An Analysis of First-Time Student Cohorts at MCC
- Summary of Findings -

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Metropolitan Community College
Office of Research, Evaluation and Assessment
Student Flow 2006:  
An Analysis of 
First-Time Student Cohorts at MCC  
- Summary of Findings -  

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Metropolitan Community College  
3200 Broadway  
Kansas City, Missouri 64111  

Melissa M. Giese  
Research Analyst  
(816) 759-1300  
Melissa.Giese@mcckc.edu  

and  

Jennifer R. Ebeling  
Research Analyst  
(816) 759-1003  
Jennifer.Ebeling@mcckc.edu  

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http://www.mcckc.edu/?qlinks=Research+Department
Executive Summary

♦ Students comprising this study were obtained from four first-time student cohorts beginning in Fall 2002, Spring 2003, Fall 2003 and Spring 2004. Each cohort was tracked from 4 to 6 semesters.

♦ There were approximately 3,800 first-time students enrolled in the fall cohorts and around 1,500 in the spring cohorts. Of these students, the majority were female, white, and of traditional age.

♦ Students were characterized according to their enrollment patterns as persisters, frequent enrollees, sporadic enrollees or one-time enrollees.

♦ Students who began their education at MCC in the fall rather than the spring were more likely to persist.

♦ About one-third of students who began their education in the fall did not return for subsequent semesters.

♦ Over half of students who began their education in the spring did not return for subsequent semesters.

♦ The “Funnel Effect” best describes student attrition where 66% of the students beginning in the fall returned the following semester. Forty-five percent (45%) enrolled the third semester and 35% enrolled for the fourth semester.

♦ The spring “Funnel” was shaped differently with 38% returning the following semester, 27% returning the third semester and 20% returning the fourth semester.

♦ Students who enrolled for the first time in the fall were more likely to be of traditional age than those who enrolled in the spring. Traditional age students were more likely to persist than non-traditional age students. Non-traditional age students were more likely to attend for only one semester.

♦ Of those attending MCC for more than one semester, 13% of fall first-time students and 7% of spring first-time students earned a degree over six semesters.
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STUDENT FLOW REPORT – EXPANDED ANALYSIS

On average, each academic year approximately 6,400 students enroll and acquire their first exposure to higher education through MCC courses and services. These students enroll for a multitude of reasons: to earn credits prior to transfer (52 percent), to enroll in courses to improve existing job skills (15 percent), or perhaps, to learn skills for them to change their current vocation to a more economically and personally rewarding career (23 percent). Students also enroll to obtain an award, such as an AA, AS, AAS or a certificate. Compiling and calculating these goals are a challenge because a student’s educational goal may represent a combination of these options, and, of course, it can change several times prior to their exit from the institution. For most district employees this report may confirm what they already know, e.g., the fluid nature of enrollment, attrition and retention for students at an open-enrollment institution. The multiple demands on students whose personal life may be a combination of parent, employee, caregiver, guardian and student. Regardless, the research office believes college personnel may receive some insight into first-time students as an educational consumer that they may have forgotten or overlooked. This report was created to provide the district community with a brief overview of the attendance behaviors of first-time students and their educational consumption patterns as educational consumers.

Demographic Overview

First-time students provide a different twist to MCC’s student demographic profile. For instance, the gender mix of first-time students is approximately 44 percent Male and 56 percent Female, as compared with the 39 percent Male and 61 percent Female for all enrolled students. Age comparisons show more distinctions between first-time and other students. In the overall student population, traditional aged students represent approximately 60 percent of the student body and those older than 25 years represent 40 percent of the students; however, the first-time student group who enrolled beginning in the fall has its traditional college-aged population at 80 percent and the non-traditional population at 20 percent. Those who enrolled for the first time in the spring had rates similar to the overall MCC student population. The racial/ethnic affiliation of the overall student population is 76 percent white and 24 percent minority or other groups. The first-
time student cohort mirrors the racial/ethnic configuration of the overall student population.

**Marketing Data – FT student Survey**

Why do students enroll at one of the MCC colleges? Student survey data collected over the past 10 years shows that the major reasons a student enrolls at MCC are simply: “Cost”, “Location”, “Convenience”, and “Can keep my job while attending”. These four issues have continually shown themselves as significant decision points. These four reasons fit nicely with a student population that is primarily enrolled part-time and working considerable hours. For instance, based on a representative sample of first-time students, 69 percent indicate they are employed while attending MCC, and of those, 32 percent work from 21 to 30 hours per week, and 30 percent work 31 hours or more per week. As a side bar, these data have shown that, overall, first-time students do not identify faculty as a principal reason to attend; however, in subsequent research it has shown that the longer a student attends MCC the greater the influence and importance of faculty. In short, the faculty may not be the reason first-time students come to MCC but they are certainly a very important reason why they stay.

**General Impression – FTO Survey**

What impressions do first-time students have of MCC after concluding one semester? Information has been routinely collected from first-time students at the conclusion of their first semester through OREA’s student survey cycle. These data reflect the views of students through the survey items……. When students were asked to rate their satisfaction with the college 85 percent indicated they were satisfied or very satisfied with their experience with the MCC college they enrolled. Likewise, nearly 80 percent of the students indicated they are satisfied with the variety of courses offered, the instruction they received in their classes, the challenge of their courses, and most of all, the size of classes. When queried about the services they used, student respondents indicated that nearly two-thirds were satisfied with the academic advising and the counseling advice they received. These items refer to academic advising and counseling following their initial enrollment activity, or that which occurs during the semester and prior to the next enrollment. Fifteen percent indicated they did not use advising services and 22 percent did not enlist advice from counselors during their first semester. Of those first-time
students using tutoring services, 58 percent indicated they were satisfied with the service provided; however, one half of all first-time students indicated they did not solicit any service from tutoring during their first semester. The lack of tutoring or other instructional intervention is interesting especially when, district-wide, 70 percent of new students need developmental coursework in math, and 39 percent in reading and writing.

**Attendance Patterns**

Attendance or matriculation patterns provide a view of how students engage the college by their enrollment and progress (accumulation of credits). As the name implies, two-year colleges are designed to have students enroll in their courses and complete an award in either four-semesters for a degree or two-semesters for a certificate. Over the past 30 years, community colleges have evolved from an institution where the majority of the students were full-time to a situation where the majority of students enroll part-time and carry an average load of just over 7 credit hours. The open admission mission of the two-year college has become more of a revolving door than an open door. Enrollment at any two-year college can be comprised of several sets of student populations: first-time students; returning students; reverse transfers; stop-outs; and high school students enrolled in college level courses (distance education enrollees can be lumped within the other categories).

For this report attendance patterns are constructed two ways: a four-semester sequence and a six-semester sequence. The reason for a double view of attendance is that, ideally, the two-year college was developed to move students through their programs in four semesters, assuming of course students enroll full-time. Regardless, the external litmus test for two-year college completion continues to be based on a four-semester attendance pattern even though it may take students three to four years to complete their award. The US Department of Education has created an alternative to the four-semester model based on its Student-Right-to-Know, known affectionately as the GRS (Graduation Rate Survey). The GRS is a reporting vehicle that applies a 150 rule to student attendance; this means that, in the view of the feds, students at an institution should complete their award, other things being equal, in 150 percent of the time of degree. For two-year colleges, this means 6 semesters, and for four-year colleges, it means 12 semesters or 6 years. Readers might remember as they have viewed other research office reports the recurring theme of the six-semester sequence or the 150 percent rule. The OREA
conducts research within that model in case there are questions about student attendance and completion at MCC.

**MCC Student Attendance**

This report provides a summary of the student flow report: *Student Flow 2006: An Analysis of First-Time Student Cohorts at MCC-A Technical Report*. The purpose of the technical report and the summary is to identify matriculation patterns through MCC and to examine demographic and academic trends between student groups with divergent enrollment patterns.

Student flow models were developed by tracking the first-time cohorts over four or six semesters. The Fall 2002 and Spring 2003 cohorts were tracked over both four and six semesters and Fall 2003 and Spring 2004 cohorts were tracked over four semesters. First-time students were selected as the unit of analysis because they have no previous college experience.

**Defining Persistence Categories**

First-time students in each cohort were placed into one of four categories based on their attendance patterns: persisters, frequent enrollees, sporadic enrollees and one-time enrollees. These groups were defined as follows:

**Persisters**: Students enrolled in every semester within the four or six-semester sequence.

**Frequent Enrollees**: Students enrolled in three semesters of the four-semester sequence or four or five semesters of the six-semester sequence.

**Sporadic Enrollees**: Students enrolled in two semesters within the four-semester sequence or two or three semesters within the six-semester sequence.

**One-time Enrollees**: Students that enrolled in only one semester during each sequence.

Each cohort was examined independently to determine demographic characteristics, persistence, student load, mean credit hours, average earned hours, grade point average, and graduation rates.
Cohort Analysis

Demographic Characteristics
On average, there were 3,823 first-time students attending MCC in the Fall 2002 and Fall 2003 semesters and 1,487 attending in the Spring 2003 and Spring 2004 semesters. Approximately 56% were female and 44% were male. The majority of these first-time students were white (77%). Most of these students were traditional age, 24 years of age or younger, with higher percentages of traditional age students enrolling in the fall cohorts (80%) than in the spring cohorts (61%).

Academic Overview
The majority of first-time students enrolled on a part-time basis, with higher percentages of part-time students in the spring rather than the fall. Typically, students who began their education in the fall rather than the spring had higher average attempted hours (9.95 vs. 8.22) and earned hours (7.40 vs. 5.94). Mean grade point averages were higher for cohorts beginning in the spring (2.53) than for those beginning in the fall (2.29).

Persistence

Semester Attrition
The “Funnel Effect” is used to describe the attrition associated with sequential enrollment across time. The “Funnel Effect” for cohorts beginning in the fall semester and spring semester are very different. For instance, for the students beginning in the fall semester, 66% return for the next semester, 45% enrolled for the third semester, and 35% enrolled for the fourth semester. The spring “Funnel” has a different shape with 38% returning for the next semester, 27% returning for the third semester, and 20% returning for the fourth semester.

Figure 1
Four Semester Cohort Persistence

![Persisten Chart](image-url)
Cohort Persistence

First-time student enrollment patterns were examined across four and six semesters. Figure 2 shows the attendance categories for the Fall 2002 and Spring 2003 six semester sequences. About one-third of fall first-time students enroll only one time while over half of those enrolled for the first time in the spring do not return. A similar trend is shown for the four semester sequences. The most noticeable change was an increase in persisters and a decrease for sporadic enrollees.

Figure 2

![Pie charts showing attendance categories for Fall 2002 and Spring 2003 first-time student cohorts.](chart)

**Characteristics of Attendee Categories**

As mentioned above, the attendance patterns of students are divided into four distinct categories: Persisters, Frequent Enrollees, Sporadic Enrollees and One-time Enrollees. Each has a few distinctive characteristics associated with attending college.

**Persisters**

Persisters who enrolled for the first time in the spring were more likely to be female than those in the fall.Persisters were more likely to be traditional age in the fall rather than the spring. As expected, persisters had the highest mean credit hours, mean earned hours, and GPA’s.
Frequent Enrollees
Traditional age students tended to enroll on a more frequent basis than non-traditional age students for the six semester sequence. The majority of fall frequent enrollees were part-time, have lower average attempted hours, average earned hours, and mean GPA’s compared to the students who enroll for all semesters.

Sporadic Enrollees
In general, sporadic enrollees look similar demographically to frequent enrollees. The most noticeable characteristics for sporadic enrollees were in the decrease of traditional age students and a slight increase in the number of full-time enrollees. Generally, average attempted hours, average earned hours, and mean GPA’s are lower for sporadic enrollees than both persisters and frequent enrollees.

One-Time Enrollees
One-time enrollees had the highest percentage of male students and non-traditional aged students. One-time enrollees had the lowest average attempted hours, average earned hours, and average GPA’s. Specifically, fall one-time enrollees only earned slightly over half of their average attempted hours compared to over 70% for sporadic and frequent enrollees, and almost 90% for persisters.

Stop-Outs
Approximately 9% of students in the four semester sequences and 18% for those matriculating through the six semester sequences stopped-out for at least one semester. The majority of stop-outs stopped out for only one semester before returning.

MCC Graduates
Graduation rates tended to be highest for first-time students beginning their education in the fall rather than the spring. Approximately 13% of fall first-time students who attended more than one semester graduated within the report’s 6-semester window and 7% of spring first-time students. As would be expected, persisters typically had the highest graduation rates.