

IOWA WESTERN COMMUNITY COLLEGE

2003 – 2004



**DEVELOPMENTAL
EDUCATION
REPORT**

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DEVELOPMENTAL EDUCATION REPORT
2003-2004
Iowa Western Community College

Overview:

Student success in developmental education coursework is a precursor for continued success at the post-secondary level. The reasons for remedial education in mathematics, reading or writing are numerous. As an open door institution, Iowa Western Community College provides coursework in developmental education to provide an academic foundation for students as they pursue higher level courses within their chosen programs of study.

The academic “success” of students in developmental education at Iowa Western has been formally tracked since the 2000 - 2001 academic year. This year’s report analyzes student enrollments and success during 2003 - 2004 as well as a comparison of enrollments and success during the past four years. It is presented in two components:

- Part I: Academic year 2003-2004 enrollment and success data
- Part II: Academic years 2001 through 2004 comparative data and trend lines

The information included in this report provides a snapshot of the developmental education program at the college. Included in this review is the data for reading, writing, and math developmental courses. ESL enrollments and course success are not part of this analysis.

Part I: DEVELOPMENTAL EDUCATION ENROLLMENT AND SUCCESS DATA 2003-2004

Introduction:

This component of the report focuses on enrollment and success data for each of the developmental (non-ESL) courses offered by Iowa Western Community College during the 2003 – 2004 academic year. Student success in next level discipline as well as non-developmental courses in each of the DEV courses has been analyzed. Course enrollments and success through the fall 2004 term were tracked. The DEV course offerings include:

- DEV083D Writing Foundations
- DEV081D Reading Foundations
- DEV087D Introduction to College Reading
- DEV052D Math Foundations
- DEV054D Pre-Algebra Math
- DEV088D Introductory Algebra

This report and analysis reviews:

- Total enrollments (duplicated if students repeated in a developmental education course).
- Success in each developmental course as defined by the letter grade awarded students at the end of the term. Course success is defined as an earned grade of an A, B or C.
- Enrollment success in higher level courses within a specific discipline; i.e.,
 - DEV083D Writing Foundations → ENG100A or ENG101A
 - DEV081D Reading Foundations → DEV087D Introduction to College Reading
 - DEV052D Math Foundations → DEV054D Pre-Algebra Math → DEV088D Introductory Algebra → MAT100T or MAT125A or MAT150A or MAT154A or MAT236A.
- Enrollment success in all other courses in which the student was enrolled from fall 03 through fall 04.

Many variables impact student success in coursework regardless of the academic level or discipline. The focus of this report is a comparative analysis of course enrollments vs. course success irrespective of these variables. A review of data from each of the developmental course success profiles supports the following conclusions:

- ✓ *Students earning an A, B, or C in developmental courses complete higher level courses within the discipline as well as all courses with a greater degree of academic success than students who earn a D, F, W or I in a developmental course.*
- ✓ *Students who are successful in developmental courses complete a greater number of other college level courses compared to students who perform poorly in developmental courses. (Grade prerequisites for next level courses as well as the relationship between the grade point average (G P A) and financial aid may be factors in student retention beyond the developmental course level.)*

Part II: ANALYSIS OF 2000-01 through 2003-04 DATA

Introduction:

Part II of the developmental education success report presents a comparison of developmental education data tabulated during the past four academic years. The analysis profiles course enrollments and success rates for those students enrolled in developmental education (non-ESL) courses from 2000 – 2001 through the 2003 – 2004 academic years. Developmental education course enrollments and success rates are calculated based upon enrollments through the 2003-2004 academic year. Success in higher level discipline as well as arts and sciences courses reflect enrollments through the fall of 2004.

Summary data and representative graphs include comparisons for each of the developmental courses and indicate:

- Enrollments by headcount
- Course success as defined by grade awarded (A, B, C vs. D, F, I, W)
- Enrollments in higher level courses within the discipline, specifically math and English
- Course success in higher level courses within the discipline
- Enrollments in other courses
- % Course success (A, B, C vs. D, F, I, W) in other courses

Trends in enrollments and course success:

The following are general observations concerning enrollments and success data studied during the past four academic years. Each of the developmental education courses is profiled.

DEV083D Writing Foundations

- Course enrollments declined 24.2% from AY 01 through AY 03. However, enrolled increased 20.8% from AY 03 to AY04. Enrollments are still below the high point established in AY 01.
- Course success was at its highest level in four years with 46.0% of the students earning A, B, or C grades.
- The four year average for course success is 41.1%.
- Course success rates in higher level English courses was slightly lower when compared to AY 04 data and has declined the past two years.
- Average course success (A, B, C) in higher-level English courses during the four-year period studied was 56.8%.
- Course success in other courses was at a four-year high increasing 6.2% between the 2003 and 2004 academic years.

Summary data depicting Writing Foundations enrollments and course success is presented on the next page.

DEV081D Reading Foundations

- No enrollments during AY 2003 nor 2004

DEV087D Introduction to College Reading

- Course enrollments declined 27.3% between AY 2003 and AY 2004 and reflect a four-year low point in enrollments.
- Student success (A, B, C) increased to 57.8% after a low point in AY 2003.
- Since fewer students were enrolled in Introduction to College Reading during the 2004 academic year, this translated into fewer total enrollments in other courses as well.
- Course success in other courses (A, B, C) declined for the second straight year although the % decline was approximately 1%. The percent course success for AY 2004 is higher than the first year of the analysis.

Summary data in enrollment patterns and course success for Reading Foundations and Introduction to College Reading are presented in graphical format on the next pages.

DEV052DMath Foundations

- Course enrollments increased 43.3% from the 2003 academic year to 2004 and reflect a 107.3% increase during the past four years.
- Course success rates declined slightly (1.4%) from AY 2003 to 2004 continuing a downward trend. Success rates are still higher than the AY 2001 rate when slightly more than one-third of the students were successful.
- Course success rates in succeeding developmental math or MAT courses were also lower (2.2%) in AY 2004 when compared to the previous three year period. The downward trend in course success in succeeding math courses is continuing.
- Higher enrollments in Math Foundations courses also translated into higher enrollments a 42.3% increase in other college courses. Course success in these courses improved approximately 3% from AY 2003 to AY 2004 and reflects a four year high.

Summary data in enrollment patterns and course success for Math Foundations is provided in graphical format on the next page.

DEV054D Pre-Algebra Math

- Course enrollments increased 27% from AY 2003 to AY 2004 and have increased 46.2% since AY 2001.
- Course success in Pre-Algebra Math declined over 5% during AY 2004. 56.5% of the students enrolling earned an A, B, or C.
- Course enrollments in succeeding developmental and college-level math increased 26.1% over prior year's enrollments continuing an upward trend. This correlates to the increased enrollment pattern also noted with Math Foundations.
- Course success improved to 57.6% after trending down to a three year low in AY 2003.
- Enrollments in other courses also increased 34% from AY 2003 to 2004. Course success rebounded to 66%.

On the next page are tables as well as graphs reflecting enrollments and course success in Pre-Algebra Math.

DEV088D Introductory Algebra

- Course enrollments declined slightly (2.4%) from AY 2003 to AY 2004 continuing a two year pattern.
- Course success (A, B, C) improved by 3% from AY 2003 to AY 2004 continuing a gradual upward trend since AY 2001.
- Headcount enrollments in higher level math courses increased 10% from AY 2003 to AY 2004.
- Course success (A, B, C) in higher level math courses rebound to 54.4% after a one year significant decline.
- Total enrollments in other courses increased approximately 3% from AY 2003 to AY 2004 even though the number of undecided headcount students who had enrolled in DEV088D as well as other college courses declined slightly.
- Success in other college courses improved slightly (2.3%) from the prior academic year.

On the next page are tables as well as graphs reflecting enrollments and course success in Introductory Algebra.

Summary:

As noted previously, success in developmental as well as college-level courses is dependent upon multiple variables. These factors range from socio-economic to academic preparedness to situational variables that impact student abilities, motivation and commitment to learning.

Developmental education course enrollments and course success as well as enrollments and course success in higher level discipline and other courses at Iowa Western Community College reflect the following general trends.

1. With the exception of Introduction to College Reading, enrollments in developmental education courses have increased during the past four years.
2. Fewer than 50% of the students enrolling in Writing Foundations have been successful (A, B, C).
3. Of those students who enrolled in Writing Foundations and then enrolled in higher level ENG courses, approximately 55 – 60% was successful (A, B, C).
4. The trend-line for student success in Introduction to College Reading has been irregular.
5. Of those students who enrolled in Introduction to College Reading as well as other college level courses, the course success rate (A, B, C) has averaged 54% or higher.
6. Student success in Math Foundations improved to over 50% the past three years after a low of 36.7% during AY 01.
7. Of those students who enrolled in Math Foundations and then enrolled in succeeding math courses, a general decline in the percentage course success (A, B, C) has been observed.
8. Of those students who enrolled in Math Foundations and were also enrolled in other courses during their tenure, improvements in course success have been noted.
9. Course success for students who enrolled in Pre-Algebra Math has exceeded 50%.
10. Of those students who enrolled in Pre-Algebra Math and then enrolled in higher level math courses, course success ranged from 47% to 63%.
11. Of those students who enrolled in Pre-Algebra Math as well as other coursework during their academic tenure, “other course” success exceeded 58%.
12. Course success for students enrolled in Introductory Algebra has continued an upward trend.
13. Course success in succeeding higher level math courses has generally averaged 50% or higher.

14. Of those students who enrolled in Introductory Algebra as well as other college coursework during their tenure, “other course” success exceeded 60% were successful (A, B, C).

Developmental Education has provided a valuable foundation for Iowa Western Community College students during their academic journey. As the college’s enrollments continue to grow, enrollments in developmental coursework may increase as well.

Success through each stage of the developmental education continuum of courses provides an impetus for success at the next level. As students and graduates of Iowa Western continue their education as well as career journey, the basic academic framework established by developmental education courses will be integral to their lifelong pursuits.

**DEVELOPMENTAL COURSE ENROLLMENT DATA
2003-2004 Enrollments**

**I. Developmental Writing
Writing Foundations DEV083D**

A. Course Enrollment Data

Number Enrolled	A, B, C Grades	Percentage	D, F, W, I Grades	Percentage
87	40	46.0%	47	54.0%

- B. Number who failed, repeated and earned a C or higher: 2
 C. Number who failed, repeated and earned a D, F, W or I: 5
 D. Enrollment success in higher level ENG Courses through Fall 2004

DEV 083* A, B, C Grade	ENG100A		Percentage Successful	Percentage Unsuccessful
	A,B,C	D,F,W,I		
16	9	7	56.2%	43.8%
	ENG101A			
19	14	5	73.7%	26.3%

DEV 083* D,F,W,I Grade	ENG100A		Percentage Successful	Percentage Unsuccessful
	A,B,C	D,F,W,I		
7	0	7	0%	100%
	ENG101A			
2	1	1	50%	50%

	ENG100A		Percentage Successful	Percentage Unsuccessful
	A,B,C	D,F,W,I		
Total 23	9	14	39.1%	60.9%
	ENG101A			
Total 21	15	6	71.4%	28.6%
TOTAL 44	24	20	54.5%	45.5%

**Unduplicated head count (a student may have enrolled in more than one or repeated ENG course).*

E. Enrollment success in courses through Fall 2004 (excluding DEV083D).

Number of Students DEV 083 A,B,C Grades	Number of A & S Course Enrollments Total	Number of A & S Course Enrollments A,B,C Grades	Number of A & S Course Enrollments D,F,W, I Grades	Percentage Course Successful	Percentage Course Unsuccessful
39	318	213	105	67.0%	33.0%

Number of Students DEV 083 D,F,W,I Grades	A & S Course Enrollments Total	A & S Course Enrollments A,B,C Grades	A & S Course Enrollments D,F,W, I Grades	Percentage Course Successful	Percentage Course Unsuccessful
33	122	24	98	19.7%	80.3%
Total Number of DEV 083 students in A & S Courses	Total A & S Course Enrollments	Total A & S Course Enrollments A,B,C Grades	Total A & S Course Enrollments D,F,W, I Grades	Percentage Course Successful	Percentage Course Unsuccessful
72	440	237	203	53.9%	46.1%

II. Developmental Reading
A. Reading Foundations DEV081D

A. Course Enrollment Data

Number Enrolled	A, B, C Grades	Percentage	D, F, W, I Grades	Percentage
0	0	0	0	0

B. Number who repeated and earned a C or higher: 0

C. Number who repeated and earned a D, F, W or I: 0

D. Enrollment success in courses through Fall 2004:

Number of Students* DEV 081D A,B,C Grades	A & S Course Enrollments Total	A & S Course Enrollments A,B,C Grades	A & S Course Enrollments D,F,W, I Grades	Percentage Course Successful	Percentage Course Unsuccessful
0	0	0	0	0	0

Number of Students DEV 081D D,F,W,I Grades	A & S Course Enrollments Total	A & S Course Enrollments A,B,C Grades	A & S Course Enrollments D,F,W, I Grades	Percentage Course Successful	Percentage Course Unsuccessful
0	0	0	0	0	0

**Unduplicated Headcount*

Total Number of Students DEV 081D	Total Number of A & S Course Enrollments	Number of A & S Course Enrollments A,B,C Grades	Number of A & S Course Enrollments D,F,W, I Grades	Percentage Course Successful	Percentage Course Unsuccessful
0	0	0	0	0	0

B. Intro to College Reading DEV087

A. Course Enrollment Data

Number Enrolled	A, B, C Grades	Percentage	D, F, W, I Grades	Percentage
64	37	57.8%	27	42.2%

B. Number who failed, repeated and earned a C or higher: 0

C. Number who failed, repeated and earned a D, F, W or I: 0

D. Enrollment success in courses through Fall 2004.

Number of Students* DEV 087D A,B,C Grades	Number of A & S Course Enrollments Total	Number of A & S Course Enrollments A,B,C Grades	Number of A & S Course Enrollments D,F,W, I Grades	Percentage Course Successful	Percentage Course Unsuccessful
35	290	189	101	65.2%	34.8%

**Unduplicated headcount*

Number of Students* DEV 087D D,F,W,I Grades	Number A & S Course Enrollments Total	Number of A & S Course Enrollments A,B,C Grades	Number of A & S Course Enrollments D,F,W, I Grades	Percentage Course Successful	Percentage Course Unsuccessful
24	87	22	65	25.3%	74.7%

**Unduplicated headcount*

Total Number of Students*	Total Number A & S Course Enrollments	Number of A & S Course Enrollments A,B,C Grades	Number of A & S Course Enrollments D,F,W, I Grades	Percentage Course Successful	Percentage Course Unsuccessful
59	377	211	166	56.0%	44.0%

**Unduplicated headcount*

III. Developmental Math
Math Foundations DEV052D

A. Course Enrollment Data

Number Enrolled	A, B, C Grades	Percentage	D, F, W, I Grades	Percentage
311	159	51.1%	152	48.9%

- B. Number who repeated and earned a C or higher: 5
 C. Number who repeated and earned a D, F, W or I: 15
 D. Enrollment success in succeeding developmental and higher level math courses through Fall 2004.

DEV052D* A,B,C	DEV054D		DEV088D		MAT100T		MAT112T		MAT125T		MAT150A		MAT154A		MAT236A	
	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I
70	42	16	26	26	-	-	-	-	3	2	10	10	-	-	2	0

*Unduplicated count

Percentage Successful (A, B, C): 60.6 %
 Percentage Unsuccessful (D,F, W, I): 39.4 %

DEV052D* D,F,W, I	DEV054D		DEV088D		MAT100T		MAT112T		MAT125T		MAT150A		MAT154A		MAT236A	
	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I
30	11	20	6	15	-	-	-	-	1	1	3	7	1	1	2	-

*Unduplicated count

Percentage Successful (A, B, C): 35.3 %
 Percentage Unsuccessful (D,F, W, I): 64.7 %

TOTAL ENROLLMENTS

DEV052D*	DEV054D		DEV088D		MAT100T		MAT112T		MAT125T		MAT150A		MAT154A		MAT236A	
	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I
100	53	36	32	41	-	-	-	-	4	3	13	17	1	1	4	0

*Unduplicated count

Percentage Successful (A,B,C): 52.2 %
 Percentage Unsuccessful (D,F,W,I): 47.8 %

E. Enrollment success in courses through Fall 2004. (excluding DEV052D)

Number of Students* DEV 052D A,B,C Grades	A & S Course Enrollments	A & S Course Enrollments	A & S Course Enrollments	Percentage Course Successful	Percentage Course Unsuccessful
	Total	A,B,C Grades	D,F,W, I Grades		
155	1130	827	303	73.2%	26.8%

Number of Students* DEV 052D D,F,W,I Grades	A & S Course Enrollments	A & S Course Enrollments	A & S Course Enrollments	Percentage Course Successful	Percentage Course Unsuccessful
	Total	A,B,C Grades	D,F,W, I Grades		
111	631	277	354	43.9%	56.1%

Number of Students* DEV 052D	A & S Course Enrollments Total	A & S Course Enrollments A,B,C Grades	A & S Course Enrollments D,F,W, I Grades	Percentage Course Successful	Percentage Course Unsuccessful
266	1761	1104	657	62.7%	37.3%

* Unduplicated count

B. Pre-Algebra Math DEV054D

A. Course Enrollment Data

Number Enrolled	A, B, C Grades	Percentage	D, F, W, I Grades	Percentage
193	109	56.5%	84	43.5%

B. Number who repeated and earned a C or higher: 7

C. Number who repeated and earned a D, F, W or I: 10

E. Enrollment success in succeeding developmental and higher level math courses through Fall 2004.

DEV054D A,B,C	DEV088D		MAT100T		MAT111T		MAT125A		MAT150A		MAT154A		MAT236A	
	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I
85	55	29	-	-	-	1	9	2	31	19	2	2	5	5

Percentage Successful (A,B,C): 63.8 %

Percentage Unsuccessful (D,F,W,I): 36.2 %

DEV054D* D,F,W,I	DEV088D		MAT100T		MAT112T		MAT125A		MAT150A		MAT154A		MAT236A	
	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I
26	6	13	-	-	-	-	0	3	4	4	1	3	1	3

Percentage Successful (A,B,C): 31.6 %

Percentage Unsuccessful (D,F,W,I): 68.4 %

TOTAL ENROLLMENTS

DEV054D*	DEV088D		MAT100T		MAT112T		MAT125A		MAT150A		MAT154A		MAT236A	
	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I	A,B,C	D,F,W,I
111	61	42	-	-	-	1	9	5	35	23	3	5	6	8

**Unduplicated count in DEV054D*

Percentage Successful (A,B,C): 57.6 %

Percentage Unsuccessful (D,F,W,I): 42.4 %

E. Enrollment success in courses through fall 2004 (excluding DEV054D).

Number of Students* DEV054D A,B,C, Grades	A & S Course Enrollments Total	A & S Course Enrollments A,B,C Grades	A & S Course Enrollments D,F,W,I Grades	Percentage Course Successful	Percent Course Unsuccessful
108	1067	780	287	73.1%	26.9%

Number of Students* DEV054D D,F,W,I, Grades	A & S Course Enrollments Total	A & S Course Enrollments A,B,C Grades	A & S Course Enrollments D,F,W,I Grades	Percentage Course Successful	Percent Course Unsuccessful
57	415	196	219	47.2%	52.8%

Number of Students* DEV054D	A & S Course Enrollments Total	A & S Course Enrollments A,B,C Grades	A & S Course Enrollments D,F,W,I Grades	Percentage Course Successful	Percent Course Unsuccessful
165	1482	976	506	65.9%	34.1%

* Unduplicated Count

C. Introductory Algebra DEV088D

A. Course Enrollment Data

Number Enrolled	A, B, C Grades	Percentage	D, F, W, I Grades	Percentage
451	257	57.0%	194	43.0%

B. Number who repeated and earned a C or higher: 28

C. Number who repeated and earned a D,F,W or I: 19

D. Enrollment in next level Math courses through Fall 2004:

DEV088D* A, B, C	MAT100T		MAT125A		MAT150A		MAT154A		MAT236A	
	ABC	DFWI	ABC	DFWI	ABC	DFWI	ABC	DFWI	ABC	DFWI
208	-	-	7	2	113	92	33	21	22	16

*Unduplicated Count – Students may have multiple enrollments in MAT courses.

Percentage Successful (ABC): 57.2%

Percentage Unsuccessful (DFWI): 42.8%

DEV088D D,F,W,I	MAT100T		MAT125A		MAT150A		MAT154A		MAT236A	
	ABC	DFWI	ABC	DFWI	ABC	DFWI	ABC	DFWI	ABC	DFWI
40	0	2	4	2	8	24	4	4	7	3

*Unduplicated Count - Students may have multiple enrollments in MAT courses.

Percentage Successful (ABC): 39.7%

Percentage Unsuccessful (DFWI): 60.3%

TOTAL ENROLLMENTS

DEV088D*	MAT100T		MAT125A		MAT150A		MAT154A		MAT236A	
	ABC	DFWI	ABC	DFWI	ABC	DFWI	ABC	DFWI	ABC	DFWI
248	0	2	11	4	121	116	37	25	29	19

*Unduplicated Count – Students may have multiple enrollments in MAT courses.

Percentage Successful (ABC): 54.4%

Percentage Unsuccessful (DFWI): 45.6%

E. Enrollment success in courses through Fall 2004 (excluding DEV088D).

Number of Students* DEV088D A,B,C, Grades	A & S Course Enrollments Total	A & S Course Enrollments A,B,C Grades	A & S Course Enrollments D,F,W,I Grades	Percentage Course Successful	Percent Course Unsuccessful
250	2648	1960	688	74.0%	26.0%

Number of Students* DEV088D D,F,W,I, Grades	A & S Course Enrollments Total	A & S Course Enrollments A,B,C Grades	A & S Course Enrollments D,F,W,I Grades	Percentage Course Successful	Percent Course Unsuccessful
148	1020	477	543	46.8%	53.2%

Number of Students* DEV088D	A & S Course Enrollments Total	A & S Course Enrollments A,B,C Grades	A & S Course Enrollments D,F,W,I Grades	Percentage Course Successful	Percent Course Unsuccessful
398	3668	2437	1231	66.4%	33.6%

* Unduplicated Count