

Minneapolis Community & Technical College: Charting Student Success

Report Summary

Copies of the full report are available from the
Minneapolis Community & Technical College
Office of Strategy, Planning and Accountability:

<http://accountability.minneapolis.edu/accountability>

ASMUSSEN RESEARCH & CONSULTING LLC

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Background

This project tracked the academic performance and educational outcomes of 8,000 students who entered Minneapolis Community & Technical College (MCTC) in the Fall terms during 2005, 2006, and 2007. These three cohorts of students were those on which the most recent IPEDS graduation rates were based (see additional discussion later in this summary about IPEDS). The project was conducted to help MCTC design initiatives to improve the educational success of its students.

First, the project identified how student characteristics varied among the four primary entering statuses:

1. First-Time/Full-time (FT/FT),
2. First-time /Part-time (FT/PT),
3. Transfer/Full-time (Tr/FT), and
4. Transfer/Part-time (Tr/PT) students.

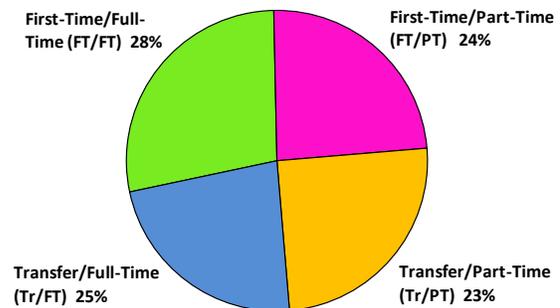
Then it analyzed how the educational outcomes (graduated, transferred out, still enrolled, and dropped out) varied depending on student characteristics and entering status.

In addition, the project analyzed different ways of measuring student success, including differing definitions of graduation rates and measures of academic progress. It investigated how college preparedness prior to entry and credit-earning patterns in the students' initial terms at MCTC were associated with student success outcomes.

Characteristics of MCTC New Entering Students

As the pie chart shows, new students entering MCTC in the Fall 2007 term were almost equally balanced among the four entering statuses.

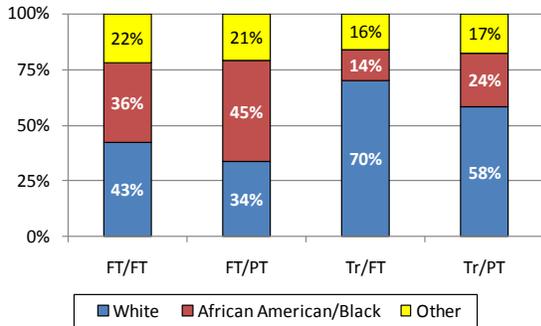
**Entering Statuses of MCTC Students
Fall 2007**



First-Time/Full-Time students accounted for the largest segment at 28%, but this segment was considerably smaller compared to other two-year colleges in the Minnesota State Colleges & Universities (MnSCU) System where it accounted for almost half of new entering students. MCTC also enrolled a much larger percentage of transfer students (48%) compared to other MnSCU colleges (average of 36%).

MCTC has a reputation as one of the most diverse colleges in the MnSCU system. A common measure of diversity is the racial/ethnic backgrounds of students. The following chart shows the racial/ethnic diversity of MCTC students and how the distributions varied among the entering statuses.

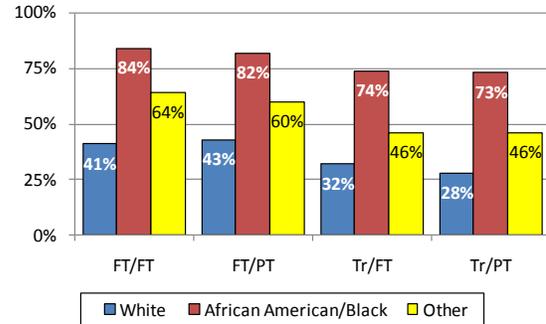
**MCTC Enrollments by Race/Ethnicity
Fall Terms 2005 - 2007**



First-Time MCTC students came primarily from minority racial/ethnic backgrounds, while most Transfer students were White. The predominance of first-time students from racial/ethnic minorities is important because one of MCTC's overarching institutional goals is to achieve educational equity for all students. This goal is particularly challenging because, as shown in the previous chart, racial/ethnic minority students disproportionately had entering statuses associated with longer times to graduate. Students who transferred into MCTC from other colleges had an advantage over first-time students who did not have any college credits. Students who enrolled full-time also had an advantage over students enrolling part-time, because they typically earn credits at a faster pace given their full-time status.

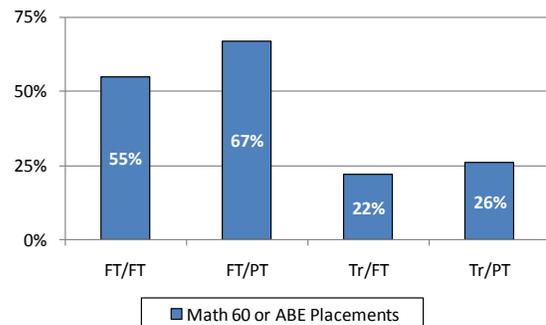
Racial/ethnic minority students also disproportionately possessed characteristics which made it more difficult to achieve success. The following chart shows that much higher percentages of African American/Black students had one or more factors that placed their student success "at risk" (low income or first-generation students whose parents did not attend college).

**MCTC "At Risk" Students by
Race/Ethnicity and Entering Status
Fall Terms 2005 - 2007**



Another important consideration for the likelihood of student success is the college readiness of new entering students. In fact, of all the characteristics in this analysis that students exhibited upon entry to college, math placement levels proved to be the best predictor of student success. As shown in the following chart, though, the majority of new first-time MCTC students had low math placements. Students placed at Math 60 or Math Adult Basic Education (ABE) must complete at least three semesters of developmental math before enrolling in college-level math courses.

**Percentage of MCTC Students with
Low Math Placement Levels
Fall Terms 2005 - 2007**

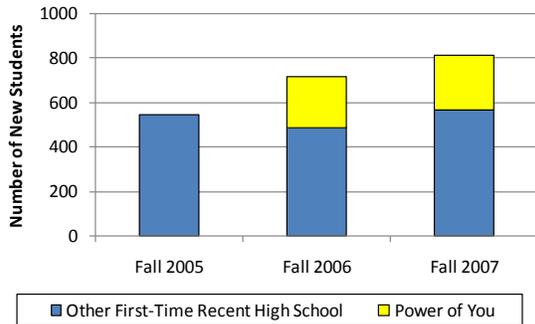


Power of YOU program

A good example of an MCTC program designed to improve student success is the Power of YOU program. The program was introduced in the Fall 2006 term and targeted students who were attending Minneapolis or St. Paul public schools, a population with high numbers of low-income students-of-color.

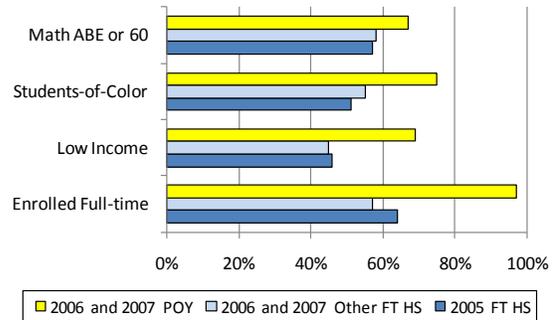
As shown in the following chart, the Power of YOU program has been very successful in increasing enrollments of first-time recent high school graduates at MCTC.

MCTC First-time, Recent High School Enrollments: Fall Terms 2005 - 2007



Furthermore, the following chart shows that the Power of YOU program helped MCTC enroll more students-of-color and more students from low income households. It also shows that the Power of YOU students were less prepared for college than other recent high school graduates, but were required to enroll full-time.

MCTC Students Enrolled in Power of YOU Compared to Other Full-time Recent High School Students



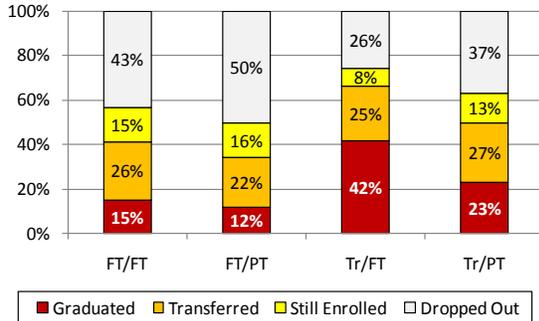
Despite the added challenges faced by Power of YOU students, they outperformed other recent high school graduates. 17.5% of Power of YOU students earned a college credential within three years, compared to 11.8% of the other recent high school graduates. A statistical model showed that participation in the Power of YOU increased the odds of graduating from MCTC by 67%.

Educational Outcomes of New Entering MCTC Students

The Minnesota State Colleges & Universities system has developed an accountability dashboard that has several measures of institutional performance. The dashboard measures student success for cohorts of new students entering MnSCU colleges each Fall term. Students are considered successful if they graduate, remain enrolled, or transfer to another college or university.

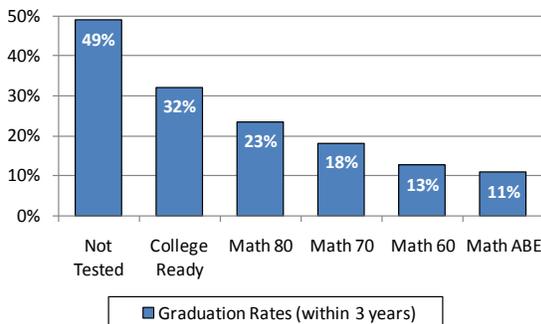
The following chart shows that the success of MCTC students who entered in the Fall 2005-2007 terms varied considerably by entering status.

**MCTC Educational Outcomes within
Three Years by Entering Status
Fall Terms 2005 - 2007**



Upon entrance to college, math placements were the most powerful predictor of whether MCTC students would achieve a successful education outcome. Students who were not tested for math placements either had previous college experience that exempted them from enrolling in math courses or pursued majors that did not require math proficiency. Those students showed a remarkable graduation rate of 49%. Of the remaining students, graduation rates declined steadily along with math placements.

**Graduation rates (within 3 years) by Math
Placement Levels: MCTC Students Entering
in Fall Terms 2005 - 2007**



Even greater insights about the prospects of student success are revealed by the academic results students achieved early in their college experience. The following table shows the percentage of MCTC First-Time/Full-Time students who graduated or failed within three years, broken down by the level of credits earned in their first semester. Remember that all FT/FT students registered as full-time students (12 or more credits) for the term. Yet, only 51% of them actually earned credits at the full-time level in their first semester at MCTC. If FT/FT students did not earn credits at the full-time level, their chances of a successful educational outcome dropped significantly.

**Educational Outcomes by Credits Earned
First Semester: MCTC FT/FT Students
Entering in Fall Terms 2005 - 2007**

First Semester Level of Credits Earned	Percentage of FT/FT MCTC Students		
	At Each Level of Earned Credits	Graduation Rate	Failure Rate
Full-Time	51%	25%	11%
Part-Time	32%	7%	59%
None	17%	2%	93%

Note: Shows results within 3 years of enrollment.

The importance of students earning their registered credits is emphasized further by examining the educational outcomes of First-Time/Part-Time (FT/PT) students. As shown in the following table, the credit-earning levels and educational outcomes of first-time students who enroll part time in their first term were strikingly similar to students who enrolled full time.

**Educational Outcomes by Credits Earned
First Semester: MCTC FT/PT Students
Entering in Fall Terms 2005 - 2007**

First Semester Level of Credits Earned	Percentage of FT/PT MCTC Students		
	At Each Level of Earned Credits	Graduation Rate	Failure Rate
All	51%	19%	15%
Some	19%	7%	67%
None	30%	2%	93%

Note: Shows results within 3 years of enrollment.

These analyses show that there is a complex relationship between enrollment status and student success. On the one hand, enrolling part time reduced students' odds¹ of graduating within three years, compared to students who had enrolled full time. On the other hand, students who registered for a full-time load of credits in their first term, but only earned a part-time level of credits, experienced an even more severe decline in their graduation rates.

Students who registered for a full-time level of credits in their first term and earned credits at the full-time level showed a 25% graduation rate within three years. For part-time students who earned all of their credits, the graduation rate declined to 19%. The most severe decline, though was shown by students who registered for full-time credits, but only earned part-time credits in their first term, resulting in a 7% graduation rate.

¹ The full report contains a statistical model that showed part-time enrollment decreased a student's odds of graduating within three years by 34%, compared to enrolling full time. This effect was measured after all other factors were considered, so it took into account all the other differences of first-time students, e.g., age, math placements, etc., and showed the residual effect for any student who enrolled part time rather than full time. It was, though, an average effect, suggesting that some students benefited from full-time enrollment while other students did not.

Likewise, failure rates increased markedly when students did not earn their registered credits. The majority of students (59% for full-time registrants and 67% for part-time registrants) who did not earn some of their first term registered credits ultimately left MCTC after experiencing academic difficulty, without any college credentials. Furthermore, 93% of all first-time students who earned no credits in their first term experienced a similar failure.

This suggests that students who did not have the capacity to earn full-time credits would have been best advised to enroll as part-time students. Accordingly, strategies to encourage students to register for a level of credits that matches their credit-earning capacity should improve student success.

IPEDS Graduation Rates

Finally, the report included additional analyses of MCTC's graduation rate as measured by the Integrated Postsecondary Education Data System (IPEDS) survey administered by the U.S. Department of Education. The IPEDS graduation rate is the official rate used to compare institutional performances across the country. Whereas the MnSCU graduation rates, as discussed previously, allowed students three years to complete any kind of academic credential, the IPEDS rate only allows students 150% of the normal time needed to earn the credential by a student attending full time. So, students enrolled in certificate or diploma programs would not have the full three years to earn their award and be counted as an IPEDS graduate.

The IPEDS graduation rate also is computed for only First-Time/Full-Time students, whereas MnSCU graduation rates may be

computed for other entering statuses. The three FT/FT student cohorts analyzed (Fall terms 2005-2007) had an average IPEDS graduation rate of 10%, compared to 15% for FT/FT students using the MnSCU method. The difference in FT/FT graduation rates were accounted for almost entirely by:

- The MnSCU rate counted 170 students who earned a certificate as a graduate, whereas the IPEDS rate counted only 14 of them as graduates.
- The IPEDS rate counted 31 students who completed the Minnesota Transfer Curriculum as graduates, whereas the MnSCU rate did not consider them graduates.

In the most recent year measured, MCTC's IPEDS graduation rate had risen compared to earlier years. For the Fall 2007 entering cohort, the IPEDS graduation rate was 11.5% compared to 9.1% and 9.0% for the entering cohorts from Fall 2005 and 2006, respectively.

Further analysis revealed that two factors contributed to the rise in the IPEDS rate:

- Relatively higher graduation rates produced by the Power of YOU program participants, especially in earning AA and AS degrees, and
- Increased numbers of students being recorded as completing the Minnesota Transfer Curriculum.

These trends should be watched closely in coming years to ensure that they will provide a sustainable increase in the IPEDS graduation rate.

Future Research Questions

Although this study provided much information about MCTC's new entering students and the educational outcomes they achieved, it also helped identify additional questions needing further study. Accordingly, the college plans to continue to pursue a research agenda related to student success.

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