

**Annual Study on Developmental
Education**

2006-2007 Academic Year

Iowa Western Community College

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I Overview

Developmental education, at Iowa Western Community College, consists of a series of courses offering pre-college level instruction in writing (ENG 013 Basic Writing, ENG 101 Elements of Writing), reading (RDG 039 College Preparatory Reading II), and math (MAT 041 Basic Math, MAT 052 Pre-Algebra, MAT 062 Elementary Algebra, and MAT 101/102 Intermediate Algebra). The following study provides descriptive numbers on developmental enrollments as well as computations on success rates such as percents of enrolled students earning A, B, or C vs. D, F, or W; and some group grade point averages. Whereas the first two sections provide overview of developmental and higher level enrollments from 2006-2007 academic year a final section offers analysis of trends on developmental education going back seven years (going back to 2000-2001 year).

II Developmental Enrollments, Grade Distributions, Success Rates, 2006-2007

Please see Table I for all student enrollments, at ten day semester counts, in seven developmental courses (referenced above) in 2006 fall, 2007 spring, 2007 summer, and 2007 fall; for 2007 fall the charts only include students' repeat enrollments from the first three terms. A label of %ABC indicates percent of enrollments earning A, B, C; %ABCDF indicates persistence scores, percents of students earning letter grades and completing courses.

All Enrollments vs. Best Outcomes

Because students often enroll more than once in the same developmental courses (e.g. withdraw early on from a course or fail a course and later enroll again in the course) the author created a separate tally called "best outcomes", based only on students' single best enrollment outcomes. For instance, if a student earned an F in a first enrollment in ENG 013

and a B in a second enrollment in ENG 013 the best outcomes tally would only count the B; the F would not count in the tally. Please see Table 2 for best outcomes.

Trends

A reader may note significant improvements in both percents of students earning ABC as well as in group GPAs upon contrasting numbers between all enrollments, Table 1, and best outcomes, Table 2. More specifically %ABC rates range from 46% to 68% in Table 1 vs. 51% to 75% in Table 2. GPA scores range from 1.63 to 2.23 in Table 1 vs. 1.70 to 2.35 in Table 2. Best outcomes numbers better all enrollment numbers for each course measured.

Table I – All Enrollments and Success Rates											
Grade Distributions - 2006 Fall, 2007 Spring, 2007 Summer, 2007 Fall (repeats only)											
ENG013 Basic Writing		A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades		26	23	43	17	57	34	200	46.00%	83.00%	1.66
ENG101 Elements of Writing		A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades		91	122	88	38	97	65	501	60.08%	87.03%	2.17
RDG039 College Prep Reading II		A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades		2	19	34	17	20	14	106	51.89%	86.79%	1.63
MAT041 Basic Math		A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades		50	58	57	35	76	51	327	50.46%	84.40%	1.89
MAT052 Pre Algebra		A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades		61	72	83	18	55	28	317	68.14%	91.17%	2.23
MAT062 Elementary Algebra		A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades		99	133	140	61	118	67	618	60.19%	89.16%	2.06
MAT101/102 Intermediate Algebra		A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades		114	143	114	47	108	102	628	59.08%	83.76%	2.21

Table II – Best Outcomes* Only - Enrollments and Success Rates

Grade Distributions - 2006 Fall, 2007 Spring, 2007 Summer, 2007 Fall (repeats only)

ENG013 Basic Writing	A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades	26	23	42	15	49	22	177	51.41%	87.57%	1.75
ENG101 Elements of Writing	A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades	91	122	88	38	80	45	464	64.87%	90.30%	2.25
RDG039 College Prep Reading II	A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades	2	19	34	17	16	12	100	55.00%	88.00%	1.70
MAT041 Basic Math	A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades	49	58	57	32	64	32	292	56.16%	89.04%	1.98
MAT052 Pre Algebra	A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades	61	72	83	13	43	17	289	74.74%	94.12%	2.35
MAT062 Elementary Algebra	A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades	99	133	139	39	87	43	540	68.70%	92.04%	2.24
MAT101/102 Intermediate Algebra	A	B	C	D	F	W	Total	%ABC	%ABCDF	GPA
Final Grades	114	143	114	38	87	62	558	66.49%	88.89%	2.32

**Best outcomes indicate single best enrollment outcomes per student; used when students have more than one enrollment in a course. For instance a student earning F for a first enrollment and B for a second enrollment would earn a single "best outcome" of B; the F would not count in the analysis.*

III Next Level and Arts and Sciences Enrollments, 2006-2007

The following charts provide outcomes in next level enrollments as well as enrollments in arts and sciences courses taken simultaneously to or subsequently to developmental course enrollments when students earned their "best outcomes" (see previous section). Both developmental and arts and sciences courses may serve as next level courses to given developmental courses, e.g. ENG 101 and ENG 105 follow ENG 013 in sequence. The charts provide a breakdown between best outcomes in developmental course enrollments, ABC vs. DFW, and on next level and arts and sciences outcomes. Staff measured all courses at ten day counts.

A common and expected trend pervades the analysis: students earning ABCs in developmental course best outcomes typically perform much better in next level and in arts and sciences courses than do students earning DFWs in developmental course best outcomes. For example, students earning ABCs in MAT 041 also earned ABCs at 66% in next level math classes, contrasted with 21% for those earning DFWs in MAT 041 and enrolling in next level math classes. One may also note relatively few next level and arts and sciences enrollments for students earning DFW in developmental courses given that they did not likely reach college level skills. In MAT 041, for example, students earning best outcomes of ABC enrolled in 222 next level math classes vs. only 42 for students earning DFW in MAT 041.

ENG 013 Basic Writing

Next Level Enrollments in English Courses

Best Outcome-E013	Next Level	A	B	C	D	F	W	Tot	%ABC	%ABCDF	GPA
ABC (66 students)	ENG-101	8	18	19	3	4	15	67	67.16%	77.61%	2.44
	ENG-105	6	7	5	2	4	4	28	64.29%	85.71%	2.38
	ENG-106		1	1			1	3	66.67%	66.67%	2.50
	All	14	26	25	5	8	20	98	66.33%	79.59%	2.42
DFW (13 students)	ENG-101		1	1		4	5	11	18.18%	54.55%	0.83
	ENG-105			2		1		3	66.67%	100.00%	1.33
	ENG-106			1				1	100.00%	100.00%	2.00
	All	0	1	4	0	5	5	15	33.33%	66.67%	1.10

Arts & Sci Enrollments - Simultaneous to or Subsequent to Completions of Best Outcomes in ENG013

Best Outcome-E013	Arts Sci	A	B	C	D	F	W	Tot	%ABC	%ABCDF
ABC (88 Students)	Arts Sci	105	118	129	45	64	88	549	64.12%	83.97%
DFW (78 Students)	Arts Sci	21	20	35	24	108	89	297	25.59%	70.03%

ENG 101 Elements of Writing

Next Level Enrollments in English Courses

Best Outcome-E101 ABC (180 students)	Next Level	A	B	C	D	F	W	Tot	%ABC	%ABCDF	GPA
	ENG-105	38	62	33	12	28	21	194	68.56%	89.18%	2.40
ENG-106	18	13	10	1	6	8	56	73.21%	85.71%	2.75	
ENG-111			1				1	100.00%	100.00%	2.00	
ENG-221		1					1	100.00%	100.00%	3.00	
ENG-230	1					1	2	50.00%	50.00%	4.00	
ENG-238		1					1	100.00%	100.00%	3.00	
All	57	77	44	13	34	30	255	69.80%	88.24%		
DFW (16 students)	ENG-105	2	1	2		6	8	19	26.32%	57.89%	1.36
	ENG-106		2			2		4	50.00%	100.00%	1.50
	All	2	3	2		8	8	23	30.43%	65.22%	

Arts & Sci Enrollments - Simultaneous to or Subsequent to Completions of Best Outcomes in ENG101

Best Outcome-E101 ABC (294 Students)	Arts Sci	A	B	C	D	F	W	Tot	%ABC	%ABCDF	
	Arts Sci	662	504	392	133	164	230	2085	74.72%	88.97%	
DFW (153 Students)	Arts Sci	41	49	86	49	214	179	618	28.48%	71.04%	

RDG 039 College Preparatory Reading II

Arts & Sci Enrollments - Simultaneous to or Subsequent to Completions of Best Outcomes in RDG039

Best Outcome-R039 ABC (53 Students)	Arts Sci	A	B	C	D	F	W	Tot	%ABC	%ABCDF	
	Arts Sci	85	88	85	38	40	62	398	64.82%	84.42%	
DFW (41 Students)	Arts Sci	8	6	20	14	43	41	132	25.76%	68.94%	

MAT 041 Basic Math

Next Level Enrollments in Math Courses

Best Outcome-M041 ABC (120 Students)	Next Level	A	B	C	D	F	W	Tot	%ABC	%ABCDF	GPA
	MAT-052	28	24	36	6	16	10	120	73.33%	91.67%	2.38
MAT-062	10	13	15	6	11	10	65	58.46%	84.62%	2.09	
M-101/2	2	8		2	3	6	21	47.62%	71.43%	2.27	
MAT-120	1		2			1	4	75.00%	75.00%	2.67	

	MAT-156		1	1				2	100.00%	100.00%	2.50
	MAT-711	3		1		1		5	80.00%	100.00%	2.80
	MAT-743			2		3		5	40.00%	100.00%	0.80
	All	44	46	57	14	34	27	222	66.22%	87.84%	

DFW (27 Students)	Next Level	A	B	C	D	F	W	Tot	%ABC	%ABCDF	GPA
	MAT-052		2	4	3	10	13	32	18.75%	59.38%	0.89
	MAT-062		1	1	2	1		5	40.00%	100.00%	1.40
	MAT-101				1		1	2	0.00%	50.00%	1.00
	MAT-711		1			1		2	50.00%	100.00%	1.50
	MAT-743				1			1	0.00%	100.00%	1.00
	All	0	4	5	7	12	14	42	21.43%	66.67%	

Arts & Sci Enrollments - Simultaneous to or Subsequent to Completions of Best Outcomes in MAT041

Best Outcome-M041 ABC (154 Students)	Arts Sci	A	B	C	D	F	P	W	Tot	%ABC	%ABCDF
	Arts Sci	294	255	172	48	70	1	147	987	73.05%	85.11%
DFW (118 Students)	Arts Sci	28	31	62	35	165	0	121	442	27.38%	72.62%

MAT 052 Pre Algebra Math

Next Level Enrollments in Math Courses

Best Outcome-M052 ABC (165 Students)	Next Level	A	B	C	D	F	W	Tot	%ABC	%ABCDF	GPA
	MAT-062	28	34	47	20	36	29	194	56.19%	85.05%	1.99
	M-101/2	5	22	9	8	13	19	76	47.37%	75.00%	1.96
	MAT-120	2	3	4	4		2	15	60.00%	86.67%	2.23
	MAT-156	1	1	3	4	1	3	13	38.46%	76.92%	1.70
	MAT-711			2		1	1	4	50.00%	75.00%	1.33
	MAT-743		1	1	1			3	66.67%	100.00%	2.00
All	36	61	66	37	51	54	305	53.44%	82.30%		

DFW (10 Students)	Next Level	A	B	C	D	F	W	Tot	%ABC	%ABCDF	GPA
	MAT-062				1	2	4	7	0.00%	42.86%	0.33
	MAT-101	1					3	4	25.00%	25.00%	4.00
	MAT-120	1						1	100.00%	100.00%	4.00
	MAT-711					1	1	2	0.00%	50.00%	0.00
	MAT-743					2		2	0.00%	100.00%	0.00
All	2	0	0	1	5	8	16	12.50%	50.00%		

Arts & Sci Enrollments - Simultaneous to or Subsequent to Completions of Best Outcomes in MAT052

Best Outcome-M052	Arts Sci	A	B	C	D	F	W	Tot	%ABC	%ABCDF	
ABC (211 Students)	Arts Sci	407	356	250	93	146	240	1492	67.90%	83.91%	
DFW (70 Students)	Arts Sci	36	23	35	21	97	100	312	30.13%	67.95%	

MAT 062 Elementary Algebra

Next Level Enrollments in Math Courses

Best Outcome-M062	Next Level	A	B	C	D	F	W	Tot	%ABC	%ABCDF	GPA
ABC (312 Students)	M-101/2	41	69	69	24	44	60	307	58.31%	80.46%	2.16
	MAT-120	19	19	24	6	3	10	81	76.54%	87.65%	2.63
	MAT-121			1			1	2	50.00%	50.00%	2.00
	MAT-129	2	1				2	5	60.00%	60.00%	3.67
	MAT-130	1	1					2	100.00%	100.00%	3.50
	MAT-156	3	21	16	11	4	11	66	60.61%	83.33%	2.15
	MAT-211					2		2	0.00%	100.00%	0.00
	MAT-711	2	1	3	1		1	8	75.00%	87.50%	2.57
	MAT-743		1		1			2	50.00%	100.00%	2.00
	MAT-750		1	1				2	100.00%	100.00%	2.50
	All	68	114	114	43	53	85	477	62.05%	82.18%	
DFW (18 Students)	Next Level	A	B	C	D	F	W	Tot	%ABC	%ABCDF	GPA
	MAT-101			1			11	12	8.33%	8.33%	2.00
	MAT-156		1				1	2	50.00%	50.00%	3.00
	MAT-711			1	1	1	1	4	25.00%	75.00%	1.00
	MAT-750						1	1	0.00%	0.00%	-
	All		1	2	1	1	14	19	15.79%	26.32%	

Arts & Sci Enrollments - Simultaneous to or Subsequent to Completions of Best Outcomes in MAT062

Best Outcome-M062	Arts Sci	A	B	C	D	F	W	Tot	%ABC	%ABCDF	
ABC (365 Students)	Arts Sci	951	681	477	159	242	345	2855	73.87%	87.92%	
DFW (167 Students)	Arts Sci	101	106	124	71	266	236	904	36.62%	73.89%	

MAT 101/102 Intermediate Algebra

Next Level Enrollments in Math Courses

Best Outcome- M101/2	Next Level							Tot	%ABC	%ABCDF	GPA
		A	B	C	D	F	W				
ABC (232 Students)	MAT-120	62	39	41	18	7	17	184	77.17%	90.76%	2.78
	MAT-121	1	1		1	2	4	9	22.22%	55.56%	1.60
	MAT-129	2	2				2	6	66.67%	66.67%	3.50
	MAT-130	5	2	2				9	100.00%	100.00%	3.33
	MAT-156	6	23	13	8	1	5	56	75.00%	91.07%	2.49
	MAT-211	2				2		4	50.00%	100.00%	2.00
	MAT-711	1	1	1	1	1	3	8	37.50%	62.50%	2.00
	MAT-743		2				1	3	66.67%	66.67%	3.00
	Total	79	70	57	28	13	32	279	73.84%	88.53%	
DFW (24 Students)	Next Level							Tot	%ABC	%ABCDF	GPA
	MAT-120		1			1	3	5	20.00%	40.00%	1.50
	MAT-121			1				1	100.00%	100.00%	2.00
	MAT-156	1		2		8	3	14	21.43%	78.57%	0.73
	MAT-711				1	1	1	3	0.00%	66.67%	0.50
	MAT-743						2	2	0.00%	0.00%	-
	MAT-751					1		1	0.00%	100.00%	0.00
	Total	1	1	3	1	11	9	26	19.23%	65.38%	

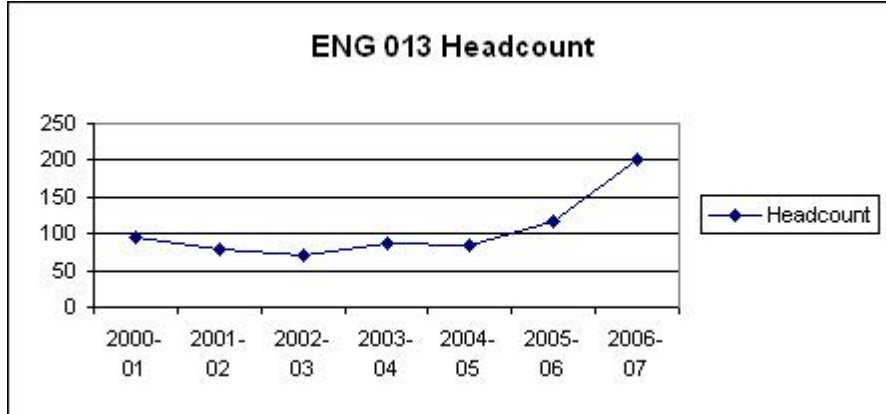
Arts & Sci Enrollments - Simultaneous to or Subsequent to Completions of Best Outcomes in MAT101/102

Best Outcome- M101/2	Arts Sci							Tot	%ABC	%ABCDF	
		A	B	C	D	F	W				
ABC (362 Students)	Arts Sci	1322	826	472	158	145	333	3256	80.47%	89.77%	
DFW (181 Students)	Arts Sci	147	131	149	74	325	233	1059	40.32%	78.00%	

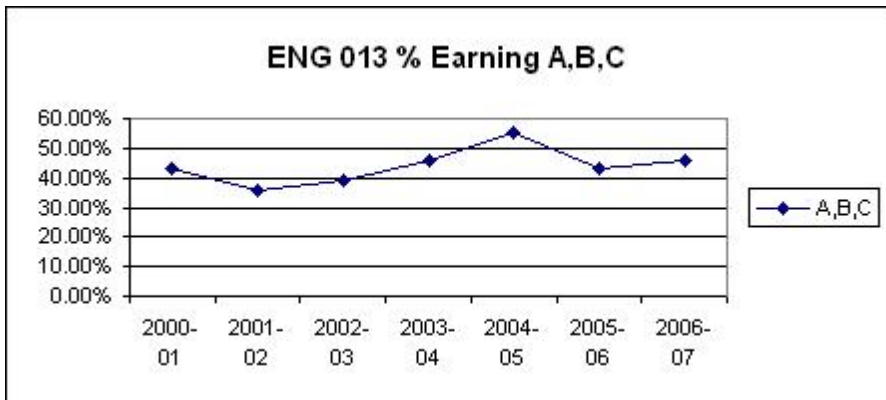
IV Trends – Seven Years of Enrollments and Success Rates

This final part of the study provides graphical presentations of trends in enrollments (all enrollments as opposed to best outcomes here), “headcounts”, and percents of students earning ABC. The analysis does not include data on either ENG 101 or on MAT 101/102. One may observe noteworthy increases in headcounts between 2005-2006 and 2006-2007 academic years in each of five studied developmental courses, including an increase from 46 to 106 in RDG 039. A reader may note little change in %ABC rates between 2005-2006 and 2006-2007 in ENG 013 (43.1% to 46.0%), MAT 041 (50.8% to 50.5%), and MAT 062 (59.6% to 60.2%). In contrast one may note significant increases in %ABC rates for RDG 039 (34.8% to 51.9%) and MAT 052 (59.8% to 68.1%).

ENG 013 Basic Writing (Formerly Writing Foundations)

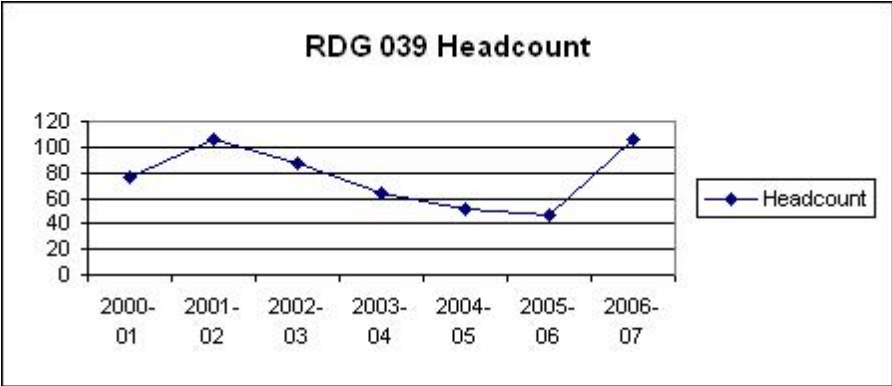


AcadYr	Headcount
2000-01	95
2001-02	79
2002-03	72
2003-04	87
2004-05	83
2005-06	116
2006-07	200

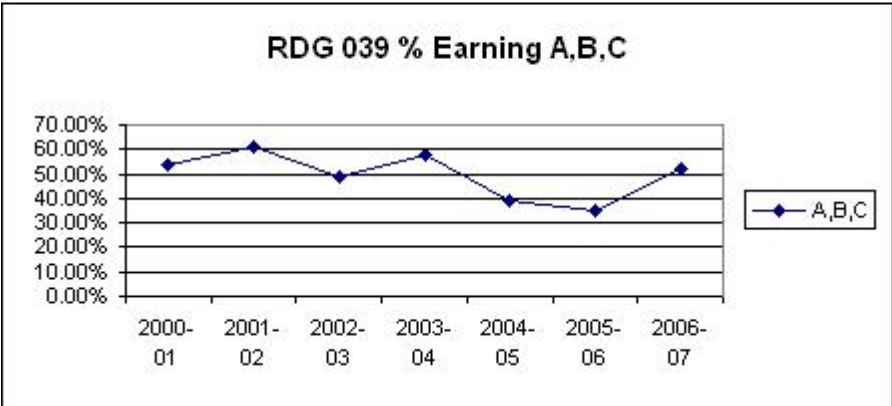


AcadYr	A,B,C
2000-01	43.20%
2001-02	35.40%
2002-03	38.90%
2003-04	46.00%
2004-05	55.40%
2005-06	43.10%
2006-07	46.00%

RDG 039 College Preparatory Reading II (Formerly Introduction to College Reading)

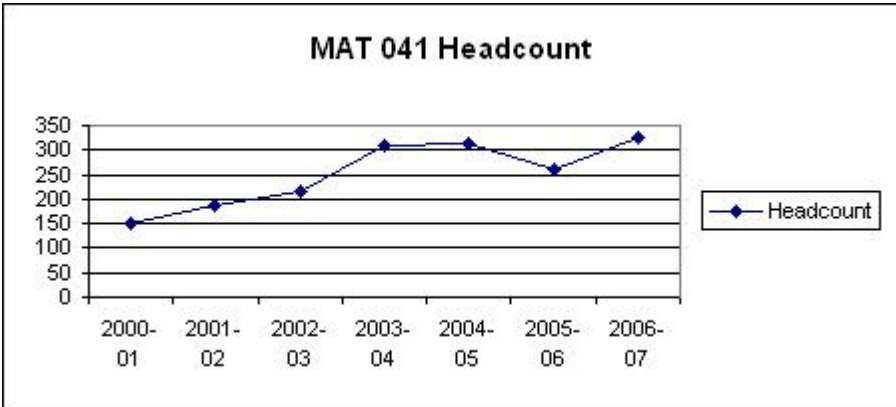


AcadYr	Headcount
2000-01	76
2001-02	106
2002-03	88
2003-04	64
2004-05	51
2005-06	46
2006-07	106

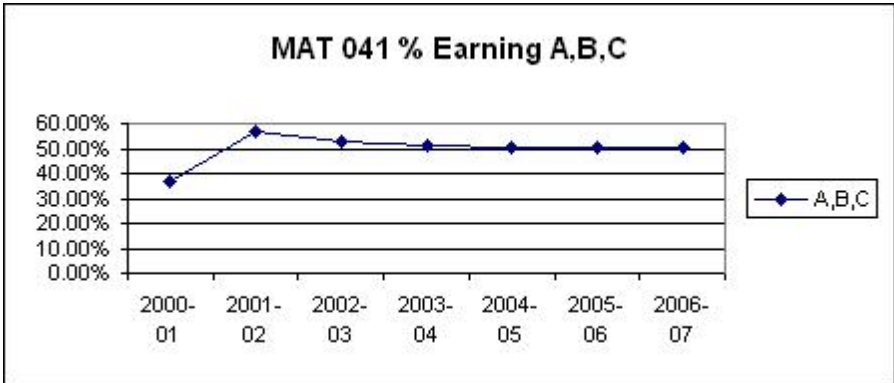


AcadYr	A,B,C
2000-01	53.90%
2001-02	61.30%
2002-03	48.90%
2003-04	57.80%
2004-05	39.20%
2005-06	34.80%
2006-07	51.89%

MAT 041 Basic Math (Formerly Math Foundations)

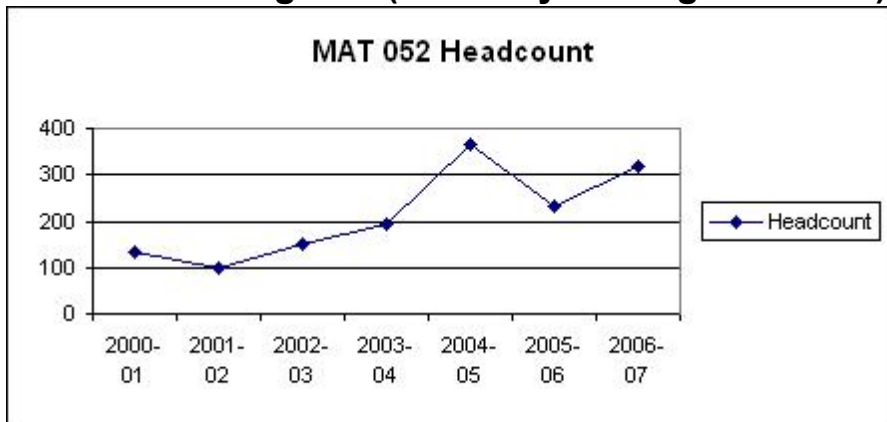


AcadYr	Headcount
2000-01	150
2001-02	189
2002-03	217
2003-04	311
2004-05	315
2005-06	260
2006-07	327

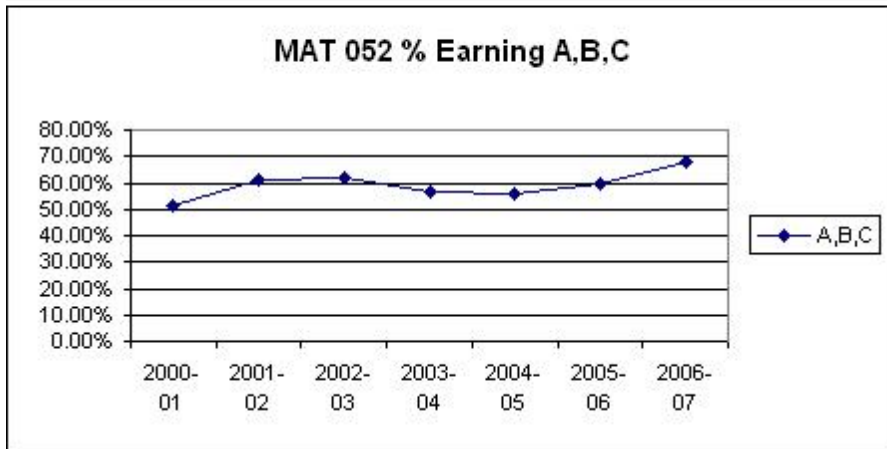


AcadYr	A,B,C
2000-01	36.70%
2001-02	57.10%
2002-03	52.50%
2003-04	51.10%
2004-05	50.10%
2005-06	50.80%
2006-07	50.46%

MAT 052 Pre Algebra (Formerly Pre Algebra Math)

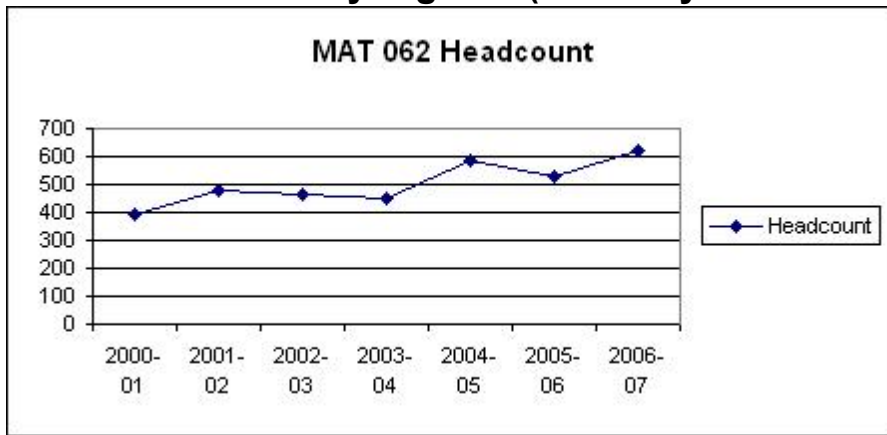


AcadYr	Headcount
2000-01	132
2001-02	101
2002-03	152
2003-04	193
2004-05	367
2005-06	234
2006-07	317

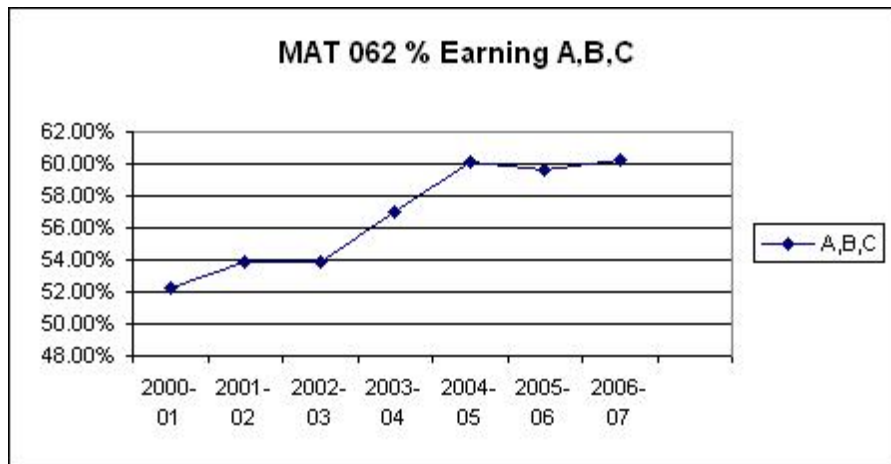


AcadYr	A,B,C
2000-01	51.50%
2001-02	61.40%
2002-03	61.80%
2003-04	56.50%
2004-05	56.00%
2005-06	59.80%
2006-07	68.14%

MAT 062 Elementary Algebra (Formerly Introductory Algebra)



AcadYr	Headcount
2000-01	390
2001-02	479
2002-03	462
2003-04	451
2004-05	584
2005-06	532
2006-07	618



AcadYr	A,B,C
2000-01	52.30%
2001-02	53.90%
2002-03	53.90%
2003-04	57.00%
2004-05	60.10%
2005-06	59.60%
2006-07	60.19%