Enhancing Quality at Input Level: Remedial/Developmental Education in Ethiopian Private Higher Institutions

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Abstract

The most essential purpose of remedial courses is to prepare students to be successful in the college curriculum. Beyond this it is reasonable to assume, for instance, that there are societal and economic benefits associated with the provision of remedial education to less prepared students. It contributes to better employment opportunities for students, improved skills for the workforce, and subsequent benefits for society and the economy.

It is imperative to assess the practice of remedial education from the demand and supply side. Thus, this study specifically aims to identify the remedial needs of students through investigating the extent to which faculty members believe the students’ preparedness for their studies in higher education and by identifying gaps in basic skills through students’ questionnaire. Furthermore the study aims to identify the organization and delivery of remedial (developmental) education in the two Private Higher Institutions namely St. Mary’s University College and Unity University College. The study identifies specific basic college skill needs in language and arithmetic on the bases of teachers’ perception of students’ difficulty and their rating of perceived importance and difficulties. Cataloging common difficulties of students, the study focuses on establishing a system that would respond and propose methods in responding the needs.
1. Introduction

Higher education institutions need to find a way of reconciling the dual values of excellence and equity. In an ideal society, excellence is best promoted by policies that select a society's most creative and motivated members for advanced education. But selection based on prior achievement will only reinforce a history of discrimination and underachievement. Equally, programs to increase equity will prove unsustainable if they are seen to undermine the standards of excellence on which higher education based. Merit criteria cannot be relaxed. Awarding degrees or certificates to people who do not deserve them cannot be in the public interest.

The answer seems to combine tolerance at points of entrance with rigor at the point of exit. Proactive efforts to attract promising members of disadvantaged groups must be coupled with well designed, consistently delivered remedial support. With sufficient funding from public or philanthropic funds, this will clearly contribute to equity, but it has the potential to contribute to excellence as well – with institutions drawing their intake from an ever-widening pool.

In many higher institutions, students face difficult conditions in their study. Because many students start their studies without any preparation. Poor basic and secondary education, combined with a lack of selection in the academic system, lie at the root of this problem. Yet rarely does an institution respond to the problem by providing remedial programs for inadequately prepared students. Refusing to offer remedial courses means refusing a significant proportion of the student population to succeed in their college studies.

Higher education in Ethiopia is about fifty years young. Throughout this period it has been transformed under various developments. The current public higher education expansion and the growing of private higher institutions are landmarks in the Ethiopian Higher Education. As to Damtew (2005) while growth in the number of institutions and enrollment figures are remarkable, an emphasis remains to be equally placed in quality.
With the expansion of higher education institutions, there is battle to cope with ever-increasing student numbers. Responding to this demand without further diluting quality is daunting challenge.

As outlined by Higher Education Proclamation (351/2003) Higher Education Institutions are accountable for providing quality and relevant education. And Higher Education Relevance and Quality Agency (HERQA) is mandated to encourage and assist the growth of an organization culture in Ethiopian higher education that values quality and is committed to continuous improvement (HRQA QA03/06/V1,2006). Regardless of the different behavior and nature of Higher Education Institutions, minimum standard of quality is the same across the board. This presumption has emanated from the fact that “accountability never has excuses”.

Evidently, in Ethiopian higher education, competition for admission in public higher institutions is very high. Those who do not get admission to the public higher institutions seek admission in private college. Private higher institutions are “open-door institutions”. The majority of students choose private colleges as the second option, after feeling they are incompetent to be admitted in public universities. This partly contributes on the lower level of academic performance of students in private institutions than those in public. In support of this assertion a study conducted by Varghese (2004) shows that, many private college students have a lower level of academic profile than government colleges.

The rising number of college students seeking remedial education is not necessarily an indication that students are becoming less capable or hard working; rather, increasing enrollment in higher education, increased competition in the job market, and poor high school preparation all affect the level of need for remedial education.

There is an underlying assumption that if an institution admits a student, it has an obligation to help that student succeed, and it has to have polices and procedures in place to help those students who are experiencing academic difficulty.
As a strategy to enhance internal quality of an institution remedial education would also serve as retention strategy.

Ashcroft and Rayner (2004) state private higher institutions are responsible for ensuring that students receive value for money, that they learn and are properly prepared for the world of work and can make an appropriate contributions to the society.

The burden of educating students to prepare for college-level work in private higher institution. As “open-door” institutions, Private higher institutions compared to the public one, receive very high remedial/developmental needs for they are supposed to have more students who are not prepared for college studies. The requirement goes beyond imparting higher education to enhancing the readiness for college education through academic support and through remedial/developmental education.

Thus, it is important that private higher learning institutions ask the following question and respond to cope up with the growing needs. These questions are: why students failing? What abilities are lacking? How can we develop the abilities? How can we provide true support? This requires identifying the diversified needs of the students and assesses the existing systems if any.

2. Conceptual Framework

Among others, the quality of higher education is dependent on the quality of the students who constitute the raw material of higher education. This students require: special attention to their problems of access in light of criteria related to merit (abilities and motivation); proactive policies for the benefit of the disadvantaged; exchanges with secondary education and with the bodies involved in the transition from secondary to higher education, to ensure that education is an unbroken chain.

Academic success in postsecondary environments is related to a number of non-cognitive factors including the type, of institution (two-year or four-year, public or private), environmental engagement, personal self-efficacy and intentions, support, finances, and others (Lotkowski et al., 2004).
However, no single variable has greater predictive validity with regard to readiness for college studies and success than the intensity and quality of academic preparation (Adelman, 1999). It has been underlined that completing a rigorous high school curriculum in “core” academic subjects such as English, Mathematics, Natural Science, and Social Sciences is a necessary precondition to success in college.

Perspectives on education quality can be clarified on the basis of a conceptual framework that describes education. The most frequently used way to do this is to depict education as a productive system, in which inputs are transferred into outcomes.

**Figure 1. The Input-Process-Output Framework of Quality Classification**

In the Input-Process-Output (IPO) frame work (figure 1 above) in which “input” refers to the entry requirements, “process” refers to the teaching and learning process, and “output” refers to the employability and academic standings. According to the productivity view the success of the education system is seen as depending on the attainment of the aspired outputs. This view underlines the output/outcome/impact indicators are predominant or even the only type of quality indicators that need to be monitored. The IPO model is popular and comprehensive in conceptualizing quality and to have an operational understanding of quality.
Based on this model this study tries to define quality education from the specific perspective of input variables like considering students preparedness for college education as a parameter of quality education. This disjointed view of quality education is descriptively the simplest one and represents a particular perspective on education.

Higher education institutions are expected to be responsive to changing environment. This means institutions can create effective buffer against external threats and on the other hand they can manipulate their environment to improve the institutional quality. With the rising number of college students who need educational support, higher institutions will be forced to design a system where by they can address the issue.

Applying the consumer behavior theory in education, students as consumers purchasing a service provided by education have the right to obtain the best quality education. How do we meet the needs of our consumers? In education, we deal different customers or some call the stakeholders.

Higher education institutions view students as the primary consumer both as those who receive the educational services and as a input to the system. According to Chua (2004) to improve quality services to these customers, we must first of all understand their needs. In order to understand their needs, we must turn understand the quality attributes embraced by the different stakeholders.

To some extent students’ perception of quality education also emanates from their potentials and capabilities. Knowing who our students are helps to draw an understanding of the quality attributes and expectations so that the system of higher education institutions can be responsive.

Evidently, partly quality education is attributed to the degree of students’ level of preparation during their high school studies and the quality of courses completed in high school is greater predictors of college success than test scores, class rank, or grade point average (Barth, 2003).
For the purpose of this study, “remedial education” is defined as those courses in reading, writing or mathematics offered to students lacking the necessary academic skills to attend college-level education.

3. Objectives of the Study

The purpose of this study is partially to identify the remedial needs of students through investigating the extent to which faculty members believe the students’ preparedness for their studies in higher education and by identifying gaps in basic skills through students questionnaire.

Furthermore, the study assesses the practices of remedial education in the two selected private higher education institutions and to learn from their experiences about the practice of addressing the remedial need of students. Various remedial programs of the different higher institutions system have also been reviewed.

4. Design of the Study

This study was made on two private Colleges in Addis Ababa namely St. Mary’s University College and Unity University College. These two colleges are purposively selected for the researcher’s convenience. Data for the research has been drawn from both qualitative and quantitative data sources. Thus, these data were analyzed both in to quantitative and qualitative terms.

4.1. Data Source

To meet the very objectives and triangulate results, the study employs different sources of data. In order to identify the remedial needs of the student’s, first year students and their instructors were randomly selected from the two private higher education institutions to fill the questionnaire.

Accordingly a total of 430 students of which 46 percent (199) and 54 percent (231) male and female respondents respectively are participating throughout the survey.
The faculty members involved in the study constitutes 72 faculty members of which women are represented by 23 percent (17) while 77 percent (59) comprise men questionnaire respondents.

This study has undertaken an extensive review of the experience of other countries such as America, Netherlands, Romania, India, and South Africa including there remedial polices and practices.

### 4.1.1. Interview

The study also aimed at identifying practices in relation to remedial education in higher Institutions. Accordingly, deans, department heads, tutors, and faculty members are interviewed. The interview questions are designed to explore the practices of remedial education in the two selected private university college.

### 4.1.2. Questionnaire

The survey questionnaire assesses the students’ academic support needs and teacher’s opinion and perception of the skills of their students. Both the students’ and teachers’ questionnaire include 40 items of which all are structured. The items are concerned with teachers’ opinion, and prejudgments about students’ difficulties to the different skills. In the students’ questionnaire respondents are inquired to gauge the importance and their level of performance to the identified skills. The responses are ranked in five scales in which respondents correspond their perceptions. In order to characterize the respondents on the basis of the demographic and socio-economic attributes, other items consist inquired on general information.

The questionnaire constitutes items that would be aggregated in to the following parameters which are perceived to be the specific skills needs for the successful accomplishment of college education.
1. English

The College readiness for English are organized into seven strands Language, Communication, Writing, Research, Logic, Information text, and Literature. These are elaborated in the instrument as follows:

a. **Language**: Correct grammar, usage, punctuation, capitalization and spelling.

b. **Communication**: Strong communication and listening skills are essential for success in college and on the job. It enables students to make effective presentations and to interpret and judge the effectiveness of others’ presentations and speeches.

c. **Writing**: Strong writing skills have become increasingly important. Students with this skill can write quickly and clearly.

d. **Research**: College students must be able to write research papers that would lead them develop their thesis and projects.

e. **Logic**: Ability to judge the credibility of sources, evaluate arguments, and distinguish among facts and opinions.

f. **Information Text**: College students will be faced with a wide range of reference materials (e.g. periodicals, memoranda, reviews and technical manuals) that they will need to interpret, synthesize and use to inform decisions or draw conclusions. From these multiple informational technical sources graduates also must be equipped to identify interrelationships among ideas and compare and contrasts texts.

g. **Media**: College students must be able to evaluate auditory, visual and written images and other effects used in television, radio, film and the Internet. These interpretive skills can help them recognize potential bias in media—and help them become savvy media consumers.

h. **Literature**: Analytic skills in interpreting complex literary texts—and providing evidence to support those interpretations—fosters the skill of reading any text closely and teaches students to think logically and coherently—priority skills identified by employers and postsecondary faculty.
2. Maths

Students readiness for college Mathematics is organized into four strands including: Number Sense and numerical operations, algebra, data interpretation, and statistics and probability.

A. **Number Sense and Numerical Operations:** Number sense is the cornerstone of math in everyday life. A student who is joining college must be able to understand the relationships between numbers; be able to add, subtract, multiply and divide with and without a calculator; and be equipped to make reasonable estimations and mental computations.

B. **Algebra:** Colleges and employers need high school graduates who are well versed in algebra — and can apply their knowledge to everyday problems. For example, graduates should be able to predict savings based on a rate of interest, project business revenues and estimate future populations based on known population growth rates.

C. **Data Interpretation, Statistics and Probability:** College students are expected to be able to interpret, analyze and describe data quickly and accurately. Visual representations of data (e.g., charts, graphs and diagrams) are abundant, and employers and professors want graduates who can make predictions and develop and evaluate inferences from these data.

4.2. **Procedures for Data Analysis**

This study employs both quantitative and qualitative analyses of the data. All the data from the questionnaire were entered and quantitatively analyzed. Accordingly, analyses of rating based on mean value has been made. The data obtained through this process is aggregated as indicated in the rating scales in Table .1. Results from the questionnaire has been transcribed verbatim, analyzed thematically and summarized.
Table 1. Rating Scales

<table>
<thead>
<tr>
<th>MEAN RESULTS</th>
<th>IMPORTANCE</th>
<th>PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.50-less</td>
<td>Unimportant</td>
<td>Have low or no skill to perform</td>
</tr>
<tr>
<td>1.51 to 2.50</td>
<td>Minor</td>
<td>Perform well but with difficulty</td>
</tr>
<tr>
<td>2.51 to 3.49</td>
<td>Important</td>
<td>Perform with some difficulty</td>
</tr>
<tr>
<td>3.50 to 4.49</td>
<td>Very Important</td>
<td>Perform with reasonable strength or skill</td>
</tr>
<tr>
<td>4.50 or more</td>
<td>Critical</td>
<td>Perform with the maximum skill required</td>
</tr>
</tbody>
</table>

As indicated below in figure 1. Students’ need for remedial education has been determined on the base of students’ ratings of importance and performance and teachers’ perceived students’ difficulty. Thus those skills that are identified as high in terms of importance and low in relation to the performance of the students are identified gaps that need to be addressed.

\[
\begin{array}{|c|c|c|}
\hline
\text{Importance} & \text{Performance} & \text{Remedial Need} \\
\hline
\text{High} & \text{High} & \text{Remedial Need} \\
\text{Low} & \text{Low} & \\
\hline
\end{array}
\]

Figure 2. Judging the remedial needs of the students
5. Findings

In order to have a general impression of the performance and importance of the skills that are identified as determinants of college success and subsequently to determine the remedial needs, this study has documented teachers’ and students’ perceptions. The mean aggregated result of the students’ rating for the performance and importance of those skills has shown, all identified skills “very important”. This level of importance corresponds to the ratings score of four in the scale of five”. On the other hand, as to the students’ perception, the performance level of the respondents lay in the range between 1.5 to 2.5. This suggests most of the respondents perform the identified skills with difficulties.

As can be seen from figure 3 below, the identified skills as perceived by the student are performed with difficulties and valued as very essentials in the same time. The comparison of the performance and importance of these skills shows that there is a high need for remedial education in the identified skills.

![Figure 3](image-url)
The students' skills proficiency in specific content areas has always been a strong issue for educational researchers in Higher Education. Studies that examine the specific performance rates of the students are important to determine transition asymmetries, competences and university success rates.

Therefore, this study aims to emphasize the role of some basic skills in the students' daily academic tasks and learning process.

Understanding the content of textbooks, articles and essays, students must be able to criticize and evaluate ideas always in a critical reading and thinking learning attitude. Therefore, students must develop techniques of reading, understanding and remembering what was read, using concentration to deal with all types of reading assignments. This role is reinforced by writing as a communication tool used for conveying ideas, lecture note taking, studying outlining, summarizing, etc.

Competences in both reading and writing but especially in writing have been considered to be of fundamental relevance to contemporary higher education. According to the results of this study however, as far as writing is concerned, when students have to write at a college level, there is a gap that has to be bridged because students' problems are deeper than the surface level. They include difficulties in grammar, punctuation and style, in knowing what is expected from them and from the text because different subjects have different requirements.

As indicated in Table1 the perception of the teachers shows students have found to have difficulties in sentence building, articulation of ideas, synthesizing skills, knowledge and utilizing vocabularies, structure formation skills and to make scientific discourse. This would suggest the need for remediation taking these specific skills into a great emphasis.

Students must be conscious that their final grades will depend, not only on their knowledge and understanding of the subjects but also on how well they write. Some studies have indicated that if two students are equal in ability and intelligence, the one who is better at conveying thoughts effectively in writing will score the higher marks.
Evidently, the development of essential intellectual and study skills namely Reading, Writing and Reasoning are stated to be the basics for the success of any college student (Fairbairn and Winch 1996).

Reading/Comprehension abilities allow students to access knowledge, understand and elaborate concepts, integrating information from lectures and reference books' content. When lecturers are asked to refer to their students' skills proficiency they frequently mention that students do not read analytically, can not distinguish between important and unimportant ideas, can not adjust their reading to the different materials they encounter, do not seem to enjoy reading and hence approach texts unenthusiastically. The ability to read well is no longer something which college instructors take for granted in their students. Students seem to have more and more trouble reading.

Since reading is comprehension, students who cannot acceptably reconstruct the author's main idea, supporting ideas and supporting facts as well as some critical evaluation of those things, cannot read for the purposes of their course, regardless of what types of material they read outside of class.

According to the teacher respondents, the students’ main difficulties in reading are associated with comprehending abilities.

<table>
<thead>
<tr>
<th>SKILLS</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sentence building and articulation ideas</td>
<td>76.4</td>
</tr>
<tr>
<td>Grammar rules</td>
<td>35.1</td>
</tr>
<tr>
<td>Punctuation</td>
<td>45.1</td>
</tr>
<tr>
<td>Coherence</td>
<td>54.3</td>
</tr>
<tr>
<td>Synthesizing</td>
<td>64.3</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>53.4</td>
</tr>
<tr>
<td>Scientific discourse</td>
<td>55</td>
</tr>
<tr>
<td>Speech clearness</td>
<td>41.6</td>
</tr>
<tr>
<td>Structures</td>
<td>51.6</td>
</tr>
</tbody>
</table>
Specifically as indicated in Table 3 students have difficulties in skills such as data demonstration, vocabulary, with understand of the connections between ideas and understanding abstract concepts.

Table 3: The Percentage Distribution of Teacher Respondents in Relation to their Perceived Difficulties of the Different Reading Skills.

<table>
<thead>
<tr>
<th>SKILLS</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data demonstration</td>
<td>63.5</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>58.5</td>
</tr>
<tr>
<td>With reading –aloud</td>
<td>14.2</td>
</tr>
<tr>
<td>With the understanding of the connections between ideas</td>
<td>72.1</td>
</tr>
<tr>
<td>Understanding abstract concept</td>
<td>65.1</td>
</tr>
</tbody>
</table>

Generally speaking, as to the majority of instructors the students from the two institutions have beginners level of competence in writing, reading and arithmetic. This has a tremendous implication on the expectation of higher education in general and students’ success in particular.

The comparison between the skills indicates, the students have a beginner level of competence in both activities although they seem to have a better performance in Writing than in Reading (comprehension).

Also according to the lecturers, the students' difficulties in mathematics are connected with: algebra (58.5%), data interpretations (64.2%), and Statistics and probability (52.1%).

Table 4. The percentage distribution of teacher respondents in the students’ main difficulties in mathematics.

<table>
<thead>
<tr>
<th>SKILLS</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number sense and numerical operations</td>
<td>33.5</td>
</tr>
<tr>
<td>Algebra</td>
<td>58.5</td>
</tr>
<tr>
<td>Data interpretations</td>
<td>64.2</td>
</tr>
<tr>
<td>Statistics and probability</td>
<td>52.1</td>
</tr>
</tbody>
</table>
In this study the students in their questionnaire consider the importance and difficulties the different language and arithmetic skills.

The findings both in table 5 and 6 show that the students’ skill performances to be lower while they perceive it as essential. With regard to English language skills, students value the importance of language, communication writing, research, logic, information text and literature as essential for the successful accomplishment of college education. To this strands of college readiness for English, students rate their performance as lower.

**Table 5.** Corresponding responses of importance and performance of the basic skills of English language

<table>
<thead>
<tr>
<th>Strands of college readiness for English</th>
<th>Mean response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Importance</td>
</tr>
<tr>
<td>Language</td>
<td>3.70</td>
</tr>
<tr>
<td>Communication</td>
<td>3.80</td>
</tr>
<tr>
<td>Writing</td>
<td>3.50</td>
</tr>
<tr>
<td>Research</td>
<td>4.00</td>
</tr>
<tr>
<td>Logic</td>
<td>3.00</td>
</tr>
<tr>
<td>Information text</td>
<td>3.50</td>
</tr>
<tr>
<td>Literature</td>
<td>4.10</td>
</tr>
</tbody>
</table>

The bar graphs in figure 4 and 5 indicate the same fact that both the identified language and mathematics skills are perceived as important by the students while they found their performance to be low.
Figure 4. The Comparison of Performance and Importance of the different language skills.

Table 6. Corresponding responses of importance and performance of the basic skills of Maths

<table>
<thead>
<tr>
<th>Strands of college readiness for Maths</th>
<th>Mean response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Importance</td>
</tr>
<tr>
<td>Numbers sense and numerical operations</td>
<td>3.63</td>
</tr>
<tr>
<td>Algebra</td>
<td>3.80</td>
</tr>
<tr>
<td>Data Interpretation</td>
<td>3.50</td>
</tr>
<tr>
<td>Statistics and probability</td>
<td>3.41</td>
</tr>
</tbody>
</table>

To sum up, as to the findings from this survey shows there is a high remedial need in relation to the basic skills of English language and arithmetic.

Figure 5. The comparison of performance and importance of the different mathematics skills.
The value of these findings lies in providing information on the lecturers' perceptions and opinions not only on their students' competence, daily performance and difficulties but also on the students perceived importance and difficulties of the different skills. This is important through identifying needs and to determine the level emphasis these skills whichever remedial intervention takes place.

These results can lead us to a wide discussion on the importance and implication of these skills for the students' academic performance and achievement and on the role of the higher learning institutions as promoters and facilitators not only of content knowledge but also of basic skills for lifelong learning and success.

6. The Practices of Remedial Education

According to McMillan, Parke, and Lanning (1997), a number of studies document a high level of correlation between student success and the following program characteristics: required entry-level testing, mandatory placement in basic skill courses, continuous evaluation, interface between remedial and college-level courses, and providing remedial courses using alternative instructional media.

A well-designed remedial program can inform the process of allocating resources and increase accountability. Weissman, Bulakowski, and Jumisko (1997) recommend measuring four aspects of program effectiveness:

- course completion success rate, which is the percentage of students earning average grades or better,
- movement of students from remedial to college-level courses,
- successful completion of college-level coursework, and
- Student persistence over the college year.

Specific policy areas suggested for review include mandatory student placement into remedial courses, enrollment in remedial courses upon initial entry to the college, and concurrent enrollment in remedial and college-level courses.
Reviews of the various literatures have shown that the practice and institutional policy for Remedial (Developmental) Education differs from a system of higher learning institution system to another. But the researcher identifies the common pattern in relation to the following attributes. These include the process of determining needs, the selection process, the type of support, and others.

6.1. Selection Process

Both research and current practice support the use of structured assessment and placement of students in remedial courses. Based on the philosophy of structured open access, the "systematic use of academic standards linked with additional approaches to assist students to reach their educational objectives," this type of proactive institutional strategy has been more successful than an open-door, laissez-faire approach that allows students to enroll in any course regardless of prerequisites (Fonte, 1997, p. 45).

According to reviews of literature in relation to the selection and the placement of those needs remedial support includes administering tests (in basic skills), high school Grade Point Average (GPA), high school courses, faculty referral, admission interview, and others. In general, higher institutions had similar organizational structures for their remediation programs. They determined students’ need for remediation by administering placement tests.

6.2. Determining Needs

It is difficult to set standards in higher institutions as to distinguish between remedial and college level work. There is also a great deal of variation across the higher learning institutions as to what constitutes a remedial course and how students are selected into remedial courses.

The institutional rules on placement into remediation might differ for several reasons. The institutions may differ in their rates of remediation due to differences in their student bodies.
For example, due to their localized nature, one college may cater more to nontraditional, older students than another school or may have students interested in particular fields due to the demands in the local labor market.

The task of determining the remedial needs of students is challenging since the potential students who enroll in remedial courses constitute a very diverse population on numerous levels. Students’ socioeconomic status, parents’ levels of educational attainment, and disability status affect participation in college remediation as well.

In the reviewed higher learning institutions the student income level is inversely proportional to the likelihood of taking remedial courses. Besides, more students who reported having a disability took remedial courses than did non-disabled students.

Age as one of the demographic variable is another significant factor to consider in the population of college students needing remediation. Older adults understandably need remediation to refresh their knowledge of academic material they presumably learned in the past.

Selection into remediation is usually determined with a combination of measures. While most students are identified using placement exams in reading, writing, and mathematics, some schools also use standardized test scores and high school transcripts to make assignments. Generally, the practices of higher institutions in determining the remedial needs of students during admission, orientations, and prior to or during registration, ongoing, prior to entrance or acceptance, or/and prior to the first semester.

6.3. Determining Exit from Remediation

However, often remedial courses do not count toward degree or certification credits. In some instance, therefore, remediation would lengthen the time necessary to complete a degree, and this can have implications on financial resources. This would be more so while, remedial courses are the gateway for students to enroll in upper level courses.
In some cases, campuses would allow enrollment in some classes while the students’ takes remediation. Often institutional rules prevent students from taking college-level classes until they have completed remedial education.

Thus remedial courses are often the gateway for students to enroll in upper level courses. Institutions set ways in order to determine those that successfully completed remediation courses. These include passing remedial course, exit exam, test, preparation of portfolio, instructors’ judgment. Some institutions determine exit from remediation on completing a course which don’t involve verifying the competence of the basic skills.

6.4. Source of Fund

Within the debate on the provision of remediation, the American higher education institutions as a case in point question whether colleges or governments should cover any of the costs of remedial education.

In Netherlands the legislature require the higher institutions to pay the full cost of remedial course work. To decide students to cover the cost of remedial education would go against the move for establishing access. In Europe and American Higher education system, this is an expense which is greater than the regular tuition rate (Ignash, 1997).

Partly because of the great costs associated with remedial education, policymakers and educators have debated who should assume the financial responsibility for providing remedial coursework. The review of practices indicates, higher institutions employ a various sources of fund to cover remedial costs. These sources of fund justify the responsibilities of different stakeholders in supporting students learning. The sources include the institution it self, the states/ government, tuitions, financial aid, students and others.

6.5. Problems Related To College Remediation

6.5.1. Cost of Remediation

Many people criticize the high costs associated with college remediation. The costs of remedial education are clearly high, and many colleges question how willing they are to continue paying.
Some argue that such expenses divert funding from more valuable and appropriate college level investments and that high schools should bear some of the cost for failing to instill in graduates mastery of basic skills. However, the social costs of not providing remedial education may outweigh the economic costs of its provision.

6.5.2. Effectiveness of the program

Another pressing concern regarding college remediation is its effect on student achievement and increasing demand of it.

The other primary problem related to college remediation is the ambiguity of what constitutes “college-ready skills” and the inconsistency of high school curriculum and academic standards.

6.6. Types of Remedial /Developmental Support

The type of remedial/developmental support that would provide by the higher institutions would be determined based from a various attributes for instance the remedial needs. The range of support would includes tutoring, providing learning centers, supplemental courses, non-credit courses, workshops, academic advise/counseling, college adjustment program, mentor/ peer advisors/internships and the like.

7. Remedial Education in the two Private Higher Learning Institutions

The existing remedial education programs in both institutions would experience a tremendous influx of students as a result of the demand for remedial education in general. When challenged by the perennial dilemma of quality versus quantity, the higher education institutions should decide to provide both. This requires on resolving the following three major impediments that remedial programs that the two institutions face in higher institutions: 1) lack of understanding of who remedial students are and what they need, and 2) underlining assumptions in designing about student support services.
Clarifying the needs of remedial students as well as the purpose and structure of the program has far reaching implications for students' success in college education. Analysis of the practice of remedial education in the two institutions indicate, though the uses of remedial courses to address academic deficiencies are limited in both institutions, little is known about their effects on subsequent student performance in the university colleges.

With regard to responding the question who should be placed in remediation? and how does it affect their educational progress? Both institutions do not have exit standards for remedial courses and do not perform systematic evaluation of their programs.

The assumption for enrolling students into remedial education would follow to enroll students in remedial education those that are under prepared, recent high school graduates, many of whom exit secondary school without grade-level competency or the proper preparation for college-level material.

But the two institutions don’t employ admission criteria to select those that have remedial needs. To be a part of the remedial program is determined by the students’ personal decisions. In some cases the program would be mandatory through attaching credit to the remedial courses. But as a matter of common practice remedial programs in those institution are optional and it doesn’t employ performance measures to identify the need for remediation.

According to the results of the study the two university colleges do not possess a structured system to determine the need for remediation. Thus, they follow common understanding that explains students’ difficulties. Moreover they do not have the exit criteria after students have been admitted into a remedial program.

In both institutions the common form of remedial education (academic support) is tutorial services. These programs have the following common attributes:

- Tutorial is provided by faculty member, teaching assistant or peer tutor.
• The institutions schedule students from tutoring at the beginning of an identified course.
• In both cases tutorial classes are neither need based nor specifically designed to fill identified gaps.
• In some instances students voluntarily or up on the recommendation of a faculty member, may request tutoring as they experience difficulty with a course.
• To the tutorial courses that do not carry college credit, it has been observed that there is poor attendance.

The other form of support that would count on remedial measures is entry orientation and counseling services. Though they are practiced commonly in both institution the support through this program are limited in scope and well established.

8. Recommendations

From the findings of the study it has been noted that there is a need to address the remedial needs of students through establishing a system that would consolidate the existing remedial services and accommodate further demand. In this case the existing remedial services lack of understanding of who remedial students are and what they need, and deemed to unable to address the existing gap. Thus there is a necessity of designing responsive remedial services in both institutions that address the diversified needs of students.

The two institutions should devise and create an early warning system that allows the identification of students that struggle and challenge in the college education. The Institutions would use administered assessment to determine the likelihood that a student will need remediation in college. This would help the institutions to have entry requirement and exit standards for remedial courses.

Diversifying the remedial/developmental support give the opportunity of addressing the various needs of students.
Therefore the two institutions would offer supports that are designed to developmental purpose such as providing learning centers, supplemental courses, non-credit courses, and workshops, academic advise/counseling, college adjustment program, mentor/peer advisors/internships and the like.