

Technical Appendix: Sample Descriptions

Student Sample

The sample of students used in MCER’s Fall Conference analyses includes students who started high school in the academic years 2004-05 to 2008-09 (i.e., first-time 9th graders). For example, the 2007 cohort refers to those students who were in 9th grade for the first time in the 2006-07 academic year.

Table 1 lists the size of each 9th grade cohort and identifies which cohorts are used in each of MCER’s analyses. Table 2 presents the demographic breakdown of our main sample used to estimate the early impacts of the Michigan Merit Curriculum (MMC). Table 3 (on back) provides mean outcomes for this same set of cohorts (i.e., 2005 to 2009) by quartile of academic preparedness.

Table 1. Number of students, by cohort¹

9 th grade Cohort	Number of students	
2004-05	145,980	
2005-06	143,141	
2006-07	138,682	
2007-08	135,484	
2008-09	130,265	

Table 2. Demographic Breakdown of 9th grade cohorts: 2005 to 2009²

Number of students	693,552
Number of schools	1,719
Number of districts	719
Black/Hispanic	25%
White/Other	75%
Ever FARM	53%
Never FARM	47%
Female	49%

¹ Readers should note that MCER’s sample definition differs from the way in which the State of Michigan groups students into cohorts for reporting purposes in at least the following ways: MCER examines only first-time 9th graders; MCER does not add in any students that transfer into the system in 10th, 11th, or 12th grade; and MCER includes all students (i.e., even those who moved out of state, transferred to a private school, or died) in our denominator when calculating graduation, dropout, and/or continuing enrollment rates.

² "Ever FARM" indicates whether a student was classified as eligible for free or reduced price school meals at any point during his/her high school career; The number of districts includes charter schools (each of which is identified as its own district).

Table 3. Mean High School Outcomes by 9th grade Cohort and Academic Readiness Quartile, 2005-2009

9th grade cohort	<i>First Quartile (Highest)</i>					<i>Second Quartile</i>				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
4-year Exit Status										
Graduated	90%	91%	92%	92%	91%	81%	82%	85%	84%	83%
Still enrolled in a Michigan public high school	6%	5%	4%	4%	5%	13%	11%	8%	9%	10%
Dropout	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%
Left Michigan public school system	2%	2%	2%	3%	2%	3%	3%	3%	3%	2%
Other	0%	0%	1%	1%	1%	1%	1%	1%	1%	2%
Unknown	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
5-year Exit Status										
Graduated	91%	92%	93%	93%	.	83%	84%	87%	87%	.
Still enrolled in a Michigan public high school	5%	4%	3%	3%	.	9%	8%	6%	6%	.
Dropout	1%	1%	1%	1%	.	2%	2%	2%	2%	.
Left Michigan public school system	2%	2%	2%	3%	.	3%	3%	3%	3%	.
Other	1%	1%	1%	1%	.	2%	2%	2%	2%	.
Unknown	1%	1%	1%	1%	.	2%	2%	1%	1%	.
ACT Scores (scale score)										
Math	23	23	24	24	24	19	19	19	19	19
Science	23	23	23	24	23	20	20	20	20	20
Reading	23	23	23	24	23	19	19	19	20	19
Writing	8	8	8	7	7	7	7	7	7	7
MME or MME-Equivalent HST Scores (scale ranges from 950 to 1250)										
Math	1116	1117	1120	1119	1119	1097	1098	1100	1099	1098
Science	1122	1124	1125	1126	1125	1103	1105	1105	1106	1106
Reading	1125	1128	1128	1129	1127	1108	1111	1110	1112	1109
9th grade cohort	<i>Third Quartile</i>					<i>Fourth Quartile (Lowest)</i>				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
4-year Exit Status										
Graduated	66%	68%	71%	68%	68%	39%	41%	44%	39%	39%
Still enrolled in a Michigan public high school	21%	18%	16%	18%	18%	33%	30%	28%	30%	31%
Dropout	5%	5%	4%	5%	4%	12%	12%	11%	11%	9%
Left Michigan public school system	4%	4%	4%	4%	4%	5%	5%	5%	5%	5%
Other	3%	3%	3%	4%	4%	8%	8%	9%	10%	11%
Unknown	2%	2%	2%	2%	2%	4%	4%	3%	5%	5%
5-year Exit Status										
Graduated	70%	72%	75%	73%	.	45%	47%	49%	45%	.
Still enrolled in a Michigan public high school	14%	12%	11%	11%	.	24%	22%	21%	21%	.
Dropout	5%	5%	4%	5%	.	13%	12%	11%	12%	.
Left Michigan public school system	4%	4%	4%	4%	.	5%	5%	5%	6%	.
Other	4%	4%	4%	5%	.	10%	10%	10%	12%	.
Unknown	2%	2%	2%	2%	.	4%	4%	4%	5%	.
ACT Scores (scale score)										
Math	17	17	17	17	17	15	15	15	15	15
Science	17	17	17	18	18	15	15	15	15	15
Reading	17	16	17	17	17	14	14	14	15	14
Writing	6	6	6	6	6	5	5	5	5	5
MME or MME-Equivalent HST Scores (scale ranges from 950 to 1250)										
Math	1081	1082	1084	1081	1080	1059	1058	1058	1056	1052
Science	1087	1088	1088	1088	1090	1061	1063	1063	1064	1066
Reading	1094	1095	1096	1098	1096	1072	1072	1076	1077	1075

Notes: Students are divided into quartiles of "academic readiness" based on their 8th-grade test scores and student- and school-level socio-demographic characteristics. College-going outcomes are created using data from the National Student Clearinghouse (NSC). The NSC is a non-profit institution that collects information on postsecondary student enrollment and degree completion. Colleges submit data to the NSC several times each year, reporting the beginning and ending date that students are enrolled during each term, the intensity with which they enroll (e.g., part-time or full-time), and whether they graduated.

Teacher Sample

The sample of teachers used in MCER's Fall Conference analyses includes high school teachers in traditional public high schools from 2003-04 to 2010-11 teaching grades 9 through 12. Excluded from these analyses are teachers in alternative and special education schools during this same period. Table 4 lists the size of the teaching force in each academic year.

Table 4. Number of full time high school teachers, by year

<u>Academic Year</u>	<u>Number of teachers</u>
2003-04	19,390
2004-05	19,685
2005-06	19,571
2006-07	17,595
2007-08	17,552
2008-09	17,186
2009-10	15,990
2010-11	15,486