



OAKLAND
COMMUNITY
COLLEGE

Memo

TO: Paula Bielfelt Rod Chase Mike Khirallah
Kathy Lorencz Michele Merritt Alfonso Millet
Pat O'Connor Mike Petrack Nicole Pitts
Tom Robinson Debra Rowe Theresa Wangler

FROM: Nadia E. Boulos

RE: Retention Program for Academic Year 1997-98

DATE: June 19, 1998

On behalf of the Royal Oak/Southfield Retention Team, I want to thank you for your participation in the Pilot Retention Initiative for Academic Year 1997-98.

Enclosed please find a comparative analysis of the retention and success rates for the Fall 97 and Winter 98 control and experimental sections and also the summary of the retention project. If you have any comments, suggestions or recommendations, please contact me at (248) 552-1146.

A meeting is planned for July 23, 1998, from 2-4pm in the SF Conference Room (131). Your attendance, input and participation is very critical as we refine the concepts of this retention program and the implementation process for the Fall 98 and Winter 99 Semesters.

If you are aware of any individual(s) who would be interested in future participation, please forward their names to Maureen Doppke at the SF Campus or call her at Ext. 2670.

Thank you again for your contribution to the Pilot Retention Program. Your dedicated efforts and commitment to students' learning are greatly appreciated.

NB/md

enclosures

cc: M. Smydra
B. Stanbrough
M. Orłowski

Pilot Retention Program Subjects

Fall 1997

Retention rates in the following sections are compared:

<u>Control Sections</u>				<u>Experimental Sections</u>			
1.	BIO	153	(SF 005)	BIO	153	(SF 004)	
2.	BIO	153	(SF 504)	BIO	153	(SF 503)	
3.	BUS	110	(SF 027)	BUS	110	(SF 515)	
				BUS	110	(SR 230)	
4.	ENG	151	(SR 286)	ENG	151	(SR 781)	
				ENG	151	(SF 045)	
5.	MAT	110	(SR 418)	MAT	110	(SF 085)	
				MAT	110	(SR 410)	
6.	POL	151	(SR 365)	POL	151	(SF 071)	
7.	POL	151	(SR 840)	POL	151	(SF 575)	

Please note:

- The control and experimental sections were taught by the same faculty in the above 1 to 5 groupings.
- The POL 151 control and experimental sections (#6 & 7) were taught by different instructors.
- The time (morning, afternoon, or evening) and the location (Southfield or Royal Oak Campus) of the control and the experimental sections did not always match.

Retention Rates - Two estimates are used:

1. Number of students who completed each course (R) relative to the beginning of term enrollment (E) i.e. R/E.
2. Number of students who completed each course (R) relative to the number who actually attended class by deducting the no show students (N) i.e. R/E - N.

Success Rates - Two estimates are used:

1. Number of students who passed the course (S) relative to the beginning of term enrollment (E) i.e. S/E.
2. Number of students who passed the course (S) relative to the number who actually attended class by deducting the no show students (N) from E i.e. S/E - N.

Table I - shows the retention rates of the control and experimental sections in the seven groupings studied.

Table II - shows the success rates.

Preliminary Analysis of Retention Rates:

1. Of the five study groupings where the control and experimental sections were taught by the same instructor:
 - One shows higher retention rates in the experimental section (No. 1), and
 - Retention rates are more or less similar in the other 4 groupings (No. 2 - 5).
2. Of the two study groupings where the control and experimental sections were taught by different instructors:
 - One (No. 6) shows higher retention rate in the experimental section, and
 - One (No. 7) shows more or less similar rates in the experimental and control sections.

Preliminary Analysis of Success Rates - shows similar mixed results:

1. The rate is higher in the experimental section in one grouping (No. 1).
2. The rates are more or less similar for the control and experimental sections in 4 groupings (No. 2 - 5).
3. The rates are higher for the control sections in the two instances (no. 6 & 7) where the instructors and the location were different.

Limitations:

1. Small number of study groupings.
2. Different instructors, location, and time for the control and experimental sections.

Conclusions:

1. Data is inconclusive at this time.
2. Increase the number of study groupings.
3. Ensure better match between control and experimental sections with regard to instructor, location, and time.

Actions:

1. Extended the pilot study to the Winter Semester without modification.
2. Distribute the current results of the Fall Semester to the members of the Retention Task Force and the participating faculty and elicit their recommendations/suggestions for further action.
3. Analyze the results of the combined Fall and Winter Semesters.
4. Distribute the results of the combined Fall and Winter Semester to the members of the Retention Task Force and the participating faculty.
5. Convene the Retention Task Force to discuss the results and recommend future direction.

PRELIMINARY ANALYSIS OF RETENTION AND SUCCESS RATES FOR FALL 97 & WINTER 98

Retention Rates

Two estimates were used:

- Number of students who completed each course (R) relative to the number enrolled at the beginning of the course (E) i.e. R/E .
- Number of students who completed each course (R) relative to the number of students who actually attended classes by deducting the no show students (N) from (E) i.e. $R/E - N$.

Success Rates

Two estimates were used:

- Number of students who passed the course (S) relative to the beginning of term enrollment (E) i.e. S/E .
- Number of students who passed the course relative to the number who actually attended by deducting the no show students (N) i.e. $S/E - N$.

Number of Groups

A total number of 17 control and 20 experimental classes are being compared.

Retention Rates

1. Using R/E ratio:

- Rates are more or less equal in 9 groups.
- Rates are definitely higher for control classes in 4 groups.
- Rates are definitely higher for experimental classes in 4 groups.

2. Using $R/E - N$ ratio:

- same result

Success Rates

1. Using S/E ratio:

- Rates are more or less equal in 6 groups.
- Rates are definitely higher for control classes in 5 groups.
- Rates are definitely higher for experimental classes in 6 groups.

2. Using S/E - N ratio:

- Rates are more or less equal in 7 groups.
- Rates are higher for control classes in 4 groups.
- Rates are higher for experimental classes in 6 groups.

Conclusions

1. It appears that there is no significant difference in retention rates between control and experimental classes using either estimate for retention rates.
2. Success rates appear to be higher for the experimental classes compared to the control classes especially when the ratio of S/E - N is used.
3. Formal statistical analysis of the results should be made to find out whether there is a significant difference between the control and experimental classes with regard to retention and success rates.

SUMMARY OF PILOT RETENTION STUDY

The study started in Fall 1997 with seven (7) control and ten (10) experimental sections. Retention and success rates are displayed in Tables I and II respectively.

Preliminary examination of the results did not show significant differences between the control and the experimental sections. Therefore:

- Study was extended to Winter 1998 Semester.
- Experimental sections of Fall 1997 were evaluated against comparable sections in Fall 1996 (Tables III & IV). Still, no definite trend could be discerned by preliminary examination.

In Winter 1998, ten (10) control sections were matched against ten (10) experimental sections (Tables V & VI) and the experimental sections were also evaluated against comparable sections from Winter 1997 (Tables VII & VIII).

Statistical analysis of experimental Fall and Winter 1997/98 vs. control Fall and Winter 1997/98 and also vs. comparable Fall and Winter 1996/97 by chi-square failed to show a statistically significant difference neither at the 0.05 nor at the 0.10 level. Thus, the null hypothesis stating that there is no significant difference between control and experimental sections cannot be rejected.

**TABLE I: RETENTION RESULTS
FALL 1997**

COURSE	R/E		R/E - N	
	Ratio	Percentage	Ratio	Percentage
1 BIO 153 (SF 005)	11/23	48%	11/21	52%
BIO 153 (SF 004)	18/27	67%	18/27	67%
2 BIO 153 (SF 504)	16/23	70%	16/20	80%
BIO 153 (SF 503)	18/27	67%	18/27	67%
3 BUS 110 (SF 027)	12/16	75%	12/16	75%
BUS 110 (SF 515)	16/23	70%	16/23	70%
BUS 110 (SR 230)	26/38	68%	26/37	70%
4 ENG 151 (SR 286)	26/29	90%	26/29	90%
ENG 151 (SR 781)	29/30	97%	29/30	97%
ENG 151 (SF 045)	22/27	81%	22/27	81%
5 MAT 110 (SR 418)	16/31	52%	16/30	53%
MAT 110 (SF 085)	15/29	52%	15/29	52%
MAT 110 (SR 410)	15/34	44%	15/34	44%
6 POL 151 (SR 365)	28/37	76%	28/35	80%
POL 151 (SF 071)	33/39	85%	33/39	85%
7 POL 151 (SR 840)	29/34	85%	29/32	91%
POL 151 (SF 575)	30/37	81%	30/37	81%

R: # Retained (C + D + F + AU + I)
E: # Enrolled
N: No show
Black Type: Control Group
Red Type: Experimental Group

Retention Results
6/10/98

**TABLE II: SUCCESS RATES
FALL 1997**

COURSE	S/E		S/E - N	
	Ratio	Percentage	Ratio	Percentage
1 BIO 153 (SF 005)	8/23	35%	8/21	38%
BIO 153 (SF 004)	18/27	67%	18/27	67%
2 BIO 153 (SF 504)	13/23	57%	13/20	65%
BIO 153 (SF 503)	17/27	63%	17/27	63%
3 BUS 110 (SF 027)	10/16	63%	10/16	63%
BUS 110 (SF 515)	14/23	61%	14/23	61%
BUS 110 (SR 230)	24/38	63%	24/37	65%
4 ENG 151 (SR 286)	25/29	86%	25/29	86%
ENG 151 (SR 781)	27/30	90%	27/30	90%
ENG 151 (SF 045)	18/27	67%	18/27	67%
5 MAT 110 (SR 418)	9/31	29%	9/30	30%
MAT 110 (SF 085)	6/29	21%	6/29	21%
MAT 110 (SR 410)	8/34	24%	8/34	24%
6 POL 151 (SR 365)	25/37	68%	25/35	71%
POL 151 (SF 071)	20/39	51%	20/39	51%
7 POL 151 (SR 840)	26/34	76%	26/32	81%
POL 151 (SF 575)	23/37	62%	23/37	62%

S: # Passed with "C" or above
E: # Enrolled
N: No show
Black Type: Control Group
Red Type: Experimental Group

Success Rates
6/10/98

TABLE III: RETENTION RATES: FALL 96 vs. FALL 97

COURSE	R/E		R/E - N	
	Ratio	Percentage	Ratio	Percentage
1 BIO 153 (SF 004) 96	21/27	78%	21/27	78%
BIO 153 (SF 004) 97	18/27	67%	18/27	67%
2 BIO 153 (SF 503) 96	16/27	59%	16/27	59%
BIO 153 (SF 503) 97	18/27	67%	18/27	67%
3 ENG 151 (SF 049) 96	21/27	78%	21/26	81%
ENG 151 (SF 045) 97	22/27	81%	22/27	81%
4 ENG 151 (SR 790) 96	20/27	74%	20/25	80%
ENG 151 (SR 781) 97	29/30	97%	29/30	97%
5 MAT 110 (SR 378) 96	15/27	56%	15/27	56%
MAT 110 (SF 085) 97	15/29	52%	15/29	52%
6 MAT 110 (SR 381) 96	14/28	50%	14/28	50%
MAT 110 (SR 410) 97	15/34	44%	15/34	44%
7 POL 151 (SF 591) 96	32/35	91%	32/35	91%
POL 151 (SF 575) 97	30/37	81%	30/37	81%
8 POL 151 (SF 083) 96	33/36	92%	33/36	92%
POL 151 (SF 071) 97	33/39	85%	33/39	85%

S: # Passed with "C" or above

E: # Enrolled

N: No show

Black Type: Control Group

Red Type: Experimental Group

Retention Rates 96-97
6/10/98

TABLE IV: SUCCESS RATES: FALL 96 vs. FALL 97

COURSE	S/E		S/E - N	
	Ratio	Percentage	Ratio	Percentage
1 BIO 153 (SF 004) 96	19/27	70%	19/27	70%
BIO 153 (SF 004) 97	18/27	67%	18/27	67%
2 BIO 153 (SF 503) 96	15/27	56%	15/27	56%
BIO 153 (SF 503) 97	17/27	63%	17/27	63%
3 ENG 151 (SF 049) 96	21/27	78%	21/26	81%
ENG 151 (SF 045) 97	18/27	67%	18/27	67%
4 ENG 151 (SR 790) 96	20/27	74%	20/25	80%
ENG 151 (SR 781) 97	27/30	90%	27/30	90%
5 MAT 110 (SR 378) 96	9/27	33%	9/27	33%
MAT 110 (SF 085) 97	6/29	21%	6/29	21%
6 MAT 110 (SR 381) 96	8/28	29%	8/28	29%
MAT 110 (SR 410) 97	8/34	24%	8/34	24%
7 POL 151 (SF 591) 96	22/35	63%	22/35	63%
POL 151 (SF 575) 97	23/37	62%	23/37	62%
8 POL 151 (SF 083) 96	19/36	53%	19/36	53%
POL 151 (SF 071) 97	20/39	51%	20/39	51%

S: # Passed with "C" or above
 E: # Enrolled
 N: No show
 Black Type: Control Group
 Red Type: Experimental Group

Success Rates 96-97
 6/10/98

**TABLE V: RETENTION RATES
WINTER 98**

COURSE	R/E		R/E - N	
	Ratio	Percentage	Ratio	Percentage
1. BUS 110 (SR 531) BUS 110 (SR 530)	31/36 24/38	86% 63%	31/35 24/33	89% 73%
2. BUS 110 (SF 813) BUS 110 (SF 324)	21/27 10/17	78% 59%	21/27 10/17	78% 59%
3. ENG 151 (SR 577) ENG 151 (SR 574)	19/26 17/28	73% 61%	19/26 17/28	73% 61%
4. ENG 152 (SR 579) ENG 152 (SF 836)	27/29 23/27	93% 85%	27/29 23/27	93% 85%
5. POL 151 (SR 166) POL 151 (SF 361)	32/37 34/37	86% 92%	32/37 34/37	86% 92%
6. POL 151 (SR 640) POL 151 (SF 877)	36/38 35/38	95% 92%	36/38 35/38	95% 92%
7. PSY 251 (SR 173) PSY 251 (SR 175)	20/36 26/38	56% 68%	20/34 26/38	59% 68%
8. PSY 251 (SF 365) PSY 251 (SF 364)	20/37 21/37	54% 57%	20/35 21/34	57% 62%
9. SPA 151 (SR 191) SPA 151 (SR 190)	13/26 17/25	50% 68%	13/26 17/25	50% 68%
10. SPA 151 (SR 189) SPA 151 (SR 650)	20/27 16/26	74% 62%	20/26 16/25	74% 64%

R: # Retained (C + D + E + AU + I)
E: # Enrolled
N: No Show
Black Type: Control Group
Red Type: Experimental Group

**TABLE VI: SUCCESS RATES
WINTER 98**

COURSE	S/E		S/E - N	
	Ratio	Percentage	Ratio	Percentage
1. BUS 110 (SR 531) BUS 110 (SR 530)	24/36 22/38	67% 58%	24/35 22/33	69% 67%
2. BUS 110 (SF 813) BUS 110 (SF 324)	17/27 7/17	63% 41%	17/27 7/17	63% 41%
3. ENG 151 (SR 577) ENG 151 (SR 574)	19/26 15/28	73% 54%	19/26 15/28	73% 54%
4. ENG 152 (SR579) ENG 152 (SF 836)	27/29 23/27	93% 85%	27/29 23/27	93% 85%
5. POL 151 (SR 166) POL 151 (SF 361)	21/37 25/37	57% 68%	21/37 25/37	57% 68%
6. POL 151 (SR 640) POL 151 (SF 877)	27/38 28/38	71% 74%	27/38 28/38	71% 74%
7. PSY 251 (SR 173) PSY 251 (SR 175)	18/36 26/38	50% 68%	18/34 26/38	53% 68%
8. PSY 251 (SF 365) PSY 251 (SF 364)	16/37 20/37	43% 54%	16/35 20/34	46% 59%
9. SPA 151 (SR 191) SPA 151 (SR 190)	13/26 17/25	50% 68%	13/26 17/25	50% 68%
10. SPA 151 (SR 189) SPA 151 (SR 650)	14/27 16/26	52% 62%	14/26 16/25	54% 64%

S: # Passed with "C" or above

E: # Enrolled

N: No Show

Regular Type: Control Group

Bold Type: Experimental Group

**TABLE VII: RETENTION RATES
WINTER 97 vs WINTER 98**

COURSE	R/E		R/E - N	
	Ratio	Percentage	Ratio	Percentage
1. BUS 110 (SR 537) BUS 110 (SR 530)	16/24 24/38	67% 63%	16/22 24/33	73% 73%
2. BUS 110 (SF 325) BUS 110 (SF 324)	7/12 10/17	58% 59%	7/11 10/17	64% 59%
3. ENG 151 (SR 594) ENG 151 (SR 574)	24/27 17/28	89% 61%	24/27 17/28	89% 61%
4. ENG 152 (SF 837) ENG 152 (SF 836)	18/21 23/27	86% 85%	18/21 23/27	86% 85%
5. POL 151 (SF 375) POL 151 (SF 361)	31/37 34/37	84% 92%	31/37 34/37	84% 92%
6. POL 151 (SF 882) POL 151 (SF 877)	34/35 35/38	97% 92%	34/35 35/38	97% 92%
7. PSY 251 (SR 213) PSY 251 (SR 175)	25/36 26/38	69% 68%	25/35 26/38	71% 68%
8. PSY 251 (SF 380) PSY 251 (SF 364)	23/37 21/37	62% 57%	23/37 21/34	62% 62%
9. SPA 151 (SR 230) SPA 151 (SR 190)	21/27 17/25	78% 68%	21/27 17/25	78% 68%
10. SPA 151 (SR 720) SPA 151 (SR 650)	19/26 16/26	73% 62%	19/25 16/25	76% 64%

R: # Retained (C + D + F + AU + I)

E: # Enrolled

N: No Show

Black Type: Control Group (Winter 97)

Red Type: Experimental Group (Winter 98)

**TABLE VIII: SUCCESS RATES
WINTER 97 vs WINTER 98**

COURSE	S/E		S/E - N	
	Ratio	Percentage	Ratio	Percentage
1. BUØ 110 (ØR 537) BUS 110 (SR 530)	12/24 22/38	50% 58%	12/22 22/33	55% 67%
2. BUS 110 (SF 325) BUS 110 (SF 324)	5/12 7/17	42% 41%	5/11 7/17	45% 41%
3. ENG 151 (SR 594) ENG 151 (SR 574)	23/27 15/28	85% 54%	23/27 15/28	85% 54%
4. ENG 152 (SF 837) ENG 152 (SF 836)	18/21 23/27	86% 85%	18/21 23/27	86% 85%
5. POL 151 (SF 375) POL 151 (SF 361)	15/37 25/37	41% 68%	15/37 25/37	41% 68%
6. POL 151 (SF 882) POL 151 (SF 877)	26/35 28/38	74% 74%	26/35 28/38	74% 74%
7. PSY 251 (SR 213) PSY 251 (SR 175)	22/36 26/38	61% 68%	22/35 26/38	63% 68%
8. PSY 251 (SF 380) PSY 251 (SF 364)	16/37 20/37	43% 54%	16/37 20/34	43% 59%
9. SPA 151 (SR 230) SPA 151 (SR 190)	16/27 17/25	59% 68%	16/27 17/25	59% 68%
10. SPA 151 (SR 720) SPA 151 (SR 650)	18/26 16/26	69% 62%	18/25 16/25	72% 64%

S: # Passed with "C" or above
E: # Enrolled
N: No Show
Black Type: Control Group (Winter 97)
Red Type: Experimental Group (Winter 98)