context of not-intended-for-transfer degrees. The actual outcomes and the unanticipated side-effects.
Evaluation Purpose: Modify, maintain, or develop new occupational degree.	Evaluation Purpose: Provide descriptive information from which institutions can make better decisions within the existing context of the occupational degree. (Relate contextually to occupational degree which was originally set-aside).
Not-intended-for-transfer degrees changed, modified, maintained	Not-intended-for-transfer degrees examined in context with students.

CHAPTER III

METHODOLOGY

To gain an insight into the transitions, support, and current activity of non-transfer students who subsequently transfer and complete baccalaureate degree programs, this study posed the questions:

1. Who are the students who complete associate degrees not-intended-for-transfer, and who subsequently transfer and complete baccalaureate degree programs?
2. What transitions do these students experience?
3. What has contributed to the ability of these students to transfer and complete baccalaureate degrees?
4. What are these students doing now that they have completed baccalaureate degrees?

STUDY POPULATION

This study was limited to students who had earned an associate degree not-intended-for-transfer from an Oregon community college and completed their baccalaureate degree from Portland State University. Portland State University provided the names, addresses, and telephone numbers of students who completed baccalaureate degrees from June 1990 through June 1995 and who had previously earned an associate degree from an Oregon community college. The list included both transfer-oriented degrees (Associate of Arts and Associate of Arts, Oregon Transfer) and non-transfer degrees (Associate of Applied Science; Associate of General Studies, Associate of Science). From the list, the population members were selected when a baccalaureate degree was earned from June 1990 through June 1995

and either an Associate of Applied Science, an Associate of General Studies, or an Associate of Science was earned from an Oregon community college prior to baccalaureate degree completion.

This study assumed, in Oregon, similar to other states, that one-third of the non-transfer students do transfer to baccalaureate study.

DELIMITATIONS

Portland State University (PSU) was selected as the transfer university due to its transfer population size, its ability to provide the initial data, and its proximity to 4 of the 16 Oregon community colleges. Students may have studied various occupational areas or a mixture of occupational with general education or lower division courses, but must have earned an Associate of Applied Science, an Associate of General Studies, or an Associate of Science degree prior to their baccalaureate completion.

COLLECTION OF DATA

A questionnaire administered through telephone contact was used to collect descriptive data (Appendix A). The researcher constructed, piloted, and administered the questionnaire to the population. Review of the survey instrument, survey protocol, and statistical calculations were provided by the Oregon State University Telephone Survey Department. Human Subject Guidelines for Oregon State University were reviewed by PSU, and Federal Education Rights to Privacy Act Laws were adhered to throughout this study (Appendix B, C, and D).

Information provided by PSU included 357 records within the parameters of June 1990 and June 1995 baccalaureate degree dates and an associate degree previously obtained

in Oregon. Excel 7.0 was used to sort and extract those records indicating an Oregon community college Associate of Applied Science, Associate of General Studies, Associate of Science, or "blank" degree information. When a degree date was specified but the degree type was not, the student was considered a member of the population until student contact was made and the community college degree type was discerned. Students who earned more than one associate degree were included in the population if the degree first earned at the community college was a non-transfer type of associate degree. From the initial Excel sort, the population contained 140 members.

INSTRUMENT VALIDITY AND RELIABILITY

From the literature, four themes occurred: community college related, decision to transfer, 4-year institution experience, and demographic information. The survey instrument, which contained 23 questions, was constructed using these four themes and was piloted on 12 members of the population selected at random. The survey instrument was then reviewed and revised as necessary. During this process, consideration was given to the literature, theory, and pilot participants' views regarding each question. This process addressed both instrument validity and reliability.

ANALYSIS AND TREATMENT OF DATA

The SAS system was used to analyze the population participants. This type of measurement described the characteristics of the population and the frequency of these characteristics. To understand the importance of these characteristics, and the transitions of the students on their completion of a baccalaureate degree, anecdotal information was compiled and coded during the interview process.

Borrowing from qualitative methodology, the anecdotal information was recorded verbatim. This information was first identified by participant record number. Second the information was separated in themes (e.g., reaction to credits unused in transfer, obtaining information, changing majors). These themes were then related to the findings. This methodology is consistent with Patton's (1980) process of triangulation, "to study and understand when and why there are differences" (p. 331). The anecdotal information was used to understand similarities and differences in participant responses.

PILOT STUDY

The pilot study consisted of 12 population members randomly selected. Excel 7.0 random numbering function was used to assign a random number to each record. The random numbers were then sorted in ascending order. Pilot study members were then selected beginning with the first record and then every twelfth record.

Contact Procedure

The pilot study was conducted over a 12-day period. Attempts to contact students by telephone were made Monday through Friday from 4:30 p.m. to 9:00 p.m., Saturday from 10:00 a.m. to 3:00 p.m., and Sunday from 12:00 noon to 4:00 p.m. If no contact was made after five attempts, a combination of non-primary hours were used (e.g., weekday hours and weekend evenings). Students with a working telephone number were considered to have never answered if after ten attempts no contact was made. In the event of a non-working number, telephone directory assistance within the telephone area of last known address was used.

Screening Procedure

Two screening questions were used to verify the appropriateness of a member included in the population:

1. Did you complete your BS or BA from PSU between June 1990 and June 1995? If so, when did you complete it and what was your major?
2. Did you complete your Associate of Applied Science, Associate of General Studies, or Associate of Science degree from an Oregon community college? If so, what was the degree, when did you complete it, and, if appropriate, what was your major?

When information specific to either screening question was provided by PSU, then the question was phrased as a verification of information. For example, "PSU provided me with information that you completed your BS degree in August of 1993. Is that correct?"

Included in all verification questions was the request for student major.

When the screening questions indicated a non-match to the population criteria in either the baccalaureate or community college degree information, no further information was collected and that respondent was removed from the population.

Questionnaire Administration

The questionnaire was administered to each pilot study member contacted. Questions were read in an open-ended format to check the accuracy of the response-set associated with each question. For example, question two was phrased: "What was your most important reason to pursue your education at the time of community college enrollment?" Based on the literature, the initial response-set items included: job skills, occupational degree, transfer degree, personal interest, economic, and other. The question was read without the response-set items. If the participant identified a response-set item, it was circled. If the participant identified a reason not in the response-set, it was written in. After the pilot study was

completed, written responses were considered for inclusion in the survey instrument when at least one-third of the participants responded the same. This process was repeated throughout the questionnaire. Comments by pilot study participants regarding lack of clarity regarding questions were also noted and the participants provided feedback on clarity of revisions.

Response Rate

The pilot study was considered complete when contact had been made with a population member or when directory assistance had been exhausted. The pilot consisted of six completed questionnaires with an adjusted response rate of 59%.

The adjusted response rate was calculated according to standard telephone survey methods (Grobe, D., personal communication, March 14, 1996). The steps included:

Step 1. Split pilot members into two categories: non-population and non-response. Non-population members did not meet the requirements of the study. These included non-working, business, and non-primary telephone numbers. Non-response members of the population included those who refused to participate, had language barriers to participation, were unable to participate in the survey, were away for the duration of the study, were contacted but not available, other non-responses, and who never-answered telephone numbers.

Step 2. Calculate the adjustment multiplier: $(\text{completed} + \text{refused} + \text{r not available} + \text{away for duration} + \text{other}) \div (\text{completed} + \text{refused} + \text{are not available} + \text{away for duration} + \text{other} + \text{non-sample})$.

Step 3. Calculate the adjusted response rate. This was the adjustment made to compensate for the never-answered telephone numbers. The never-answered numbers consisted of residential numbers that were never answered in any of 10 calls made.

Completed ÷ (completed + refused + are not available + away for duration + other) + (adjustment calculation multiplier found in step 2)(never-answered).

Changes in Instrument and Administration

Upon completion of the pilot study, questions and/or response-set items were added or deleted. Using the previous example of Question 2, a response-set item labeled “career enhancement” was added since three of the six participants (50%) referred to the concept of career enhancement as the reason for their decision to pursue education at the community college.

The researcher decided to be the exclusive instrument administrator based on the pilot study participants' questions regarding the survey and its use. This dialog with the participants created a greater trust environment and subsequent candor that would have otherwise been jeopardized.

SURVEY ADMINISTRATION AND PARTICIPANT RESPONSE RATE

Of the 140 original population members, 12 were members of the pilot study, leaving 128 population members for the study. The study survey instrument was administered with response-set items. When participants volunteered additional information or experiences while responding, the researcher recorded verbatim the information offered. The researcher requested clarification if a comment or information was made regarding a response-set item which was unclear.

Calls were made to each of the 128 members of the population during a 4-week period. At the end of this period, 60 members participated in the survey. Table 3, shows the type of contact made with each member of the population.

This information was used to calculate the adjustment multiplier and the adjusted response rate. The adjustment multiplier = $(60 + 2 + 4 + 1 + 0) \div (60 + 2 + 4 + 1 + 0 + 52) = .563$. The resulting adjusted response rate = $60 \div (60 + 2 + 4 + 1 + 0) + (.563)(9) = .832556 = 83\%$. The response rate for this study was above the average telephone response rate of 30% (Dillman, 1978).

TABLE 3
POPULATION AND PARTICIPANTS ($N = 128$)

Category	Number
Participants	60
Non-Sample:	
Non-working numbers	52
Business numbers	0
Non-primary numbers	<u>0</u>
Total Non-Sample	52
Non-Response:	
Refusal to participate	2
Language barriers	0
Not able to participate	0
Away for duration of study	1
Contacted but not available to participate	4
Other	0
Never answered	<u>9</u>
Total Non-Response	16

The participant category of the population was representative of the non-working number category of the population. Figure 3 shows that the distribution of graduation dates from June 1990 through June 1995 appear in a similar pattern for both population and non-working numbers. This indicates that participants represent a cross-section of the population, rather than more recent or later year baccalaureate degree completion.

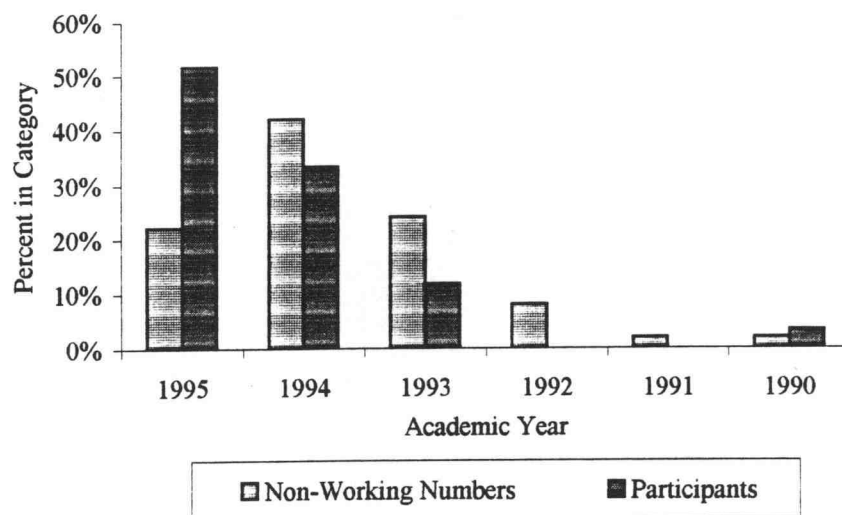


FIGURE 3

PERCENTAGE OF PARTICIPANTS COMPARED TO NON-WORKING NUMBERS BY
DEGREE YEAR

CHAPTER IV

REPORT OF THE FINDINGS

For the purpose of reporting the findings, Chapter IV is divided into four sections relating to the research questions. The information presented in this chapter is discussed using the presentation of the raw data, identification of responses which were an anomaly, and inclusion of the anecdotal information collected.

RESEARCH QUESTION ONE

Who are the students who complete associate degrees not-intended-for-transfer, and who subsequently transfer and complete baccalaureate degree programs?

Based upon previous studies and the role of articulation agreements in smoothing the transfer to senior institutions, it is possible to speculate that the non-transfer students who actually do transfer are similar in age to transfer students. In this study, only half of the participants began their community college experience between 18 and 21 years of age, completed their community college degree between the ages of 20 and 26, entered into PSU between the ages 21 and 28, and completed their baccalaureate degree between ages 23 and 32. While these ages are representative of the transfer student, it is premature to assume that non-transfer students who are traditional college-age will transfer and complete baccalaureates and those who are not, will not.

The remaining half of the participants enrolled at a community college after age 22, completed their community college degree between age 27 and 53, entered PSU between age 29 and 53, and completed their baccalaureate between the ages of 33 and 55. There is nothing in particular that distinguishes those students who will transfer from those who will

not. Further, in a classroom which is administratively identified as a non-transfer course, one cannot tell in advance which of the non-transfer students will actually transfer.

As a group, there is nothing that would distinguish the population of this study demographically from the group of 320,000 community college students in Oregon or from the 9,507 Oregon State System of Higher Education baccalaureate degree earners. This study used demographics to describe who the participants are and how their characteristics played a role in their transitions. The demographic information in this section includes gender, ethnicity, parental educational levels, age, and the length of time taken to complete the baccalaureate.

Gender

Twice as many of the participants were women. Of the 60 participants, 40 (67%) were women and 20 (33%) were men (Figure 4). Participants did not make specific comments regarding their gender. However, roles associated with gender did play a part in their decision to attend college and seek supportive services on campus.

Nationally, 58% of community college students are women (U.S. Department of Education, Office of Vocational and Adult Education, 1993). In Oregon, women represent 53.8% of the community college enrollment (Office of Community College Services, 1996). Baccalaureate degree completion at PSU is comprised of 54.2% females and 45.8% males (Oregon State System of Higher Education, 1993-1994, p. 82).

The larger percentage of women in this study may be due to the number of women who were willing to respond versus the number of men. Men represented all of the possible participants who were contacted, but refused to respond, were away for the duration of the study, or were contacted but unable to participate. If these seven additional contacts would have participated, the females would have been 59.7% and the males would have been

41.3% which is representative of the national community college and Portland State University female/male ratios.



FIGURE 4
PARTICIPANTS BY GENDER

Ethnicity

Ethnicity among the participants was generally representative of the PSU and Oregon community college undergraduate enrollment as illustrated in Figure 5. Participants were African American (3.3%), Asian American (13.3%), Caucasian (81.7%), and 1.7% were Hispanic American. In this study no participants were American Indian/Alaskan Native or Non-Resident Alien.

All of the Asian American participants began their community college experience immediately upon high school graduation. These participants identified themselves most frequently as undecided in their major discipline upon entry to the community college, but

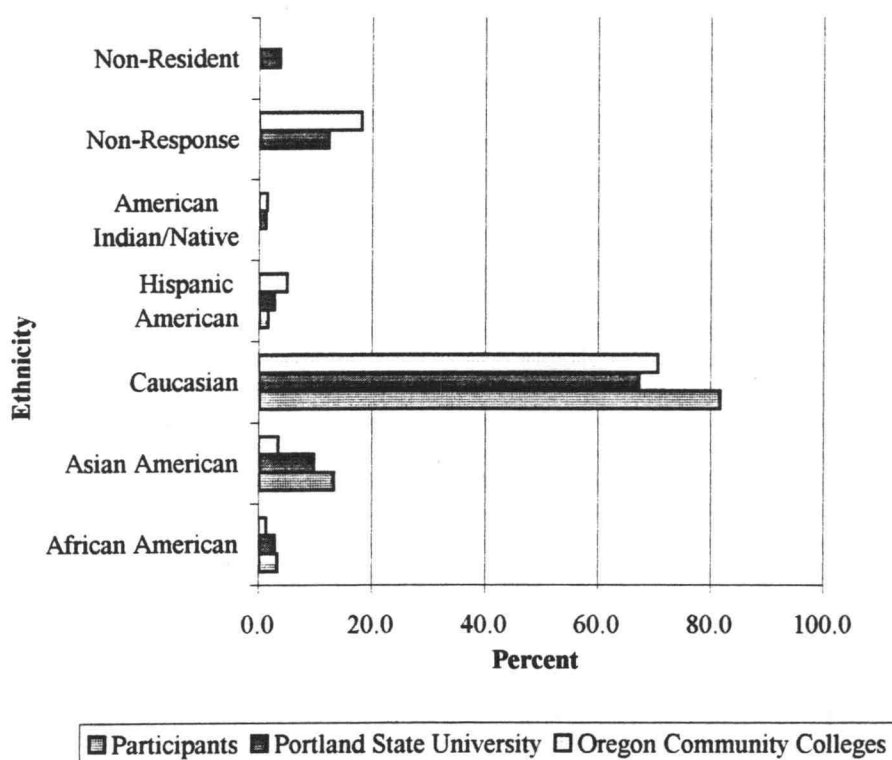


FIGURE 5

**ETHNIC DISTRIBUTION BY PARTICIPANTS WHEN COMPARED TO ETHNIC
ENROLLMENT AT PSU AND ENROLLMENT AT
OREGON COMMUNITY COLLEGES**

also identified their most important reason for enrollment as transfer degree. As one participant said:

I was a Vietnam immigrant and went straight to college. I spent too much time working so hard for a degree. I would recommend others enjoy it.

This participant originally identified an occupational degree in accounting as the primary reason for enrolling at a community college. As she became involved in the community college she finally understood that to complete her baccalaureate she needed to declare a "business major - transfer." She had expended time and energy accumulating 40 credit hours which were non-transferable. For this participant, the extra time and money

spent in taking more credit hours to accomplish her baccalaureate would have been worth it to her if she had chosen a field that paid more. From her perspective:

The field [accounting] is good [but] competitive. It is hard. I would not take accounting [again], it is so hard and the money isn't worth it. Engineering or computers maybe [worth it].

While this participant's transition is not generally descriptive of participants with Asian American ethnicity, it is indicative of the unfamiliarity of how educational systems work. According to Alkin and Hendrix (1967), 85% of variance in students transferring could be explained by community family income, employment levels, educational attainment levels, and the population of the college's district. Lower socioeconomic and educational status creates a lack of familiarity with post-secondary education. The lack of familiarity fosters a limitation in the knowledge and structure of post-secondary education. The experience described by the previous participant and by Alkin and Hendrix (1967) is found among the participants whose parents did not attend college or had limited college experience.

Parents' Educational Level

Educational levels among participants' parents were usually at or below a high school level. More than two-thirds of the participants' parental education was below the high school level, which was generally found of community college students' parents. Kindergarten through 8th grade completion is more common among fathers' educational level than the mothers, with 10.2% and 3.3% respectively. High school graduation or its equivalent was more prevalent among the mothers of the participants with 40%, while fathers' high school graduation or equivalent was 27.1%. Participants' mothers were less likely than fathers to have post-secondary educational experiences. Only 8 participants' mothers achieved beyond a high school education while 18 of the participants' fathers

attained post-secondary education. Table 4 shows the percentage of parents in each educational level category.

TABLE 4
PARENTS' EDUCATIONAL LEVEL ($N = 60$)

Highest Grade Completed	By Fathers (%)	By Mothers (%)
Elementary School K-8	10.0	3.3
Some High School	11.7	11.7
High School or Equivalent	26.7	40.0
Total Secondary Education	48.4	55.0
Some College	16.7	18.3
Associate or 2-Year Degree	3.3	13.3
Baccalaureate	18.3	11.7
Graduate	6.7	1.7
Professional/Doctorate	5.0	0.0
Unknown	1.7	0.0
Total Post-Secondary Education	51.6	45.0

Participants who are younger cite parental support as critical to their success. This is not generally found with participants whose parents have lower educational levels.

Participants with lower parental educational levels indicate parental support is present, but that parents "lack the understanding of what it takes" to get through college. As one participant said of his parents and background:

I came from a more affluent school district, but I was in a lower socioeconomic background . . . the people at school were bound for college. It helped me to decide to go to college also. I think demographics had a lot to do with it. If I lived in a different neighborhood, people with similar backgrounds to mine, perhaps my expectations would have been different.

Parental educational level also influences participants' economic background and ability to continue their education (Evans, 1978; Holstrom & Bisconti, 1974).

I started college a long time ago, but had to stop to help support my mom and siblings.

Evans (1978) found that, "most students who have both high grades and high socioeconomic status attend universities rather than community colleges. Few students who have both low grades and low socioeconomic status will attend any post-secondary education" (p. 229).

The occurrence of more individuals from lower socioeconomic status enrolling in programs which are not intended for transfer is also supported by this study. Nearly half of the participants whose parents have lower educational levels more frequently pursued occupationally oriented programs to begin with, and then subsequently transferred. Holmstrom and Bisconti (1974) also concluded that high family socioeconomic status is one predictor of academic success when combined with academic programs taken in high school, good high school GPAs, and good academic performance in community colleges.

Age

Participant ages are similar to the students at community colleges in Oregon and nationally. The journey from the perspective of age is described by 2 different participants. The first identifies himself as a "high school drop-out." The second identifies herself as a "re-entry adult." The first participant explains his educational transitions in the context of his youth. This participant enrolled at a community college at age 15, immediately began pursuing college course work, and continued being the youngest in his classes.

I dropped out of high school at 15. I took GED and started at the community college. I jumped around majors a lot and realized I had enough credits to apply for an Associates Degree. When I transferred, it was a kind of general mess. I had a couple of things to catch up on. I only lost four credits. PSU is a commuter college. Older people *go* to school. I wanted to distance myself from college yuppies. I felt like I didn't have to fit in. I chose PSU because one of my professors at the community college [I attended] went to PSU. I

was motivated by my degree. I felt intimidated prior to transfer, but when I did transfer, it was easier than at the community college for me.

The re-entry adult described her transitions from the perspective that age brought wisdom influencing her ability to achieve her community college and baccalaureate goal.

I recognize that being an older returning student I was more focused. The community college was very supportive. PSU less so, you have to be self-sufficient. I saw that younger students got lost. You have to be able to look at all resources and try to make it work.

Length of Time to Complete Baccalaureate

The average length of time spent for baccalaureate degree completion from a student's entering community college experience to completion of a baccalaureate degree, with the conditions of full-time enrollment and no college preparatory courses involvement, is approximately 5 years (National Center for Educational Statistics, 1995). Only 16.7% of participants completed baccalaureates during this average time period. More common among participants were completion lengths of between 6 and 10 years (56.7%). As shown in Table 5, participants completing their baccalaureates over an 11 to 15, 16 to 20, and 21 or more year period are 16.7%, 10%, and 1.7%, respectively.

TABLE 5

LENGTH OF TIME FROM COMMUNITY COLLEGE ENTRY TO
BACCALAUREATE COMPLETION ($N = 60$)

Length of Time in Years	Participants (n)	Participants (%)
5 or less	9	15.0
6 to 10	34	56.7
11 to 15	10	16.6
16 to 20	6	10.0
20 or more	1	1.7

The length of time participants in this study took to complete their baccalaureate was affected more by the decision made at the community college degree completion point, not due to a lack of seriousness regarding their educational pursuit. The primary purpose of a non-transfer degree is employment, and 40% of participants entered into degree-related employment upon completion of the community college non-transfer degree. An additional reason for the length of completion time was the number of credit hours meeting baccalaureate degree requirements which needed to be earned prior to transfer. The seriousness and motivation of participants in their educational pursuit was present due to the 71% full-time enrollment at the community college and 81% full-time enrollment at Portland State University.

The overall length of time to complete the baccalaureate degree can be attributed to post-community college employment and to additional course work time needed to position themselves for junior level transfer status.

In a 1996 article summarizing the U.S. Department of Education, National Center for Educational Statistics (NCES), *Education Attainment of 1980 High School Sophomores by 1992*, Li highlights the NCES findings that full-time, part-time, and delayed entry students spend close to the same actual time in pursuing their baccalaureate.

In examining the data, there exists an appeal to infer that age and the length of time taken to complete a baccalaureate degree influenced the participants' decision-making process. This inference applies only to one participant in this study. As a group, there was nothing which distinguished the age at each transition point with the ages of community college and Oregon State System of Higher Education students at the same transition points.

RESEARCH QUESTION TWO

What are the transitions of these students?

Several points are identified by the literature and by the participants as part of their transition. The transition points identified by participants were: (a) community college enrollment, (b) community college experience, (c) community college degree completion, (d) decision to transfer, (e) enrollment at senior institution, (f) senior institution experience, (g) baccalaureate completion.

Most participants at the beginning of their community college experience did not identify themselves as a baccalaureate pursuer. In retrospect, the completion of the baccalaureate by participants was identifiable by up to seven transition points. Each transition point required participants to make a decision either before or after the completion of one transition period. For example, a decision was made to transfer either before the completion of their community college degree or after completion.

Enrollment at Community College

When post-secondary and community college enrollment occurs. Two-thirds of the participants began their post-secondary education immediately following their high school or equivalent completion. Of the 37 participants who began immediately, 48.7% continued their post-secondary education after a 9 month period (one academic year). All of the participants who started and continued without stopping, began their post-secondary education at a community college. The 19 participants who enrolled immediately from high school and stopped attending within the first academic year had a variety of post-secondary experiences.

I started for one term then decided to do 2 years at a private vocational school, but only completed 1 year in accounting. I didn't expect the loss that occurred in the amount it did (credit hours).

I did one semester of business college then stopped for 12 years.

One-third of the participants delayed entry to post-secondary education from 1 to 22 years. Participants delaying from 1 to 5 years totaled 12, 3 participants delayed 6 to 10 years, 3 participants delayed 11 to 15 years, 3 participants delayed 16 to 20 years, and 1 participant delayed 20 years or more. These participants also experienced post-secondary education from a variety of sources, but more commonly they began at the same community college from which they completed their degree. Unlike the immediate entry participants, only 2 of the 23 participants stopped within the first academic year.

I returned as an older student. It was my time now that the kids were on their way to completing their goals, it was just my time.

I first did 4 years in the Navy then worked for 3 years. I then started my B.S. at Georgia State. I moved out here and began a horticulture program at a community college. I had to back step a little and did that at another community college. I knew I wouldn't transfer technical courses, but didn't think I'd lose so many. I have two associate degrees now and one B.S.

This participant, who waited and stopped after his initial entry, was deliberate in his decision.

I went a couple of terms to junior college first. I stopped because of fear. I used community college advising to get into the program, but not to continue. Sometimes it was really hard and I didn't think I could do it, but because financially I didn't worry, I could keep going and get over my fears.

The experience of participants who delayed entry enrolled at fewer post-secondary education institutions was also found in the NCES (1995) study. In this study, students who delayed entry to post-secondary education tended to enroll in fewer post-secondary educational institutions to obtain their associate degree.

Reasons for entry to community college. It is clear that participants do not necessarily think in terms of baccalaureate degrees. In response to the question, "What was your most important reason to pursue your education at the time you enrolled at the

community college?," only 15% of the participants who actually transferred and completed a baccalaureate degree identified that as a goal at the time of community college enrollment, further evidencing that it is impossible to tell which non-transfer students will transfer. As one participant said:

I enrolled at a community college because of all the reasons, but mainly for career enhancement.

It was impossible for this participant or the community college she attended to anticipate that during her community college experience an enthusiastic teacher would be the catalyst to alter her reasons, motivating her to declare a major and to continue her education through completion of a baccalaureate. House (1995) identified the lack of predictability which exists within the relationship of initial reasons to actual outcomes. "Nearly 75% of all certificates and degrees were earned by students who had not declared a certificate or degree goal upon entry" (House, 1995, p. 2). Table 6 shows the participants' most important reasons for pursuing education at the time of community college enrollment.

TABLE 6

MOST IMPORTANT REASON FOR PURSUING EDUCATION AT TIME OF
COMMUNITY COLLEGE ENROLLMENT ($N = 60$)

Reason	Participants (n)	Participants (%)
Job Skills	16	26.7
Occupational Degree	5	8.3
Transfer Degree	9	15.0
Personal Interest	11	18.3
Economic	2	3.3
Career Enhancement	12	20.0
Other	5	8.3

Major at time of enrollment. A wide variety of majors were declared by participants at the time of initial enrollment, with 14 declaring psychology as shown in Table 7. When enrolling at a community college students, are asked to declare a major. In addition, Federal Financial Aid Forms (FAF) require major information. Using the FAF Major Information Categories and adding the category of undecided, participants were asked, "What was your major at the time of enrollment?" Participants selected from 27 major options (Appendix A).

At the time of enrollment, participants represented 12 of the 27 major options. More than 18% (11 participants) responded that they were undecided about their major at the time of enrollment, while 82% declared a major at entry.

TABLE 7

PARTICIPANTS' MAJORS AT TIME OF COMMUNITY
COLLEGE ENTRY ($N = 60$)

Major	Participants (n)
Business	10
Computer Science	1
Education	2
Engineering	1
Fine and Performing Arts	1
Foreign Languages	1
Health Professions	5
Nursing	2
Law	2
Social Science/History/Economics	6
Psychology	14
Vocational Technical	3
Wildlife/Forestry/Marine Sciences	1
Undecided	11
Total	60

The Community College Experience

Major goals and changes. Due to the high number of undecided participants at entry, it is not surprising that roughly 50% (26) of the participants changed majors during their community college experience. Eliminating the undecided participants from the total, only 25% of those who selected a major at community college entry actually changed from one major to another. The primary reasons for changes in major included career/job goal change (69.2%), positive academic experience (26.9%), and negative academic experience (1.6%). No participants cited family or other reasons for changing majors during their community college experience.

[Teacher] reinforced my interest in biology while I was majoring in psychology. I was doing better in [biology] class than the "majors."

Most frequent enrollment status. While full-time enrollment was most common among participants during their community college experience (Figure 6), participants' enrollment in credit hours was unrelated to lack of educational commitment, motivation, or seriousness of purpose. As one participant recalled:

[I was] real cautious about my academic ability and took fewer credits at first. Lots of support from friends, family. Time element with pursuing this. Trying to figure out what were my priorities, mother versus student, learning how to juggle.

Stopped while attending community college. Only 7 participants (11.7%) stopped attending for more than one term, not including summer term, during their community college experience. Participants were evenly distributed among three of the five reasons. The reasons most frequently cited included employment related, not ready, and family, with 2 participants in each of these categories; one participant cited "other" as the reason. The

remaining 81.6% comment that they had attended year-round. One participant summarized the feelings of other participants: "Once I started, I just kept going. Summers too!"

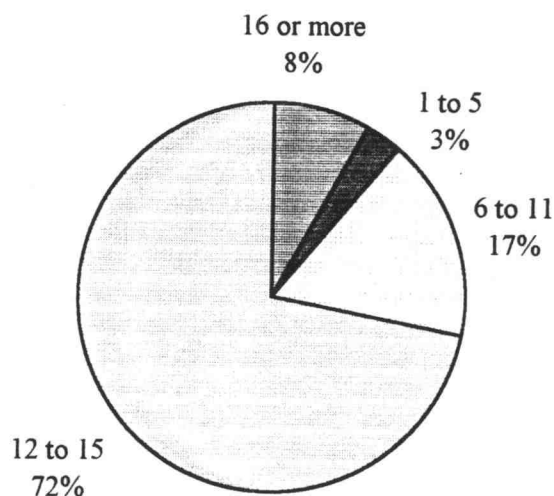


FIGURE 6

MOST FREQUENT CREDIT HOURS TAKEN PER TERM BY
PARTICIPANTS, IN PERCENT ($N = 60$)

Completion of a Community College Degree and the Decision of Employment and Transfer

Completion of community college degree. Participants completed their community college degree between 1 and 13 years after first enrolling at a community college. The majority of participants spent between 3 and 5 years completing their 2-year associate degree. It is unusual that a 2-year degree is completed in less than a 2-year period, and the transfer of credits from prior post-secondary experiences account for the 2 students completing their degrees before 2 years had elapsed.

The length of time spent is indicative of the community college experience. Participants changed majors, changed enrollment status, and stopped for various reasons. Each of these decisions increased the time taken.

Employment or immediate transfer. The decision to transfer was made by 60% (36) of the participants while they were involved in their community college experience. This does not reflect the lack of preparation for employment (which is the non-transfer degree objective), but does reflect a shift in the personal desire of the participants toward baccalaureate study. The decision to transfer immediately upon associate degree completion was higher than the national average found by Prager (1988) of 39%. Shifting labor demands and the degrees associated with the labor market may have been partially responsible for the larger numbers. One participant expressed her concern about the long range competitiveness of her 2-year graphics design and production focus and decided to add a baccalaureate in business to her educational level. She worked part-time in graphics production while pursuing her baccalaureate. The remaining 40% (24) made the decision after completing their community college degree and beginning employment.

The 24 participants who made their decision to transfer after completing their community college non-transfer degree made their decisions between 1 and 9 years of enrollment at the community college, regardless of post-secondary experiences prior to community college enrollment. Reasons for the decision varies. Two participants who became employed immediately after community college degree completion expressed satisfaction with their economic choices.

I went from a rural college to PSU. I thought I was getting married so I focused on a technical degree. When I didn't, I had to get a job that paid more. A Bachelor of Science helped me do that.

I had been in accounting for over 5 years and had worked my way up as far as I could. I knew that if I wanted to earn more and take on more challenges, I would have to pursue it [baccalaureate in business].

Major changes at transfer. When participants made the decision to transfer, over half changed majors, and over a third changed due to career choice change. For the remaining 7 participants, reasons for change included academic, current requirements for employment, lack of employment opportunities, and one identified a dislike for his/her occupational area.

I didn't like the job market. I was laid off twice [Engineering Technology] so I went back and studied Spanish.

It wasn't about work force, just having a degree. I switched majors at PSU from Business to Psychology because it cost too much in time and money for a Business degree. I had enough credits to finish with a Psychology degree so I did it.

Transfer standing. Transfer standing was determined by the number of credits earned at the community college and the ability of those credits to be used toward the completion of the baccalaureate. For example, a transfer degree would assure junior standing at the time of transfer, without additional course work.

For these non-transfer participants, 72 reported junior or above status at the time of transfer. The reasons for junior standing were not attributed to the non-transfer degree, but because participants returned to a community college to earn the appropriate courses that would transfer in prior to their enrollment at PSU, as described by this participant:

The community college made clear that my degree wouldn't transfer except to OIT [Oregon Institute of Technology]. [When I graduated,] I had to choose between family circumstances and moving. I decided to stay. [I worked in my field] and took more time to fill course requirements at another community college.

One participant with senior level standing reported attending another senior institution prior to transferring to PSU. For the remaining participants in this study (28%),

their transfer status was 3% freshman, and 25% sophomore. They chose to transfer and complete additional courses at PSU.

In taking a short cut [at transfer, I was] disallowed credit which placed me at sophomore status. I'm not clear how much of an impact it would have on me. Probably an extra two quarters to complete because of General Studies Degree. I am an unusual Associate Degree earner. I was a finalist in Merit scholarship but didn't get it because of the high school [I did not complete]. I really like being a student. My sole motivation was to study math, not because I want to use my degree.

Figure 7 shows the transfer status upon enrollment at PSU. Two participants with freshman status had completed specific occupational degrees and had not taken additional lower division course work before transferring. Regardless of the transfer status, all students completed additional course work of 15 to 45 credit hours beyond their non-transfer degree and prior to beginning their upper division course work.

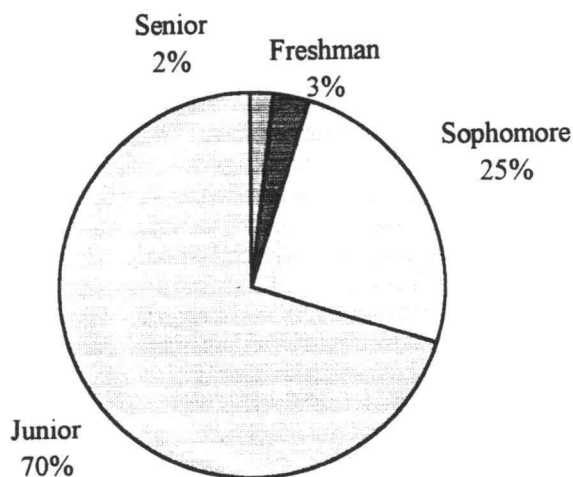


FIGURE 7

PARTICIPANTS' TRANSFER STANDING AT THE TIME OF PSU
ENROLLMENT, IN PERCENT ($N = 60$)

Participants reacted differently to the additional course work required before entering upper division courses. The participants' prior knowledge that credits would not be used toward a baccalaureate, the ability of the participants to use credits in employment prior to transfer, and the opportunity costs (time and money) affected reactions. As one participant who had prior knowledge of the transferability recalled:

Only those I knew already wouldn't transfer. No surprises. I used the mentorship program for women, it was extremely helpful. In addition to my spouse, I had two bosses who mentored and encouraged me. One friend transferred after a year and I did not feel it was worth pursuing. My needs were to continue.

For this participant, accurate information enabled her to plan accordingly to complete her goal. For other participants, however, gaining information and then discovering the same information to be in error created difficulty.

Losing 93 credits was pretty difficult. I had worked very hard and felt cheated. PSU was challenging. I found it tough to get advice. I get to [baccalaureate completion] the end and find out they didn't [take some credits after all].

With so much life experiences there ought to be a way to measure life experiences when you lose so many credits. Especially if they're not going to give you credit for your work [previous credits].

Transition from community college to university is not always smooth. There doesn't seem to be continuity between two. I began Japanese language at community college. In trying to transfer community college language courses, I didn't know PSU had a different instructional method and standards. [The] counseling [process of] transfer credits was "mysterious." I went everywhere to figure it out [what credits would transfer] but was still shocked.

Credits and their use. The accumulation of unused credit hours was experienced by 78% (38) of the participants. The range of credits not used toward baccalaureate completion was from 1 to 95 quarter hours in lower division and occupational courses. Lower division courses not used was experienced by 34.2% of participants; 47.4% were occupationally

oriented courses, and 18.4% earned course work in both areas that went unused toward baccalaureate degree completion.

The number of credit hours not accepted at the time of transfer was dependent upon the total number of credit hours the participant had accumulated prior to transfer, the course numbering and comparable course offerings at the university, and the lower division courses required by the university. The maximum amount of credit accepted at transfer to PSU is 108 credits of lower division work. Only 2 of the participants reported losing credit hours due to the 108 credit hour limit. As one participant stated:

I knew that some [credit hours] wouldn't transfer. I thought some would. The 20 credits in math and science made me really mad. I was trying to stay on top of it. I followed the sheet and then transferred. I had too much [over the 108 maximum]. It was a waste of two terms. I was driven to finish. I should have transferred earlier. Then I found out about the School of Business requirements.

Participants used a variety of strategies to deal with application of credits toward their baccalaureate. Their strategies and the success they had using these strategies eased the transition and their satisfaction with their transfer experience.

Some of my community college credits I had to go through PSU Department approval because they didn't quite fit the 100 level courses needed even though they were 200 level courses. I stayed on top of everything, otherwise it would have been a real problem.

I first graduated in Aerospace. When the market declined, I decided to return to school. My program at the community college meshed well with PSU so I didn't lose credits. It would have been pretty tough if I had been employed because the income to give up in order to do school is so great.

In my situation it was 'just a year.' Degree requirements [more credits] had to finish classes in other subject areas. I decided to turn it to my advantage.

Participants who were unable to use credits reacted stronger due to the inability to gain accurate information. Over 50% of the participants were surprised by the type and number of credits previously earned but not applicable to their baccalaureate degree. As one

participant commented, "I knew I wouldn't transfer technical courses, but didn't think I would lose so many."

Woodbury (1988) discussed the expectations of transfer students regarding program articulation. Specifically, transfer students want to know "that the courses closely parallel the baccalaureate curriculum and how the community college courses will be treated" (p. 8). The participants in this study had similar expectations as transfer students. The availability and accuracy of course and degree information was important to the participants.

Then on top of that you bust your butt and lose credits. It chapped my hide. If we could just figure out what the hell is going on when we transfer. It wasn't like I changed majors. After talking with other students, we're going to lose people in higher education, because not everyone can hang on and take the losses.

If anybody transfers, really find out how it would transfer. Really check if course numbers work. Certain ones do and others don't.

I went to Western before transferring to PSU. I needed another year of undergraduate work. During transition [PSU] don't give you enough advisement on how to transfer if you want to change major or complete early. Advisors would give you different answers. No one knew. Always exceptions. There was no particular communication. I had to take an extra year to get it [degree]. It cost me time.

The PSU Experience

Major goals and changes. Once transfer to PSU occurred, 23% of the participants changed majors. For all but one participant, career goal change was the primary reason. The change in major can be attributed to the shift from an occupationally specific program of study to a different upper division major goal. For example, a participant studied automotive at the community college and reentered at PSU to study business. One participant cited a negative academic experience as their reason for changing majors.

Most frequent enrollment status. Similar to their community college enrollment status, 91% of participants enrolled in 12 or more credit hours (Figure 8).

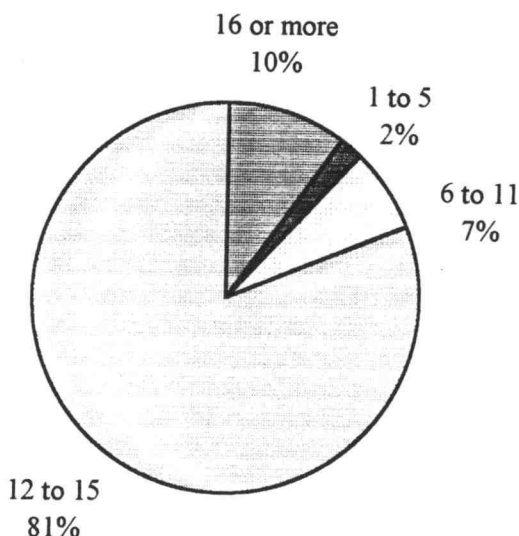


FIGURE 8

MOST FREQUENT CREDIT HOURS TAKEN PER TERM AT PSU BY
PARTICIPANTS, IN PERCENT ($N = 60$)

Stopped while attending PSU. Very few participants stopped attending for more than one term, not including summer, during their PSU experience. Of the 7 participants who stopped, the reasons were family obligations (3), financial (2), employment related (1), and other (1). While the same number of participants stopped attending PSU as did community colleges, for the first time financial reasons were cited.

I stopped to go out of state with a scholarship, because financially it was better. But I lost so much when I came back I still had another 1½ years. It was confusing to appeal course by course decisions and it took everyone a while to figure it out.

Patterns in Retrospect: Community College, Transfer, and PSU

In analyzing the data, changes in majors throughout the baccalaureate experience warrants further discussion. The participants who changed majors were likely to be high school dropouts. Eleven participants identified changing majors during their community college enrollment and at the point of transfer. Participants who changed majors at these two juncture points did so because of their transfer experience. The major they had identified at the community college could not transfer smoothly so they decided to change their major. The remaining participants changed majors from the time of community college enrollment to the point of transfer changed from undecided to declaring a major.

I took my GED and started at CC. I jumped around majors a lot and realized I had enough credits to apply for an Associates degree. When I transferred, it was a kind of general mess. I had a couple of things to catch up on. Luckily, I only lost four credits.

Nine participants changed majors at transfer and during their PSU experience. Examples of changes included: (a) undecided while at community college to a specific major at PSU, and (b) a professional/technical degree participant who did not like the work then entered and changed to psychology.

I used my A.A.S. to earn money to go to PSU. I didn't have a mentor at the PSU level, but it was so necessary to graduate. I felt that teachers were frustrating. They had an "air" about them that they may or may not give it [degree] to you.

Only 2 participants changed majors at all three critical points — during community college, at transfer, and during PSU. One participant changed from undecided to social science, to education, to communications, and another participant changed from undecided, to business technology, to business transfer.

Ten participants declared a major at community college entry and did not change. Eight tried an initial enrollment in post-secondary education then waited between 6 and 15

years to begin again, 1 began immediately from high school, and 1 waited 1 year before beginning. None of these participants were high school dropouts.

When examining if a pattern of stopping developed, only 2 participants of the 14 participants who stopped during their community college experience or their PSU experience did so in both experiences. The reason for one participant was family, the second participant was other.

I was exhausted. I was trying to care for my mother and my children. I knew my mother would be gone soon [die], so I stopped.

My disability made me work 10 times harder. I needed periodic "time outs." It was better for me to do it this way.

RESEARCH QUESTION THREE

What has contributed to the ability of these students to transfer and complete baccalaureate degrees?

Compounding the problem is the preponderance of adult students at community colleges, who "back into" higher education, taking a few business courses to enhance their job skills, move on to an associate degree, and then decide to pursue a baccalaureate degree. Unfortunately, virtually none of their technical credits will transfer and they must retake the same courses to earn a bachelor degree. (Savage, 1986, pp. 1, 3)

For the majority of participants in this study, Savage's (1986) perspective on the community college student is accurate. For 85% of the participants, the intention at initial community college entry was for something other than transfer. Participants' perspectives on what contributed to their completion of a baccalaureate are separated into headings of goal strength, services used, support person, and culture shock.

Goal Strength

During the experience of completing a baccalaureate, participants found a number of ways to withstand the transition points. From the literature, services provide one means of students maintaining their movement toward their goal. But, it is their goal which keeps them going.

Siebert (1994) described the survivor personality. Siebert suggests to ask a person who has survived a major challenge, "Do they talk to themselves when under pressure? Do they hold any goals?" (p. 29).

It is evident that participants in this study had a goal. The goal at community college entry was not the same goal at the time of PSU entry, but during each of the transitions a goal was present.

The best thing for me to do was connecting with other students. They know what you needed to do to survive. If you want to, do it. Remember your goal. You know how much time is and how much things cost. I kept going back and forth [do I stop attending or keep going] then keep going. Buck the system and the system keeps chipping away at you. You've got to do this . . . nobody told me. I got most of my information from E.O.P., otherwise the information was inconsistent. I had to keep up on information.

My iron will got me through. An absolute belief that I deserved an education in this society. Even after I felt rejection by community college and PSU, I had a force of will! For many people they are brilliant human beings locked in an ignorant body not because they aren't smart but because they don't have the sheer determination and support. [Education] is vital to social structure.

The reasons I made it: I came back as an older student. More importantly, with a goal to complete. B.S. was most hideous part. I felt out there on my own. I could figure out how to get through the system. [I kept telling myself] "Okay, 2 more years" then get my Masters.

The participants' driving force of a goal, the influence of services available, and support persons intensified eased the difficulty of transitions when both credit loss at transfer and cultural assimilation were experienced. Through each transition point and to the next

transition point, participants accessed services, gained support from others, and experienced difficulty along the way. It is the strength of the goal, regardless of the transition point, which made participants able to complete a baccalaureate degree. Participants' express being simultaneously frustrated and ready to give up one day and determined to keep going the next. As the participant described, "I kept going back and forth [do I stop attending or keep going] and then kept going."

Siebert (1993) described the struggle of quitting or continuing as healthy survivor strengths. Essentially, people stop using *either/or* terms and understand that *both/and* are okay. too. For participants, it means dealing with the ups and downs simultaneously: the idea that things do not always go smoothly, even when it is expected they should.

The Role of Services Used

Participants were asked, "What were the two most important student services you used while attending the community college?" One student service was identified by 81.7% of the participants as important to their community college experience, and 40% identified two services as most important. A listing of the services used is shown in Table 8. Surprisingly, roughly 20% of participants did not identify any student services as critical to their success.

Participants were mixed on their perspective towards the services. Remarks that were positive in retrospect were primarily made by women who identified other, such as special population programs and day care facilities.

Displaced homemaker programs and centers associated with [them]. Without them I couldn't have done it.

Vital at the community college was day care. Other services I left crying on more than one occasion.

For participants who chose not to use services, their comments are equally important. These participants did not use the services because they did not feel confident about the information given to them.

Advising needs to be better. I was so frustrated with advisors, I didn't go to one. No one seemed to know what I was supposed to do. Every time I went in, a different counselor/advisor would say something different.

TABLE 8
TWO MOST IMPORTANT SERVICES USED DURING
COMMUNITY COLLEGE ENROLLMENT ($N = 60$)

Service	Percent Responding First Most Important	Percent Responding Second Most Important
Advising Center	13.3	0.0
Counseling Educational Related	15.0	3.3
Counseling Personal Related	1.7	1.7
Financial Aid	11.7	3.3
Job Placement	1.7	3.3
Cooperative Education	0.0	0.0
Tutoring	3.3	5.0
Library	8.3	6.7
Computer Laboratory	1.7	3.3
Veterans' Department	3.3	3.3
Child Care On-Site	0.0	1.7
Other	11.7	6.7
No Response	18.3	61.7

I found advising at community college detrimental. I didn't get my degree on time. Students who use community college as a platform and then go to a 4-year [need] to get true advising. Advising needs to be done by professionals. Specific requirements were more problematic. I received student [peer] advising, it was on the fly.

In her 1992 study, Banks provided a possible reason as to why information is so difficult to obtain by community college students. Banks reported that it is equally difficult to obtain information by Student Services personnel at community colleges. "Coordination and communication between academic and student services departments were, for the most part, left to individual counselors and faculty to make connections" (p. 10).

While attending PSU, participants shifted the focus of services used most frequently. When asked what the two most important student services they used while attending the university, participants cited advising, specifically faculty advising, as most important (36.7%), financial aid (16.7%), library (15.0%), and the computer laboratory (8.3%) (See Table 9). The "other" category included the Educational Opportunities Program, mentorship, networking programs with other students, and all other services. Frustration regarding services was even more prevalent during PSU enrollment, with 60% of participants not using any services.

For participants now confronted with new service delivery methods, the frustration level was evident. The services used seemed to be portrayed by participants as separate from the university itself, whereas services used at the community college seemed to be representative of the community college. For example:

I had an initial unsatisfactory experience with PSU services and decided not to use them. . . . The state universities set up only allow strongest fish to swim up river. I was very frustrated about how it was set up. I saw many of my counterparts "stop out" and drop out and everything is so difficult to access. Time consuming to do the smallest thing [bureaucratic].

The [Educational Opportunities Program] was very helpful. PSU was real overwhelming. There were budget pressures and academic burnout. Halfway through [the time spent at PSU], the mentoring program would have been helpful. I screwed up my major and got an "F" because I didn't withdraw. I [don't remember if I] didn't know or [that life and] things were so crazy.

I used the mentorship program for women, it was extremely helpful.

Plan ahead years, plan ahead each term, if you do a little each week you have less pressure. Attend student orientations. Keep asking questions until you get precise answers.

TABLE 9

TWO MOST IMPORTANT SERVICES USED DURING PSU ENROLLMENT ($N = 60$)

Service	Percent Responding First Most Important	Percent Responding Second Most Important
Advising Center	36.7	1.7
Counseling Educational Related	3.3	0.0
Counseling Personal Related	1.7	0.0
Financial Aid	16.7	8.3
Job Placement	3.3	3.3
Cooperative Education	0.0	0.0
Tutoring	1.7	3.3
Library	15.0	8.3
Computer Laboratory	8.3	20.0
Veterans' Department	0.0	3.3
Child Care On-Site	0.0	5.0
Other	5.0	5.0
No Response	8.3	41.7

The separation by participants who used special programs and the larger institution of PSU may be attributed to special intervention strategies (Cohen, Brawer, & Bensimon, 1985). Special intervention strategies are designed to create a buffer between the larger institution and the personal aspect of student life. From the participants' view, the special programs at PSU were creating that buffer zone.

Support Person

The community college teacher reinforced my interest. . . . All the services were good and I have no complaints. I think its because I made myself fit in. My mom began as my support and my spouse helped me finish.

As participants moved through the transition points, they relied on several different people for support and inspiration (see Table 10). The primary support person was dependent on the age of the participant, their involvement in a primary personal relationship, and on their relationship with faculty members.

TABLE 10
PERSON PARTICIPANTS IDENTIFIED AS IMPORTANT TO THEIR
COMPLETION ($N = 60$)

Person Believed to Support	Participants (n)	Participants (%)
Father	5	8.3
Mother	5	8.3
Parents Collectively	8	13.3
Child/Children	2	3.3
Friend	0	0.0
Spouse/Partner	17	28.3
Teacher — High School	3	5.0
Teacher — Community College	5	8.3
Teacher - PSU	0	0.0
Other	11	18.3
Self	4	6.7

Participants who were younger, most frequently identified their mother, father, or parents collectively as providing the most support. For older students, most frequently their

spouse/partner was identified. While participants identified teachers and others as being most important, these participants did so primarily because of their parents' educational levels. As one participant remarked:

My parents provided emotional support, but [they] couldn't understand what I was going through.

For these participants, peers, work place mentors, and themselves are the most important form of support.

Participants identify support people in context with the difficulty associated with their community college experience, transferring, and completing their baccalaureates.

Regarding credits lost, one participant commented:

I had two bosses who mentored and encouraged me. One friend transferred after a year and did not feel it was worth pursuing. My needs were to continue, hers was to help in her husband's business.

Regarding services, another participant said:

I had more trouble with advising and counseling. Go around in circles. I was working too. I figured out how to do it on my own, to use student organizations to answer questions because there are so many. Talk to other students and department continually.

Because of support of family. No financial problems. I feel fortunate in all [the friends I made who kept me going]. More than you know. Lifetime friends.

The importance of having a goal, accurate information, and support persons are reflected in this participant's remark:

I took classes that would transfer while I was waiting to get into the program. I knew going in that many of the courses wouldn't transfer. My mom's old boss is a lawyer and when I was at a point when I would have to stop or take out loans, he sat me down and pointed out the cost of a car and that it is thrown away. My education is far more important and worthy of that investment. There were several times when I got so frustrated that I wanted to quit.

The importance of information, aside from the opportunity costs associated with credit loss, was compounded by the phenomenon of culture shock which participants reported experiencing after transfer.

Culture shock. The change in environments and expectations only added to the confusion and frustration for these non-transfer degree earners. House (1989), in his study of transfer shock, stated that:

More studies are needed to investigate how students develop during their college experience, particularly with respect to changes that make individuals more able to cope with the specific adjustments and stresses that occur immediately after transferring.

Participants responses toward GPA shock supported Webb's (1971) conclusion that "the most important factor contributing to reduced grade performance was differential in grading standards" (p. 82). Hughes and Graham (1992) recommended avoiding:

Comparisons between transfer grade point averages and senior institution grade point averages. Because community colleges may have different grading practices, it is difficult to account for decreases or increases in comparison to grades at the senior institution. (p. 38)

While practitioners in the field of education advised against comparing GPAs, participants could not help comparing their performance between the institutions. Only 3 of the 60 participants noted a decline in GPA. For 2 of the participants the decline was minimal, while 1 participant noted a decline of 1 point. Each of these participants had relatively high GPAs at the community college level (3.60-3.97). They each had high expectations of their performance. Each mentioned only a one-term drop in GPA, which was consistent with previous studies done on transfer shock (Thomas, 1988; Hughes & Graham 1992).

Overall dramatic change in transferring. There was a night and day difference. The quality of professor rose dramatically. There were higher expectations at PSU. Rose in intensity. Tried to accommodate the transition

at PSU. My 3.69 GPA heightened the challenge. [The community college needs to] come closer to university standards so the shock isn't so great.

It was pretty hard to transfer into a larger university. Community college has a more intimate environment. Grading criteria was higher and I dropped my GPA a lot. Talk to teachers more often so you get a feel. Reexamine bulletin to know what you can take. Know the rules!!! I needed science classes and I had to take them later.

Understand [there is a] jump from high school to community college and then another big jump from community college to PSU is required. I felt like I handled it. But I was surprised at three 10-page papers the first time [due the first week]. To do well you have to plan.

In the transition from community college to university studies, participants first experienced the loss of credits in transfer, second they faced uncertainty of their academic performance characterized by changes in GPA, and third, they dealt with the less intimate feel of attending an institution larger than the community college.

Jungle out there [PSU]. Things went smoothly for me because I talked to someone . . . but I [felt as if I] was a real SSN [Social Security Number]. Complicated issues with family and poverty. Once I started the process and continue. I got a notice that financial aid would be discontinued. Everyone had to tell the FA office. Hoops and Obstacles. Pretend you belong. It is easy to feel that you don't belong. Ask. Try to get in. "Crash" classes if you have to. Develop a network of peers as much as time permits.

I wasn't real happy because it was so huge. Anytime you called you got transferred. There was no personal touch. Don't feel as I learned a lot.

A lot of people have culture shock and because the campus has so many people [students] working. People are more community-oriented at the community college. I was disorientated, and we weren't able to support each other as we did at community college.

PSU wasn't as user friendly as community college. The biggest transition to PSU is that you couldn't talk to people. No one had time.

RESEARCH QUESTION FOUR

What are these students doing now that they have completed baccalaureate degrees?

The idea that students in fact move away from their community college areas during their academic experience is also found upon completion of their baccalaureate. Participants followed three patterns after completing their baccalaureate: graduate school, employment in a related field, or employment in a non-related baccalaureate field.

Entering graduate school was a decision made by a surprising 20 (33 %) of the 60 participants. Of the 20 enrolled in graduate school, 7 are employed in their baccalaureate degree field. The remaining 13 are employed in fields not related to their baccalaureate degree. The 13 represent baccalaureate areas of math and liberal arts and are pursuing graduate degrees in teaching.

Participants enrolled in graduate school offer the following perspectives on their journey:

I enjoyed my A.S. degree and have my contractor's license to fall back on. I am now enrolled as a graduate student and hope to teach. I still earn money when I need too through my community college degree.

Don't give up. I handled a lot. There were times when I wanted to throw up my hands and walk. But now as a grad student I get great treatment.

[I have] those same feelings at law school. Intensity and grading expectations. I did the same transition at PSU, now I'll do it again.

At the beginning of their community college enrollment, both student and community college did not realize that these non-transfer students would gain the academic skill and the personal efficacy to continue to their baccalaureate or graduate and pursue advanced study.

After completion of their baccalaureate degree, 53 % (32) of participants report being employed in a field related to their study, including 7 in graduate school (Table 11). As one participant remarked, "I looked for work for 9 months, and now I am doing what I dreamed of. I own my own business and feel I use my degree in daily living and in my business."

TABLE 11

EMPLOYMENT IN BACCALAUREATE FIELD OF STUDY ($N = 32$)

	Number of Participants
Employment and Continuing Education	7
Employed	22
Employed Own Business	3

Twelve participants were not employed in their field of study. The reasons for not being employed in their field is based on the job market (4), wanting to be an at-home parent (2), having to accept lower wages (3), and 6 did not respond (Table 12).

TABLE 12

PARTICIPANTS NOT EMPLOYED IN BACCALAUREATE STUDY ($N = 28$)

	Number of Participants
Job Market	4
Mom	2
Continuing Education	13
Job Change to Field Would Pay Less	3
Non-Response	6

[Finding employment] was difficult because of disability. Cerebral Palsy, mild but affected the time required. I think employers still discriminate. I'm still thinking of getting an advanced degree.

I'm not utilizing education, but make more money than what I would with my degree. I would like to go back and get a Masters, but I want to wait until I have saved enough.

CHAPTER V

DISCUSSION AND IMPLICATIONS FOR THE FUTURE

The study of non-transfer students who do transfer and complete baccalaureate degrees led to several conclusions:

1. No educational program is actually terminal.
2. Community Colleges cannot configure programs that will meet all learner needs.
3. Availability and quality of information is a catalyst to student goal achievement.

NO EDUCATIONAL PROGRAM IS ACTUALLY TERMINAL

Students who complete community college associate degrees not-intended-for transfer do not necessarily end their education. They continue to need, seek out, and compete for continuing education. The participant transitions in this study — where each completed a baccalaureate and 30% continued in graduate study — affirm that students do not view their education as terminal. Therefore, to identify education labeled by the completion Associate of Applied Science, Associate of General Studies, and Associate of Science degrees as terminal, runs counter to what students actually seen to do.

Current editorials in the *Chronicle of Higher Education* (1996) continue to support a rhetoric inclusive of terminal education. These editorials address the pros and cons of underprepared students and their entry into baccalaureate education. The concern in the editorials is that if the student is not prepared for baccalaureate study, then they should attend a technical program. In another editorial, the idea of creating career track and college

track in secondary school is raised up again. This discussion continues to assume that students who are academically inclined move directly to baccalaureate study and those who are not move to "terminal" education.

In a community college publication (*Community College Week*) there was a call to, "seize the moment, our moment, to insure that our people are empowered with core values, academic and technical skills, and civic and social responsibility necessary for this grand democracy" (Zeiss, 1996, p. 4). This discussion also serves to create a third level of education which is directed at workforce development. Included in workforce development is the notion of short-term or skills-based training. The challenge for community colleges and the students enrolled in this new area is to create a "new door" which opens the possibility for further movement, rather than create a new form of terminal education.

The reality of dividing educational areas into transfer, terminal, or workforce development may be attributed to the continuing need for community colleges to protect their identity and resources. The pressure to ensure an identity separate from universities and to develop financial resources is not unlike the pressure created with the 1917 Vocational Education Act. At that time, community colleges expanded their mission to include terminal occupational degrees (U.S. Department of Education, Office of Vocational and Adult Education, 1995). Today, declining state and local resources make short-term education and re-training opportunities tempting, satisfying both financial and identity needs for the community college. The continuing quest by community colleges to be players in post-secondary education creates a window of opportunity both financially and as part of the post-secondary educational market to further distinguish themselves from senior institutions.

The quest for a continued identity different from the senior institutions is not an issue in and of itself. It is the structure and the separation created through "tracks" which creates

risk to the student/consumer. As history is quick to point out, when community colleges align more closely with business and industry the personnel and financial resources available to develop and maintain relationships with senior institutions is diminished. Instead of a coexistent and fluid process which is inclusive of business, industry, and senior institutions, a more dichotomous relationship is developed (Bakker, 1994).

The implication arising from developing distinctions between short-term terminal, terminal education, and transfer education are: (a) which student in any of the community college classrooms will be thought of as pursuing terminal education?, and (b) how can community colleges anticipate when a student with a degree not-intended-for-transfer will transfer and complete a baccalaureate?

It is clear from this study that the discussion by educators regarding the idea that education is terminal is countered by the practice of students. What is true is that students may not know whether or not they will transfer, and therefore neither will the community college. This is not to suggest that community colleges must make either/or decisions regarding degree structure. Based upon personal, economic, employment, and social experiences, students make educational decisions throughout their lives and these decisions do not necessarily consider the community colleges' structural differentiation of transfer, terminal, or workforce development of community colleges programs. Their perspectives provide a more qualitative aspect.

It was not the environment or external stimuli described in "objective" terms that influences our behavior but rather it was the *meaning* that each individual attaches to his or her experiences of the environment and that this meaning was influenced by an extremely complex myriad of social and cultural factors. (Cziko, 1989, p. 18)

It is not the objective of a degree and its transferability or non-transferability which led individuals to pursue education. In this study, over three-quarters of the participants did

not cite degree attainment as their reason for entering the community college. Rather, reasons for entry were interpreted through social and economic meaning. The difference between the students' perspectives and the community college structure perspective when relating a view of degree areas not-intended-for-transfer is summarized as follows.

From the students' perspective, the degree is tangential to the objective, which is economic or social development based upon life experience. From the community college and senior institutions' perspective, social and economic development from which life is interpreted is tangential to the degree. In the end, both the student and the community college end in degree recognition; it is the beginning point of the process toward degree recognition which differs.

COMMUNITY COLLEGES CANNOT CONFIGURE PROGRAMS THAT WILL MEET ALL LEARNER NEEDS

Community colleges cannot anticipate all student needs and create appropriate configurations for each. The meaning of experiences throughout life support that people can and do complete community college non-transfer degrees in one discipline then move to a different baccalaureate discipline and then employment in another area not directly related to either degree. Conversely, students also complete baccalaureates and reverse the usual transfer pattern to return to complete 2-year non-transfer degrees. This movement among areas of study and employment defies the construct of linear education and depicts lifelong education. In a linear approach, students enter with the baccalaureate goal stated and set out in a nicely defined course of study to complete this. While the definitive model is suited for some, the same is not true for others.

In this study, two-thirds of the group began post-secondary experiences immediately after secondary experiences. Many may have been high school dropouts, or in non-persistors

community college, or in a senior institution. As their experiences created new meaning, participants moved through educational points. The implications for shifting goals account for the length of degree completion from 1 to 13 years for a community college degree, and from 4 to 22 years for a baccalaureate.

From this study, it is evident that non-transfer educational decisions are made in a non-linear fashion (e.g., not at the time of initial community college enrollment). Non-transfer students use their economic, personal, and educational experiences creating a pattern of stairs stopping at various floors. These floors are described in this study as seven transitions points: (a) community college enrollment, (b) community college experience, (c) community college degree completion, (d) decision to transfer, (e) enrollment at senior institution, (f) senior institution experience, and (g) baccalaureate completion. The activity of stopping-out may occur at any transition point.

The climbing of stairs and stopping at floors over a longer period of time deviates from a linear model of education which is based upon continuous movement to the completion of a baccalaureate through a prescribed set of standards. This shift away from linear movement to a process movement is consistent with Swift (1986), who stated:

No longer do these potential transfer students earn their associate degree studying the traditional "transfer program." Unfortunately, transfer for many of them means the loss of credit and being required to complete more than two years of additional full time collegiate study. (p. 307)

While students use a process-oriented movement to achieve broader educational and economic opportunities and perceive their movement as beneficial, they do so at a cost. The costs associated with not following the linear pattern set up by post-secondary education results in time and monetary expenses which are usually unanticipated by the student during the process of their lifelong learning.

AVAILABILITY AND QUALITY OF INFORMATION IS A CATALYST TO STUDENT GOAL ACHIEVEMENT

The role of information is crucial to students at any point in their transition. It is both the availability and the quality of information which affects the opportunity costs of the student making educational decisions. Over 50% of the participants reported being surprised at the type and number of credits lost in transfer. Participants cited the difficulty in knowing what questions to ask and how to measure the reliability of the answers when found. For some, this meant asking at least three different community college and senior institution counselors, advisors, and faculty before determining the information had validity. Given that lost credits averaged 45, understanding that information is crucial. A participant in this study exemplified the quest for information:

. . . [then find out that] curriculum needs to include this . . . in order to transfer. Even though you had "X" class it doesn't match in every way. Things change and YOU have know WHO KNOWS what is happening.

Community colleges and senior institutions provide factual information regarding programs of study and degrees offered. This information is most frequently available at only two of the seven transition points: community college enrollment and enrollment at a senior institution. Orientations and advising at these two points serve the purpose of providing information which describes the linear activities associated with obtaining education. This information either includes specifics which outline the means to a degree or specifics regarding course scheduling and registration.

However, information which prepares students who complete non-transfer degrees to make decisions is critical at all seven of the transition points, not just two. Because decisions about full-time study, major, degree choice, transfer, and upper division goals have not been made at the time of community college enrollment, the need for continual information is

apparent. This is congruent with Thomas (1988) who recommended the need for early transfer counseling and transition services:

Ideally, this process should start as soon as the student has selected courses that were prerequisites to courses in upper division. What was indicated here goes far beyond advisement. It requires direct involvement with the institution to which the student plans to transfer. This principle applies to regular transfer and articulated 2+2 programs, as well as to the more unusual patterns involving cooperative education, dual admissions, and consortia programs. (p. 53)

Early transfer and transitions services which start when a student enrolls in courses which are prerequisites to courses in upper division is a good beginning. However, students pursuing occupationally specific courses may take general education requirements which trigger transfer services much later in their degree program. For them, the information connected to transfer and transitions come nearer to degree completion.

Nearly two-thirds of the participants in this study made the decision to transfer and pursue a baccalaureate later in their community college experience. The timeliness of transfer and transition information reduces transition/transfer shock.

The role of community college faculty in the daily educational lives of not-intended-for-transfer degree students advances the necessity that faculty facilitate the connection between the student and the appropriate community college and/or senior institution staff to begin planning their next transfer transition. The one-third of participants who possessed information regarding transferability prior to community college enrollment or at the time they made decisions about their longer term educational activity did not refer to opportunity costs and/or transition shock as a deterrence to completing a baccalaureate.

The participants who possessed information most frequently identified a faculty member as the provider of the information. The role of a faculty member in providing information to students about their courses, the connection to different associate degree

opportunities, senior institutions, and senior institution faculty, facilitated a sense of connection and clearly outlined next steps. Many researchers have identified the role of faculty in facilitating students in their identification and movement toward their goals. However, this usually identified transfer faculty. The faculty who teach courses that students who complete degrees not-intended-for-transfer take normally do not worry about transfer or transition activities unless the degree area is articulated. Then only information about the articulating institution is conveyed. The faculty member who not only facilitates transfer activities, but also begins the process of connection with the senior institution helps to alleviate the shock students feel when moving from a more intimate environment to a usually much larger senior institution.

The size of most senior institutions makes information about transfer, credits, grading practices, and environment equally important. Again, while this may be provided through formal communications (e.g., college catalogs, application processes, orientations) it is equally critical to continually remind students of what they might experience and how to maintain a level of connection to “good” information that they have become accustomed to at the community college. The lack of connection found in this study by two-thirds of the participants resulted in expending extra effort to complete courses “approved” for baccalaureate work and bureaucratic navigation of different environments. This extra effort was experienced simultaneously and continuously at least for the first year. The extra effort expended took time away from academic study inhibiting the student for maintaining their previous academic standard.

Continuing providing information through each of the seven transition points, whether formal or informal, reinforces the students’ feelings of support. Critical to seeking support is the accessibility of faculty, advisors, counselors, and mentors who provide

information and perspectives which are unlike the support persons that they are currently exposed to (e.g., family, peers, workplace colleagues).

IMPLICATIONS FOR THE FUTURE

Community college students enrolled in courses which lead to non-transfer degrees comprise a substantial percent of the community college student population (U.S. Department of Education, Office of Educational Research and Improvement, 1994). These students may at some point in their lives decide to alter their educational plans based upon personal and economic goals. The changing nature of work leads them to expect that they will need to retrain or redirect their education. Their economic livelihoods depend on it.

Community colleges are celebrating a century of providing their communities with educational opportunities. The mission of the community college began with providing lower division courses leading to the baccalaureate degree and then included occupationally specific programs of study. Now the mission also encompasses short-term and skills-based training for work force development. While the mission has expanded, the community college structure of associate degree programs continues to mirror the linear and prescriptive nature of social, cultural, and economic realities present 100 years ago.

This is not the late nineteenth or early twentieth century where young adults depending upon social class entered baccalaureate programs or occupational programs and remained respectively segregated throughout their lives. It is no longer true that, "once an auto mechanic always and auto mechanic," or, "once a teacher always a teacher." There exists not only movement between professions in the workplace and socially, but a demand for this movement. The demand is placed on individuals who face change in their workplace, family, and personal desires. The reality of the change is further post-secondary

education. For 80% of the population, the post-secondary access is at the community college. At the door of the community college is a mission which is broad and encompassing, but once entered is structurally confining. The structure of linear and separate educational tracks collide with the fluid demands of people in a fluid labor force.

Community college researchers have investigated their student constituency for predictive information on persistence, transfer, and academic performance, each time placing it within the context of the existing structure. As community colleges move into the next century and the next millennium, will the structure which was founded on terminal and linear constructs cede to the demands of personal, societal, and economic constructs which will not accept anything less than seamless education? If community colleges cannot or will not shift, it is only a matter of time before another educational entity will.

Meanwhile, students pursuing degrees not-intended-for-transfer, will transfer, complete baccalaureates, attend graduate school, and be employed at different points along the way. Their areas of study and employment may make substantive changes regardless of what paths current post-secondary structures provide. They will do all these things for themselves and at a price.

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APPENDICES

APPENDIX A

SURVEY QUESTIONNAIRE

SURVEY QUESTIONNAIRE

Survey #: _____

Name of Student: _____

Telephone Number: _____

Contacts Made: Date Time Log

1.

2.

3.

4.

5.

=====

Hi, this is _____ calling. Congratulations you are only one in 144 students who completed both an associate of science/general studies and earned a baccalaureate degree during the previous five years at Portland State University. This is major accomplishment since over 3500 students in Oregon complete associate degrees and are unable to finish their baccalaureate. I am conducting a short survey to better understand how students transfer and complete bachelor degrees. The results of this survey could be used to help others who want to accomplish what you have accomplished. Would you be willing to take 5 to 10 minutes to answer a few questions?

Screening Questions:

Did you complete your BS/BA from Portland State University between June 1990 and June 1995?

Yes = 1 Data from PSU: _____ / _____ Major: _____
 No = 2 Degree Date

Did you complete your Associate of Applied Science or Associate of General Science from an Oregon Community College?

Community College _____
 Yes = 1 Data from CC _____ / _____ Major: _____
 No = 2 Degree Date

I want to assure you that all the information that you give us is strictly confidential and what you tell use will not be revealed to anyone. The interview is voluntary and if we come to a question you don't care to answer, just say so and we will go on to the next question. Okay?

**This part of the survey is related to your community college experience.
 COMMUNITY COLLEGE RELATED**

1. How many years after completing high or its equivalent did you first enroll at a community college? _____ months/years. If they completed a GED or High School Diploma please note it.

☐ Adult High School Diploma: _____ year ☐ GED: _____ year

2. What was your most important reason to pursue your education at the time of community college enrollment?

Job Skills =	1	Economic =	5
Occupational Degree =	2	Career Enhancement =	6
Transfer Degree =	3	Other =	7
Personal Interest =	4		

3. What was your major at the time of enrollment?

01 = Agriculture	02 = Architecture	03 = Biological Sciences
04 = Business	05 = Communications	06 = Computer Science
07 = Education	08 = Engineering	09 = English/Literature
10 = Fine/Perfor Arts	11 = Foreign Lang.	12 = Health Professions
13 = Home Economics	14 = Law	15 = Liberal Arts
16 = Library Science	17 = Mathematics	18 = Nursing
19 = Personal Services	20 = Philosophy	21 = Physical Sciences
22 = Social Science/History/Economics		23 = Psychology
24 = Theological Study		25 = Vocational/Technical
26 = Wildlife/Forestry/Marine Sciences		

4. Did your educational goal change during your community college experience?

Yes = 1 No = 2 (Go to 5)

- 4a. What was your primary reason for changing majors?

Family =	1
Career/Job Goal change =	2
Academic Experience Negative =	3
Academic Experience Positive =	4
Other =	5

- 4b. What did your educational major change to?

01 = Agriculture	02 = Architecture	03 = Biological Sciences
04 = Business	05 = Communications	06 = Computer Science
07 = Education	08 = Engineering	09 = English/Literature
10 = Fine/Perfor Arts	11 = Foreign Lang.	12 = Health Professions
13 = Home Economics	14 = Law	15 = Liberal Arts
16 = Library Science	17 = Mathematics	18 = Nursing
19 = Personal Services	20 = Philosophy	21 = Physical Sciences
22 = Social Science/History/Economics		23 = Psychology
24 = Theological Study		25 = Vocational/Technical
26 = Wildlife/Forestry/Marine Sciences		

5. How many credits per term did you most frequently take?
- | | |
|--------------------------------------|---|
| Part-time 1 to 5 credits per term = | 1 |
| Half-time 6 to 11 credits per term = | 2 |
| Full-time 12 to 15 per term = | 3 |
| 16 Credits or more = | 4 |
6. Did you "stop" attending for more than one term per year, not including Summer Term?
- Yes = 1 (Go to 6a)
No = 2 (Got to 7)
- 6a. What was your primary reason for stopping?
- | | |
|----------------------|---|
| Family obligations = | 1 |
| Financial = | 2 |
| Employment Related = | 3 |
| Not Ready = | 4 |
| Other = | 5 |
7. What were the two most important student services you used while at the Community College?
- | | |
|------------------------------------|---|
| Advising Center = | 1 |
| Counseling - Educational Related = | 2 |
| Counseling - Personal Related = | 3 |
| Financial Aid = | 4 |
| Job Placement = | 5 |
| Cooperative Education = | 6 |
| Tutoring Support = | 7 |
| Library = | 8 |
| Computer Lab = | 9 |
| Other _____ | |
8. Did you obtain employment related to your field of study?
- Yes = 1 No = 2



This next section relates to your decision to transfer to PSU.

DECISION TO TRANSFER

9. Was your decision to transfer made during community college education or after completing your degree?
- During community college = 1 (Go to 10)
After completing occupational degree = 2 (Go to 9a)

- 9a. What were your top two reasons influencing your decision to transfer:
- | | |
|--------------------------------|---|
| 9aa. Employment goal related = | 1 |
| 9ab. Family = | 2 |
| 9ac. Personal = | 3 |
| 9ad. Career Goal Change = | 4 |
| 9ae. Access of 4 year school = | 5 |
| 9af. Other = | 6 |
- 9b. How long was the time between the completion of your AS/AG degree and your transfer? _____ years
10. Was your baccalaureate major the same as your associate degree major at the time of transfer?
- | | |
|-------|---------------|
| Yes = | 1 (Go to 11) |
| No = | 2 (Go to 10a) |
- 10a. What was your primary reason for changing majors?
11. What was your grade level at the time of transfer:
- | | |
|-------------|---|
| Freshman = | 1 |
| Sophomore = | 2 |
| Junior = | 3 |
| Senior = | 4 |
12. Did you experience a loss in credits?
- | | |
|-------|---------------|
| Yes = | 1 (Go to 12a) |
| No = | 2 (Go to 13) |



FOUR YEAR INSTITUTION EXPERIENCE

This Section Relates to your PSU Experience

13. Did your educational major change during your Portland State University experience?
- | | |
|-------|---------------|
| Yes = | 1 (Go to 13a) |
| No = | 2 (Go to 14) |
- 13a. What was your primary reason for changing majors?
- | | |
|--------------------------------|---|
| Family = | 1 |
| Career/Job Goal change = | 2 |
| Academic Experience Negative = | 3 |
| Academic Experience Positive = | 4 |
| Desire to Graduate Quickly = | 5 |
| Other = | 6 |

13b. What did your educational major change to?

01 = Agriculture	02 = Architecture	03 = Biological Sciences
04 = Business	05 = Communications	06 = Computer Science
07 = Education	08 = Engineering	09 = English/Literature
10 = Fine/Perfor Arts	11 = Foreign Lang.	12 = Health Professions
13 = Home Economics	14 = Law	15 = Liberal Arts
16 = Library Science	17 = Mathematics	18 = Nursing
19 = Personal Services	20 = Philosophy	21 = Physical Sciences
22 = Social Science/History/Economics		23 = Psychology
24 = Theological Study		25 = Vocational/Technical
26 = Wildlife/Forestry/Marine Sciences		

14. How many credits per term did you most frequently take?

Part-time 1 to 5 credits per term =	1
Half-time 6 to 11 credits per term =	2
Full-time 12 to 15 per term =	3
16 Credits or more =	4

15. Did you "stop" attending for more than one term per year, not including Summer Term?

Yes = 1 (Go to 15a)

No = 2 (Got to 16)

15a. What was your primary reason for stopping?

Family obligations =	1
Financial =	2
Employment Related =	3
Not Ready =	4
Other =	5

16. What were the two most important student services you used while at the University?

Advising Center =	1
Counseling - Educational Related =	2
Counseling - Personal Related =	3
Financial Aid =	4
Job Placement =	5
Cooperative Education =	6
Tutoring Support =	7
Library =	8
Computer Lab =	9
Other _____	

17. Did you obtain employment related to your field of study?

Yes = 1

No = 2

We are nearing the end of the survey and have some demographic information to collect.

DEMOGRAPHIC INFORMATION

17D. What is your birth month and year? /
Month Year

OR If uncomfortable with question ask grouping:

18-24 = 1 25-34 = 2 35-44 = 3 45-54 = 4 55-64 = 5
65+ = 6

18. Which best describes your ethnic identity?

African American = 1
American Indian/Alaskan Native = 2
Asian American = 3
Caucasian = 4
Hispanic American = 5
Other (please specify) _____ 6

19. What was the highest grade completed by your father? (Interviewer will check 1).

Elementary School (k-8) = 1
Some High School = 2
High School /Equiv. = 3
Some College = 4
Associate Degree/2 yr = 5
Baccalaureate = 6
Graduate = 7
Professional/Doctoral = 8

20. What was the highest grade completed by your mother? (Interviewer will check 1).

Elementary School (k-8) = 1
Some High School = 2
High School /Equiv. = 3
Some College = 4
Associate Degree/2 yr = 5
Baccalaureate = 6
Graduate = 7
Professional/Doctoral = 8

21. Please identify one person you believe inspired/supported you most in pursuing your educational goals. (Interviewer will check 1).

Father =	1
Mother =	2
Parents =	3
Children =	4
Friend =	5
Spouse/Partner =	6
Teacher (HS) =	7
Teacher (CC) =	8
Teacher (PSU) =	9
Other _____ =	10

22. Are there any other education related experiences you wish to provide that were not asked in this questionnaire, but that you would want other students or colleges to understand?

Thank you for taking some time, the responses will be tabulated for the study as a whole. I may want to contact you about specific issues. Would, or would you not be willing to be contacted again?

Yes =	1
No =	2

If you have any questions about this research project, your rights, and/or research related issues regarding this survey direct your questions to Dr. Sam Stern, Oregon State University, Department of Education at 737-6392.

Interviewer Comments:

APPENDIX B**LETTER OF APPROVAL**

OFFICE
OF
DEAN OF RESEARCH



OREGON
STATE
UNIVERSITY

312 Administrative Services
Corvallis, Oregon
97331-2140

541-737-0670
FAX: 541-737-3093
INTERNET
nunnm@ccmail.orst.edu

February 27, 1996

Principal Investigator:

The following project has been approved for exemption under the guidelines of Oregon State University's Committee for the Protection of Human Subjects and the U.S. Department of Health and Human Services:

Principal Investigator(s): Sam Stern

Student's Name (if any): Joanne Truesdell

Department: Education

Source of Funding:

Project Title: In Pursuit of a Baccalaureate: Students and their Journey from Community College Occupational Degrees to Completion of a Baccalaureate in Oregon

Comments:

A copy of this information will be provided to the Committee for the Protection of Human Subjects. If questions arise, you may be contacted further.

Sincerely,

Mary E. Nunn
Sponsored Programs Officer

cc: CPHS Chair

APPENDIX C

LETTER OF PARTICIPATION AND DATA SPONSORSHIP

PORTLAND STATE UNIVERSITY

January 31, 1996

TO: Robert Tufts, Registrar

FROM: Mary Kinnick, Professor, School of Education and
Coordinator, PSU/Community College Research Consortium

RE: Research Request from Joanne Truesdale

I have reviewed Joanne's proposed dissertation research and find it to be highly compatible with the on-going research of the PSU/Community College Research Consortium housed in the School of Education. Through her research we will gain important new information about the community college transfer process, with a focus on the experience of those completing a Bachelor's degree at PSU who received occupational degrees from an Oregon community college. We are pleased to serve as the PSU sponsor of this timely research.

We would appreciate the opportunity to review the data elements in the proposed questionnaire and any other data on the students that will be used in the analyses. This will help us to understand better what kinds of questions these data will be able to address. We also would expect to receive a copy of the final dissertation study.

As we discussed, you will let Joanne know she has our sponsorship and will send her a copy of this memorandum. Thanks Bob.

APPENDIX D

FEDERAL RIGHTS TO PRIVACY GUIDELINES REGARDING CONFIDENTIALITY

FEDERAL RIGHTS TO PRIVACY GUIDELINES
REGARDING CONFIDENTIALITY

Confidentiality used in this study is defined through Academic Regulations of the Portland Community College 1996-97 Catalog (p. 24) regarding federal laws, rules, and regulations regarding federal educational rights to privacy commonly referred to as FERPA.

All information that is personally identifiable to any student will be kept confidential and will not be released, except upon prior written consent of the subject student or other order of court of competent jurisdiction.