

**THE IMPACT OF REMEDIAL ENGLISH COURSES ON STUDENT COLLEGE-
LEVEL COURSEWORK PERFORMANCE AND PERSISTENCE**

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Introduction

This study of remedial English course at West Chester University was undertaken at the request of the Developmental Education Task Force, which Dr. Skerl chaired and which had representatives from the English Department, the Mathematics Department, and developmental education support services. One of the charges was for the Task Force to review the structure and effectiveness of remedial English and Mathematics courses and to propose to the Provost alternative structures if warranted by the review.

West Chester University's policy indicates that, "Placement in the appropriate composition course is determined by the score on the SAT and/or by performance on a placement test administered by the Department of English." (p. 33, West Chester Undergraduate Catalog, 1999-2000). SAT Verbal (SAT-V) scores and an optional placement writing challenge exam are used to determine whether students must first be placed in a zero-level remedial composition course before being permitted to enroll in 100-level English courses, which are the college-level required courses. The cutoff score for remedial English placement was 450 SAT-V before the recentering, and 500 after it. Students must earn a grade of C- or better in order to pass the zero-level remedial courses before they are permitted to enroll in the 100-level courses. West Chester University requires all students to take two college-level composition courses as part of their general education requirements.

Although a very large percentage of entering freshmen at WCU are placed in these courses (about one-third in English and fourteen percent in Mathematics remedial programs,) there had been no comprehensive evaluation of the effectiveness of these courses since their inception over 20 years ago. Therefore, the Task Force asked Dr. Zhai from Office of Planning & Analysis to study the impact of remedial programs. Results and analyses about remedial Mathematics were presented at the 26th NEAIR conference. Since then we updated our initial studies of remedial English course. Results and analyses are presented here.

As pointed out by Weissman, Bulakowski and Jumisko (1997): "The purpose of remedial courses is to enable students to gain the skills necessary to complete college-level courses and academic programs successfully." Based on these guidelines, this study tried to examine the following issues: (1) To what extent are the remedial English courses effective in preparing students for their college-level required English courses? (2) To what extent do the remedial English courses contribute to students' academic success as shown by their retention and graduation rates?

Methodology

Data

Student course grades for the remedial (ENG 020) and two other required college-level English courses (ENG 120 & ENG 121), their SAT-V scores, admission type, enrollment status and graduation records were used in this study. Data were taken from the University's historical snapshots and the Student Flow Models maintained by the Office of Planning & Analysis. This study covers the period from Fall 1992 to Spring 2000.

Selection of the Comparison Group (Control Group)

One of the major challenges facing the evaluation of remedial course impact in this four-year public institution is the lack of student comparison groups due to the remedial course placement policy adopted by the university. For this study it is assumed that, in order for a remedial program to be judged effective, it ought to help some students succeed who otherwise would most likely fail their college-level coursework. It was also assumed that, if the English remedial program can help some under-prepared students to succeed, it would fulfill its function.

In order to ensure reasonably informative comparisons, the control or comparison group used for this study were those students who scored no more than 50 points higher than the SAT-V cutoff score for placement into the remedial program. The cutoff score for remedial English was 450 before the recentering of SAT in fall 1996 and 500 after the recentering. As a result, the placement score for the Control Group was SAT-V above the cutoff score, but below or equal to 500 (550 after the recentering).

Due to WCU's policy, an entering student with SAT-V below 450/500 may be placed out of remedial program if that student takes the English placement test and successfully passes it. A student may also be placed out of ENG 020 if that student has Advanced Placement credit or transferred credits from comparable English composition courses. In the forthcoming analysis, this group of students will be separated from the remedial and the comparison group.

Definition of Terms

Student Groups:

- **remedial group** - students who took at least one remedial English course during their matriculation in the University
- **placed-out group** - students with SAT-V below the cut-off score (450/500) who were placed out of the remedial program by taking a placement test given by the English Department
- **Control Group** - students whose SAT-V were high enough to place them out of the remedial program but lower than 500 (550 after the recentering)
- **college-ready** - students whose SAT-V scores were higher than 500/550
- **no-SAT-V** - students with no SAT-V (transfer and non-traditional students)

Admission Status:

West Chester University admits students in four categories: regular admission and three categories of special admissions for those students who do not meet the criteria for regular admission: Academic Development Program Act 101, Academic Development Program non-Act 101, and Special Admit Motivational. The minimum qualifications for each category are as follows:

- **Regular Admit:** Academic program continued into senior year; combined SAT of 1000; High School Rank 50%; and Honors or AP classes a plus
- **Academic Development Program Act 101 (ADP Act 101):** Verbal SAT 380; Math SAT 340; High School Rank 40%; and GPA 2.0
- **Academic Development Program Non-Act 101 (ADP Non-Act 101):** Similar as ADP Act-101, but without special financial assistance
- **Special Admit Motivational (Special Admit):** Verbal SAT 480; Math SAT 450; High School Rank 60%; and GPA 2.7

Outcome Measures

Three major outcome measures were employed to assess the impact of the remedial program. They are: (1) student performance in college-level English composition courses; (2) second-year retention rates and (3) six-year graduation and retention rates. Outcome measures were collected and compared between remedial students and students in the Control Group.

It is NOT the intention of this study to compare developmental students with other college-ready students. Information concerning other students was included in this study for reference only.

Statistics

Chi-square statistics were used to compare student course passing rates between remedial students and the Control Group. A grade of C- or better was considered a passing grade. One-way ANOVA was used to detect course performance differences on college-level English work. Due to the large sample size (4,388 records for ENG 020, 11,247 for ENG 120 and 14,305 for ENG 121), all statistical analyses yielded significant statistical results even when the magnitude of the difference was of little practical concern (for example a GPA of 2.69 vs. 2.83). As a result, statistical results were not reported. Instead, emphases were placed on the practical application of the findings when pertinent. Detailed statistical results are available upon request.

Results and Analyses**Course-Takers**

From fall 1992 to spring 2000, there were 4,060 students who took ENG 020 and 328 of them had to repeat the course at least once. The majority of ENG 020 course takers were first-time, full-time degree-seeking students. Taking the Fall 1999's ENG 020 class for example: There were 564 students enrolled in the course. About 98% of them were first-time, degree seeking students. Of the 564 students, 59% were Regular

Admits, 5%, ADP-Act 101, 7%, ADP-Non Act, and 27%, Special Admits. Table 1 tabulates the class profile for Fall 1999.

Table 1. Summaries of ENG 020 Class Profile for Fall 1999

ENG 020 Fall 1999 Class				995 Freshman Cohort	
Admission Status	N	% within the Class	SAT-V	# by Adm Type	% taking 020
ADP	29	5.14	408	48	60.42
ADP - Non Act 101	43	7.62	417	77	55.84
Regular Admit	334	59.22	469	1,374	24.31
Special Admission	150	26.60	448	201	74.63
Regular Admit (Transfer)	3	0.53			
Admission Info Missing	5	0.89			
	564			1,700	

Remedial Student Course-Taking Patterns

Student course-taking pattern tracking showed that the majority of the students took ENG 020 in fall. If he/she passed the course by earning a grade of C- or better, he/she would proceed to take ENG 120 in spring and ENG 121 the following fall. If a student failed to pass ENG 020, he/she would usually repeat it in spring and then moved on to take ENG 120 the following fall, if he/she passed ENG 020. Table 2 provides a brief summary of the course passing status in the past 8 years. The total number in Table 2 is not unduplicated headcount. If a student took ENG 020 twice, once with a grade below C- and once with a grade C- or better, that student will be counted once in the Pass and once in the Fail to Pass. As shown in Table 2, the success rate for ENG 020 was about 87%.

Table 2. Summaries of ENG 020 Student Course Grade Distribution

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Pass	3818	87.0	87.0	87.0
Fail to Pass	450	10.3	10.3	97.3
Withdraw	120	2.7	2.7	100.0
Total	4388	100.0	100.0	
Total	4388	100.0		

After passing ENG 020, about 80% (3235/4060) of the remediated students proceed to take ENG 120.

Remediated Student Course Performance in ENG 120

In order to see how remedial English helped preparing the students for their college-level course work, we first took a look at student course performance in ENG 120. Table 3 presents student course completion rates by the five student groups.

Table 3. Summaries of ENG 120 Student Grade Distribution by Student Comparison Groups

Student Comparison Groups		ENG 120 Course Passing Grade			Total
		Pass (C- or Better)	Fail to Pass (Below C-)	Withdraw	
Remediated Students	Count	3235	204	128	3567
	% within Student Comparison Groups	90.7%	5.7%	3.6%	100.0%
PlacedOut - No Remedial, SATV below 450/500 (Placed-out)	Count	1271	92	37	1400
	% within Student Comparison Groups	90.8%	6.6%	2.6%	100.0%
Control - No Remedial, SATV >=450/500 and <500/550	Count	2756	176	94	3026
	% within Student Comparison Groups	91.1%	5.8%	3.1%	100.0%
College-Ready, SATV >500/550	Count	1743	124	65	1932
	% within Student Comparison Groups	90.2%	6.4%	3.4%	100.0%
No SATV	Count	1028	144	150	1322
	% within Student Comparison Groups	77.8%	10.9%	11.3%	100.0%
Total	Count	10033	740	474	11247
	% within Student Comparison Groups	89.2%	6.6%	4.2%	100.0%

According to Table 3, 90.7% of remediated students who took ENG 120 successfully passed the course, compared with 90.8% in the placed-out group, 91.1% in the Control Group, 90.2% in the college-ready group, and 77.8% in the no-SAT-V group. A study of the means of student course grades for the various groups in Table 4 shows that not only the passing rates between the remediated and the control groups were very comparable, the means were also very close. The mean course grade was 2.70 for the remediated students, 2.64 for the placed-out group, 2.74 for the Control Group, 2.863 for the college-ready group, and 2.73 for the no-SAT-V group.

Table 4. Comparisons of Student Course Performance in Eng 120

ENG 120 Course Grade			
Student Comparison Groups	Mean	N	Std. Deviation
Remediated Students	2.6969	3439	.7968
PlacedOut - No Remedial, SATV below 450/500 (Placed-out)	2.6390	1363	.8390
Control - No Remedial, SATV >=450/500 and <500/550	2.7474	2932	.8427
College-Ready, SATV >500/550	2.8647	1867	.8945
No SATV	2.7311	1172	1.1466
Total	2.7361	10773	.8780

Remediated Student Course Performance in ENG 121

An examination of remediated students’ performance in ENG 121 revealed similar results as found in ENG 120. Tables 5 & 6 exhibits how remediated students performed in ENG 121 compared with the Control Group.

According to Table 5, the passing rates for the remediated and the Control Group were very close: 82.3% for the former and 84.2 for the latter. In general about 81.3% of students who took ENG 121 pass the course. Results in Table 6 reveal that even though remediated students tend to have a similar passing rate as their non-remediated peers, their individual grades tend to be lower than those earned by their peers. For example, the mean grade for the remediated group was 2.54, as shown in Table 6, while the mean grades for the control and college-ready groups were 2.66 and 2.81 respectively.

Table 5. Summaries of ENG 121 Student Course Grade Distribution by Student Comparison Groups

Student Comparison Groups		ENG 121 Course Passing Grade			Total
		Pass (C- or Better)	Fail to Pass (Below C-)	Withdraw	
Remediated Students	Count	2405	324	195	2924
	% within Student Comparison Groups	82.3%	11.1%	6.7%	100.0%
PlacedOut - No Remedial, SATV below 450/500 (Placed-out)	Count	1406	238	92	1736
	% within Student Comparison Groups	81.0%	13.7%	5.3%	100.0%
Control - No Remedial, SATV >=450/500 and <500/550	Count	1846	228	118	2192
	% within Student Comparison Groups	84.2%	10.4%	5.4%	100.0%
College-Ready, SATV >500/550	Count	1751	222	175	2148
	% within Student Comparison Groups	81.5%	10.3%	8.1%	100.0%
No SATV	Count	4220	543	542	5305
	% within Student Comparison Groups	79.5%	10.2%	10.2%	100.0%
Total	Count	11628	1555	1122	14305
	% within Student Comparison Groups	81.3%	10.9%	7.8%	100.0%

Table 6. Comparisons of Student Course Performance in Eng 121

ENG 121 Course Grade			
Student Comparison Groups	Mean	N	Std. Deviation
Remediated Students	2.5418	2729	.9945
PlacedOut - No Remedial, SATV below 450/500 (Placed-out)	2.4322	1644	1.0181
Control - No Remedial, SATV >=450/500 and <500/550	2.6558	2074	1.0255
College-Ready, SATV >500/550	2.8083	1973	1.1010
No SATV	2.7450	4763	1.0911
Total	2.6593	13183	1.0611

Results from this analysis confirm the findings by Weissman, Silk and Bulakowski (1997), who found that although the average GPA for the remediated students was not as high as that of college-ready students, remediated students performed at above a C average in their college-level courses. For our study, we found that our remediated students averaged a B- in ENG 120, just as the rest of their peers. Remediated students tend to earn C+ in ENG 121 compared with an average of B- for the control and the college-ready groups. Since the University allows students with high SAT-V to skip ENG 120 by taking ENG 121 directly, we saw more college-ready students in the analysis of ENG 121 than in ENG 120.

Remediated Student Second-Year Retention Rates

The second measure used to assess the impact of remedial English course was student second-year retention rates. In order to get more accurate assessment of the impact that the remedial English program had on student persistence and graduation rates, only first-time, full-time degree-seeking remedial student retention and graduation rates were used. As a result, the following comparisons and analyses will be based on cohort data, instead of student course class.

Table 7 summarizes the percentage of students taking remedial English. Table 8 presents the second-year retention rates when the same cohort were regrouped according to if they had taken remedial English or not.

Table 7. Summaries of First-time, Full-time, Degree-seeking Students Taking Remedial English Fall 1992 – 1999

Cohort Year	1st Fall Enrolled				
	Taking Remedial ENG		NonRemedial		Total Cohort
	N	%	N	%	
1992	388	28.53	972	71.47	1,360
1993	422	30.89	944	69.11	1,366
1994	503	37.09	853	62.91	1,356
1995	448	32.58	927	67.42	1,375
1996	507	35.04	940	64.96	1,447
1997	536	34.12	1,035	65.88	1,571
1998	507	31.30	1,113	68.70	1,620
1999	544	32.00	1,156	68.00	1,700
Multi-year Average		32.68		67.32	

According to Table 7, in fall 1992, there were 1,360 students enrolled as first-time, full-time, degree-seeking students. Of them, 388 (28.53%) took ENG 020 that fall. Table 8 revealed that the second-year retention rates for the 1992 cohort were: 82% for non-remedial students and 89.89% for the remediated students. For the 1993 cohort, the rates were 80% for non-remedial course takers and 91% for remediated students. Generally speaking, remediated students seem to have higher second-year retention rate than the rest. One factor we will need to consider is that in WCU, ADP students are committed to enroll for two years.

Table 8. Comparisons of Second-Year Retention Rates Between Remediated and Non-Remediated First-time, Full-time, Degree-seeking Students

Cohort	2nd Fall Retention Rate					
	Remedial		NonRemedial		Total	
	N	% Retained	N	% Retained	N	% Retained
1992	360	92.78	770	79.22	1130	83.09
1993	388	91.94	748	79.24	1136	83.16
1994	411	81.71	671	78.66	1082	79.79
1995	364	81.25	763	82.31	1127	81.96
1996	400	78.90	770	81.91	1170	80.86
1997	446	83.21	853	82.42	1299	82.69
1998	417	82.25	935	84.01	1352	83.46
1999	468	86.03	948	82.01	1416	83.29
Multi-year Average		84.76		81.22		

Table 9 gives the second-year student retention rates by the University's admission types. According to Table 9, both ADP and Special Admit students have comparable second-year retention rates as the Regular Admit. As a result, the higher second-year retention rate for the remediated students as shown in Table 8 might be due to those students' enrollment commitment as well. More evidence is needed to assess remedial English program's impact on the retention issue.

Table 9. Second-Year Retention Rates For First-time, Full-time, Degree-seeking Student Cohorts

Fall Cohort	Regular Admit	ADP-ACT 101	ADP-Non ACT 101	Special Admit
1992	83.5%	72.2%	82.9%	85.3%
1993	82.9%	76.8%	90.9%	85.6%
1994	78.9%	83.6%	87.9%	82.4%
1995	82.4%	77.2%	80.6%	80.7%
1996	80.5%	81.8%	89.1%	80.1%
1997	82.5%	90.7%	83.1%	81.7%
1998	82.9%	89.7%	89.5%	83.7%
1999	82.4%	83.3%	94.8%	85.1%
Multi-Year Average	82.0%	81.9%	87.4%	83.1%

Remediated Student Six-Year Graduation and Retention Rates

The third measure used to assess the remedial English program's impact is the six-year retention and graduation rate. Table 10 present comparisons of the six-year retention rates for students with or without taking remedial coursework. The six-year retention and graduation rates were based on three cohorts from 1992 to 1994.

Table 10. Six-Year Graduation and Retention Rates for Fall 1992 - 94 First-Time, Full-Time, Degree-Seeking Student Cohorts as of Fall 2000

Cohort Year	6-year Retention & Graduation Rates					
	Remediated Students			No ENG 020		
	Graduated	Enrl (7thFall)	Grad+Enrl	Graduated	Enrl (7thFall)	Grad+Enrl
1992	245	16	261	495	14	509
1993	230	16	246	488	26	514
1994	220	8	228	398	22	420
	%	%	Retention Rate	%	%	Retention Rate
1992	63.1	4.1	67.3	50.9	1.4	52.4
1993	54.5	3.8	58.3	51.7	2.8	54.4
1994	43.7	1.6	45.3	46.7	2.6	49.2
Average	53.8	3.2	57.0	49.8	2.3	52.0

Table 10 shows that the six-year retention and graduation rate for remediated students was 57%, about 5% higher than those who didn't take ENG 020.

Six-year retention rates of Remediated students were also compared with those of other student groups and the results were tabulated in Table 11. Those rates were also based on the averages of Fall 1992 - 94 cohorts. For example, the six-year retention and graduation rate was 56.7% for the Regular Admit, 55.7% for the Special Admit, 29.8% for ADP Act 101, and 48.3% for ADP Non-Act 101. The general six-year retention rate was 54.9% for the University.

Table 11. Comparisons of Six-Year Graduation and Retention Rates Between Remediated Students and Other Student Groups

Admission Type	Retention	Graduation	Total Ret. & Grad.
Regular Admit	2.4	54.3	56.7
ADP-Act 101	5.2	24.6	29.8
ADP-Non Act 101	1.8	46.5	48.3
Special Admit	2.1	53.6	55.7
Remediated	3.2	53.8	57.0
Non-Remedial	2.3	49.8	52.0
University Total	2.5	52.4	54.9
National Average ¹ (CSRDE, 2000)			
Moderately selective ²		44.2%	
Selective		53.6%	

¹ Institution size 5,000 - 17,900

² Moderately Selective SAT's 900 - 1044; Selective SAT's 1045 - 1100

Table 11 also gives a national average student retention rate as reported by the Consortium for Student Retention Data Exchange (CSRDE), in May 2000. CSRDE reported that the national averages for six-year retention and graduation rates were 53.6% for selective institutions and 44.2% for moderately selective institutions. WCU is one of the “Moderately Selective Institutions” based on CSRDE’s criteria. According to CSRDE, not only West Chester University’s general six-year retention and graduation rates were above the national norm (54.9% vs. 44.2%), its remediated first-time degree-seeking students’ six-year retention rate was even higher than the University’s average (57% vs. 54.9%). The retention rate index for Selective Institutions was 53.6%, according to CSRDE. West Chester University’s 6-year student retention and graduation rates was 54.9%, slightly higher than 53.6%.

Conclusions & Recommendations

Based on the findings from this study, we concluded:

1. ENG 020 prepares students effectively for ENG 120 and 121.
2. ENG 020 supports students’ overall academic success, as measured by retention and graduation.
3. The academic success of ENG 020 students, and their strong showing in subsequent writing courses, suggests that the placement procedure is appropriate.

Our findings and conclusions led to the following recommendations pertaining to the English remedial course:

1. Given the success of English 020, a major overhaul is not necessary; however, Task Force members believe that the program can be improved and updated according to current best practices. The Task Force recommends that the English Department consider the following alternative structures for its developmental composition program: smaller classes; two-semester courses; an expanded Writing Center which works more closely with instructors and students in ENG 020; studio courses; more frequent class meetings.
2. A special information meeting should be scheduled as part of summer Orientation for students placed in zero-level courses and their parents. English Department representatives would have the opportunity to explain to students and their parents: the WCU English placement policy and procedure, the educational rationale, and—most important—the benefits of placement in ENG 020.
3. Communication with our feeder high schools about our academic standards and placement criteria for English should be improved via information on the University website, distribution of a brochure/information sheet to teachers and school officials, and meetings between Admissions staff and school officials.

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