In 1988, a study was conducted by the Research Department of the Minnesota House of Representatives to examine college student retention and enrollment patterns in the state. Community college retention was examined by tracking the progress of fall 1987 entering freshmen through 1990. Interviews, focusing on students' plans, background, preparation for college, and freshman year experiences, were conducted with a sample of retained students and dropouts who entered as freshmen in fall 1988. Study findings included the following: (1) by their second year of enrollment, 55% of the 1987 new entering freshmen (NEF) had dropped out; (2) 16% of the NEF transferred by the beginning of their fourth year of enrollment, with full-time students transferring at a higher rate than part-timers; (3) 35% of the students interviewed were not enrolled in a degree program and did not intend to pursue a degree; (4) by spring 1991, 25% of the fall 1988 degree-seeking students had transferred, 33% had dropped out, 30% were still enrolled, and 13% were graduates; (5) the majority of community college students received some type of financial aid, most commonly a grant; (6) 82% of all students were employed, with dropouts working the most hours and four-year transfers working the fewest; (7) 34% of all students enrolled in at least one remedial or basic skills course; and (8) 29% of the students reported some problem in enrolling in desired courses. The study report includes a discussion of the policy implications of the findings and options for addressing such problems as the lack of focus in the community college mission, low levels of student academic preparation, lack of timely completion, and low rates of transfer to four-year colleges. Data tables, graphs, and figures are provided. (JMC)
Retention of Minnesota College Students: What About the Community Colleges?

Working Paper 5

November 1991
This report was prepared by KERRY KINNEY FINE, Legislative Analyst (296-5049), and MARY JANE LEHNERTZ, Legislative Analyst (296-8038). Questions may be directed to them.

JOAN HALVORSON and DOUG BERG interviewed the students, and assisted in background research and data analysis.

JUDY HANSEN designed and produced the graphics.

JUDY HANSEN provided secretarial support and designed the layout.
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Summary of Findings

I Retention Rates and Enrollment Patterns

What is the retention rate for the community college system?

By their second year of enrollment, 55% of the 1987 new entering freshmen (NEF) have dropped: 37% of the full-time and 70% of the part-time students. For some campuses, retention and transfer activity is much stronger. There is little difference in retention or transfer by sex or minority status, but traditional students are much more likely to be retained or to transfer than nontraditional students. (p. 7)

How many students transfer to 4 year colleges? How well are they retained?

16% of the NEF transfer by the beginning of their fourth year of enrollment. Full-time students transfer at a higher rate than do part-time students. Students who transfer after two years have much higher retention rates than those who transfer after one year. (p. 12)

II. All Interviewed Students

Are students identified as new entering freshmen (NEF) truly new students?

43% of the community college students identified on HECB’s data base as NEF in fall 1987 have been enrolled in college previously. Many have 2 or 4 year degrees. (p. 16)

How many students enroll for degrees? What do we know about the nondegree students?

35% of the students interviewed are not enrolled in a degree program and do not intend to pursue a degree. Compared to degree students, nondegree students are much more often nontraditional, more often women, and enroll for far fewer credits. There are different types of nondegree students. Some take one class, while others take a course every quarter. Many have bachelor’s degrees, while some are enrolled for the first time. Their course enrollment can be categorized as follows: employment-related (40%), recreational/hobby (29%), general coursework (28%), and remedial/skills courses (3%). (p. 18)

III. Student Experiences -- Interviewed degree students

What is the status of fall 1988 degree seeking students by spring 1991?

25% are 4 year transfers, 33% are drop outs, 30% are retainees, and 13% are graduates. In the metro schools one-third of the students are drop outs, while another one-third are retained; few graduate within three years. In greater Minnesota, there are significantly fewer drop outs and retainees, and far more graduates and 4 year transfers. (p. 26)
**How do students compare in sex, age, and credit load?**

Women are overrepresented among retainees and especially graduates, while the sexes are nearly equal in the other statuses. 71% of the degree students are traditional. Retainees and particularly graduates are disproportionately nontraditional. 39% of degree seeking students are full-time (13+ credits/quarter) -- 62% in greater Minnesota and 30% in the metro colleges. Few retainees (23%) or drop outs (22%) attend full-time, while most 4 year transfers (69%) and graduates (68%) do. (p. 28,38)

**How do students' high school preparation and degree plans compare?**

Only 13% of those interviewed completed pre-calculus, with 4 year transfers having the strongest math preparation. A significantly larger proportion of students in greater Minnesota took college prep English than metro students. 58% of the students expected to earn at least a bachelor's degree when they entered a community college. While more metro students plan a B.A., a larger proportion of greater Minnesota students transfer to 4 year colleges. (p. 30,34)

**What sources of financial support do community college students have?**

The majority of students receive some type of financial aid, most commonly a grant. Far fewer metro students receive financial aid than greater Minnesota students. 82% of all students are employed, with drop outs working the most hours and 4 year transfers the fewest. Metro students are employed more and work longer hours than those in greater Minnesota. (p. 36)

**How many students are enrolling in remedial courses?**

34% of all students enroll in at least one remedial or skills course. Retainees and drop outs are somewhat more likely to take remedial courses. There are significant campus differences in the size of remedial enrollments and in the types of courses taken. (p. 40)

**Are the students in remedial courses recent high school graduates?**

Most of the remedial enrollment is from traditional students. When the enrollment proportions are controlled, it is clear remedial enrollments are not being driven by older students. (p. 40)

**How many students are using services at the campus learning centers?**

Campuses have learning centers for remedial/developmental and tutorial services. 44% of the retainees report using these services, while only an average of 15% of the other groups report such use. Students at the metro colleges are more likely to use these services. (p. 42)

**Are community college students active on campus?**

Only 18% of the community college students report any involvement in activities or organizations: 34% at greater Minnesota campuses and 11% at the metro campuses. (p. 42)

**Do students experience problems enrolling in desired courses or transferring credits?**

29% of the students reported some problem in enrolling in desired courses. Both the highest and lowest levels of enrollment problems were at the metro campuses. Of those who transferred to a 4 year college, 84% experienced no problems in transferring credits and only half of the reported problems related to a Minnesota public 4 year college. (p. 44)
Summary of Policy Implications

<table>
<thead>
<tr>
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<th>Policy Options</th>
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<tr>
<td>Problems with reliability, usefulness of data for planning (p. 53)</td>
<td>- determine ways to increase reporting accuracy</td>
</tr>
<tr>
<td></td>
<td>- use, verify data more extensively</td>
</tr>
<tr>
<td></td>
<td>- improve quality and type of data for planning</td>
</tr>
<tr>
<td>Lack of focus in community college mission; numerous functions without priorities (p. 54)</td>
<td>- determine priorities to better serve student, state needs and to concentrate resources effectively—higher priority on traditional functions of 2 year general education and preparation for transfer</td>
</tr>
<tr>
<td></td>
<td>- eliminate enrollment driven funding formula</td>
</tr>
<tr>
<td></td>
<td>- limit state subsidy for nondegree students to place costs on students and/or businesses</td>
</tr>
<tr>
<td></td>
<td>- limit state subsidy of students by length of enrollment or number of credits as in state grants</td>
</tr>
<tr>
<td></td>
<td>- study possible duplication of courses with community education, other systems’ extension</td>
</tr>
<tr>
<td></td>
<td>- consider whether to subsidize student activities given cost and low usage</td>
</tr>
<tr>
<td>Low levels of student academic preparation; extensive remedial/skills courses and services (p. 55)</td>
<td>- increase preparation requirements, graduation requirements and/or rigor of secondary courses</td>
</tr>
<tr>
<td></td>
<td>- specify clearly the preparation needed to successfully complete an associate degree within 2 years</td>
</tr>
<tr>
<td></td>
<td>- study whether remedial, skills courses are duplicating learning centers, other student services</td>
</tr>
<tr>
<td></td>
<td>- eliminate funding incentives to develop additional credit courses</td>
</tr>
<tr>
<td></td>
<td>- provide remedial/skills services through workshops/tutoring sessions in place of credit courses</td>
</tr>
<tr>
<td></td>
<td>- consider remedial/skills services as part of determination of funding formula</td>
</tr>
<tr>
<td></td>
<td>- evaluate effects/effectiveness of assessment program before instituting mandatory placement</td>
</tr>
<tr>
<td>Lack of timely completion (p. 56)</td>
<td>- remove campus barriers to timely completion to help students progress more rapidly</td>
</tr>
<tr>
<td></td>
<td>- communicate completion standards/expectations</td>
</tr>
<tr>
<td></td>
<td>- create tuition/financial aid incentives to encourage students who can enroll full-time to do so</td>
</tr>
<tr>
<td>Low rates of transfer to 4 year colleges (p. 57)</td>
<td>- determine state, system priority on transfer role</td>
</tr>
<tr>
<td></td>
<td>- plan for effects of enrollment declines at the 4 year systems that may increase demand for transferring</td>
</tr>
<tr>
<td></td>
<td>- examine ability to meet the potential demand and ways to best serve students who desire to move on</td>
</tr>
<tr>
<td></td>
<td>- examine the transfer process and rates of transfer across the systems as well as success of students</td>
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Overview

Community college students differ in significant ways from students enrolled in 4 year colleges and universities. Far more students in community colleges are nontraditional; far more are attending part-time; they enroll for more diverse purposes than students in 4 year institutions; and they are much less likely to remain enrolled. Therefore, comparisons of community college students to 4 year students must be done carefully. Nonetheless, it is useful to gather similar information about both groups to understand student enrollment patterns in Minnesota.

This is the fifth in a series of working papers on college student retention and enrollment patterns. Working Paper #1 looked at overall retention rates in 4 year institutions; Working Paper #2 examined linkages between K-12 and post-secondary education; Working Paper #3 analyzed enrollment trends; and Working Paper #4 presented survey responses of students in 4 year universities.

This paper combines the approaches of the first and fourth to examine community college retention rates and to analyze the survey responses of a sample of community college students. It follows students for three years to track their educational progress and experiences. In doing so, this paper looks at the different roles that community colleges play and the purposes for which students attend these colleges.

Data

Data for the systemwide analysis of retention and transfer patterns are from the Higher Education Coordinating Board's (HECB) student record data base. This same data base was used to draw the samples of students for interviews.

Time and resource constraints limited the size of the sample that we could interview. Rather than select a small number of students from each campus, we chose to select a larger number of students from a limited number of campuses. The survey is based on telephone interviews with 1988 new entering freshmen (NEF) on five campuses (2 metro, 3 greater Minnesota). These students constituted a 12% sample of students continuing to be enrolled at the same campus one year later (retainees), and a 12% sample of students not enrolled at any Minnesota institution one year later (drops).

Since a larger proportion of students drop than are retained, the sample overrepresents retainees. This was done to ensure a reasonable sample size. However, since certain characteristics are associated with retention (e.g. younger age), the demographic characteristics of some of the campuses are skewed slightly.

No sample was drawn of students who transferred to another Minnesota college by fall 1989 because this population was too small at any campus to yield a reliable sample. Only a small percentage of NEF transfer during or after one year. However, a number of students interviewed had transferred by 1991 so information is included for them.
I. Retention Rates and Enrollment Patterns

The initial step in examining community college retention was to track students' progress using HECB's student record data base.* All Minnesota students identified on the data base as new entering freshmen (NEF) at a community college in fall 1987 (16,001) were tracked through 1990 to determine the rate of students remaining on the same campus each fall after their initial enrollment. Students are classified in this part of the paper as follows:

Retained -- students who are enrolled at the same campus as their initial fall 1987 campus

Transferred -- students who are enrolled in a Minnesota institution other than their initial fall 1987 campus

Dropped -- students who were enrolled in a Minnesota institution in fall 1987 but are not enrolled in a subsequent fall.

What is the retention rate for the community college system?

The figure below shows the retention and transfer rates after one, two and three years for all community college fall 1987 new entering freshmen. By the second year of enrollment (1988), a majority of the students have dropped; only 9% have transferred to another institution. The concept of "dropped" is not useful for the third and fourth years of enrollment in a 2 year institution, since it may include students who graduated at the end of the second year. The rates shown in the 1989 and 1990 figures are based on the number of students retained the previous year.

Figure 1
Retention of 1987 Community College New Entering Freshmen

<table>
<thead>
<tr>
<th>Year</th>
<th>Retained</th>
<th>Transferred</th>
<th>Dropped</th>
</tr>
</thead>
<tbody>
<tr>
<td>'88</td>
<td>9%</td>
<td>37%</td>
<td>54%</td>
</tr>
<tr>
<td>'89</td>
<td>19%</td>
<td>39%</td>
<td>42%</td>
</tr>
<tr>
<td>'90</td>
<td>24%</td>
<td>31%</td>
<td>45%</td>
</tr>
</tbody>
</table>

N = 16,001
N = 5,910
N = 2,329

*For a discussion of data limitations, see Working Paper #1 in this series.
How do retention rates compare for full and part-time students?

While only 53% of full-time students are retained for their second year, this is twice as many as the number of part-time students who are retained.

Full-time students also transfer at a much higher rate than part-time students. The largest number transfer after two years of enrollment.

Of the full-time students retained for a second year, more than one-third continue to be retained for a third year -- demonstrating that many full-time students are not completing two year programs within two years.
Figure 2
Retention of Full-Time and Part-Time Students

Full-Time

Part-Time

House Research Graphics
How does retention compare across campuses?

Retention rates vary widely by campus. The figure opposite shows the retention rates after one year for each of the large community colleges (metro area and Rochester) and each of the small colleges. Some of the colleges are retaining a much larger proportion of students after one year than are others. At Willmar 55% of the students return the second year, while at Hibbing only 30% return.

Transfer activity is much stronger at some campuses also. Some campuses appear to act more as "feeder" institutions for 4 year colleges, while others have little of this activity. Hibbing, with the lowest retention rate, has the highest transfer rate (17%). Other campuses with particularly low retention rates do not have a correspondingly high transfer rate.

How does retention vary among population groups?

Retention rates were examined by sex, age and ethnicity. After one year there is little difference in retention of males and females. Females are slightly more likely to drop (55% to 53%) and males slightly more likely to transfer (10% to 8%).

Minority students are just slightly less likely to be retained or to transfer as nonminority students (36% vs. 37% retained; 8% vs. 9% transfer).

Traditional students (under 25 years) are much more likely to be retained or to transfer as are nontraditional students. While 44% of traditional students are retained one year later, only 28% of the nontraditional are still enrolled. These differences are even more pronounced in transfer rates: nearly twice as many traditional students transfer compared to nontraditional students (11% vs. 6%).
Figure 3
First Year Retention by Campus

Large Colleges

Retained
Transferred
Dropped

Small Colleges

Retained
Transferred
Dropped
How many students transfer to 4 year colleges?

One of the major functions of community colleges is to provide entry and lower division preparation for students transferring to 4 year colleges. Because of this, additional attention is given here to student transfer.

Using HECB’s data, we tracked 1987 NEF for three years after initial enrollment, with the assumption that most students who intend to transfer will do so by their fourth year. This method compensates for a weakness in HECB’s data: by collecting information on fall enrollment only, a student who transfers in winter or spring will be missed in a one year analysis. By studying four years of enrollment, students who transfer after the fall term in one year will be identified in the next fall, assuming they are retained that long.

Figure 4 displays the transfer patterns of community college students. By fall 1988, 4% of the NEF have transferred to a 4 year college. After two years -- the peak of transfer activity in these data -- another 8% have moved to a 4 year institution. By fall 1990, an additional 5% have transferred, for a total of 16% by the beginning of the fourth year of enrollment. The largest recipient of this activity is the State University System which over the three year period received 1548 students or 59% of all these 4 year transfers from the community colleges. An additional 1750 students (11%) transferred to a different 2 year college over this same time period.

A total transfer rate of 16% after three years of enrollment would indicate that the transfer function does not constitute a major part of the community college mission. The community colleges argue that students enroll for many different purposes, and therefore, transfer rates, as well as retention and graduation rates, should only be considered for students who enroll full-time. Figure 4 compares the transfer rates of full and part-time students. (Since more than half the community college students enroll part-time, and they are supported in direct appropriations as well as financial aid, it is not clear how the performance of these students or of the system is to be measured.)

It is clear that full-time students transfer to 4 year colleges at a higher rate than do part-time students. However, it is still a relatively small number (26%) of these students who actually do move on to a 4 year college.

Retention rates at their transfer institution were determined for the 1988 and 1989 transfer students. (Data are not yet available for retention of 1990 transfers.) As Figure 5 shows, one year retention rates are lower than the rates for students who start at a 4 year institution (see Working Paper #1). However, students who transfer after two years in a community college have much higher retention rates than those who transfer after one year; in fact, their retention rates are comparable to those of students who begin at a state university.

The chart at the bottom of the opposite page shows the institutions to which students transferred.
Figure 4
% of 1987 NEF Transferring to a Minnesota 4 Year College by 1990

![Pie chart showing the percentage of 1987 NEF transferring to a Minnesota 4 Year College by 1990.](chart)

Figure 5
% of Transfer Students Retained 1 Year Later

![Bar chart showing the percentage of transfer students retained 1 year later.](chart)

Table 1
Destination of Transfer Students
% of All Transfers by Receiving Campus

<table>
<thead>
<tr>
<th>Institution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bemidji State (182)</td>
<td>4%</td>
</tr>
<tr>
<td>Mankato State (380)</td>
<td>9%</td>
</tr>
<tr>
<td>Metro State (144)</td>
<td>3%</td>
</tr>
<tr>
<td>Moorhead State (118)</td>
<td>3%</td>
</tr>
<tr>
<td>St. Cloud State (500)</td>
<td>11%</td>
</tr>
<tr>
<td>Southwest State (44)</td>
<td>1%</td>
</tr>
<tr>
<td>Winona State (180)</td>
<td>4%</td>
</tr>
<tr>
<td>UM Duluth (157)</td>
<td>4%</td>
</tr>
<tr>
<td>UM Morris (21)</td>
<td>0.5%</td>
</tr>
<tr>
<td>UM Twin Cities (454)</td>
<td>10%</td>
</tr>
<tr>
<td>Priv. Lib. Arts (372)</td>
<td>9%</td>
</tr>
<tr>
<td>Other 4 Year (67)</td>
<td>2%</td>
</tr>
<tr>
<td>Comm. Colleges (536)</td>
<td>12%</td>
</tr>
<tr>
<td>Tech. Colleges (951)</td>
<td>22%</td>
</tr>
<tr>
<td>UM 2 Year (18)</td>
<td>0.4%</td>
</tr>
<tr>
<td>Priv. Proprietary (245)</td>
<td>6%</td>
</tr>
</tbody>
</table>
II. Interviewed Students

The remainder of this paper is based on interviews with a sample of retained students and a sample of drops. For these interviews, we selected students from the fall 1988 new entering freshmen in order to have the most recent cohort for whom two years of data were available. Because of time and resource constraints, the sample could not be large enough to adequately represent each campus. Therefore, five campuses were chosen which represented geographical diversity, differences in enrollment, and a broad range of retention rates. These campuses are: Fergus Falls, Hibbing, Lakewood, North Hennepin and Worthington.

In the telephone interviews, students were asked about their plans and background, their preparation for college and, especially, about their experiences during their freshman year.
Are students identified as new entering freshmen truly new students?

One fact that quickly became clear in the interviews is that many students who are identified on the data base as new entering freshmen (NEF) are not new students.

In fact, nearly one-half of the community college students identified as new entering freshmen (NEF) in fall 1988 have been enrolled in college previously, as seen in the figure opposite.

Students were selected from the data base because they were identified as NEF. By HECB's definition, this term is only to be applied to students with no previous college credit (except credits earned through special high school programs). It is understandable that some nontraditional students might have been enrolled years before and are making a new start. However 43% of the students contacted had previous college experience, some very recently. Many students had 2 year degrees; some had 4 year degrees.

It appears that the community college campuses or system identify a student as a new entering freshman unless that student is already enrolled in a degree program at that campus or is transferring credits from another college.

This method of identifying NEF calls enrollment growth figures into question, while raising serious doubts about our knowledge of enrollment patterns and participation rates and our ability to plan. Figure 7 illustrates this problem. If all of the students listed as NEF were so, the community colleges would be the system of entrance for 43% of all new entering freshmen in the collegiate systems. However, if the community college NEF is adjusted according to the proportion of actual new students we found in our interviews, the system accounts for only 30% of new students, while the proportion of each of the other systems increases.
Figure 6
% of Identified NEF with Prior College Experience

43%
57%

Figure 7
Change in Proportions of NEF Enrolling in Academic Systems 1988

Currently Reported
N=41,828

Adjusted for Non NEF
N=34,064

House Research Graphics
Are students enrolling for degrees?

A large number of students are enrolling in community colleges with no intention of being retained. More than one-third of the students contacted are not enrolled in a degree program and do not intend to pursue a degree.* These students are enrolled for a particular course(s). They differ significantly from degree seeking students as seen in the findings that follow.

There is a strong relationship between those students who are not NEF and those who are not in degree programs: most of the students with prior college are not seeking degrees; most degree seeking students are truly new entering freshmen. Figure 8 shows this relationship.

This large proportion of nondegree students is very significant for a study such as this one. The concepts of retention and transfer rates cannot be applied in the same way to these students as they are to degree seeking students.

*Students enrolled in a joint technical college program are classified as degree seeking.
Figure 8
Relationship Between New Entering Freshmen and Degree Seeking Students
How do degree and nondegree students compare?

The table below summarizes some of the major differences between degree and nondegree students. Nondegree students are older and more often women. Particularly significant is the difference in the number of credits between the two groups. Two-thirds of the degree seeking students are enrolled for at least 12 credits; more than two-thirds of the nondegree students are enrolled for four credits or less.

<table>
<thead>
<tr>
<th></th>
<th>Degree</th>
<th>Non-degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>% NEF</td>
<td>72%</td>
<td>30%</td>
</tr>
<tr>
<td>Non NEF</td>
<td>28%</td>
<td>70%</td>
</tr>
<tr>
<td>% Male</td>
<td>42%</td>
<td>35%</td>
</tr>
<tr>
<td>Female</td>
<td>58%</td>
<td>65%</td>
</tr>
<tr>
<td>% Traditional</td>
<td>72%</td>
<td>26%</td>
</tr>
<tr>
<td>Nontraditional</td>
<td>28%</td>
<td>74%</td>
</tr>
<tr>
<td>Credits per quarter*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% 4 or less</td>
<td>8%</td>
<td>70%</td>
</tr>
<tr>
<td>5-8</td>
<td>16%</td>
<td>27%</td>
</tr>
<tr>
<td>9-11</td>
<td>8%</td>
<td>3%</td>
</tr>
<tr>
<td>12+</td>
<td>67%</td>
<td>--</td>
</tr>
<tr>
<td>N</td>
<td>323</td>
<td>177</td>
</tr>
</tbody>
</table>

*Credits per quarter reflect the load carried during a student's last/only quarter of enrollment.
Who are these nondegree students?

Nondegree students are people who enroll in classes but are not seeking a degree. Some take one class, while others take a course every quarter at any local post-secondary institution. Many already have bachelor degrees, while some are experimenting for the first time in collegiate education. During the interview process we recognized that there are different types of nondegree students.

The first type includes people who dabble in a specific area -- English literature, the history of World War II, languages, music and dance lessons, recreational sports, etc. These students take several courses, either consecutively or over the course of many years. One student from Hibbing, who had already received his B.A., has taken every computer class offered on the Iron Range. A retired woman in Fergus Falls has taken various art and language courses since her retirement, while a recently widowed woman in Worthington is taking classes "just to stay active."

A second type includes students who take classes at the local community college to update job skills, such as management training. Many work for companies which stress new skills and strategies for advancement. Some companies pay for the courses, so many employees participate. Other people enroll to maintain job licensure, including teachers and nurses, or for certification such as building inspector or mechanic.

A third category identified includes students who participate in self-help courses such as public speaking, career enhancement, personal health or income tax preparation.

A fourth group is the new entering freshmen who are not sure what they want so they try a quarter at the local community college -- usually only one or two courses. They tend to drop after one quarter.

A fifth type consists of those interviewees who could not remember ever attending a community college. After considerable thought, they recalled taking one class. One woman denied having ever attended a college in her life, but then remembered an aerobics class she had taken at North Hennepin in 1988.

The final type is not a true nondegree student. This is the student who takes one or more classes at a community college as a prerequisite for advanced courses or admission to another college, usually to save money. Many of these classes are in math or science; some are in remedial studies or English proficiency.

It may be perfectly legitimate for community colleges to provide services to nondegree students and their communities. However, the amount of this activity which is all subsidized through state appropriations, raises question at a time when state resources are limited. Additionally, there is a question of overlap in the provision of these services, particularly with community education and extension courses in other post-secondary systems.
What types of courses are nondegree students taking?

The enrollment of nondegree students is divided among different types of courses: employment-related, recreational/hobby, remedial/skills, and general coursework, as seen in Figure 9.

Do men and women enroll in the same types of courses?

Both men and women enroll most often in employment-related courses, but men are more likely to pursue these courses (46% of men vs. 36% of women). Women are more likely to enroll in recreational/hobby courses than are men (31% of women vs. 21% of men).

Do traditional and nontraditional age students enroll in the same type of courses?

There are strong differences in the types of courses that nondegree students take when the age of the students is considered. The figure on the opposite page compares the course enrollment of traditional (under 25) and nontraditional (25+) age students.

The fact that the majority of traditional students are enrolled in general coursework may indicate that they are testing the collegiate waters, so to speak. However, not one of these students enrolled in a degree program between their initial 1988 enrollment and our 1991 survey.

Community colleges in their 1991 Quality Incentives Report express concern that "... traditional concepts of retention ... should not be applied to the entire student body when judging the effectiveness of community colleges. These concepts should only be applied to students whose goals include graduation and transfer." Therefore the remainder of the paper focuses on degree seeking students and the few nondegree students enrolled for at least 12 credits.
Figure 9
Types of Courses Taken by Nondegree Students

- Total: 40%
  - Gen. Course: 28%
  - Rec./Hobby: 29%
  - Employment Rel.: 2%
  - Remedial/Skills: 3%
- Male: 46%
  - Gen. Course: 32%
  - Rec./Hobby: 2%
  - Employment Rel.: 11%
  - Remedial/Skills: 2%
- Female: 34%
  - Gen. Course: 29%
  - Rec./Hobby: 4%
  - Employment Rel.: 36%
  - Remedial/Skills: 2%
- Traditional: 11%
  - Gen. Course: 68%
  - Rec./Hobby: 7%
  - Employment Rel.: 14%
  - Remedial/Skills: 2%
- Nontraditional: 52%
  - Gen. Course: 34%
  - Rec./Hobby: 12%
  - Employment Rel.: 2%
  - Remedial/Skills: 2%

House Research Graphics
III. Student Experiences

This section analyzes the characteristics of those students interviewed who demonstrated their intention to stay in a community college by enrolling in a degree program or enrolling for at least 12 credits. Students who never intended to remain or to seek a degree are excluded from the rest of the analysis.

To account for differences among colleges as well as among students, student interview responses are compared in two ways:

- by student enrollment status at the time of the interview in 1991
- by location of the community college -- those enrolled in community colleges in the metropolitan area compared to those enrolled in greater Minnesota, or by individual campuses where differences are significant.

The previous working papers in this series focused on retainees vs. drops; however, this dichotomy does not fit community college students well. Since these students were surveyed three years after enrolling, they should have graduated or moved to a 4 year institution by this time. Only those students enrolled half time or less would be expected to be retained at this point. Therefore, this section contrasts each of the following student statuses:

- **4 Year Transfers** -- students who leave a community college and enroll in a 4 year college or university
- **Drop outs** -- students who permanently leave a community college and do not enroll in another institution
- **Retainees** -- students who continue to be enrolled in the same community college
- **Graduates** -- students who complete a degree program at a community college.

Demographically, drop outs and 4 year transfers are somewhat like two sides of the same coin: they are largely traditional students, fairly evenly divided between the sexes, and very likely to be new entering freshmen.

Graduates and retainees are also quite similar: they are often nontraditional students, predominantly female, many of whom have prior college experience.

Despite their similarities, the plans and experiences of these students lead them in different directions, accounting in part for the difference in their statuses.

*Transfers to 2 year colleges are excluded because they constitute a small group (8%) and any analysis of them would be skewed since they are predominantly from one campus.*
What is the status of fall 1988 first year, degree seeking students by spring 1991?

The figure on the opposite page shows the 1991 enrollment status of the degree students. Drop outs constitute the largest group. These are students who have left school sometime after their 1988 enrollment and have not re-enrolled. The second largest group is the retainees -- those who are still enrolled after three years. One quarter of the degree students transferred to a 4 year college, and 13% graduated after earning a 2 year degree and left school.

In the metro schools one-third of the students had dropped out, while another one-third continued their enrollment, although they were completing their third year. Few metro students graduated within three years. In greater Minnesota, there were significantly fewer drop outs and retainees, and far more graduates and transfers to 4 year colleges.

Campuses in greater Minnesota differ in some areas, however. Fergus Falls has very few students who graduated, but by far the highest percentage of 4 year transfers. Worthington has a higher percentage of retainees than other non-metro campuses, and far fewer drop outs.
Figure 10
1991 Status of 1988 Degree Seeking Students

**Grad.** - 13%
**Retainee** - 30%
**Drop Out** - 33%
**4 Yr. Trans.** - 25%

Non Degree - 35%
Degree - 65%

by College Location

Metro

Non Degree - 37%
Degree - 63%

Grad. - 9%
Retainee - 33%
Drop Out - 36%
4 Yr. Trans. - 22%

Greater Minnesota

Grad. - 22%
Retainee - 19%
Drop Out - 25%
4 Yr. Trans. - 34%
Demographics

*How do the sex and age of students compare among the different statuses?*

Overall, community colleges enroll more women than men (58% vs. 42%). However, these proportions fluctuate greatly by status: women are overrepresented among retainees and especially graduates, while the sexes are nearly equal in the 4 year transfers and drop outs. There is no significant difference between metro and greater Minnesota colleges in their enrollments of men and women.

Although nearly three-fourths of the degree and full-time students are of traditional age (under 25), this also varies by student status. Retainees and particularly graduates are disproportionately nontraditional (36% and 57%, respectively); these statuses are heavily made up of older female students. Traditional students are predominant among the 4 year transfers and drop outs.

*What is the ratio of true new entering freshmen (NEF) to students with prior college experience?*

Clearly there is a relationship between age and previous college experience: young students straight out of high school are necessarily new entering freshmen, while older students have had the opportunity to have prior college experiences. In fact, the percent of NEF in each status is close to the percent of traditional students in each status, except for graduates. Graduates are older students, yet they are disproportionately NEF. These are often students who decide to enroll several years after high school and generally complete their degrees in two years.

The proportion of NEF varies by campus, from a low of 60% at Worthington to a high of 83% at Lakewood.
Figure 11
Age and Sex by Status

Figure 12
% NEF by Status

House Research Graphics
College Plans and Preparation

_How does the high school preparation of students compare?_ 

Overall, only 13% of the students interviewed completed pre-calculus or calculus, while 51% of the students completed only introductory algebra or geometry. The proportions vary by status, with the 4 year transfers having the strongest high school math preparation, while the graduates have the least. The low level of math among graduates is attributable in part to the large number of nontraditional women in this status. Generally, nontraditional women have completed lower levels of math than most students.

The math preparation of students at different campuses is fairly comparable. However, Worthington has a disproportionately low number of students who completed pre-calculus or calculus, while Lakewood has a disproportionately high number of these students.

There is little difference by student status in regard to English preparation; however, a significantly larger proportion of students in greater Minnesota took college preparatory English in high school than the proportion in the metro area.
Figure 13
Math Preparation by Status
% Taking Pre-calculus/Calculus

Figure 14
English Preparation by College Location
% Taking College Prep English
What is the primary reason these students give for attending college?

Students report a variety of reasons for choosing to attend college, but these tend to fall into one of three categories:

- educational reasons
- employment reasons
- social/recreational reasons

Overall, 72% cite education, 23% employment and 5% social reasons. While a majority in each group offers education as its primary reason, 4 year transfers are the most likely to attend for educational reasons (89%). Graduates are most likely to give employment as their reason (34%), and drop outs cite social reasons more than any other group (12%).

Education is the most common reason offered at every campus, although the proportion varies from a high of 81% at Fergus Falls to a low of 61% at Lakewood. Conversely, 35% of the Lakewood students cite employment as their primary reason while only 12% of the Fergus Falls students offer this reason.

This difference in student goals helps to explain the difference in student status: Fergus Falls has a large number of 4 year transfers in part because students enroll with strong educational goals. Students at Lakewood, with a greater interest in employment, are more likely to drop out or to continue working toward a 2 year degree. Interestingly, Fergus Falls also has the largest percentage of students who cite social reasons for attending. These students are more likely to drop out than others.
Figure 15

% Citing Reason for Attending College
by Status

by Campus

House Research Graphics
What is the highest degree students plan to earn when they enter community colleges?

Degree plans are an indication of the likelihood that students will remain enrolled; they also are related to students' reasons for attending. Overall, 58% of the students expect to earn at least a baccalaureate degree when they enter a community college. As expected, those students who transfer to a 4 year college are the most likely to plan a higher degree (93%) and those students who graduate are least likely to plan one (20%).

Those enrolled in the metro community colleges are more likely to enter with plans to earn a bachelor's degree than those in greater Minnesota colleges, as seen in the figure opposite. This is noteworthy in light of the difference in status, (see Figure 10) which shows a larger proportion of greater Minnesota college students transferring to 4 year institutions, and a larger proportion of metro college students dropping out.

In general, students in greater Minnesota appear to be more realistic in their plans and more committed to achieving their goals than metro area students. Metro area students seem more casual in their attendance. While more of the metro students expect to earn a higher degree, they enroll for fewer credits, stop out much more often and drop out far more. This difference may be attributable, in part, to the ease and convenience of community college enrollment and the availability of employment in the metro area. Students in greater Minnesota appear to make a stronger geographical and financial effort which may lead to a greater commitment.
Figure 16
% Planning a Bachelor's Degree
at Time of Initial Enrollment by Status

by College Location

Metro

Greater MN

House Research Graphics
Financial Issues

What sources of support do community college students receive?

Students were asked whether they received family support and/or financial aid. The majority (52%) of students receive some type of financial aid, most commonly a grant. A majority (54%) report receiving no family contributions. The lack of family support is questionable, however. While we did not inquire specifically about living arrangements, we know that at least some of these students were living with their families who were providing them room and board.

There are few significant differences across groups regarding the likelihood of receiving aid or family support. The major distinction is that graduates are much less likely to have been supported by their families (30%) and much more likely to have received aid (70%).

Metro students are far less likely to receive financial aid than greater Minnesota students. Nearly two-thirds of the metro students reported receiving no financial aid, while slightly more than one-fourth of greater Minnesota students received no aid.

Students in greater Minnesota colleges who receive financial aid most often receive a scholarship/grant or a "package" in which grants are combined with loans or work study. Metro students receive few such packages; nearly all their aid is in the form of scholarship/grants.

How much do community college students work while in school?

A large majority of students are employed while attending school. Graduates are least likely to work; nonetheless, about three-fourths of them are employed. The more significant difference is in the number of hours worked. Drop outs work the largest number of hours, while 4 year transfers work the fewest.

Students attending metro colleges are more likely to be employed and to work longer hours than those in greater Minnesota. Over 60% of students outside the metro area work less than half-time or do not work at all, while only 39% of metro students fit this pattern. Fergus Falls is somewhat like the metro schools in its work patterns: only 12% of the students are not employed and 35% work over 30 hours per week. The figure on the opposite page displays the work hours of students.
Figure 17
% Receiving Financial Aid by College Location

- None
- Loan
- Combination
- Scholar/Grant

Metro

Greater MN

Figure 18
Number of Hours Worked by Status and College Location

- 31+
- 21-30
- 1-20
- No

Metro

Greater MN

House Research Graphics
Academic Issues

How many students are attending full-time?

To determine full-time enrollment for degree students, we used a student’s average number of credits per quarter enrolled. Students whose average was 13 or more credits are defined here as full-time.

Overall, 39% of degree seeking community college students are full-time. Less than one-fourth of either the retainees or drop outs attend full-time, while over two-thirds of the 4 year transfers and graduates averaged 13 or more credits each quarter.

Significant differences are evident by campus also. Nearly two-thirds of the students in greater Minnesota are enrolled full-time, but less than one-third in metro colleges are enrolled at this level. The figure opposite shows the students’ average credit loads per quarter.
Figure 19
Average Credit Load Per Quarter by Status

by College Location

Metro

Greater MN
How many students are enrolling in remedial courses?*

A large number of students are enrolled in some type of remedial/developmental or skills courses. Approximately one-third of all the students have taken at least one such course while at the community college.

Retainees and drop outs are somewhat more likely to enroll in remedial/developmental courses than are 4 year transfers or graduates. Over one-third of the retainees and drops are in these classes compared to just over one-fourth of 4 year transfers.

There are significant differences in remedial enrollments by campus. At Hibbing just over one-fifth of the students take some type of remedial course, while at Lakewood nearly one-half are enrolled in remedial classes.

Are the students in remedial courses recent high school graduates?

While many nontraditional students are enrolled in remedial/developmental courses, most of the enrollment is from traditional age students. However, since the majority of students are traditional, the number of students enrolled in remedial courses must be considered as a percentage of the total enrollment of that age group. Figure 21 shows the proportion of traditional and nontraditional students enrolled in remedial/developmental courses. When the size of the groups is controlled, it is clear that remedial enrollments are not being driven by students who have been out of school several years. They are no more likely to take these courses than traditional students, and there are far fewer nontraditional students overall among degree seeking students.

What type of remedial courses are students taking?

Students' remedial enrollments are in math or English courses, in skills courses such as study skills, or in some combination of these. While not all of the courses apply to graduation, all are credit courses and therefore supported by state appropriations. As Figure 22 shows, there are substantial differences in the types of remedial enrollments by campus. Students in the metro area are much more likely to be in skills courses than are those in greater Minnesota. Math courses generally are the primary academic courses, regardless of location.

*For additional discussion of remedial enrollments, see Working Paper #2 in this series.
Figure 20
% of Students Enrolling in Remedial/Skills Courses by Campus

Figure 21
% of Students Enrolled in Remedial/Skills Courses by Age

Figure 22
Types of Remedial/Skills Courses Taken by College Location

House Research Graphics
Student Services Issues

How many students are using services at the campus learning centers?

Each campus has a learning center where remedial/developmental and tutorial services are offered. The only group that makes much use of these learning centers is the retainees. About 44% of the retainees report using these services, while only an average of 15% of the other groups report such use.

Students at the metro colleges are more likely to use the services at campus learning centers than the students in greater Minnesota. There are major differences between campuses, however. At Lakewood, 38% of the students report using the center, while only 5% report such use at Worthington. Students at Lakewood also report the highest remedial enrollment (47%).

The availability and use of learning centers raises questions about the need for many of the remedial/developmental courses. While the tutoring services of the centers may not be duplicated, other services offered by the centers, including noncredit courses/workshops in academic subjects (e.g. math), skills courses, and career planning, appear to be duplicated by credit courses offered on the campuses. Although this may provide students with more opportunities, it would seem that this duplication could be quite costly.

Are community college students active on campus?

Most community college students do not participate in campus activities. Only one-fourth of the 4 year transfers and 30% of the graduates report any involvement in activities or organizations, and these are by far the most active groups.

Participation is much higher at greater Minnesota campuses than at the metro campuses. Only one in ten metro students is involved in any campus activity; in greater Minnesota the level of activity is much greater although it still involves only a minority of students (34%).

This again raises financial questions. Activities and the resources and buildings to support them can be very costly, especially if so few students are involved. The percentages here are the proportion of degree students only. If the nondegree students, who make up 35% of all students, and who are even less likely to be involved in organizations or activities, were included in the total, the percentage of students making use of these programs and facilities would be very low indeed.
Figure 23
% of Students Using Services at Learning Centers
by Campus

Figure 24
% of Students Involved in Campus Activities
by Status and College Location
Student Problems

Do students experience problems enrolling in desired courses?

Overall, 29% of the students report some problem in enrolling in desired courses. Drop outs and retainees most often cite this problem. While this could help to account for their status, it should be noted that almost as many 4 year transfers have these problems.

Both the highest and lowest levels of enrollment problems are at the metro campuses -- North Hennepin students report the fewest problems (18%) while Lakewood's report the most (48%).

Over three-fourths of the students attribute their problems to lack of room in the desired course. The remainder of explanations involve courses that were not offered or scheduling problems.
Figure 25

% of Students Experiencing Problems Enrolling in Courses
by Status

by Campus

House Research Graphics
Are students experiencing problems in transferring their community college credits?

Students who transferred to a 4 year college were asked whether they had any problems in transferring the credits they earned at the community college. As Figure 26 shows, the large majority (84%) experienced no problems.

Of those who did have problems, only half related to transferring credits to a Minnesota public 4 year college. These cases are presented in the table on the opposite page. The remainder of the problems involved transferring credits to a public college in a bordering state or to a Minnesota private college.

Additionally, students who transferred to a different 2 year college were asked about credit transfer. Only 35% of these students tried to transfer any credits. Overall 8% reported problems. These related to the transfer of remedial/developmental courses into technical programs.
Figure 26
% of Transfers to 4 Year Colleges with Credit Transfer Problems

Table 3
Reported Problems in Transferring Credit to Minnesota Public 4 Year Colleges

<table>
<thead>
<tr>
<th>Problem</th>
<th>% of 4 Year Transfers</th>
<th>Receiving System</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic credits not accepted</td>
<td>4%</td>
<td>University of MN State University</td>
<td>The majority of these involve transfer of remedial courses</td>
</tr>
<tr>
<td>Academic credits accepted as electives only</td>
<td>3%</td>
<td>State University</td>
<td>In some cases students transfer more credits than can be applied to general education requirements</td>
</tr>
<tr>
<td>Vocational credits not accepted</td>
<td>1%</td>
<td>University of MN</td>
<td></td>
</tr>
</tbody>
</table>
What reasons do drop outs give for leaving school?

Students who dropped out of a community college were asked for the primary reason they left. While a wide range of responses were given, these generally fit into three categories. The table below displays the proportion of students whose answers fall into each.

Table 4
Drop Outs' Reasons for Leaving School

<table>
<thead>
<tr>
<th>Reason</th>
<th>% Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivational/academic problems - including poor grades, a preference for work instead of school, or dissatisfaction with the program.</td>
<td>48%</td>
</tr>
<tr>
<td>Financial - including the cost of college, problems finding a job, lack of financial aid, or desire to spend limited money in other ways.</td>
<td>31%</td>
</tr>
<tr>
<td>Personal reasons - including family problems, pregnancy, illness, or dissatisfaction with the size or location of the college.</td>
<td>20%</td>
</tr>
</tbody>
</table>
What recommendations do students have for the legislature?

At the close of the interview, students were asked if they had any recommendations for the legislature regarding the improvement of higher education. While there were a variety of comments made, there was a high degree of consensus on many issues. Two comments may be of particular interest to legislators: a significant number of students requested the reinstatement of summer school; several others recommended that the merger of the three post-secondary systems be eliminated, while no student endorsed the merger. The table below indicates the percent of responses that fall into each of the major categories.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>% Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Improvement</strong> - smaller classes and more sections, higher quality of instruction, more instructional equipment and facilities, more flexible scheduling, reinstatement of summer session, clearer/more uniform credit transfer.</td>
<td>33%</td>
</tr>
<tr>
<td><strong>Financial Aid Expansion</strong> - more financial aid, more aid to the middle class, more equitable distribution, changes in independent student status.</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Lower Tuition and Related Costs</strong></td>
<td>24%</td>
</tr>
<tr>
<td><strong>Student Services Enhancement</strong> - better academic advising, more daycare, more parking, better services for nontraditional.</td>
<td>13%</td>
</tr>
<tr>
<td><strong>High School Preparation Changes</strong> - better post-secondary counseling, more rigorous college prep courses.</td>
<td>6%</td>
</tr>
</tbody>
</table>
IV. Conclusions and Policy Implications

Community college students are not wholly comparable to students in 4 year colleges in terms of their backgrounds, experiences and goals. For that reason we have chosen to look at community college students separately in this paper rather than including them with 4 year college students in Working Papers # 1 and # 4.

However, for purposes of state policy development, it is necessary to be able to compare these groups of students in at least a broad sense. This allows state policymakers to determine how their decisions might affect different students and to target the policies at a particular system or group of students, if they so choose.

The information below and on the opposite page juxtaposes community college NEP$^1$ and 4 year college (State University System, University of Minnesota)$^2$ NEF to allow for this comparison.

---

Figure 27
Comparison of Community College and 4 Year College Retention Rates 1 Year After Initial Enrollment

<table>
<thead>
<tr>
<th></th>
<th>Full-time</th>
<th>Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>UM/State U</td>
<td>N = 11,092</td>
<td>N = 1,352</td>
</tr>
<tr>
<td>Comm. Coll.</td>
<td>N = 7,485</td>
<td>N = 8,516</td>
</tr>
</tbody>
</table>

- Includes all students identified as NEF in HECB's data; nothing in those data determines the accuracy of the status.
- Figures for the State University System and University of Minnesota exclude the 2 year campuses of the U of M.
Figure 28
Comparison of NEF Characteristics between Community Colleges and 4 Year Colleges

<table>
<thead>
<tr>
<th>Sex</th>
<th>Full-Time/Part-Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=12,444</td>
<td>N=16,001</td>
</tr>
<tr>
<td>F--52%</td>
<td>F--58%</td>
</tr>
<tr>
<td>PT--53%</td>
<td>PT--11%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trad.--97%</td>
<td>Minor.--5%</td>
</tr>
<tr>
<td>Trad.--51%</td>
<td>Minor.--5%</td>
</tr>
</tbody>
</table>

- 4 year college students have stronger high school academic preparation
- 4 year college students are much more involved in campus activities and organizations
- Community college students work more often and more hours
- Slightly more 4 year college students receive financial aid
Policy Implications

The findings of this working paper raise a number of policy questions and implications. These are discussed briefly below.

How reliable are the available higher education data? How useful is this information for policymaking and planning?

HECB maintains a data base on all Minnesota post-secondary students. HECB specifies the information that the systems are to provide and defines the terms for consistency across the systems. The retention and enrollment data used in this paper were provided to HECB by the community college system.

Our assessment of these enrollment data raises critical concerns about the reliability of the information available. When people with college degrees and people with a history of enrollment are identified as new entering freshmen, it is an indication of a serious data problem.

Previously we had encountered problems with data in the areas of student participation rates and enrollment growth, as well as lack of comparability between data of different years.* Added to this, the data are severely limited in terms of the amount and type of information available.

To a large extent, HECB is dependent upon the post-secondary systems and campuses to provide it with student data. Some of the systems (particularly the University of Minnesota) provide accurate and well documented information; others do not. While the quality of the information is not HECB’s responsibility, more extensive use and verification of the data would alleviate and possibly prevent many of the problems. At the same time, HECB could work with the systems to determine the causes and remedies for the data problems.

The lack of reliable data seriously undermines the ability of the state to engage in meaningful planning. If we do not know the number of NEF and cannot distinguish degree students from those taking only aerobics classes, it is impossible to assess the implications of policy decisions. Additionally, the problems with student enrollment data raise questions about the reliability of other higher education data that policymakers must use, including those enrollment data used for average cost funding.

*See Working Paper #3 in this series.
What is the mission of the community college system? What roles are the system and its campuses playing?

This research indicates that the mission of the community college system is quite broad. As an open access system, it is subject to being used for a variety of purposes. The traditional twin purposes of providing 2 year general education degrees and the lower division component of 4 year degrees appear to be relatively limited parts of the system's many functions.

To be sure, this varies by campus: some campuses, particularly outside the metro area, seem to have one or both of these functions as the central core of their activities; on other campuses, other functions are predominant. The system apparently at least serves as: a community education center, a recreational center, a seniors' activity area, a remedial and study skills provider, an employment skills trainer, a career assessment center, a licensure/certification provider, a less expensive alternative to 4 year colleges for selected required courses, and a skills maintenance center. These are all in addition to the system's traditional two functions.

An often-used phrase in higher education in recent years appears to characterize much of the activity we found in the community colleges: the system is "trying to be all things to all people." As many people involved in post-secondary education have come to realize, concentrating on a small number of functions makes it easier to enhance educational quality. Serving many purposes can be very costly or can spread finances too thinly -- facts that must be considered in a time of limited state resources.

The community colleges have placed a strong emphasis on access, and the state has a clear interest in preserving educational access for students. However, educational access need not mean access to every type of educational activity. The system can set priorities among its functions without sacrificing access. These priorities would allow it to concentrate its resources more effectively and focus its functions in ways that may better serve student and state needs.
How do the academic preparation levels of students affect remedial education?

In general, community college students enroll with considerably lower levels of academic preparation than do students at 4 year colleges. As open access institutions, the community colleges have maintained that it is inappropriate for them to establish preparation standards for admission.

The state has endorsed the policy that the community colleges should be available to students who did not prepare and/or perform very successfully prior to college, but who now seek an opportunity to continue their education. However, a lack of standards encourages students to do little in high school because they know they can still enroll in college.

The lack of expectations for students increases the demand on the community college system to offer extensive remedial/developmental courses and services. While the system points out the need for these among some nontraditional and disadvantaged students, most of the demand is coming from traditional, majority students, many of whom attend high schools that have a strong academic curriculum. The community colleges have stated that remedial education is a central part of their mission. This is laudable where it is necessary for student success. However, remediation is very expensive and the state has a strong interest in preventing the need for these services where possible.

Higher education, particularly the University of Minnesota and more recently the State University System, is being praised by many for bringing about K-12 curricular reforms through the adoption of preparation requirements. The community colleges could increase student preparation, while preserving access, through a modified version of these standards: the system could articulate clearly and forcefully the preparation necessary in high school to successfully complete an associate degree within two years. This message should result in far fewer students arriving unprepared and requiring remedial services.

The community colleges have instituted an assessment process to help determine student placement in math and English courses. This is a useful mechanism to prevent student failure in courses that are beyond the student’s skill levels. However, some campuses have suggested that this process has led to very significant increases in remedial enrollments, although it was not clear that there were a large number of students failing or underserved prior to adoption of this uniform process. Unnecessary or precautionary placement of students in remedial courses can lengthen the time and cost of enrollment. This issue will become more significant in the near future because of planned changes in remedial placement. Currently student assessment results in recommended remedial courses for those whose performance is inadequate. Beginning in 1993, the community college system intends to make the remedial course placement mandatory for those who perform below the expected level on the assessment instruments.

The system also appears to encourage some of its remedial/developmental load. Community colleges offer an abundance of skills and personal development courses for credit. Most of these can be applied to the credits needed for graduation. For example, while career services are available on each campus, many community colleges offer credit courses relating to career assessment; although counselors and tutors are available to help students academically, credit courses are offered on study skills, notetaking, and student success. The necessity for credit courses is questionable when student services are designed to meet most of these needs. The question of whether the remedial and skills courses are duplicating the learning center and other student services needs to be addressed, because needless duplication is a very expensive proposition. Perhaps the funding available to student services is insufficient to meet these needs; perhaps an enrollment driven funding formula has rewarded the development of more credit courses. The legislature may want to consider the best way to meet students' developmental needs as it determines the course of state higher education funding.
Are students completing programs in a timely manner?

Most students are not carrying full credit loads and, therefore, are not progressing through a 2 year program in 2 years' time. This is particularly the case in the metro area colleges.

Lack of timely completion increases the cost of education to the students and the state. The state must pay for the additional time on campus through such things as more student support services and greater capital expenditures to accommodate larger enrollments.

Of the degree seeking students we interviewed, 30% were still enrolled after three years, while 25% had transferred, and only 13% had graduated. In the metro colleges, the number remaining enrolled is greater than the graduates and transfers combined. Some of these retainees are nontraditional and may be working full-time and supporting families. But the majority are traditional, many of whom are living at home with their parents and are not forced by family or financial circumstances to attend less than full-time. On the other hand, there are also those retainees who are attending full-time yet continue to remain enrolled. Nearly one-fourth (23%) of the retainees carried an average of 13 or more than credits each quarter, yet did not complete their program in three years of enrollment.

While neither the state nor the colleges wants to compel students to attend full-time, the state does have an interest in seeing that barriers to timely completion are removed and that students have an opportunity to progress more rapidly. Moreover, it is not unreasonable to set expectations and perhaps create incentives to encourage those students, especially traditional students, who can enroll full-time to do so.

The community colleges have suggested that since students are not completing programs in the expected timeframe, a new definition of timely completion is needed. However, in light of the legislature’s interests, it seems more appropriate to attempt to change the behavior than to change the definition.
Are community colleges fulfilling their transfer function?

Relatively few students who start at a community college transfer to a 4 year college in the state. Using HECB's student data base, only 11% of all community college students have transferred by their third year of enrollment. By the fourth year, this only increases to 16%.

As we have seen, many students enter without pursuing a degree. This is true especially of part-time students. However, if part-time students (53%) are excluded, the number of students progressing to a 4 year college by their fourth year of enrollment only increases to 26%.

Community colleges are charged with providing initial access to baccalaureate education for students who cannot or choose not to begin at a 4 year institution. While it is certainly recognized that students attend community colleges for other reasons, the low transfer rate raises questions about how much need there is for this initial bachelor's degree access and how well that need is being met.

The low level of transfer activity is of particular importance to policy makers in light of the plans and actions of the University of Minnesota and State University System to limit their enrollments. To the extent that their enrollments decline because of smaller entering classes, more students may look to the community colleges for the first two years of college. We cannot determine the cause of the low transfer rate from this research; however, the actions of the 4 year systems may force the community colleges to place a higher priority on their traditional role of preparing students for transfer. The community colleges need to examine their ability to meet this potential demand and determine how they can best serve students who desire to move on.

At the same time, the legislature may want to determine how important it considers the transfer function to be, within the community college mission, to meet the needs of students and the state and to complement the missions of the other post-secondary systems. The legislature could then make policy and funding decisions that support and promote this function as well as the missions of each system.

An example of such a policy decision is the issue of credit transfer. Ease of credit transfer is important if the community colleges are to serve their transfer function successfully. The legislature has made it clear that the state supports maximum ease of credit transfer within the limits of good academic policy. This appears to have had an effect, as only a small number of complaints about credit transfer were heard in the interviews. In fact, it does not appear that this issue will be a serious impediment if the rate of transfer were to increase. Since the complaints primarily related to the transfer of remedial and vocational courses or to an overabundance of lower division credits, most of these problems can be resolved through early counseling of students who plan to transfer.
How do the issues raised in this research relate to state financing of community colleges?

Most of the issues raised in this research have a direct relationship to state costs. At a time when available resources are limited, it is important to consider the cost implications of state and system policies. Many of these implications have already been mentioned, so they will only be summarized here.

The most significant cost issue raised relates to the mission of the community colleges and the purposes of the students enrolling. If 35% of the students are not enrolled in a degree program, should the state consider limiting its subsidy of all or part of this group while continuing to subsidize degree students?

Many of the nondegree students are in school for self-enrichment or recreational purposes. This is not to say that these are not legitimate educational purposes or that there is no return to the state from these activities. It is only to say that state policymakers could choose to allow these students to bear a greater proportion of their own cost or, where businesses are paying a student's cost for job related courses, to allow the business to assume a greater share.

An alternative approach might be to base the state's subsidy on the length of enrollment. Some of these students have previously completed 2 or 4 year degrees; others enroll in some post-secondary institution almost continually. The state could opt for a system that subsidizes a student for a certain amount of time or number of undergraduate credits, but places the burden of cost for enrollment beyond that time or credit limit on the student. This approach is not unlike state policy on financial aid.

Also related to the issue of community college functions and student intentions, is the cost of providing services such as athletics and activities at each community college. The cost of facilities and land are borne by the state, as well as some personnel and other costs of the activities themselves. With so few students using these activities, even among degree students, this can be a very expensive operation. This is particularly true in the metro area where only 1 in 10 degree students reports involvement. To the extent that community colleges are not functioning as 4 year colleges are, these activities may deserve more scrutiny in the funding process.

Another issue regarding state costs is the possible duplication of financing going toward community education and community colleges. We have not examined this issue well, but on the surface at least, it appears that state and local support of community education may be going in part toward the provision of similar courses as are being supported by the state in the community college system. Self-help courses, recreational and hobby courses and many skills courses are offered in communities throughout the state by the K-12 system. This deserves more thorough study.

Remedial/developmental education is another significant cost item. About one-third of the students interviewed reported enrolling in some type of remedial or skills courses. Most of these students are recent high school graduates. If they are not being sufficiently prepared in high school, the state is effectively paying the costs of this education twice. That is an expensive undertaking. Ways could be sought to ensure better student preparation through entrance standards or graduation requirements or through more rigorous content in high school courses. Additionally, the system needs to evaluate how well its assessment process is functioning before making placement in these courses mandatory which will further increase these enrollments.

Many of the skills enhancement courses offered in the community colleges might be offered less expensively through short-term workshops or tutoring sessions, rather than credit courses. This would
also allow more room in the curriculum for college level academic courses and might encourage more
timely completion of degrees.
Timely completion itself might be encouraged more through the removal of barriers (i.e. reasonable
availability of needed courses) or the provision of incentives (i.e. lower tuition for higher credit loads).
These could help to reduce current costs. While it is true that students may have changed their
patterns and prefer to take longer to complete degrees, the state has a strong interest in shortening this
time. The creation of expectations and incentives may well spur some student movement in this
direction.

Finally, more assessment of the transfer rate and process is necessary. Community colleges can
provide the first two years of college less expensively than the 4 year systems, if students continue on
for their degrees and do so successfully. The systems must cooperatively examine the transfer rate
and the success of students to determine their appropriate roles in this process.