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ABSTRACT

A study was undertaken at Illinois' Moraine Valley Community College (MVCC) to gather information on the course taking patterns, course completion rates, and retention rates between summer 1990 and spring 1993 for students who successfully completed one of eight remedial classes. Students in the sample began in one of three levels of remedial reading courses, one of two levels of remedial writing, and one of three levels of remedial mathematics. Successful completion rates for the eight courses ranged from low of 52% for the highest level mathematics course to a high of 76% for the highest level reading course. For the reading and writing groups, the groups at the lowest levels had the lowest successful completion rates, while those at the highest levels had the highest successful completion rates. In general, students in the higher level reading, writing, and math cohorts took more college-level courses and had higher college-level course completion rates than those in the lower levels. Finally, both across-term and across-year retention rates for students completing all eight courses were higher for the remedial students than for all credit students. A list of remedial and college-level course titles with brief descriptions is appended. (AJL)

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Remedial Students From Summer 90 to Spring 93 Follow-Up through Spring 96

By

Moraine Valley Community College

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DATE: September 1996

RE: Remedial Students from Summer 90 to Spring 93 - Follow-up through Spring 96**I. Introduction**

One of the factors that led to the development of community colleges was the desire to expand higher education opportunities for previously underserved populations. Moraine Valley, like most community colleges, continues to maintain an open enrollment policy which allows anyone to enroll in courses at the college upon completion of an application and placement testing. Open access admission policies, however, usually result in the enrollment of a significant number of students under-prepared for college-level course work.

One objective of developmental education is a commitment to access and an opportunity to overcome the barrier of lack of academic preparation. Another objective is the commitment to high program quality and academic standards. To meet both of these objectives, an effective developmental program must do more than provide opportunity. The program also must demonstrate that its students are prepared for successful college-level academic experiences.

The following report summarizes college-level course taking patterns, completion rates, and retention rates for students who successfully completed one of eight remedial classes at Moraine Valley between summer 1990 and spring 1993. Course taking patterns and completion rates were computed over three years. For example, students who took a remedial course in spring 1993 were given until spring 1996 to complete selected college-level courses. In this report, all "completion" or "pass" rates refer to A, B, or C grades only (D is considered an unsuccessful completion). See Appendix I for a complete list of remedial and college-level courses, titles and descriptions.

II. Developmental Education at Moraine Valley

Moraine Valley has a comprehensive developmental education program. The program includes assessment and placement, required developmental courses and academic support. The college's developmental courses are designed to remediate student deficiencies so that students who complete the remedial course can successfully complete college-level course work.

Students registering for 12 or more credit hours are required to complete placement tests in reading, writing and mathematics. Part-time students are required to complete placement tests in reading, writing and mathematics prior to registering for English composition courses or any mathematics course at the elementary algebra or higher level.

Students who place into remedial reading must enroll in that reading course their first semester and continue in the reading sequence until the last reading course is completed with a grade of C or better. Students who place in remedial writing or mathematics must complete the remedial

course with a grade of C or better before continuing in the sequence.

Remedial Reading Courses

Moraine-Valley offers three levels of reading classes. RDG-041 is designed to give the student a solid foundation in the basics of college reading. The primary focus is on improving comprehension. Students who test into this course read below the 7th grade level. RDG-071 is the second level reading course. This course focuses on developing thinking, reading and writing techniques necessary for comprehension of college textbooks, and is designed for students who read at the 7th to 8th grade level. The third reading course is RDG-091 which refines and expands critical thinking strategies, and is intended for students who read at the 9th through the 11th grade level. (RDG-091 is now mandatory, but was not in 1990-93.)

Successful completion of reading courses requires a substantial amount of work. In addition to completion of classroom assignments and a post-test, the student must pass a standardized departmental final to pass the course.

Remedial Writing Courses

The college offers two levels of remedial writing classes. COM-085 is designed to help students understand and use the basics of grammar and punctuation with sentences and paragraphs. COM-090 focuses on understanding and writing basic paragraphs and short themes.

A comprehensive final which counts for 25 percent of the final grade is given in both COM-085 and COM-090. These courses require a rigorous course of study to get a grade of C or better.

Remedial Mathematics Courses

The college offers three levels of remedial mathematics classes. The lowest level is MTH-090, developmental mathematics which emphasizes fractions and percentages. The second level is MTH-095, beginning algebra with geometry and the third level is MTH-101, intermediate algebra. (The classification of MTH-101 was changed from college-level to remedial level in summer 1994.)

A comprehensive final is given in MTH-090 and MTH-095 which accounts for about 20 percent of the final grade. The comprehensive final given in MTH-101 accounts for between 10 and 20 percent of the final grade.

III. Remedial Course Grade Distributions

For this analysis, students were placed in one of three reading groups, one of two writing groups and/or one of three math groups. The total number of students in each group and the number in each cohort (students who completed the course with a C or better) is shown in Table 1.

Students were assigned to a group depending upon where they started in the sequence. For example, RDG-071 was the first reading course taken by the 397 students in the RDG-071 group (i.e., they did not take RDG-041; the 296 students in the RDG-091 group did not take RDG-041

Table 1
Remedial Course Grade Distributions
Combined Data - Summer 90 through Spring 93

Class	Total Number of Students	Grades in Remedial Course			
		A, B, C - (Remedial Cohort)		D, F, N, W, I	
		N	%	N	%
RDG-041	355	238	67%	117	33%
RDG-071	397	276	70%	121	30%
RDG-091	296	224	76%	72	24%
COM-085	1,654	873	53%	781	47%
COM-090	391	282	72%	109	28%
MTH-090	3,865	2,355	61%	1,510	39%
MTH-095	1,783	1,013	57%	770	43%
MTH-101	2,803	1,460	52%	1,343	48%

or RDG-071.) Assignment to the writing (COM) and math groups follows a similar pattern. Students who took remedial reading, communications and mathematics, however, are included in one reading, one communications and one mathematics group.

This method for selecting groups/cohorts generally means that students in a higher level group/cohort have higher entering skill levels. There are, however, a few exceptions. Since placement is mandatory, a student who places in MTH-095, for example, cannot enroll in MTH-101. But a student who tests at the MTH-101 level may choose to (and a few do) enroll in MTH-095.

Table 1 also shows grade distribution summaries for each remedial course group. Successful completion rates for all remedial courses ranged between 52 and 76 percent. For the reading groups, the lowest level of reading (RDG-041) had the lowest successful completion rate (67 percent), followed by RDG-071 (70 percent). The highest level of reading (RDG-091) had the highest successful completion rate (76 percent). The lower level of writing (COM-085) had a much lower completion rate (53 percent) than the higher level (COM-090, 72 percent). For math courses, the opposite occurred: the highest level course (MTH-101) had the lowest completion rate (52 percent), followed by MTH-095 (57 percent) and MTH-090 (61 percent).

The number of students in the remedial reading cohorts was fairly small, ranging from 224 to 276. The COM-090 cohort was also small (N=282). The remaining cohorts, COM-085 (N=873), MTH-095 (N=1,013), MTH-101 (N=1,460) and MTH-090 (N=2,355), had much larger numbers of students.

IV. Course Taking Patterns and Completion Rates

RDG-041 Cohort

Table 2 shows selected college-level course taking patterns and completion rates for the 238 students in the RDG-041 cohort. The middle section of the table shows the number and percent who registered for each class within three years of taking the remedial class. For example, 30 of the 238 students (13 percent) registered for a BUS-100 class within three years (students who started in summer 90 were given until summer 93, while students who started in spring 93 were given until spring 96.)

Table 2
RDG-041 Cohort (N = 238)
Summary of Selected Course Grades

Class	Registered* For Class		Completed with A, B, C	
	Number	Percent (based on N=238)	RDG-041 Cohort	All Students**
BUS-100	30	13%	47%	58%
COM-101	109	46%	64%	67%
COM-102	53	22%	66%	68%
HIS-101	13	5%	69%	60%
HUM-101	76	32%	55%	69%
PHI-101	17	7%	76%	75%
PSY-100	37	16%	43%	70%
PSY-101	77	32%	56%	70%
SOC-101	60	25%	53%	70%

Combined data for the 238 students who successfully completed RDG-041 (grade A, B, C) between summer 1990 and spring 1993.

* Within three years of taking RDG-041.

** "All student" completion rates are combined data over 6 years (summer 90-spring 96).

None of the selected classes was taken by more than half of the RDG-041 cohort. COM-101 was the class taken by the highest percent of the cohort (46 percent). HUM-101 and PSY-101 had the next highest number of registrations (32 percent), followed by SOC-101 (25 percent) and COM-102 (22 percent). Less than 20 percent of the cohort registered for BUS-100, HIS-101, PHI-101, or PSY-100 within three years.

The right section of Table 2 shows course completion rates for the RDG-041 cohort and for all Moraine Valley students. Course completion rates were based on the number who took each class. For example, 47 percent of the RDG-041 cohort who took BUS-100 passed the course with an A, B, or C. "All student" completion rates are combined data for all students who took the course between summer 1990 and spring 1996. For example, 58 percent of all Moraine Valley students who took BUS-100 completed the course with a C or better.

The cohort had a completion rate less than 50 percent in two of the nine courses (BUS-100 and PSY-100). An additional three courses had a completion rate less than 60 percent (HUM-101, PSY-101 and SOC-101). The remaining four courses had completion rates between 64 and 76 percent (COM-101, COM-102, HIS-101 and PHI-101.)

Comparing the RDG-041 cohort grades to all student grades shows that the cohort did better in HIS-101 (9 percent higher completion rate) and slightly better in PHI-101 (+1 percent). The cohort did slightly worse in COM-101 and COM-102 (-2 to -3 percent), and much worse in BUS-100, HUM-101, PSY-100, PSY-101 and SOC-101 (-11 to -27 percent).

The total number of course grades on which the "all student" percentages were calculated is not shown in any tables. However, the number of grades was very large for all courses except PSY-100 (which had about 1,900 grades). BUS-100, HIS-101, PHI-101 courses had between 3,500 and 7,500 grades each, while COM-101, COM-102, HUM-101, PSY-101, and SOC-101 had between 12,000 and 20,000 grades each.

RDG-071 Cohort

Table 3 shows selected college-level course taking patterns and completion rates for the 276 students in the RDG-071 cohort. COM-101 (62 percent) was the only class taken by more than half of the RDG-071 cohort. PSY-101 (42 percent), HUM-101 (41 percent), COM-102 (36 percent), and SOC-101 (29 percent) had the next highest number of registrations. Less than 20 percent of the cohort registered for BUS-100, HIS-101, PHI-101, or PSY-100 within three years.

This cohort had a completion rate of 50 percent or less in two of the nine courses (BUS-100 and HIS-101). The remaining seven courses had completion rates between 68 and 79 percent.

Comparing the RDG-071 cohort grades to all student grades shows that the cohort did better in COM-101 (9 percent higher completion rate) and COM-102 (+11 percent), slightly better in HUM-101 (+4 percent) and PHI-101 (+1 percent), and the same in PSY-101. The cohort did slightly worse in PSY-100 (-1 percent) and SOC-101 (-2 percent), and much worse in BUS-100 (-8 percent) and HIS-101 (-28 percent).

Comparing the RDG-071 cohort to the RDG-041 cohort shows that a higher percent of the RDG-071 cohort took all of the selected classes except PSY-100. The RDG-071 cohort also had an equal or higher percent of C or better course completion rates in all courses except HIS-101. The number of students who took HIS-101, however, is small for both cohorts.

Table 3
RDG-071 Cohort (N = 276)
Summary of Selected Course Grades

Class	Registered* For Class		Completed with A, B, C	
	Number	Percent (based on N=276)	RDG-071 Cohort	All Students**
BUS-100	40	14%	50%	58%
COM-101	170	62%	76%	67%
COM-102	100	36%	79%	68%
HIS-101	25	9%	32%	60%
HUM-101	114	41%	73%	69%
PHI-101	34	12%	76%	75%
PSY-100	36	13%	69%	70%
PSY-101	115	42%	70%	70%
SOC-101	80	29%	68%	70%

Combined data for the 276 students who successfully completed RDG-071 (grade A, B, C) between summer 1990 and spring 1993. Students who also took RDG-041 were deleted from this cohort.

* Within three years of taking RDG-071.

** "All student" completion rates are combined data over 6 years (summer 90-spring 96).

RDG-091 Cohort

Table 4 shows selected course taking patterns and completion rates for the 224 students in the RDG-091 cohort. Two classes were taken by more than half of this cohort: COM-101 (71 percent) and HUM-101 (52 percent). The next highest number of registrations was in COM-102 (46 percent), PSY-101 (41 percent) and SOC-101 (33 percent). Less than 20 percent of this cohort registered for BUS-100, HIS-101, PHI-101, or PSY-100.

This cohort had no completion rates less than 50 percent, and three completion rates between 59 and 67 percent (BUS-100, HIS-101, and SOC-101). The remaining six courses had completion rates between 72 and 80 percent.

Comparing the RDG-091 cohort grades to all student grades shows that this cohort did better in COM-101 (13 percent higher completion rate), COM-102 (+12 percent), HUM-101 (+5 percent), and PSY-101 (+8 percent) and slightly better in BUS-100, HIS-101, PHI-101, and PSY-100 (+1

Table 4
RDG-091 Cohort (N = 224)
Summary of Selected Course Grades

Class	Registered* For Class		Completed with A, B, C	
	Number	Percent (based on N=224)	RDG-091 Cohort	All Students**
BUS-100	32	14%	59%	58%
COM-101	158	71%	80%	67%
COM-102	104	46%	80%	68%
HIS-101	13	6%	62%	60%
HUM-101	117	52%	74%	69%
PHI-101	29	13%	76%	75%
PSY-100	25	11%	72%	70%
PSY-101	92	41%	78%	70%
SOC-101	75	33%	67%	70%

Combined data for the 224 students who successfully completed RDG-091 (grade A, B, C) between summer 1990 and spring 1993. Students who also took RDG-041 or RDG-071 were deleted from this cohort.

* Within three years of taking RDG-091.

** "All student" completion rates are combined data over 6 years (summer 90-spring 96).

to +2 percent). The cohort did slightly worse in only one course (SOC-101, -3 percent).

Comparing the RDG-091 cohort to the RDG-071 cohort shows that an equal or higher percent of the RDG-091 cohort took six of the nine selected classes, while a slightly lower percent took HIS-101, PSY-100 and PSY-101. The RDG-091 cohort had an equal or higher percent of C or better course completion rates in all courses except SOC-101. (The difference in SOC-101 completions, however, was only 1 percent).

In general, students in a higher level reading class registered for more college-level classes and had higher successful completion rates than students in the level below. Students at the lowest reading level did better than all students in two out of nine courses, students at the middle reading level did the same or better in five courses, while students at the highest level did better than all students in eight out of nine courses.

It should be noted that the RDG-041 cohort students had somewhat less time over the three years allowed to take college-level courses than students who started in RDG-071 or RDG-091. However, transcript analyses showed that most students who take these courses at Moraine Valley take them within three years of entry, regardless of their entering reading level.

COM-085 Cohort

Table 5 shows selected college-level course taking patterns and completion rates for the 873 COM-085 cohort students. Like Tables 2, 3 and 4, the middle section shows the number and percent who registered for each class within three years of taking the remedial writing class. For example, 115 of the 873 students (13 percent) registered for a BUS-100 class within three years (e.g., students who started in summer 90 were given until summer 93, while students who started in spring 93 were given until spring 96.)

Table 5
COM-085 Cohort (N = 873)
Summary of Selected Course Grades

Class	Registered* For Class		Completed with A, B, C	
	Number	Percent (based on N=873)	COM-085 Cohort	All Students**
BUS-100	115	13%	50%	58%
COM-090	322	37%	76%	66%
COM-101	501	57%	71%	67%
COM-102	263	30%	72%	68%
HIS-101	56	6%	39%	60%
HUM-101	315	36%	66%	69%
PHI-101	101	12%	82%	75%
PSY-100	87	10%	59%	70%
PSY-101	306	35%	66%	70%
SOC-101	243	28%	65%	70%

Combined data for the 873 students who successfully completed COM-085 (grade A, B, C) between summer 1990 and spring 1993.

* Within three years of taking COM-085.

** "All student" completion rates are combined data over 6 years (summer 90-spring 96).

COM-101 was the only one of the selected classes taken by more than half of this cohort (57 percent). COM-090 (37 percent), COM-102 (30 percent), HUM-101 (36 percent), PSY-101 (35 percent), and SOC-101 (28 percent) had the next highest number of registrations. Twenty percent or less of this cohort registered for BUS-100, HIS-101, PHI-101, or PSY-100 within three years.

The right section of Table 5 shows course completion rates for the COM-085 cohort and for all Moraine Valley students. Course completion rates were based on the number who took each class. For example, 50 percent of the COM-085 cohort who took BUS-100 passed the course with an A, B, or C. "All student" completion rates are combined data (summer 1990 to spring 1996) for all students who took the course. For example, 58 percent of all Moraine Valley students who took BUS-100 completed the course with a C or better.

This cohort had one completion rate less than 50 percent (HIS-101, 39 percent), and two completion rates between 50 and 59 percent (BUS-100 and PSY-100). The remaining seven courses had completion rates between 65 and 82 percent.

Comparing the COM-085 cohort grades to all student grades shows that the cohort did better in COM-090 (10 percent higher completion rate) and PHI-101 (+7 percent) and slightly better in COM-101 and COM-102 (+4 percent). The cohort did slightly worse in HUM-101 (-3 percent) and PSY-101 (-4 percent), and much worse in BUS-100 (-8 percent), HIS-101 (-21 percent), PSY-100 (-11 percent), and SOC-101 (-5 percent).

COM-090 Cohort

Table 6 shows selected course taking patterns and completion rates for the 282 students in the COM-090 cohort. Three of the selected classes were taken by half or more of this cohort: COM-101 (79 percent), HUM-101 (51 percent) and PSY-101 (50 percent). The next highest number of registrations was in COM-102 (49 percent) and SOC-101 (36 percent). Less than 20 percent of this cohort registered for BUS-100, HIS-101, PHI-101, or PSY-100.

This cohort had only one completion rate less than 50 percent (HIS-101, 37 percent). The remaining eight courses had completion rates between 67 and 75 percent.

Comparing the COM-090 cohort grades to all student grades shows that the cohort did better in BUS-100 (+9 percent) and COM-101 (+8 percent) and slightly better in COM-102 (+4 percent) and HUM-101 (+1 percent). The cohort did the same in PSY-100, PSY-101 and SOC-101. The cohort did slightly worse in one course (PHI-101, -3 percent) and much worse in one course (HIS-101, -23 percent).

Comparing the COM-090 cohort to the COM-085 cohort shows that a higher percent of the COM-090 cohort took all but one of the selected classes (a slightly lower percent took PSY-100.) The COM-090 cohort also had an equal or higher percent of C or better course completion rates in all courses except PHI-101 and HIS-101. (The difference in HIS-101 completions, however, was only 2 percent).

Table 6
COM-090 Cohort (N = 282)
Summary of Selected Course Grades

Class	Registered For Class		Completed with A, B, C	
	Number	Percent (based on N=282)	COM-090 Cohort	All Students**
BUS-100	45	16%	67%	58%
COM-101	224	79%	75%	67%
COM-102	137	49%	72%	68%
HIS-101	30	11%	37%	60%
HUM-101	145	51%	70%	69%
PHI-101	50	18%	72%	75%
PSY-100	30	11%	70%	70%
PSY-101	142	50%	70%	70%
SOC-101	101	36%	70%	70%

Combined data for the 282 students who successfully completed COM-090 (grade A, B, C) between summer 1990 and spring 1993. Students who also took COM-085 were deleted from this cohort.

* Within three years of taking COM-090.

** "All student" completion rates are combined data over 6 years (summer 90-spring 96).

In general, students in the higher level writing class cohort (COM-090) registered for more college-level classes and had higher completion rates in most classes. Students in the lower writing level cohort (COM-085) did better than all students in four of ten courses, while students at the higher level did the same or better than all students in seven out of nine courses.

MTH-090 Cohort

Table 7 shows selected college-level math course taking patterns and completion rates for the MTH-090 cohort students (N=2,355). The middle section of the table shows the number and percent who registered for each class within three years of taking the remedial mathematics class. For example, 1,601 of the 2,355 students (68 percent) registered for a MTH-095 class within three years (e.g., students who started in summer 90 were given until summer 93, while students who started in spring 93 were given until spring 96.)

MTH-095 was the only one of the selected classes taken by more than half of this cohort (68 percent). MTH-101 (29 percent) had the next highest number of registrations. Five percent or

Table 7
MTH-090 Cohort (N = 2,355)
Summary of Math Course Grades

Class	Registered For Class		Completed with A, B, C	
	Number	Percent (based on N=2,355)	MTH-090 Cohort	All Students**
MTH-095	1,601	68%	68%	55%
MTH-101	689	29%	52%	48%
MTH-119	30	1%	80%	74%
MTH-120	61	3%	59%	54%
MTH-121	56	2%	38%	59%
MTH-135	25	1%	44%	52%
MTH-139	32	1%	47%	56%
MTH-141	127	5%	50%	47%
MTH-142	27	1%	33%	50%

Combined data for the 2,355 students who successfully completed MTH-090 (grade A, B, C) between summer 1990 and spring 1993.

* Within three years of taking MTH-090.

** "All student" completion rates are combined data over 6 years (summer 90-spring 96).

less of this cohort registered for MTH-119, MTH-120, MTH-121, MTH-135, MTH-139, MTH-141 or MTH-142 within three years. (See Appendix I for a complete list of courses, titles and descriptions.)

The math courses shown in Table 7 are only those math courses taken by at least 20 MTH-090 cohort students. The highest level of math that appears in this table is MTH-142 (Trigonometry). Higher level math courses (e.g., Finite Mathematics, Calculus) do not appear in this table because fewer than 20 cohort students took these courses. Overall, less than 30 percent of the students in this cohort took a math course higher than the elementary algebra level.

The right section of Table 7 shows math completion rates for the MTH-090 cohort and for all Moraine Valley students. Course completion rates were based on the number who took each class. For example, 68 percent of the cohort who took MTH-095 passed the course with an A, B, or C. "All student" completion rates are combined data (summer 1990 to spring 1996) for all students who took the course. For example, 55 percent of all Moraine Valley students who took

MTH-095 completed the course with a C or better.

This cohort had two completion rates less than 40 percent (MTH-121 and MTH-142), and three completion rates between 40 and 50 percent (MTH-135, MTH-139 and MTH-141). The remaining four courses had completion rates between 52 and 80 percent.

Comparing the MTH-090 cohort grades to all student grades shows that the cohort did better in all lower level courses: MTH-095 (13 percent higher completion rate), MTH-101 (+4 percent), MTH-119 (+6 percent) and MTH-120 (+5 percent). Few students in this cohort took higher level math courses. Those who did did slightly better in MTH-141 (+3 percent), but worse in MTH-121, MTH-135, MTH-139 and MTH-142 (-8 to -21 percent).

The total number of course grades on which the “all student” percentages were calculated is not shown in any math cohort table. However, the number of grades was large for all algebra, trigonometry, calculus and statistics courses (MTH-095, MTH-101, MTH-139, MTH-141, MTH-142, MTH-150, 2,300 to 12,000 grades). The number of grades for the other math courses was smaller (400-900).

MTH-095 Cohort

Table 8 shows selected math course taking patterns and completion rates for the 1,013 MTH-095 cohort students. MTH-101 was the only one of the selected classes taken by more than half of this cohort (58 percent). MTH-141 (16 percent) had the next highest number of registrations. Five percent or less of this cohort registered for MTH-119, MTH-120, MTH-121, MTH-135, MTH-139, MTH-142, or MTH-150 within three years.

Like Table 7, the math courses shown in Table 8 are only those math courses taken by at least 20 MTH-095 cohort students. The highest level of math that appears in this table is MTH-150 (Calculus I). Other higher level math courses (e.g., Finite Mathematics, Calculus II) do not appear in this table because these courses were taken by less than 20 cohort students. Less than 20 percent of the students in this cohort took a math course higher than the intermediate algebra level.

This cohort had one completion rate less than 40 percent (MTH-121, 35 percent), and two completion rates close to 50 percent (MTH-139 and MTH-141). The six remaining courses had completion rates between 60 and 81 percent.

Comparing the MTH-095 cohort grades to all student grades shows that the cohort did better in MTH-101 (+12 percent), MTH-119 (+7 percent), MTH-120 (+11 percent), MTH-135 (+19 percent), MTH-142 (+12 percent), and MTH-150 (+12 percent) and slightly better in MTH-141 (+4 percent). The cohort did worse than all Moraine Valley students in only two courses: MTH-121 (-24 percent) and MTH-139 (-7 percent).

Comparing the MTH-095 cohort to the MTH-090 cohort shows that a higher percent of the MTH-095 cohort took higher level math courses. The MTH-095 cohort also had a higher percent of C or better course completion rates in all courses except MTH-121.

Table 8
MTH-095 Cohort (N = 1,013)
Summary of Math Course Grades

Class	Registered For Class		Completed with A, B, C	
	Number	Percent (based on N=1,013)	MTH-095 Cohort	All Students**
MTH-101	587	58%	60%	48%
MTH-119	31	3%	81%	74%
MTH-120	46	5%	65%	54%
MTH-121	34	3%	35%	59%
MTH-135	35	3%	71%	52%
MTH-139	47	5%	49%	56%
MTH-141	159	16%	51%	47%
MTH-142	47	5%	62%	50%
MTH-150	20	2%	60%	48%

Combined data for the 1,013 students who successfully completed MTH-095 (grade A, B, C) between summer 1990 and spring 1993. Students who also took MTH-090 were deleted from this cohort.

* Within three years of taking MTH-095.

** "All student" completion rates are combined data over 6 years (summer 90-spring 96).

MTH-101 Cohort

Table 9 shows selected math course taking patterns and completion rates for the 1,460 MTH-101 cohort students. MTH-141 was the only one of the selected classes taken by more than half of this cohort (51 percent). The next highest numbers of registrations were considerably less: MTH-139 (10 percent) and MTH-142 (12 percent). Eight percent or less of this cohort registered for MTH-119, MTH-121, MTH-143, MTH-145, MTH-150, or MTH-212 within three years.

Like Tables 7 and 8, the math courses shown in Table 9 are only those math courses taken by at least 20 MTH-101 cohort students. Three higher level math courses appear in this table that did not appear in the previous two: MTH-143, MTH-145, and MTH-212. MTH-150 appears in Tables 8 and 9, but not in Table 7. Two courses that appeared in Table 7 and Table 8, however, do not appear in Table 9 (MTH-120, MTH-135.)

This cohort had one completion rate less than 50 percent (MTH-139), and three completion rates between 50 and 60 percent (MTH-121, MTH-141, and MTH-142, 55-56 percent). The remaining five courses had completion rates between 62 and 90 percent.

Table 9
MTH-101 Cohort (N = 1,460)
Summary of Math Course Grades

Class	Registered* For Class		Completed with A, B, C	
	Number	Percent (based on N=1,460)	MTH-101 Cohort	All Students**
MTH-119	25	2%	80%	74%
MTH-121	39	3%	56%	59%
MTH-139	152	10%	44%	56%
MTH-141	738	51%	55%	47%
MTH-142	171	12%	56%	50%
MTH-143	111	8%	69%	64%
MTH-145	101	7%	62%	65%
MTH-150	69	5%	65%	48%
MTH-212	29	2%	90%	72%

Combined data for the 1,460 students who successfully completed MTH-101 (grade A, B, C) between summer 1990 and spring 1993. Students who also took MTH-090 or MTH-095 were deleted from this cohort.

* Within three years of taking MTH-101.

** "All student" completion rates are combined data over 6 years (summer 90-spring 96).

Comparing MTH-101 cohort grades to all student grades shows that the cohort did better in MTH-119 (+6 percent), MTH-141 (+8 percent), MTH-142 (+6 percent), MTH-143 (+5 percent), MTH-150 (+17 percent), and MTH-212 (+18 percent). The cohort did slightly worse in two courses (MTH-121 and MTH-145, -3 percent) and much worse than all Moraine Valley students in only one course (MTH-139, -12 percent).

Comparing the MTH-101 cohort to the MTH-095 cohort shows that a higher percent of the MTH-101 cohort took higher level math courses. The MTH-101 cohort had a higher percent of C or better course completion rates in MTH-121, MTH-141 and MTH-150 and a somewhat

lower completion rate in MTH-119, MTH-139 and MTH-142.

In general, students in a higher level math class registered for higher levels of math classes and had higher successful completion rates than students in the level below. Very few students at the lowest math level registered for any college-level math course, the percentage increased for students at the elementary algebra level and was highest for students at the highest level (intermediate algebra). Except for MTH-139 and MTH-142, successful completions increased as the cohort level increased.

V. Across-Term and Across-Year Retention Rates

Table 10 shows the number and percent of students in each cohort who returned the next semester (across-term retention) and the next year (across-year retention). Across-term retention

Table 10
Across-Term and Across-Year Retention Rates
For Remedial Cohorts and All MVCC Students

	Total Number of Students*	Across Term Retention Rate		Across Year Retention Rate	
		N	%	N	%
Remedial Cohorts:					
RDG-041	208	170	82%	127	61%
RDG-071	257	213	83%	165	64%
RDG-091	206	162	79%	125	61%
COM-085	800	626	78%	467	58%
COM-090	267	225	84%	188	70%
MTH-090	2,103	1,684	80%	1,261	60%
MTH-095	907	752	83%	605	67%
MTH-101	1,335	1,170	88%	961	72%
All Students	74,506	47,676	64%	39,586	53%

*Combined data for fall 90, 91, 92 and spring 91, 92, 93.

Note: the total number of cohort students does not match Tables 1-9 because summer semesters were excluded.

"All Students" includes any student who registered for at least one college-level or remedial course.

rates were high for all cohorts, ranging from 78 percent (COM-085) to 88 percent (MTH-101). The combined across-term retention rate for all credit students for the same terms was 64 percent. Comparing cohort retention rates to all students shows considerably higher retention rates (+14 to +24 percent) for the remedial cohorts.

The across-year retention rates for all cohorts ranged from 58 percent (COM-085) to 72 percent (MTH-101); this was also higher (+5 to +19 percent) than the across-year retention rate for all credit students (53 percent). (Note: students in the summer cohorts were excluded from this table.)

VI. Summary

This report summarizes college-level course taking patterns, completion rates, and retention rates for students who successfully completed one of eight remedial classes at Moraine Valley between summer 1990 and spring 1993.

- Successful completion rates for the eight remedial courses analyzed in this study ranged between 52 and 76 percent. The group at the lowest level of reading had the lowest successful completion rate for the remedial reading course, while the highest reading group had the highest successful completion rate. The lower level writing group had a lower completion rate than the higher level. For math courses, the opposite occurred: the highest level group had the lowest completion rate in the remedial math course.
- For the most part, students in the higher level cohorts have higher entering skill levels.
- In general, students in a higher level reading cohort took more college-level classes than students in the level below. Students in a higher level reading cohort also had higher college-level course completion rates than students in the level below.
- Comparing reading cohort students to all students shows that students at the lowest reading level did reasonably well in some college-level courses, but in general were less successful than average in most (they did better than all Moraine Valley students in only two out of nine courses.) Students at the middle reading level did slightly better than average (they did the same or better than all students in five out of nine courses), while students at the highest reading level did much better than average (they did better than all students in eight out of nine courses.)
- In general, students in the higher level writing cohort took more college-level classes than the lower level course. The higher level writing cohort also had higher college-level course completion rates.
- Comparing the writing cohort students to all students shows that students in the lower writing level cohort did close to average (they did better than all students in four out of ten courses), while students at the higher level did much better than average (they did the same or better than all students in seven out of nine courses.)

- The lowest level reading cohort had a slightly below average success rate in COM-101 and COM-102. The two other reading cohorts and both writing cohort students were very successful in COM-101 and COM-102.
- In general, students in a higher level math cohort registered for higher levels of math classes and had higher successful completion rates than students in the level below.
- Very few students in the lowest math cohort registered for any college-level math courses, the percentage increased for students in the middle math cohort and was highest for students at the highest level.
- Except for MTH-139 and MTH-142, successful completions increased as the cohort level increased. For all math cohorts, students were very successful in the next sequential math course.
- For all eight remedial cohorts, both across-term retention rates and across-year retention rates were higher than for all students.

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Appendix 1 Courses, Titles, and Description

Remedial Course:	Title	Description
RDG-041	Approaches to College Reading	Basic reading skills (below 7th grade level)
RDG-071	Techniques for Textbook Reading	Second level reading, develops comprehension and rate skills (grade level 7th-8th grade)
RDG-091	Critical Reading	Third level reading, emphasizes critical reading skills (grade level 9th-11th grade)
COM-085	Sentence and Paragraph Writing	Designed to help students understand and use the basics of grammar and punctuation with sentences and paragraphs
COM-090	Paragraph and Theme Writing	Understand and write basic paragraphs and short themes
MTH-090	Developmental Mathematics	Emphasizes fractions and percentages
MTH-095	Beginning Algebra with Geometry	Elementary algebra and geometry topics
MTH-101	Intermediate Algebra	Intermediate algebra topics
College-Level Course:	Title	Description
BUS-100	Introduction to Business	Provides background information for students interested in business subjects
COM-101	Composition I	First college-level writing course
COM-102	Composition II	Analytical and critical writing
HIS-101	Western Civilization I	Surveys development of the West from ancient times to 1715
HUM-101	Introduction to Humanities	Interdisciplinary study of the cultural achievements of Western civilization
PHI-101	Introduction to Philosophy	Introduces philosophical questions and philosophical ways of reasoning
PSY-100	Human Potentials	“College Success” course
PSY-101	Introduction to Psychology	Psychological theories and scientific methods used in the study of behavior of man and animals
SOC-101	General Sociology	Introduces basic sociological concepts
MTH-109	Math for Allied Health	Covers common math requirements for students in allied health science programs

MTH-119	Elementary Programming Techniques	Elementary computer programming
MTH-120	Quantitative Literacy	Liberal arts mathematics course (not a prerequisite for any other course in math)
MTH-121	Math for Teachers I	Designed for elementary education majors
MTH-122	Math for Teachers II	A continuation of MTH-121
MTH-135	Technical Math	Algebra with physical applications
MTH-139	Probability and Statistics	General statistics
MTH-141	College Algebra	The functions approach to college algebra
MTH-142	Trigonometric Functions	College trigonometry
MTH-143	Finite Mathematics	Includes sets, probability, matrix algebra, linear programming, systems of equations, exponential growth and annuities
MTH-145	Calculus for Business and Social Science	Introductory Calculus for business
MTH-150	Analytical Geometry and Calculus I	First of three courses in the Calculus sequence
MTH-212	Business Statistics	Similar to MTH-139, but moves at a faster pace and is more oriented toward business examples



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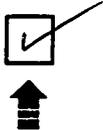
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