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ScienceDirect

Procedia - Social and Behavioral Sciences 152 (2014) 1178 – 1188

Procedia
Social and Behavioral Sciences

ERPA 2014

The impact of remedial English on the improvement of English proficiency: The case of the United States international university- Africa

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Abstract

This study probes the effect of a remedial English course in raising the level of English proficiency of freshmen at the United States International University. Using a quasi-experimental design, it tracks 46 underprepared students, admitted to the USIU in the Summer Semester of 2011 who failed to make the threshold for university course in a placement test (pretest) and went through a remedial English course for 14 weeks. On completion of the course, they were given the same placement test (posttest). Comparisons between the scores in the pretest and those on the post-test are used to determine the significance of the change the treatment gives the students. Further comparisons are made between the scores in composition and in the grammar sections of the pretest and posttest and variation between the scores of students. T-tests establish a significant and positive difference at p value of $p=0.00$ between overall performance between the pretest and posttest and between grammar and composition aspects of the tests. The conclusion is therefore that the remedial class raises the English proficiency of the students.

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Peer-review under responsibility of the Organizing Committee of the ERPA Congress 2014.

Keywords: remediation; language support unit; underprepared students.

1. Introduction

A remedial program as observed by Weissman Bulakowski & J umisko (1997) is designed “...to enable students to gain the skills necessary to complete college-level courses and academic programs successfully.” It is based on

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the recognition that some students come to university with skills not suited for competent participation in the programs on offer. Remediation is often required in English and Mathematics which are regarded by many academics as gatekeeper courses because “students who are successful in disciplines such as history, geography, arts and languages are also successful in the English language and that those successful in Science, logic and engineering are successful in Mathematics”. Goff-Kfourri & Ramzi (2008:86) While educationists are in agreement about the value of remediation in uplifting the skills of underprepared university entrants before they get into courses meant to meet university requirements for graduation, parents see it as paying for the same education twice and are not entirely convinced about the distinction between the remedial courses and the mainstream ones for a start, they also find the value of these programs in preparing students for future academic success indeterminate. Students, on their part, see remedial programs as duplicative and lengthening their college years unnecessarily. For purposes of admission, the presence of remedial course requirements is a key reason why students choose some universities over others. Although universities that pursue student placement into remedial courses persist and see good value in them, arguing that they help the underprepared students to acquire skills they need to excel in college, this remains a source of disenchantment and controversy among faculty, policy makers, students and a financial burden on parents.

2. Remediation

While Tella, Indoshi & Othuon (2011) report a trend of falling standards in English proficiency in secondary schools in Kenya; they do not mention the need for remediation. Anecdotal evidence however suggests that the population of pre-university students seeking remedial education or bridging courses has gone up tremendously particularly for those seeking admission into parallel degree programs.

Hoyt & Sorensen (1999) cite widespread need for remedial education across the United States of America. Citing Kirst (1998) and Sandham (1998), Hoyt & Sorensen (1999) report that 81 per cent of public four-year institutions offered remedial education in 1995 and that in Georgia, 30 per cent of graduating students with college preparatory diplomas that year had remedial education in colleges. In Maryland, Malooney (1996) reports that 46 per cent of students sought college remediation.

There is a general agreement among educationists and researchers, however, that students who do not meet admission requirements of universities require remedial education.

The need for remediation has been blamed on a number of factors associated with the training of high school graduates. It is feared that high school graduates neither understand nor undertake the right preparation for college. It is also believed that, since in many places high school and universities do not have a continuous or progressive curriculum, high school graduation standards do not include competencies needed in college. Hoyt & Sorensen (1999) establish that a student’s high school preparation is predictive of the need they will have for remedial education in college or university. In what Ponessa (1996) calls the “chain of blame”, the responsibility for low proficiency has been passed by the universities to high schools, the high schools to the middle schools and the middle schools to the elementary schools. According to Richey, O’Shea, & Pierce (1997) a commission studying the preparation of high school students in Ohio pointed to the inadequacy of the high school curriculum in preparing students for work at the college level. Moreover, there is concern in the United States about the rigor of the writing courses in high school. Instructors have reported very low standards where “... our basic is kind of like remedial, and our so-called honors is more like college-prep bordering on basic” (Ponessa, 1996: 32). The instructors also report that if they were to observe the rules strictly, a good proportion of graduates in the honors class would actually fail. Other studies like that by Bamberg (1978) have reported that the literature and creative writing courses have failed to prepare students effectively for college writing.

According to Hoyt & Sorensen (1999), this concern with rigor and quality in the educational system has led states and university authorities to raise standards for high school graduation, increase admission requirements at senior colleges and universities, structure open admission programs, and use testing and evaluation to assess educational outcomes.

Other interventions to improve the standards have sought to forge collaboration between college and high school instructors. Richey, O’Shea, & Pierce (1997) reports the development of a collaborative portfolio program by the Early English Composition Assessment Program in Ohio where high school students’ essays are annually graded by high school and college English instructors with feedback given to students and their schools.

The philosophy driving the remediation programs, and also upon which the USIU based its pre-university program, is that the courses help underprepared students to acquire the critical skills required for them to excel in university. Apart from this, the remedial program also offers students who would have been locked out by university admission regulations a second chance.

Remedial courses provide institutions with a mechanism to separate weaker students from stronger ones and place them into less costly courses. This way, “these institutions protect institutional selectivity, regulate entry to more expensive upper-level courses, and maintain the research functions of the university.” (Bettinger& Long 2008)

Bettinger& Long (2008) further observe that, because remediation groups together students with similar needs, it is similar to “tracking in primary and secondary schools, which could enable instructors to better tailor their teaching to the needs of students and provide other kinds of support, such as tutoring” (3). However, they concede that such grouping of lower-ability students in courses may have negative peer effects. This is because, as observed by Sacerdote (2001), Hoxby (2000), and Zimmerman (2003), students who work with peers who are higher achievers than themselves tend to improve better.

Remedial programs also generate enrolment for English and Math units for university departments that offer these courses - a phenomenon that would not exist without remediation.

Allison (1992) prefers a terminological change from remedial English to English enhancement because, in her opinion, enhancement portends a more satisfying account of the work of English language teaching in universities and colleges. Some of her reasons for this preference are that:

- (a) The term remedial has ingrained in it a belief that remedial courses should “ensure minimal curricular survival for a minority of linguistically disadvantaged or less able students, who encounter serious and persistent problems of a kind that normal students do not experience, or do not need assistance with”(16)
- (b) There are dismissive opinions expressed about the academic and professional standards of teachers of remedial courses who in reality however do a difficult job with slow learners.
- (c) (c)All the views about students, the remedial programs, and teachers reflect on the units (or departments) associated with ESL work which has remained peripheral in universities. (Allison, 1992)

Remedial teaching, however useful we may think it is, is thought not to be the critical mandate of the universities and therefore remain a peripheral aspect of their core business. Enhancement, to Allison (1992), would bring remediation into the core business of the university.

Even though remediation helps under-prepared students to gain the skills necessary to excel in college, a large number of reasons are stacked against it. Remediation has a high cost which parents, guardians or sponsors are not convinced they need to shoulder. Bettinger& Long (2008:2), citing Ohio Board of Regents (2001), report that in Ohio, “public colleges spent approximately \$ 15 million teaching 260,000 credit hours of high school level courses to freshmen in 2000; another \$ 8.4 million also spent on older students.” Other estimates of the cost of remedial education by Sandham (1998), Manzo (1996), Ponessa (1996) and Ignash (1997) quote 10 million dollars for California, 155 million dollars for Texas, 32 million dollars for Louisiana, 50 million, 50 million for New Jersey, and 18.7 million dollars for Oklahoma.

No costing of the Pre-University program at the USIU was available for this research but it is certain that the costs of remediation are extra to what students pay for the regular degree courses.

There may also be a spiral effect felt in high schools as Bettinger& Long (2008:2) state that “Critics question whether the courses remove the incentive for students to adequately prepare while in high school.” Tella et al (2011) trace poor writing skills among entrants to university to learning in earlier school, primary and secondary. Measures to correct the instructional weaknesses throughout the system may be deemed unnecessary if remediation at the university fixes it. Remediation, as it offers opportunity to redeem the training in language, may reinforce the inadequate preparation at these formative stages.

Bettinger& Long (2008) also observe that remediation may be harmful because it increases the number of requirements and lengthens the time it takes to graduate which in aggregate may lower the likelihood of degree completion.

Although this study aims at establishing the effect of a remedial course on the proficiency of freshmen at the USIU, it should be noted that many institutions that offer remedial courses have not been able to establish the effects of such programs on the performance in college. The deeper question about how remediation affects the educational

progress and completion of candidates placed on the programs remains difficult to answer. Many institutions also lack exit standards upon which remedial courses would be evaluated and do not also perform systematic evaluations of these programs. (Crowe 1998; Weissman, Bulakowski, & Jumisko 1997). The United States International University has not attempted an evaluation or assessment of the remedial program and therefore does not have an impression about its effects on the subsequent performance of students who undergo it in a holistic sense.

2.1. Remediation at the USIU

Remedial classes at the United States International University began in the Fall quarter of 1990 with the introduction of the Pre-University program which ran bridging courses in English, Mathematics, and Study Skills to the students who did not meet the requirements for direct university admission. This group included the first crop of the 8-4-4 graduates and the last groups of the A level class. The Kenya Certificate of Secondary Examinations (KCSE) had just released the results for the first graduates of the new 8-4-4 curriculum in 1989 due for admission into the country's universities in 1990. These results raised widespread concerns because they were particularly skewed towards the lower end of the scale in terms of the total average grade. One of the concerns was the yardstick to use for university admission. Other concerns were that, with these poor results and because the 8-4-4 students had lost two years of transition to university, they did not have skills that would ensure their success at their undergraduate studies. With the phasing out of the A level class, the 8-4-4 students would no longer have the high school training at which it was thought students made the transition from secondary to university in terms of study and writing skills. Although these fears were only anticipatory at the time, they confirm the impressions of Greene and Foster (2003) who observe that many recent high school graduates entering college each year were unprepared academically for college-level academic engagement. Trounson (2002), for example, reports that in the fall of 2001, the California State University expelled 2,200 students, nearly 7 per cent of the freshman class, because of lack of mastery of basic Math and English skills. Public universities, in Kenya, wary of the competencies of these KCSE graduates, also started courses in Communication or Study Skills to bridge the competencies of this crop of students.

That year, universities had a double intake which comprised the 8:4:4 graduates and the final group of A level graduates. While the public universities pegged their entry requirements at grade C in the cluster system of a minimum of 8 subjects, the USIU admitted KCSE applicants with the average grade of C- only.

The Pre-University program was therefore introduced to prepare students for admission into the regular USIU undergraduate program although it specified that there was no guarantee of admission to the university's undergraduate program merely because of having gone through the pre-university program. At admission, the university also got applications from other candidates from outside the program. It meant that only superior performances from pre-university graduates would ensure their admission. This is why the university strung eligibility for admission at a minimum of an accumulated GPA of 2.70. Among the admissions to this program, the university reserved 20 per cent of places for a group it called "exceptional cases". These were applicants who had documentation of circumstantial evidence in respect of sickness, exam time conditions, and change of family conditions such as death or financial difficulties that would affect performance in exams. In general terms, the pre-university program was an instantiation of the university's commitment to giving students a second chance to get a university education. This way, it offered admission to many underprepared students who had not met admission requirements directly; students from countries that were experiencing civil wars; students who had refugee status; staff of the university who desired to advance their education but who had not met its requirements expressly, or students who did not have opportunities to upgrade their high school qualifications due to the nature of curricula in Africa.

In 2003, the university however terminated the Pre-University program and also moved away from the quarter system to the semester system and, with it, the remedial burden of the pre-university program was incorporated into the degree programs with the introduction of remedial courses in the university (ENG 0999, IST 0999, and MTH 1105).

The university now runs placement tests in English, Mathematics and Information Technology during the orientation week. Students who do not make the mark of 60% in the English Placement examination are registered into the remedial courses and subjected to remedial intervention for 14 weeks after which they are admitted into the

regular university programs if they pass with a credit. Those who do not get a credit may repeat the course and at the same time they undertake instructional intervention at the Language Support Unit (described below). When they do not pass at the second attempt, they are deregistered.

Alongside the remedial programs described above, the university developed a remedial unit to which faculty would refer students with writing difficulties for short term remedial intervention by English faculty on a consultation basis. The unit began as a language lab in 1990 but was later restructured as a Language Support Unit headed by a Coordinator with a graduate assistant.

2.2 The remedial class

Students who end up in the remedial classes are not a happy lot because of a variety of reasons. The remedial courses are credit courses which do not count towards the requirements for graduation. For this reason, students in the remedial class feel they are not working towards their degrees. Many students in the remedial class also struggle with the thought that they are perceived as stupid; they may not want their friends to know that they are in that class and may for this reason not adjust themselves to achieve the learning outcomes the remedial courses are designed to achieve. Many students in the remedial class also feel that they should not be there. Some of them may point to the fact that they have passed English in their earlier schooling or have lived in domains where English was the predominant language, or simply, that in their opinion, they speak English too well to fail a placement test in it.

According to Jennlee³, there are three types of students in the remedial class: the very needy student, the middle of the road student, and those who think they do not need any remedial classes.^{†‡} The instructor of a remedial class therefore requires a great deal of patience and determination because these students do not have the skills they need to participate effectively in their university programs and the fact that the materials the instructor will use may be drawn from programs for children. The fact that many of the students may not accept being in the class means that their attitudes, over and above their competencies, need to be addressed. They may also feel intimidated from the outset.

3. Methodology

This study adopted a quasi-experimental design in which a sample of 46 freshmen who failed to make the cutoff mark in the English placement test administered in the Summer Semester of 2010 was drawn. This group registered for the remedial ENG 0999 course that semester and at the end of instruction in the course, the placement test was administered to them again. The placement test is the pre-test in this quasi-experimental study while the course is the treatment and the re-administered placement test the posttest. The means of the two sets of scores on the test were compared and a t-test administered to establish the significance of the differences in the two scores

The analysis of the data was done using SPSS program and the analysis was focused on the following three main cases:

- a. Comparison of means of the scores in the pretest and posttest
- b. Establishing a correlation between the scores in the grammar and composition tasks within the pretest and the posttest
- c. Establishing a correlation and variation between the scores in the grammar and composition tasks between the pretest and the posttest

³http://hubpages.com/hub/Teaching_in_Remedial_Classroom 72 extracted 9/10/2010

4. Data presentation and analysis

The data analysis meant to explain the changes that occurred between the time of taking the placement test and the posttest. It was also intended to explain the relationship between the proficiency in the grammar and composition at pretest and the change that that relationship undergoes after the remedial course. The changes are established by a t-test (two-tailed) at 95% confidence levels.

4.1. Pretest vs. posttest

Comparison of means of the scores in the pretest and posttest show that performance improved in the posttest. In Figure 1 below, the mean of scores in the pretest is 54 (Total 1) while the mean of scores in the posttest is 61 (Total 2).

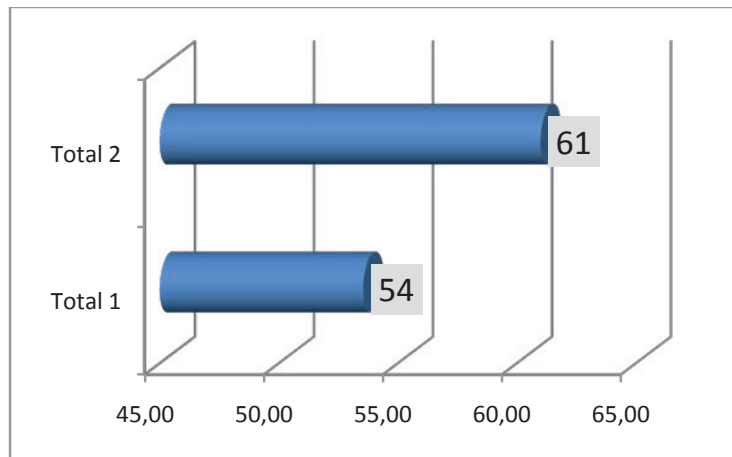


Figure 1. Comparison of Total Scores in Pretest and Posttest

Comparison of the performance on the composition task between the pretest and the post test also shows an improvement (see figure 2 below). The mean of the scores in the composition task in the pretest was 13 while that at the posttest was 15. The maximum possible score in this task was 20.

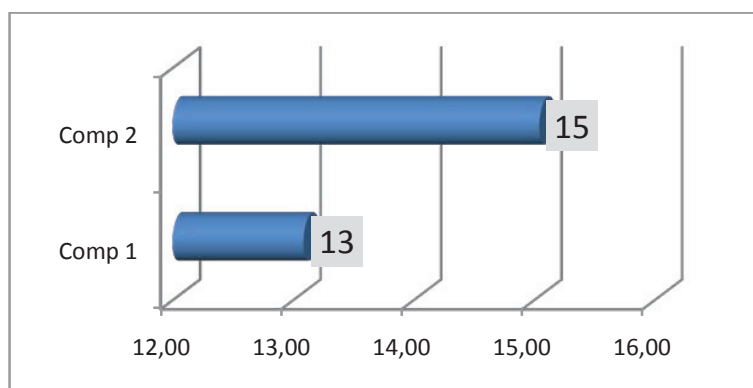


Figure 2. Comparison of performance in composition in pretest and posttest

Comparison of the performance in the grammar task between the pretest and the posttest indicates an improvement according to figure 3. Out of a total possible score of 80, the mean of the scores at the pretest was 40 while that at the posttest was 46.

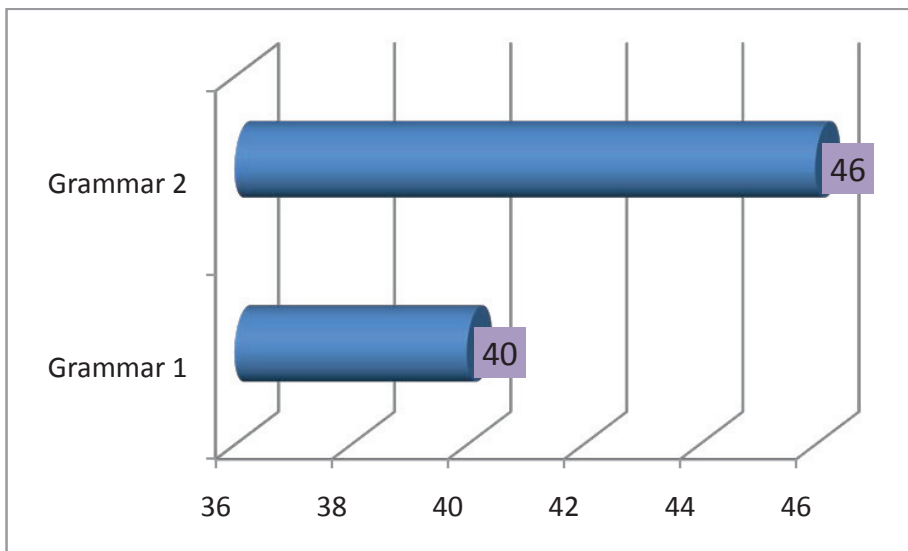


Figure 3. Comparison of performance in grammar in pretest and posttest

4.2. Correlation

The study sought to determine the correlation between scores in the composition and grammar tasks at the pretest and posttest on the one hand, and composition and grammar at the posttest on the other. Tables 1 and 2 below report the Karl Pearson correlation coefficient of composition and grammar at the pretest (Grammar 1 and composition 1) and at the posttest (Grammar 2 and Composition 2).

At the pretest, the Pearson correlation coefficient is 0.229 which establishes a correlation of about 23%. This is a very small correlation but which means that improvement in grammar would benefit the students in writing composition.

Table 1. Correlation between pretest Composition and Grammar

Comp1	Pearson Correlation	Comp 1	Grammar 1
	Sig. (2-Tailed)	1	.229
	N	46	.126
Grammar 1	Pearson Correlation	.229	1
	Sig. (2-Tailed)	.126	
	N	46	46

At the posttest, the Pearson coefficient is 0.506 which establishes a correlation of 50.6% which is a big correlation. This correlation is significant at the 0.01 level (2-tailed). This means that the instruction in the remedial

class has fostered a strong correlation between the two tasks and knowledge in grammar has enabled an improvement in the performance in composition.

Table 2. Correlation between posttest Composition and Grammar

		Grammar2	Comp2
Grammar2	Pearson Correlation	1	.506
	Sig. (2Tailed)		.000
	N	46	46
Comp2	Pearson Correlation	.506	1
	Sig. (2-Tailed)	.000	
	N	46	46

Further correlations were established between performance in the composition task at the pretest and the posttest and between the grammar task at the pretest and posttest. As shown on Table 3 below, the Pearson correlation coefficient for composition task at the pretest and the posttest is 0.539 or about 54%. This is a stronger correlation than what is shown in the grammar task which is 0.422 or about 42%.

Table 3. Correlation between Grammar and composition at pretest and posttest

		N	Correlation	Sig.
Pair 1	Comp 2 & Comp 1	46	.539	.000
Pair 2	Grammar2 & Grammar 1	46	.422	.003
Pair 3	Total 2 & Total 1	46	.520	.000

4.3. Variation

In this section, we explore the variation in performance between students within tasks of composition and grammar at the pretest and at the posttest. This is done in order to establish the variation in the proficiencies of the students at arrival and also to determine if the instruction in the remedial course, apart from raising proficiency, also reduces the variation between the students. At this point in the analysis, all scores were converted into percentages for ease of comparison.

4.4. Grammar

In the grammar task, the pretest mean score was $50.571 \cong 51$ marks while the post-test mean score was $57.446 \cong 57$ marks. Each had a standard deviation of 8.1040 and 9.2720 respectively. Thus, the variation was $CV_1 = 16.02499456\%$ approximately 16.025% while $CV_2 = 16.14037531$ approximately 16.140%. This shows that there was a tiny increase in the posttest of about 0.115.

4.4.1. Difference, d

The difference of the means, d , of the pretest and posttest was -6.8750 with a standard error, $SE=1.3851$. This means, $t = d/SE$, which gives the t value of $t = -6.8750/1.3851 \cong -4.964$.

Estimation for population difference, D

Thus, the population difference of means, D , range from -4.0853 to -9.6647 that means that D ranges from -4.0853 to -9.6647.

Note that the correlation of grammar 1 and grammar 2, $r_{xy} = 0.422$ was a little below average, but was highly significant, because significance was .003, which was lower than 0.01 but, not lower than 0.001, for very highly

significant cases. In this case, the significance of this is the importance attached on a rare event occurring or not. Such events occur at the tails of a normal curve.

4.5. Hypothesis testing

Let the null hypothesis be $H_0: D = 0$, where D is the difference in the respective populations means. Hence, the alternative hypothesis is $H_a: D \neq 0$.

Using the SPSS program it was found that the difference in performance in grammar 1 & 2 had a double tail significance of 0.0000 (i.e. $p=0.000$). But, the H_0 is rejected when significant; S is less than 0.005 at the 5% level of confidence; 0.01 at 1% level and 0.001 at 0.01% level. Hence, H_0 is rejected at 0.01% level making the difference to be very highly significant.

4.6. Composition

Variation in performance

Similarly with the compositions,

$$CV1 = 20.61862917\% \cong 20.62\%$$

$$CV2 = 12.68689259\% \cong 12.69\%$$

Performance in the pretest was more varied than in the post-test. This may have been attributed to the different backgrounds that the students graduated from. But it seems that with time, some bridging-up of the difference was achieved and it reduced the variability to 12.69% from the earlier 20.62%, a difference of about 7.93%.

4.7. Correlation and the difference in the means

The correlation between the pretest and post-test was 0.539 which was higher than the grammar case. There is a stronger correlation between the composition task than grammar. But both were equally highly significant (i.e. 0.003 and 0.009).

The difference in performance was -9.7826, with $SE = 1.7093$, giving a $t = -5.723$.

The significance was $S = 0.0000$, meaning that this difference was very highly significant.

5. Discussion

This paper has established that the remedial course provided to underprepared students is useful and that remediation uplifts the proficiencies of students referred for remediation, it must be appreciated that sustaining proficiency in this context is a continual process where the two regular English courses and the communication course: ENG 1106, ENG 2206, and COM 1500, are important but not sufficient. Midwifing proficiency needs to continue beyond these courses. Students' majors must make strong demands on the outperformance of English proficiency by outlining specific standards for students' writing. Writing Across the Curriculum needs to be ensured so that students can regard observing the rules of the language as all-encompassing beyond the language courses. The USIU curriculum designates some courses in the majors as writing intensive. Such courses must entrench the skills that remediation and early language instruction provides. An assessment of the literacy outcome at the USIU in the 2007/2008 cycle had revealed that language proficiency was higher at freshman year but tended to flag in the senior year.

Even though the USIU, like other universities (see Bettinger & Long (2008)), does not have an exit criterion for evaluating the success of the remedial course for the improvement in English proficiency or for general educational success in the case of students who get referred for remediation, this study is important as a preliminary attempt to throw light on the value of remediation in the institution. The practice as it is now is to enroll students into the regular English course when they meet the threshold. This however may be a superficial measure of real-time success. An assessment of real improvement outside performance on an exit test will reveal more concrete improvement that may be related solidly to academic success. The habit has been to see that remediation is

successful at this level and assume that language skills are sufficient and therefore to forget that these skills are required all through the curriculum, career, and life. That the skills meet the threshold of 60 per cent may not meet the test of the other domains that make demands on writing skills.

The university admits students from varied linguistic backgrounds; while some of them come from backgrounds of ESL, others are from EFL and others are from native speaker backgrounds. This variation is confirmed in this study where there is greater variation in the performance at the pretest. Apart from merely raising the proficiency of students in English, it appears that the remedial course also integrates the students by reducing the variation. This is not only beneficial to individual students but also to faculty who teach these students because of having a class where proficiency variations are reduced significantly.

The practice at the USIU has been to register students on remedial intervention in other courses of the General Education program or in courses of the majors. This may not help the development of language skills as time is divided between the acquisition of linguistic skills and performance on these courses which may demand the utilization of these skills at the same time. The anxiety associated with employing skills not fully acquired may militate against the acquisition of these skills and good performance in the courses of the major. In other places, underprepared students go solely into studying the language and only after acquiring the skills at required levels do they register for other courses (see Germany).

Even though this research presents students on remediation as a homogeneous group that is far from it: these students also come in groups. There are those with very low command of English (scoring between 0 per cent and 35 per cent) and those who are on the borderline, which could be between 50 per cent and 59 %. Both groups in a remedial class pose challenges with the lower proficiency most of Foreign language competence.

6. Conclusion

The aim of the remedial education is to raise the competencies of the students to enable them to participate competently in their university programs. With this done, there are wider and probably more deep-seated questions about how remediation helps university education in entirety and how it affects successful completion. While we have established here that the 14 week remedial course is useful in raising proficiency and reducing variation, we are unable to answer the more long term questions which are however still very important for the justification of the course. We saw in the literature review that many students and their guardians are concerned about the long term benefits of remediation and whether it is necessary for their educational success.

To deal with the rigors and quality of the preparation of high school students, it is important to address the preparedness that students get at that stage instead of overburdening university education with unnecessary remediation. It would also appear that working out a curriculum that provides continuity is beneficial. The program that allows collaborative between instructors at high school and college as seen in the case in Ohio (Richey et al, 1997) would also seem to provide strong transition between these levels so that students may be provided with an anticipatory capacity to face university education.

References

- Allison, J. (1992) From "Remedial English" to "English Enhancement". (So, What Else is New?) *Hong Kong Papers in Linguistics and Language Teaching* 15 15-29
- Bamberg, B. (1978) Composition instruction does make a difference: A comparison of high school preparation of college freshmen in regular and remedial English classes. *Research in the Teaching of English*, 12, 47 – 59.
- Bettinger, E. P. & Long, B. T. (2008) "Addressing the Needs of Under-Prepared Students in Higher Education: Does College Remediation Work?" *Journal of Human Resources*, University of Wisconsin Press, vol. 44(3).
- Crowe, Edward (1998) "Statewide Remedial Policies – State Strategies that Support Successful Student Transitions from Secondary to Postsecondary Education." Denver: SHEEO and ACT, Inc., September.
- Goff-Kfour, C. A. & Nasser, R. N. (2008) Assessment of the English Remedial Programme at a Private University in Lebanon. *Mediterranean Journal of Educational Studies*, Vol. 13(1), pp. 85 -100.
- Greene, J. & Foster, G. 2003. "Public High School Graduation and College Readiness Rates in the United States." New York: Manhattan Institute, Center for Civic Information, Education Working Paper n. 3, September.
- Hoxby, C. 2000. "Peer Effects in the Classroom: Learning from Gender and Race Variation." Cambridge, MA: National Bureau of Economic Research Working Paper No. 7867.

- Hoyt, J. E. & Sorensen, C. T. (1999) "Promoting Academic Standards? The Link between Remedial Education in College and Student Preparation in High School." Orem: U.T.: Utah Valley State College, Department of Institutional Research & Management Studies mimeo, May. http://hubpages.com/hub/Teaching_in_Remedial_Classroom 72 retrieved April 23, 2012.
- Ignash, J. M. (1997) ed *Implementing effective policies for remedial and developmental education, New Directions For Community Colleges*: No 100 (pp. 73-80). San Francisco: Josey-Bass.
- Kirst, M. W. (1998) Bridging the remedial gap. *Education Week*, September 9, 76.
- Malooney, W. (1996). Reading at the 8th grade level – in college, Fayetteville Observer – Times, December 11th, 11A.
- Manzo, K.K. (1996) Math, English Standards in California. *Education Week*, November 27.
- Nasser, R. N. & Goff-Kfour, C. A. (2008), Assessment of the English Remedial Programme at a Private University in Lebanon. *Mediterranean Journal of Educational Studies*, Vol. 13(1), pp. 85-100.
- Ohio Board of Regents (2001) Ohio Colleges and Universities 2001: Profile of Student Outcomes, Experiences and Campus Measures. Columbus, O.H; Ohio Board of Regents
- Ponessa, J. (1996) Chain of blame. *Education Week*, May 22, 29 – 33.
- Richey, D. K. Mathern, O'Shea J., Carol S., & Pierce, S. J. (1997) Community College / High School feedback and Collaboration: Preventive measures. In Jan M. Ignash (Ed) *Implementing Effective Policies for Remedial and Developmental Education*, 100, 63 -72.
- Sacerdote, B. (2001) "Peer Effects with Random Assignment: Results for Dartmouth Roommates." *Quarterly Journal of Economics* 116(2): 681-704.
- Sandham, J. L. (1998). Massachusetts plan would make districts pay for remediation. *Education Week*, February 18, 18.
- Tella, J., Indoshi, F. C. & Othun, L. A. (2011) Students' Perspectives on the Secondary School English Curriculum in Kenya: Some Related Implications, *Educational Research*, Vol 2(1) pp 809 - 817
- Trounson, Rebecca (2002) "Cal State Ouster Rate Rises Slightly." *The Los Angeles Times*, Jan 31, p. B1.
- Weissman, J., Bulakowski, C., & Jumisko, M.K.. (1997). Using Research to evaluate developmental education programs and policies. In J.M. Ignash (ed) *Implementing effective policies for remedial and developmental education, New Directions For Community Colleges*: No 100 (pp. 73-80). San Francisco: Josey-Bass.
- Zimmerman, D. (2003) "Peer Effects in Academic Outcomes: Evidence from a Natural Experiment." *Review of Economics & Statistics* 85(1): 9-23.