High School Type as a Predictor of Student Academic Performance and Retention: A Case Study of Student Academic Performance and Retention in relation to High School type qualification in Undergraduate Business Program at an Off-Shore Campus in U.A.E

نوعية المدرسة الثانوية كمؤشر على الأداء الأكاديمي والتحصيل العلمي للطلاب: دراسة حالة للأداء الأكاديمي والتحصيل للطالب بالنسبة لطبيعة المؤهلات الثانوية المدرسية في البرامج الجامعية في إدارة الأعمال في فرع جامعي خارجي في الإمارات العربية المتحدة

By

Irfan Ali Larik

Student ID: 2014101048

Dissertation submitted in partial fulfillment for the degree of
Master of Education (M.ED)

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Contents

Abstract

It has been observed that students from different high school types tend to show a difference in their academic performance after joining a program of study at a college or a university. The present research attempted to study the relation between student grades in two high school types as a predictor of academic performance in college/university. The findings indicate that several reasons can be attributed for causing the difference in academic performance of students due to the high school type such as school environment, role of peers, gender differences and number of hours of study required and so on. The study indicates a strong positive correlation between the prequalification marks of Intermediate/HSSC students and the total of GPA of the 4 courses (r2 value is 0.492). Though the correlation is positive in the case of GED Students (r2 value is 0.221) but with a lot of variation. In the case of Intermediate/HSSC students not only the correlation r values is strong in comparison with GED students, but also they are clustered close within the range 7.75 and 14.5. So it is apparent that the positive trend that's seen in intermediate students are more stronger and uniform than in GED students, this is due to their strong foundation in intermediate studies.

However the findings would have been more significant with a bigger sample size. The academic performance of students enrolling in the business program after completing Intermediate/HSSC shows a more stable trend as compared to students joining the undergraduate business program after completing their GED.

ملخص

لوحظ أن الطلاب القادمين من مدارس مختلفة يظهرون تفاوتا في أداءهم وتحصيلهم الأكاديمي عند إلتحاقهم ببرنامج دراسي في معهد أو جامعة. هذا البحث هو محاولة لفهم ودراسة العلاقة بين علامات الطلاب من مدرستين ثانويتين مختلفتين كمؤشر على أدائهم العلمي في الجامعة أو المعهد. أظهرت النتائج أن هناك عدة أسباب يمكن أن تعزى لها الفروقات في الأداء الأكاديمي للطلاب القادمين من نوعين مختلفين من المدارس الثانوية، كالبيئة المدرسية ودور الأقران و الفروقات الجنسية بين الذكور و الأناث وعدد ساعات الدراسة المطلوبة، وهذه فقط بعض الأسباب. وقد أظهرت الدراسة علاقة طردية قوية بين علامات التأهيل في المدرسة المتوسطة والثانوية وبين معدل النقاط العام GPA للكورسات الأربعة. (قيمة r2 =0.492). ومع أن العلاقة موجبة في حالة طلاب التعليم العام في التنمية (قيمة r2= 0.221) ولكن مع إختلافات كبيرة. وفي حالة طلاب الإعدادي والثانوي لم تكن قيمة العلاقة النسبية فقط قوية بالمقارنة مع طلاب التعليم العام في التنمية ولكن النسب كانت مجمعة بشكل متقارب بين 7.75 و 14.5. فمن الواضح أن الظاهرة الايجابية التي ظهرت في طلاب الإعدادي أقوى ومتشابهة أكثر من طلاب التعليم العام في التنمية ، ويعود السبب في ذلك إلى التأسيس القوي لهم في المرحلة المتوسطة.

علما بأن نتائج الدراسة كان من الممكن أن تكون ذات دلالة أكبر لو كانت الشريحة المعاينة من الطلاب أكبر. الأداء الأكاديمي للطلاب المسجلين في برنامج إدارة الأعمال في الحرم الخارجي بعد إكمالهم للشهادة المتوسطة /الثانوية يكون أكثر إستقرارا بالمقارنة بالطلاب المنضمين إلى برنامج الأعمال بعد إنهاء التعليم العام التنموي.

Chapter 1: Introduction

1.1 Overview of the Topic

The learners in today's world do not fit a traditional learning path of high school to college/university programs. The academic performance of students in an educational system is of crucial importance to educators, parents, students and the society at large. The academic performance of students in high schools also influences their enrollment in post-secondary colleges and their choice of majors (Shim and Paik, 2014). Education has been labeled as one of the basic needs of individuals. In all educational systems the academic performance of the students is important as the quality of input at the educational institution will determine the quality of output in terms of academic performance (Okon and Archibong, 2015). The completion of a college degree benefits the individual as well as the society in many diverse and significant ways. Getting a college degree reduces unemployment rates, poverty, and mental health problems, moreover people with a college degree seen to have the higher level of civic involvement (Baum, Ma, and Payea, 2013). Research has also indicated an increasing sense of civic responsibility as well as social responsibility when students pursue a college education (Dee, 2004). One of the primary responsibilities of an educational institution is to predict as accurately as possible, the future academic prospects for a student, student retention based on academic performance and to modify or change their policies accordingly as well as future prospects of employment and career path to be undertaken by the students enrolled in an educational institution. It is crucial that diagnostic research and studies should be carried out to investigate the factors influencing the academic performance of students at college level in order to develop new policies and institute corrective measures. High failures or poor academic performance can influence student retention and reduced graduate throughput (Mlambo, 2012).

This research will be conducted in the United Arab Emirates, a country that is host to several nationalities and offers a broad range of curricula to its enormous expatriate population. To name a few of the types of curricula offered here; The

National Curriculum of U.K, the High School system in U.S, the IB curriculum, Indian (CBSE) curriculum, the Pakistani curriculum (Intermediate), Iranian curriculum, MOE curriculum and French curriculum based schools (The Knowledge and Human Development Authority, 2015).

The General Education Test was introduced less than a century ago, immediately after World War II. The learner rationale for taking General Education Development (GED) has changed over a period, including gaining admission to a college education or access to employment. General Education Development (GED) is often not considered a total equivalent to a traditional 12-year high school qualification. The basis of such perception may be attributed to the difference in the acceptance of General Education Development (GED) in different academic institutions as well as a perceived low rate of students being admitted in an undergraduate business program based on their General Education Development (GED) credentials and subsequently not completing their college education or not performing well in their program of study. On one hand the General Education Development (GED) provides a second chance to learners for their postsecondary education, and on the other hand, the General Education Development (GED) route is questionable when students' academic performances are compared (Penner, 2011). A comparison of adult students joining Nova Scotia Community College and Holland College Prince Edward Island included focused on examining the traditional trajectory of high school graduates and those joining after completing their General Education Development (GED) to develop their outreach programs further to accommodate the differences in performance of mature students entering after completing General Education Development (Penner, 2011). In North America, General Education Development (GED) is usually taken by adult learners returning to college, however in this study, the average student joining the undergraduate program in Business is between 17-20 years of age (Stephan et al, 2015).

1.2 Research Gap

Students from different high school types tend to show a difference in their academic performance after joining a program of study at a college or a university (Cappellari, 2004). The difference in academic performance between students in different high school types can be attributed to factors such as school environment, the role of peers, gender differences and the number of hours of study required (Yusuf and Adigun, 2010). From my search so far, it is becoming evident that there is a dearth of literature available on the academic performance of students who join the offshore campus of a South Asian educational institute based in the United Arab Emirates. Limited information is available for this offshore campus regarding students entering higher educational institutions after completing their General Education Development (GED) Diploma and their academic performance in comparison with the students who join the undergraduate Business program after completing Grade 12 qualifications (Intermediate system) through the traditional post-secondary trajectory. Given its multinational expatriate population, the United Arab Emirates provides a wide array of curricula to the students. The Knowledge and Human Development Authority provide a database of schools in Dubai as well as the curriculum followed at these schools (KHDA, 2015). This study will be a significant contribution towards the importance of high school type in determining and predicting future performance in an undergraduate program of their choice at the offshore campus based in Dubai. The offshore campus has not conducted any research to study this research question. Hence, this research could be a significant milestone in attempting to study the research problem and set the momentum for more research in this area focusing on the needs of the offshore campus in terms of student retention following poor academic performance. The declining and poor performance of students joining the offshore campus after completing General Education Development (GED) as observed by faculty members preempted the researcher to conduct this particular study to identify if high school type was actually a strong predictor of academic performance for this offshore campus.

1.3 Operational Definitions

1.3.1 General Education Development (GENERAL EDUCATION DEVELOPMENT (GED))

The General Education Development (GED) tests were launched after World War II, in order to provide opportunities for a more educated work force. American Council on Education (2009) has cited different rationales for taking General Education Development (GED) over a period of time. These include access to employment, career advancement as well as opportunities to pursue higher education. The General Education Development (GED) tests are in five subjects: Reading, Writing, Social Studies, Science and Mathematics (as cited in Penner, 2011). A number of institutions offer coaching classes for General Education Development (GED) preparation. American Council on Education (ACE) and Pearson are jointly responsible for General Education Development (GED) testing service. The General Education Development (GED) test has provided opportunities for better jobs and higher education opportunities to approximately 18 million graduates since 1942.

1.3.2 Higher Secondary School Certificate (Pakistani Grade 12 equivalent)

The Higher Secondary School Certificate, also known as HSSC, is a public examination taken by students of Intermediate colleges in Pakistan. The HSSC is an equivalent to A Levels (British System) and a high school diploma (U.S and Canada). In Pakistan, students after completing grade 10 (Secondary School Certificate-SSC) continue with 2 years of junior college and take Higher Secondary School Certification (HSSC). A student enters in this level on successful completion of SSC/O Level. The HSSC is a two year university preparation program and teaching is done at college or equivalent institutes. The Curriculum can be pursued along four streams; Pre-Medical, Pre-Engineering, Arts & Humanities, Commerce. Those students who successfully complete the two years are awarded with Higher Secondary School Certificate by the Board of Intermediate & Secondary Education, Pakistan. The Federal Board of Intermediate &Secondary Education (FBISE)

Islamabad was set up under FBISE ACT 1975. It is an independent body of the Ministry of Education and Trainings). It has the authority to overall organize, regulate, develop and control Intermediate and Secondary Education. In Pakistan, the traditional trajectory for entering a university program includes a HSSC or A Levels qualifications (Higher Education Commission, Pakistan, 2014).

1.3.3 International Branch Campus/Offshore Campus

International branch campuses or offshore campuses are rapidly developing as a form of transnational education. An international branch campus is a facility that provides an opportunity of face to face instruction for the students at a country different from where the parent campus is located. The branch campus follow the approach of providing a physical location for a institution as well as the branch campus operates under the same name as the parent campus and the student receives a certificate of qualification from its parent campus (Wilkins, 2010).

1.4 Problem Statement

Increasing attention is being paid to the pathways that students take during college and the hurdles they face in completing their undergraduate degrees. This research study examines high school type as a predictor of academic performance of undergraduate business program students. The study aims to identify the possible grounds underlying the student academic performance difference concerning their high school education background and suggest the measures to bridge the performance gap. This study will aim to investigate the performance of different learners in an institute of higher education, enrolled in the undergraduate business program at an off-shore campus in Dubai, United Arab Emirates. The study will use data for students who enrolled in the undergraduate business program in Fall 2014 semester and are currently in the 3rd semester of study at the higher education off shore campus in Dubai, United Arab Emirates. In recent years, this higher education institute (offshore campus) in the United Arab Emirates has seen a rise in the number

of applicants who are enrolled in the undergraduate programs based on their General Education Development (GED) qualifications. The researcher has been a part of the offshore campus for eight years and has noticed a trend of difference in performances of students joining the offshore campus after completing either their Grade 12 (Intermediate as per Pakistani system) or General Education Development (GED). The researcher conducted interviews with faculty members to discuss this particular trend. These interviews are conducted end of the term by the researcher as part of his job responsibilities. The faculty members confirmed the trend observed by the researcher regarding difference in academic performance of students coming from 2 trajectories i.e. Intermediate and General Education Development (GED). This formed the base of conducting this research study to identify and highlight any differences in academic performance of students completing Grade 12 or General Education Development (GED). The research will be a unique contribution relevant to the offshore campus based in the United Arab Emirates and will be able to provide a framework for admissions criteria and related marketing strategies for the future. The study can also help in determining the level of support needed by students who might be performing poor academically and whether the offshore campus is in a position to provide that support as well as to determine if high school scores/grades are actually significant predictors of performance in college courses and leads to graduation and completion of undergraduate studies. The research can also help in determining if the difference in academic performance could also indicate a link with student retention for this offshore campus. The primary reason for considering Higher Secondary School Certificate, also known as HSSC and General Education Development as high school types for predicting academic performance of students is due to these 2 high school types being the predominant admission criteria at this offshore campus based in Dubai.

1.5 Research Objectives

Research is an inquiry. The purpose of research is to discover answers to questions through the application of scientific procedures. Though each research study has its own specific purpose, we may think of research objectives as falling into a number of following broad groupings: To gain familiarity with a phenomenon or to achieve new insights into it; to portray accurately the characteristics of a particular individual, situation or a group (studies with this object in view are known as descriptive research studies); to determine the frequency of occurrence of a phenomenon; to test a hypothesis of a causal relationship between variables.

The current research includes the following objectives:

1. To examine if the high school type acts as a predictor of students' academic performance in the Undergraduate business program.
2. To investigate how two different school types may predict differences in students' academic performance.
3. To investigate which school type is a significant predictor of students' academic performance.
4. To determine student retention related to high school type.

1.6 Research Questions

1. Is high school type a predictor of students' academic performance in an undergraduate business program?
2. Does significant difference exist in the academic performance of students from different high school type?
3. What high school type is significantly affecting students' academic performance in the undergraduate business program?

1.7 Significance of the Research Study

This research will aim to investigate the importance of high school type and prediction of students' academic performance at undergraduate level at an offshore campus in the United Arab Emirates. The study will take into consideration 2 different school types Grade 12 Intermediate according to Pakistani Federal board system and General Education Development (GED). The primary reason for selecting the Intermediate as per Pakistani system) The study will also help in investigating whether the increase in the number of admissions for this offshore campus is a consistent occurrence or is it due to the perception that General Education Development (GED) is an easier alternative and a shorter path available to most students who are otherwise unable to complete their Grade 12 or equivalent from a school system (Heckman, Humphries, La Fontaine & Rodriguez, 2014). Hence, are the students doing General Education Development (GED) causing an artificial increase in the admissions of this offshore campus each semester? Will this number remain consistent when this group of students reaches their graduation time as a number of students who will have joined after completing their General Education Development (GED) might drop out earlier as they might not be able to cope with the demand of the studies? As the researcher has been associated in a senior capacity in this offshore campus, it has been observed and noted based on personal communications that an increasing number of students and their parents are considering the General Education Development (GED) as an easier and time saving alternative to the Higher Secondary School Certification that is the primary qualification for admissions at this offshore campus according to the data available with the Admissions Office of this off shore campus. (personal communication, August 30, 2015).

Chapter 2: Literature Review

A literature review discusses published information in a particular subject area, and sometimes information in a particular subject area within a certain time period. A literature review can be just a simple summary of the sources, but it usually has an organizational pattern and combines both summary and synthesis.

2.1 High School Type and Academic Performance

To what extent does the choice and selection of a high school type determine the future academic performance of students at college and university level also understood as the school to college and university transition? Are differences in academic performance due to a particular sorting pattern or does a causal effect exist between high school type and academic performance.

In recent times a number of researches have been done to study the impact of high school type on the academic performance of the students. Several researches highlight the role of high school types as a predictor of academic performance. Bertola and Checchi (2002) studied the differences in academic performance of students from public and private schools and their research findings indicated that students from public school system performed better than those from private schools. Another study focusing on high school type as predictor of academic performance was conducted by Boero et al. (2001). The study highlighted that in a comparison between general and technical high school graduates, there exists a significant difference in the final graduation mark. William et al. (1980) in their study revealed that with all factors constant, students attending Catholic schools had higher academic performance levels as compared to those from Government schools. Ajayi (1999) in his study revealed that school type does play a major role in determining the academic performance of the students. Obe (1984) noticed a difference in the academic performance between students from urban and rural schools.

Deraney and Abdelsalam (2012) in their research have compared high school type and academic performance in higher education. Public and private high school types have been a subject of many research studies to study their effects on subsequent performance in college and university level. Earlier studies by Hoffer, Greeley and Coleman (1985) found that the private school had a overall positive influence in later academic performance at university level. Jimenez and Lockheed (1995) compared private and public schooling in 5 developing countries. Results showed a significant positive effect related to private school education.

In a study conducted at the Sultan Qaboos University in Muscat by Islam and Ghassani (2015) it was demonstrated that the drop-out rate is increasing at Sultan Qaboos University. Among the factors, it was observed that the drop- out rate might have relationship with their high school performance. The study looked into weak performance and scores in Math for the students to study the relationship with poor performance in college level Calculus and may create problems for students during their first year at college and if proper support is not available then this performance can lead to continued poor performance resulting in drop-outs. Available body of research indicates that basic skills in mathematics and high school GPA/Grade are best predictors of freshman's overall GPA during their undergraduate studies (Hoffer et al., 1995). In recent times, the gender of the student has also emerged as a significant variable along with high school GPA in predicting college success. Fischer et al. (2013) in their research has shown a trend of outperformance by girls academically both at high school and college (as cited in Islam and Ghassani, 2015). The current study will aim to compare 2 high school types and the academic performance of the students in a post secondary environment at the offshore campus in Dubai. There is little literature available about the performance of General Education Development (GED) learners in a post secondary environment. As this offshore campus has recently seen an increase in the number of applicants who are enrolling in the undergraduate business program and their academic performance does not appear to be equal to those students who join the undergraduate business

program after completing the HSSC (12 year of schooling as per Pakistani system). The current research is specifically comparing the performance of the students from these 2 high school types to determine if the difference between the academic performances is significant enough to merit change in admissions policy, marketing strategies or developing more support strategies for General Education Development (GED) learners if their academic performance is not comparable with that of traditional HSSC trajectory.

2.2 Overview of General Education Development (GENERAL EDUCATION DEVELOPMENT (GED))

The General Education Development (GED) is accepted by almost all U.S colleges and employers (ACE American Council on Education, 2015). However, in contradiction to its acceptance studies show that General Education Development (GED) is not considered as an equivalent to a traditional trajectory or a high school diploma. General Education Development (GED) graduates perform at the level of high school dropouts in work, marriage and other societal aspects. There is a stigma attached with General Education Development (GED) and a number of employers, when hiring are concerned that those high school dropouts who were unable to complete their high school and opted for General Education Development (GED), might display the same behavior and traits at work, which caused them to drop out from high school in the first place, such as lack of motivation and persistence (Heckman, Humphries, La Fontaine & Rodriguez, 2014). The General Education Development (GED) exam can be done following some coaching or with self study as well and that can be a source of concern about its equivalency to a 12 year diploma following proper classroom instructions.

2.3 Overview of the Pakistani Education System (South Asian Country in current Research)

The challenges faced by the education system in Pakistan are multifold from poor enrolment in primary schools followed by lack of trained teachers, meager

salaries and lack of teaching resources to name a few. The aim of education is to improve productivity and to gain economic stability based on human capital. In Pakistan the quality of primary and secondary education is rapidly declining. Public schooling is in a state of deterioration with poor investment from the public in the education sector. Pakistan is among the top in the low literacy list (Memon, 2007). There is a declining trend of education in Pakistan and instead of forming the backbone of the society, the education sector in Pakistan is rapidly crumbling. In a study by Ahmed, Rehman, Iqbal, Ali and Badshah (2013) the problems faced by the government secondary school systems were analyzed. The system was influenced by factors such as lack of motivation among the teachers, frequent transfers of teachers between schools, political interference in hiring, nepotism and favoritism and as a result under qualified teachers are hired who are unable to manage classes effectively which leads to poor teaching and poor performance by students. Teachers are also over worked and generally no budget is allocated for providing trainings to the teachers. Teacher community is generally the poorest and least satisfied and hence there is lack of interest in them to teach appropriately. Absenteeism is quite high and in all this the system of education is dying a slow death. The quality of education imparted by private schools is better than public schools, though still questionable. Some large school systems like Beaconhouse, City School, Grammar School constitute a small percentage of private schools with a well established academic structure. The situation of Pakistani schools based in U.A.E is also not very promising. KHDA (2015) rates the Pakistani schools based in Dubai, U.A.E as "satisfactory" or "acceptable". The Pakistani schools in U.A.E have their own share of challenges and these include similar issues like lack of teacher motivation, under qualified teachers, lack of facilities. Reforms introduced for teacher education have not yielded much impact and education system in this South Asian country has yet to develop at level with other developing countries in the region.

2.4 Theoretical Perspectives on Factors affecting Academic Performance of Students

Student retention is an area of critical concern in higher education. U.S has been experiencing the problem of student retention since the 35 years, particularly in case of students from minority backgrounds based in U.S (Lau, 2003, p.126). England faces concerns in areas of student retention and increasing the number of students who join higher education to pursue their studies (Thomas et al, 2002).

The earliest studies of student retention in U.S occurred in 1930's and at that time student retention was referred to as student mortality: the inability or failure of students to graduate (Berger & Lyon, 2005). Studying successful students and those who are academically successful can provide valuable insight that can be applied to facilitate other students in terms of improving retention at universities by improving academic performance (Shushok & Hulme, 2006). In 1960's several publications such as Gekoski and Schwartz's (1961) study on student mortality and related factors and Panos and Astin's (1967) study on Attrition among college students set the trend for undergraduate student retention studies, which is an area of concern for offshore campuses in United Arab Emirates as well (Madichie & Kolo, 2013).

Lewin (2000) has discussed in his article on a growing high school trend of opting to take an extra year at high school to prepare a better student group who will be able to adapt well to the increasing demands of college requirements and challenges. The extra year of high school is being considered as a way of preparing students to meet the rigorous graduation requirements. This can be specifically helpful for students who might find the transition from school to college a complicated experience.

Three theories interlinked to explain student performance and their retention are Spady (1970), Tinto (1975) and Bean (1980).

2.4.1 Spady's Sociological Theory

The main idea of this theory explains student dropout as a process involving an interaction between each student and higher learning environment. Student characteristics as attitudes, interests and skills are influenced by the demands and expectations from the higher education institution. The way this environment influences these characteristics will determine whether the student will get accepted within the university environment successfully and become a part of the social system and as a result be retained as a student, or lack of social integration will lead to alienation from the university system and hence the chances of dropping out from university will be higher (Spady, 1970).

2.4.2 Tinto's Integration Theory

This is one of the most referred theories in terms of student performance and retention. The theory uses Emile Durkheim's theory of suicide and relates it to student retention. The basic premise follows an interesting linkage between two seemingly different concepts. The theory is based on the assertion that the likelihood of an individual committing suicide is determined through how well integrated that person is within the society (Tinto, 1975). In Durkheim's model a person commits suicide if they are not well integrated in the society, while Tinto (1975) asserts that dropouts and retention of students is dependent on how well the students are integrated within the different areas of university life. These areas could be academic or social. Tinto concurs that dropout rate could be due to the students being unable to adapt to the expectations and systems within the university. Based on further research, Tinto's original theory was revised in 1987 and three stages of moving from one community to another one was also included in lack of integration leading to increase in dropout rate. The first stage referred to as separation stage is when a student leaves one community or parts ways with one community and joins another one. This could be moving from one university to a different one where it would be change of social as well as educational set up and hence facing two different

separations. The second stage is called the Transition stage where the student deals with the stress of separation, losing friends, social support and coping up with an unfamiliar environment. The last stage of incorporation allows the students to successfully becoming members of the new environment (McClanahan, 2004). A further revision of the theory by Tinto (1993) added other factors as isolation, incongruence, financial constraints and external obligations as influencing the academic integration within the university system. Further revision by Tinto (1997) focused on classroom experiences as playing a vital role in social and academic integration of students. An interesting elaboration on Tinto's theory was done by Bennett (2003) focusing on 2 aspects. The first aspect of academic integration includes students' perception of importance of lectures and intellectual development. Social integration depends on self esteem and relationship with teachers and other students. This elaboration can be of significance in the present study as well, as majority of General Education Development (GED) students entering this offshore campus do not have a structured classroom setting for the General Education Development (GED), and most of them do self study. Further to this, McCubbin (2003) and Seidman (1996) include among other factors prior schooling as an influence on the subsequent performance of the students in higher education. The factors influencing academic performance of students are not straightforward and easy to understand and include complex variables and their interactions. Tinto's model has been revised, attacked and supported over the last 40 years, and it has significantly impacted how researchers view undergraduate student retention and graduation (Swail, 2004).

Many theories highlighting the retention of college students have been based upon the model originally proposed by Tinto (1975). Tinto has highlighted the importance of student integration which in turn is dependent on pre college characteristics and goals, interactions with peers and faculty. Researchers and educators have build upon the theoretical framework provided by Tinto to question the role played by the institution in integration of the students. Tinto's perspective of

the student being responsible for his/her integration in the educational environment, Rendon, Jalomo and Nora (2000) have given the concept of dual socialization in student integration, hence shifting the primary responsibility of integration from the student to a joint responsibility shared by the student and the institution. The authors claim that when the responsibility is solely on students for integration, then institutions are not expected to facilitate the integration process. In the present research the comparison between high school types can also benefit from an investigation to determine how will these high school types prepare the students for success in the higher education institution.

There has been a rapid expansion of higher education in 1990s and beyond and has added to the existing complications relating to student performance, retention due to a greater diversity of students. Several perspectives that have been highlighted include the following:

Sociological perspectives: Focusing on Tinto's model of academic integration, relating student retention and graduation to successful academic and social integration within the university culture and environment.

Organizational perspectives: Focus is on the size of the institute, resources available and the student staff ratio to ensure appropriate available support for the integration of the student in a new environment with its new set of demands.

Psychological perspectives: Focusing on expectancy theory, motivational theory, self efficacy theory and internal locus of control highlighting the responsibility of the student.

Cultural perspectives: Focus on minority groups and their challenges unique to their culture that creates problems and gaps in their adjustments in the university environment.

Economic perspectives: Highlight the role of financial constraints as well as cost and benefits discussions that play a role in student performance and retention.

Student development perspective: Tinto's Model of Institutional departure (1993), Tinto and Pusser's model of institutional action for student success (2006).

2.4.3 Bean's Psychological Theory

Bean (1980) stressed the importance of background characteristics of the students in determining the retention of the students within the learning environment. Whether a student wants to proceed and persist in studying is determined by the attitude and behavior of the student. The student's attitude might also be a determinant of whether a student will be content with the educational institution. If a student is satisfied, it will increase the level of commitment in terms of performance as well. Bean and Metzner (1985) developed a theory on non-traditional students who might be older or part time students. The retention of such students in educational institutions is influenced by factors as financial responsibilities or family encouragement rather than traditional social integration factors as university memberships and friends which tend to influence the acceptance and satisfaction of students within and with the university set up.

The present research can relate the concepts of non-traditional students in Bean and Metzner (1985) theory to the General Education Development (GED) students applying for undergraduate business program as they are either pursuing GED after a gap in regular education or using GED as a shorter path to college education, as instead of completing 2 more years of schooling after Grade 10 (Pakistani system) these students give General Education Development (GED) exams and do not get two more years of school experience that might help them cope with demands of college/university life. Often these students come from families who might not be educated and hence little support for the student. Under such circumstances the integration and acceptance within the social set up of college might become more of a challenge. Tinto's theory shares commonalities with Bean and Spady's theories, while these two theories do not share many similarities on their own.

Bean and Eaton (2000) have also suggested a integrated model of causes of dropping out of students from college. Their model characterizes variables such as high school experiences (this could be considered as high school type for the purpose of the current research), students' intentions, academic goals, students' academic standing and social integration, students attitude towards their institution as well as their interactions and relationships within their institution. Astin (1997) focuses on patterns of engagement exhibited by successful students and their involvement in both academic and intellectual pursuits as well as development of higher cognitive skills.

2.5 Retention Theory for non-traditional students

The proposed retention theory for non-traditional students has 4 tiers. The first tier starts at the pre-entry level. Some non-traditional students here find themselves with minimal family support. The school has also not equipped these students for adjustment. These students have studied most subjects in English, but with poorly developed communication skills. When the students complete school they are highly motivated as they realize that they have access to the next tier of academic life.

The second tier is a critical phase as it requires major adjustments to take place in terms of a new learning environment, interacting with students from different backgrounds, and new demands of academic life. If financial problems persist at this stage, students continue to miss out on essential learning both academically and in terms of socio-cultural adjustments. Often students feel overwhelmed with this type of exposure (Swail, 2006). Financial problems result in inability to pay for tuition, commuting, resources etc.

The third tier of teaching and learning experience requires adjustments and learning about new assessment and teaching strategies. Problems due to financial constraints can lead to missing classes and subsequently poor academic performance, lack of motivation, low self esteem. Fourth tier when students start their specialization in a program is the last stage of student integration and social support is

still important in integration as at this stage peer support and preparing for professional integration are important concerns. Lack of support at this stage can cause isolation, lack of motivation and even dropping out at this advanced stage (Martinez, 2003). The retention theory provides a holistic understanding of challenges faced by non-traditional students in South African context (Jama, Mapesela and Beylefeld, 2009). In the present research, General Education Development (GED) students can be considered as non-traditional as they do not follow the traditional trajectory of 12 years of education before joining a university for higher education.

General Education Development (GED) students have fewer years of education as compared to traditional students who join a college undergraduate program after completing 12 years of education. In a unique policy change in 1995 the provincial government in Ontario announced a change in the high school system by introducing a 4 year high school program, so that in 2003 there would be 2 cohorts of students graduating from high school and entering college together, one cohort after completing 4 years and the other after completing 5 years of high school and hence offering a unique chance of comparing how one year can make a difference in the academic performance in college. A survey was conducted to match year of high school with academic performance at college and it was seen that students with 4 years of high school performed significantly worse than their five year counterparts (as cited in Krashinsky, 2006). There was difficulty in assessing the impact of one year reduction, as a number of students returned back to high school to complete more courses even when they had an option of finishing their degree in 4 years. The students enrolled in four year program performed one half grade point less than those enrolled in five years of high school. However it was difficult to isolate whether this difference was due to the age of the students being higher due to completing five years of high school or due to the difference in school years. In the current study on the offshore campus, the General Education Development students will sometimes enroll in coaching classes for General Education Development preparation, while in

some cases they will give the exams after self study, so the time actually involved in General Education Development completion does vary but is less than the traditional twelve years of schooling according to Intermediate certification as per Board of Intermediate and Secondary Education Pakistan.

Research has identified factors as academic performance as a predictor of persistence in college as well as student retention in college. In a study by Makuakane-Drechsel and Hagedorn (2000) found that Grade Point Average (GPA) was a major contributor in predicting persistence of students in certain programs in college. Hagedorn, Lester, Moon and Tibbetts (2006) made similar contributions with findings relating a high Grade Point Average (GPA) in high school with receiving an undergraduate degree. Allen et al. (2006) found academic performance in high school as a predictor of academic performance in college as well as retention.

At an institutional level, academic engagement activities can also have a positive influence on how students will be performing in college and their retention at college/university. Using Tinto's model, Townsend and Wilson (2009) found that social and academic integration was influenced by university size and opportunities to conduct research and join various activities based clubs.

2.6 High School Dropouts and Academic Performance

Even though the present study is not directly addressing the issue of high school dropouts, however, the problem is quite central to the current research. Students who are either not at school currently and have dropped out or those who take General Education Development (GED) as an easier option without going to twelve year of schooling are the main components of this research. It is important to discuss why do students drop out of school and then some of these students use General Education Development (GED) as a second chance or an easier option to join a college or university. How does this affect their academic performance?

Dropping out of high school has always been of concern as a social, educational and economic problem. When a student drops out of high school they

have several deficiencies that stunt their development and progress in the future. The individual consequences lead to social costs of billions of dollars in terms of these students not being able to adapt within the social structure as contributing members towards social development (Rumberger, 1987).

In an article in Gulf News, Ahmed and Nazzal (2014) highlighted the alarming number of Pakistani school children in U.A.E who are not at school. There are 20,000 Pakistani students who are not in schools. There are 9 schools that are under the consulate for Pakistan and these provide affordable education. However, these 9 schools are unable to cater to the needs of all Pakistani students as the schools are limited in resources as well as short staffed and unable to cope with increasing demands. Individuals suffer when they dropout as they are unable to find a well paying job. The whole society suffers as demands on social services increase due to increased unemployment. However these are not the only consequences and a wide range of social and economic consequences result, which would be beyond the scope of the present academic performance of students who rejoin after dropping out or those who opt for General Education Development (GED) as an easy way back to join higher education.

2.7 Student Quality and Retention at International Branch Campuses

Offshore/branch campuses in United Arab Emirates often struggle with retaining quality students and faculty members. Often branch campuses have been forced to recruit students who in normal circumstances would not be considered eligible for admission. Most branch campuses due to their infancy stage are unable to replicate the conditions at their parent campus. Many branch campuses are unable to provide the facilities and the services available at the parent campus. Most students who would not be accepted in the parent campus get admission at the branch campuses and lead to a culture of awarding passing grades to enable students to graduate (Altbach, 2010). Most branch campuses in United Arab Emirates have a diverse student population that leads to both advantages and disadvantages. The

diverse range of secondary education that students have taken prior to joining higher education can raise several challenges related to student academic performance and retention at the branch campus. A survey conducted by Gerson (2010) indicated that in U.A.E most professors believe that students have poor skills in Math and English but are awarded a higher grade than they deserve.

2.8 Attributional Retraining

Students on academic probation, as in case of students who are not performing well due to their high school type, are at risk for not being retained. An understanding of attribution theory would be helpful in understanding the students on academic probation or those struggling with academic eligibility. Several students on academic probation do not take responsibility for their academic performance by attributing poor academic performance on factors outside their control such as university policies, biased instruction or academic advising. Taking an attributional approach with such students can facilitate them to be more responsible and to work towards academic eligibility. College students who take responsibility for their academic performance are more resilient and bounce back more swiftly from academic failures and tend to stay longer in college (Kallenback & Zafft, 2004). All students deemed for academic failure do not necessarily dropout of college. Fin and Rock (1997) conducted a research study to demonstrate that not all students who are considered to be at risk for poor academic performance or school problems drop out of school or even suffer from poor academic performance.

2.9 Academic Success in College

There is a sizeable amount of research literature on academic success in university and college. Much of the earlier research in this area was focused on the impact of previous school performance i.e. grades in high school and in case of the present study the marks obtained in General Education Development (GED) and Higher Secondary School Certificate (HSSC). The predictive utility of this line of research proved to be quite limited, however, as these variables were found to

account for relatively small amounts of variability in grade-point average (GPA) or student attrition (Murtaugh, Burns, & Schuster, 1999; Randsell, 2001). With so much of the variance left unexplained, it is not surprising that researchers have turned their attention to a broad range of other possible predictors for academic success. Lichtman (1989) and Smith (1982) highlighted variables as research interest, full- or part-time attendance, employment status, being a member of an ethnic minority, family obligations, distance from home town, financial concerns, and gender (as cited in Parker, Summerfeldt, Hogan, & Majeski,2004).

High school GPA and scores on college entrance examinations are generally used to predict the student's probable capability of academic success in the first year of college (Breland, H., Maxey, J., Gernand, R., Cumming, T. and Trapani, C., 2002). First year college GPA generally provides an indication of academic success in college program. Although high school GPA and college GPA both measure educational achievement, they also include other distinctive traits such as effort, attendance, conformity, and motivation (Stiggins, et al., 1989). Goldman and Hewitt (1975) found that high college grades were more likely to reflect cognitive achievement and less likely to reflect non-cognitive factors (as cited in Noble & Sawyer, 2002).

An interesting study conducted by Geiser and Santelices (2007) finds that high-school grade point average (HSGPA) is consistently the best predictor not only of freshman grades in college but of four-year college outcomes as well. Their research study urges for greater importance on the high-school record, and a corresponding de-emphasis on standardized tests, in college admissions. HSGPA focuses on the mastery of specific skills and knowledge required for college-level work. Even if high-school record had less predictive value, its use as a college-admissions criterion would still be defensible and appropriate as it affirms the value of demonstrated academic achievement. In an earlier research study by Geiser and Studley (2003), it was demonstrated that HSGPA in college-preparatory courses was the best predictor of freshman grades for a sample of almost 80,000 students admitted

to the University of California. The reason behind attempts to predict academic success include the success rate and completion of degree programs at various universities.

The academic performance of students during the first year of college in the first few college courses are quite crucial in determining how the student will proceed in college (Armstrong, 2000). Students performing well and securing a good GPA during their first year of college or first few courses have a strong relation with persistence and retention at a college and graduating or completing their diploma/degree from that institution and moving into high level occupations and jobs for further pursuits (Tinto, 1975; Pascarella & Terenzini, 1991). The performance of college freshman cannot be solely dependent on high school GPA/Grades and there can be several contributing factors as: cognitive factors (e.g., high school achievement, SAT or ACT score), non-cognitive factors (e.g., teaching and institutional quality, students' motivation and so on) and demographics (e.g., gender, ethnicity, location). Traditionally, SAT scores or admissions test play a major role in selecting a student for college. Some institutions use only the high school achievement scores, while others use both high school scores and standardized scores (SAT or ACT) to select the students (Clercq et al., 2013). Several studies have demonstrated that high school performance scores is a significant predictor of student academic success during their undergraduate studies (Noble, 1991; Cohn et al., 2004; Kuncel et al., 2005).

Chapter 3: Research Methodology

3.1 Introduction

In this section of the research study, the researcher has discussed in detail the research design that was followed in order to find answers to the research problem. A research design is essentially a systematic roadmap that guides the researcher and provides scientific support to the study. In the subheadings given below each and every aspect of the research design has been elaborated in detail. In the previous chapter a detailed review of literature has assisted the researcher in developing a theoretical and conceptual base for the research problem under investigation. The research questions developed need to be answered with a structured and systematic approach, which is provided by the research methodology followed. A research design provides structure that can guide in the execution of a research method and the subsequent data .Research methods can be and are associated with different kinds of research design. In this chapter the researcher has provided thorough discussion on the sampling method followed, data collection method, data analysis tools, ethical considerations and lastly conclusion.

The methodology section of a research study answers two main questions: How was the data collected or generated? And, how was it analyzed? Data gathering is crucial in research, as the data is intended to contribute to an enhanced comprehension and understanding of a theoretical framework. It then becomes crucial that selecting the manner of obtaining data and from whom the data will be acquired be done with sound decision, especially since no amount of analysis can make up for incorrectly collected data (Bernard 2002).

3.2 Research Design

As discussed in the research objectives the researcher aims at examining the factors that predict student's academic performance with specifically keeping high school type as an indicator. Thus the research design followed is descriptive research,

observational method and surveys and interviews method has been used. Observations were made in natural settings thus helping the researcher collect data in the naturalistic setting without any sort of manipulation. the research paradigm is positivist ,empiricism as the researcher has scientifically approached the research problem, critically reviewed theories proposed and based upon that empirically investigated the research problem, supporting with observations, interviews using mixed method approach.

3.3 Sampling Method

The sampling method employed for this research is purposive sampling. The purposive sampling technique is a type of non-probability sampling. Purposive sampling is used with both qualitative and quantitative research techniques. Purposive sampling allows for strategic choices in data collection. The study required data from a limited student body studying at this offshore campus and this was further constrained by a limited time period used so as to obtain a sample which comprised of a homogenous group who had enrolled at the off shore campus at the same time and were enrolled in the same courses so as to obtain a sample who did not differ in their performance because of different nature of courses they had completed during the two semesters that were used as time frame for this sample. (Nyikahadzoi et al,2013; Corengia et al,201. For uniformity of data in the present study the original sample size was further reduced in order to have same Intermediate/HSSC and GED students in 5 courses so a more accurate comparison could be made. The reason for the sample size being small is due to the reason that the off-shore campus based in U.A.E is a small branch campus with total new enrollments in the Bachelor of Business Administration program not exceeding 50 during one year.

The present study used a sample comprising of two groups of students who were from two high school types. The two high school types were General Education Development and Higher Secondary School Certificate (Intermediate as per Pakistani qualifications). The initial data was comprised of 50 students (admitted in BBA program in Fall 2014) who were to be compared based on their high school

performance against their performance during the freshman year (1st and 2nd semester) of their study/courses in the offshore campus based in United Arab Emirates. There were 30 male and 20 female students (Table 1, Fig 1). The GED students were 24 and the students joining the offshore campus after their HSSC were 26. The age group of the sample was between 17years to 20 years.

3.4 Data Collection Method

The study employed a mixed methods design. As such, a design is useful to capture the best of both quantitative and qualitative approaches (Johnson, Onwuegbuzie & Turner, 2007). A mixed approach allows for generalizing the findings to a population and developing a detailed view of a concept for individuals. In this situation the advantages of collecting quantitative data and open-ended qualitative data helps in understanding the research problem. A mixed approach helped in investigating the students' academic performance effectively as different tools helped in examining the different facets.

The qualitative data included observations and comments shared by faculty members and Program Managers regarding the difficulties that GED students appeared to be facing in the classrooms (the confidential nature of these sessions do not allow them to be shared as an annexure from an ethical viewpoint) . Observations, unstructured interviews were conducted among those faculties and program mangers as they are the ones who are either teaching these students or heading those programs that have GED students enrolled in different courses and different semesters. In total 6 faculties were interviewed. These faculties were identified based upon common criteria that they all are essentially teaching GED students along with students from other high school types. At the same time these faculties are teaching numeric and non numeric courses that also assisted in having a better understanding of the students overall performance in most of the courses that they are enrolled into. The faculties were asked questions pertaining to what challenges they have experienced when they have to teach GED students along with other high school types? What type of teaching methodology they implement to accommodate students from varied

school types? Do they provide extra course work, home work or tutorials for these students to ensure they are at par with the rest? etc. Observations included both the observations made by the faculties and the researcher. The observations were recorded in the form of notes based upon specific criteria's such as the interaction of GED students with the rest of the students when they are involved in group work, their level of participation and involvement in class discussion, their approach in understanding a topic that was being discussed in the class, the way they find it easy or difficult to answer the questions , the way faculties assist them in facilitating their involvement and participation in the class, the way teacher supports them in revising the topics that they may fine difficult to understand etc. , however these observations and discussions promoted the current study to serve as a pilot study to investigate the differences in performance of GED and HSSC students enrolling at the offshore campus.

The qualitative component included personal communication with instructors and Admissions/Enrollments personnel and general observations of students facing challenges. Qualitative research has the particular strength of formulating valid arguments by linking context and explanations and has the potential to generate cross-textual generalities. Conducted systematically and with clarity, qualitative research can establish its strong foundations along with continued critical self scrutiny by the researcher so as to reduce researcher influence on qualitative data. Qualitative research has its roots in observation, recording and analyzing of occurrences in their natural settings focusing on the contextual factors and social world (Mason, 2002).

The researcher followed a quantitative approach as well. Quantitative research gathers data in numerical form which can be put into sets/classes or groups, or in rank order, or measured in units of measurement. This type of data can be used to construct graphs and tables of raw data. The quantitative data was mainly collected from the student's transcripts that are generated at the end of each semester and also based upon the regular summative assessments that are conducted in different courses

for each of the students'. The university online portal was used to pull out reports for each student that were a part of the sample for the different courses that they were enrolled into. The course teacher regularly uploads the students' grades for each of the assessments that were planned for a particular course. This was used to examine quantitatively the gradual progress for each of the students.

3.5 Data Analysis

In statistics linear correlation is used to assess what relationship, if any, exists between two variables. It measures the direction and strength of the relationship and this "trend" is represented by a correlation coefficient, most often represented symbolically by the letter *r*. The variables in a correlation can move in the same direction or opposite directions which indicates if it is a positive or negative correlation. Standard deviation is used to determine by how much the members of a group differ from the mean value for the group. There was no hypothesis testing done, however the research question from Chapter 1 were studied. The results discussed in Chapter 4 showed a relationship between high school type and academic performance in an undergraduate business program. The academic performance of students enrolling in the business program after completing Intermediate/HSSC shows a more stable trend as compared to students joining the undergraduate business program after completing their GED.

3.6 Ethical Considerations

The area of ethical considerations is of growing importance, considering the level of significance a scientific investigation has for the multiple stakeholders directly and indirectly involved in the research study. The level of importance placed on ensuring the generalizability of the findings also emphasizes on how the researcher has ensured ethical considerations were given at each of the stages while planning the research approach.

The researcher has ensured that the identity of the sample members is not disclosed. At the same time minimal interference was made by the researcher while

noting the observations. In no ways any of the respondents were pressurized or attempts were made to put stress on them to provide responses. At the same time researcher ensured lack of manipulation and biasness while collecting data, analyzing the data and reporting the findings. The participants were not subjected to any physical or mental harm in the course of this study.

3.7 Conclusion

The researcher has ensured the research methodology is rigorous and helps in answering the research questions. At the same time the research design has been implemented in a systematic manner ensuring that no loopholes are left.

Chapter 4: Data Analysis

The present study used data for 2 groups of students belonging to 2 high school types. For this research the 2 high school types were General Education Development and Higher Secondary School Certificate (Intermediate as per Pakistani qualifications). The initial data was comprised of 50 students (Admitted in BBA program in Fall 2014) who were to be compared based on their high school performance against their performance during the freshman year (1st and 2nd semester) of their study/courses in the offshore campus based in United Arab Emirates. These 50 students were enrolled for their 1st semester of study in Fall 2014. There were 30 male and 20 female students (Table 4.01, Fig 4.01). The GED students were 24 and the students joining the offshore campus after their HSSC were 26. The data was further filtered based on marks distribution in Grade 10. Based on the Grade 10 marks, 5 ranges were determined (Table 4.02 and 4.03; Fig 4.02 and 4.03). The Grade 10 marks in the first stage also shows a significant divide as 50% of the Intermediate students had an A or B grade in grade 10, while only 7 out of 24 students or 29% of GED students had an A or B grade range in grade 10.

Table 4.01

Previous Qualifications	frequency
GED	24
Intermediate	26
Total	50

Fig 4.01

Previous Qualifications

GED   Intermediate

52%   48%
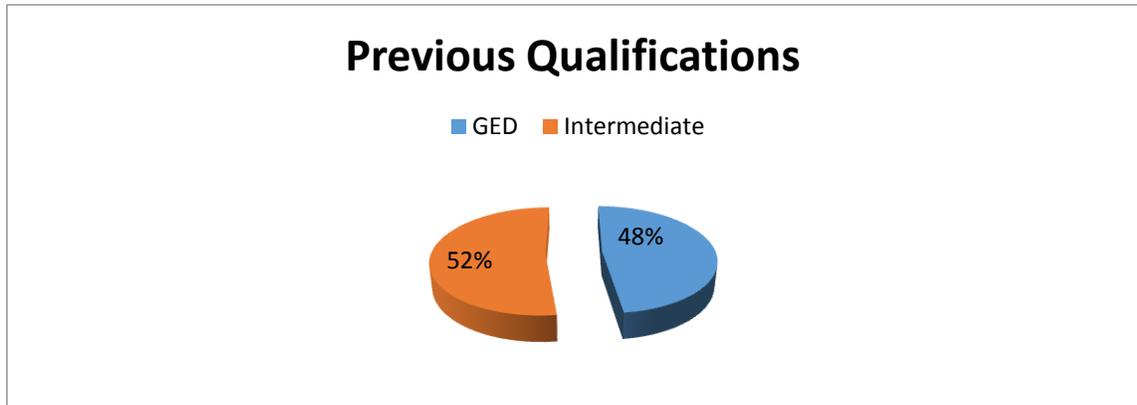
Table 4.02

GED Grade 10 Marks %	frequency
NA	3
50 and less	8
50-60	6
60-70	4
70 and above	3
Total	24

Fig 4.02

GED Marks %

NA
50 and less
50-60
60-70
70 and above

13% 12%
17%
33%
25%
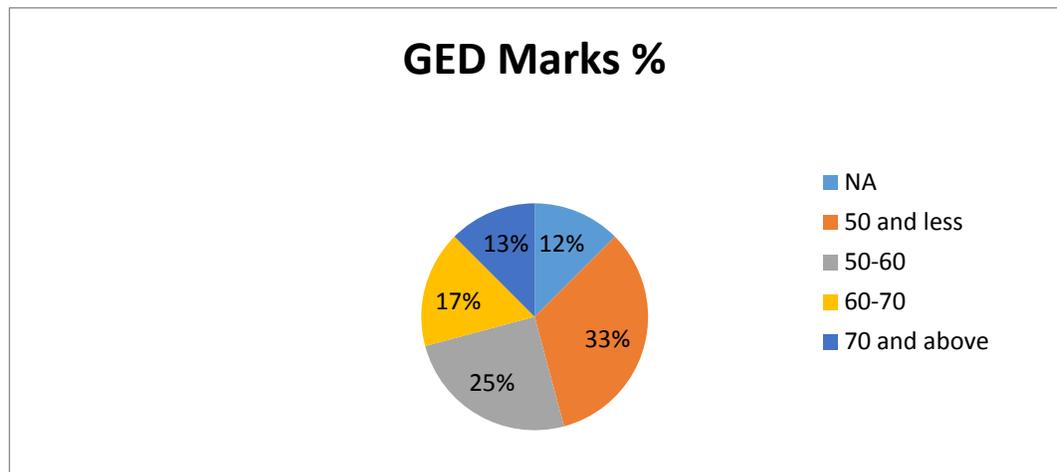
Table 4.03

Intermediate Grade 10 Marks %	frequency
NA	3
50 and less	3
50-60	7
60-70	8
70 and above	5
Total	26

Fig 4.03
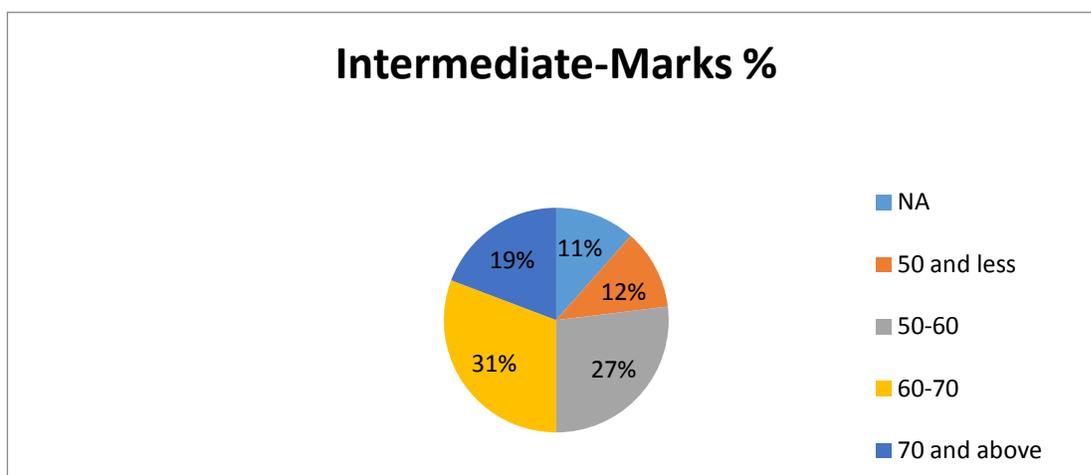
The performance of the 2 high school type enrolled students (admission semester Fall 2014) was compared in the courses taken during their first 2 semesters of study at the off shore campus.

Table 4.04ai, 4.04aii and 4.04aiii shows the grades/percentage range obtained by the students in the course Introduction to Accounting. The comparison between the scores of 48 students (23 GED and 25 HSSC/Intermediate) show that a total of 7 students from High School type (Intermediate/HSSC) who had scored in 60-70 and 70 and above range in Grade 10 scored A range grades in Introduction to Accounting while only 2 students with GED qualifications scored in A range for Introduction to Accounting and had Grade 10 qualifications in 60-70 and 70 and above range (Table 4.04ai; Fig 4.04ai). In Table 4.04aii and Fig 4.04aii a total of 4 students who had

scored in 60-70 range in Grade 10, secured a B grade in Introduction to Accounting, while only 2 GED students who had scored in 60-70 range in Grade 10 scored a B grade in Introduction to Accounting. Table 4.04aiii does not give a clear demarcation in terms of previous qualification and current performance.

Table 4.04ai

Introduction to Accounting (A , A+and A-)

Marks %\ Previous Qualifications	GED	Intermediate
NA	1	1
50 and less	1	1
50-60	1	0
60-70	1	3
70 and above	1	4
total	5	9

Fig 4.04ai
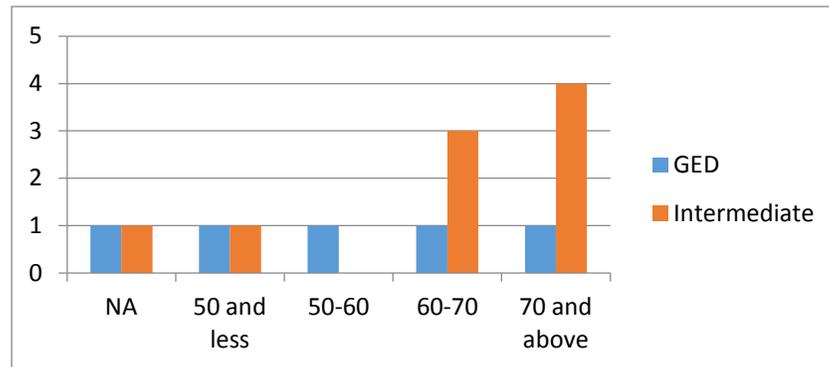
Table 4.04aii

Introduction to Accounting (B's and C's)

Marks %\ Previous Qualifications	GED	Intermediate
NA	0	1
50 and less	2	0
50-60	3	4
60-70	2	4
70 and above	0	0
total	7	9

Fig 4.04aii
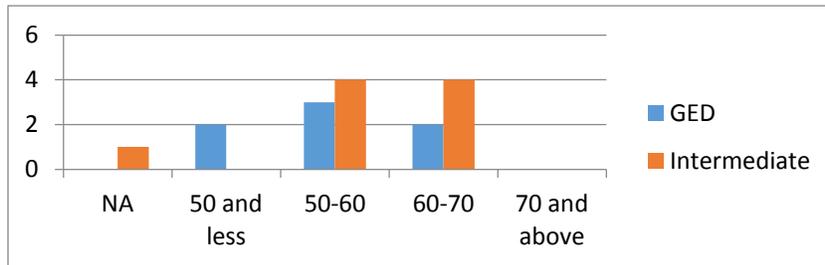
Table 4.04aiii

Introduction to Accounting (F's , D'sand W's)

| Marks %\ Previous Qualifications	GED	Intermediate
NA	2	1
50 and less	4	2
50-60	2	3
60-70	1	1
70 and above	2	0
total	11	7

Fig 4.04aiii
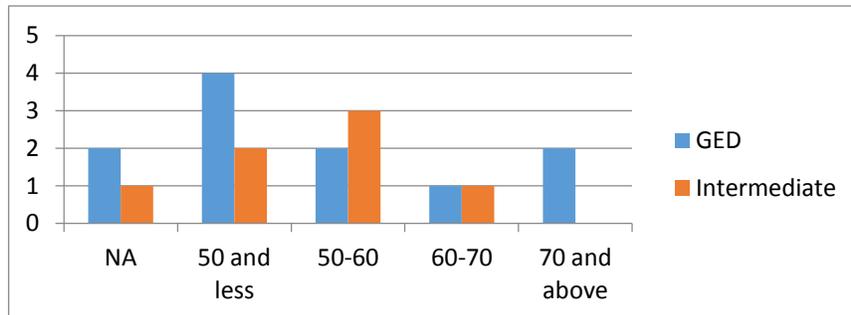
Table 4.05ai, 4.05aii and 4.05aiii shows the grades/percentage range obtained by the students in the course Financial Accounting. The comparison between the scores of 29 students (10 GED and 19 HSSC/Intermediate) show that a total of 5 students from High School type (Intermediate/HSSC) who had scored in 60-70 and 70 and above range in Grade 10 scored A range grades in Financial Accounting while only 1 student with GED qualifications scored in A range for Financial Accounting and had Grade 10 qualifications in 60-70 and 70 and above range (Table 4.05ai; Fig 4.05ai). In Table 4.05aii and Fig 4.05aii a total of 2 students (Intermediate/HSSC) who had scored in 60-70 range and 70 and above in Grade 10, secured a B or C grade in Financial Accounting, the number stayed the same (2) for GED students who had scored in 60-70 range or 70 and above in Grade 10 scored a B grade in Financial Accounting. Table 4.05aiii does not give a clear demarcation in terms of previous qualification and current performance

Table 4.05ai

Financial Accounting (A , A+and A-)		
Marks %\ Previous Qualifications	GED	Intermediate
NA	0	0
50 and less	0	1
50-60	0	1
60-70	1	3
70 and above	0	2
total	1	7

Fig 4.05ai
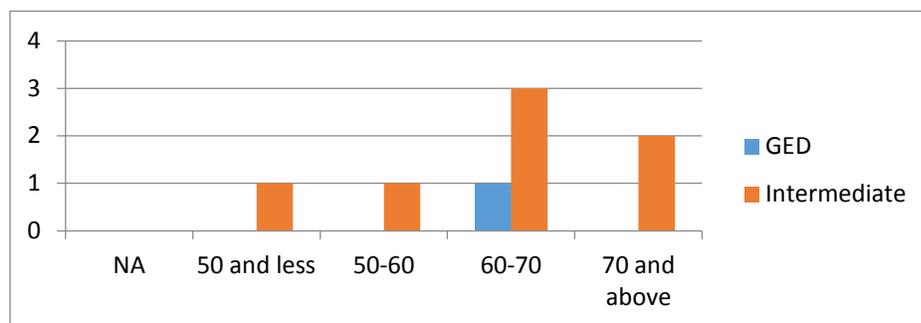
Table 4.05aii

Financial Accounting (B and Cs')		
Marks %\ Previous Qualifications	GED	Intermediate
NA	0	2
50 and less	1	1
50-60	2	1
60-70	1	1
70 and above	1	1
total	5	6

Fig 4.05aii
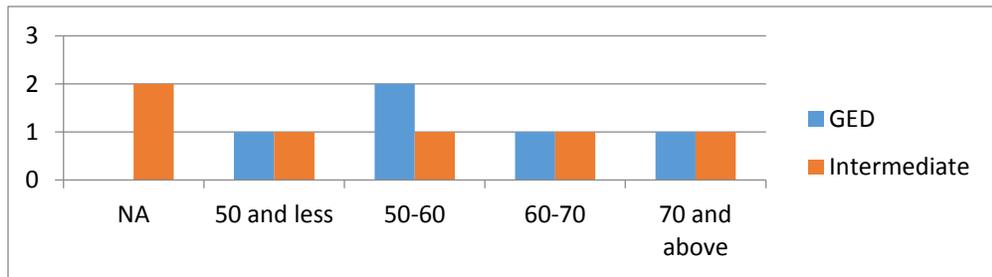
Table 4.05aiii

| Financial Accounting (F's , D'sand W's)		
Marks %\ Previous Qualifications	GED	Intermediate
NA	0	1
50 and less	1	1
50-60	3	0
60-70	0	4
70 and above	0	0
Total	4	6

Fig 4.05aiii
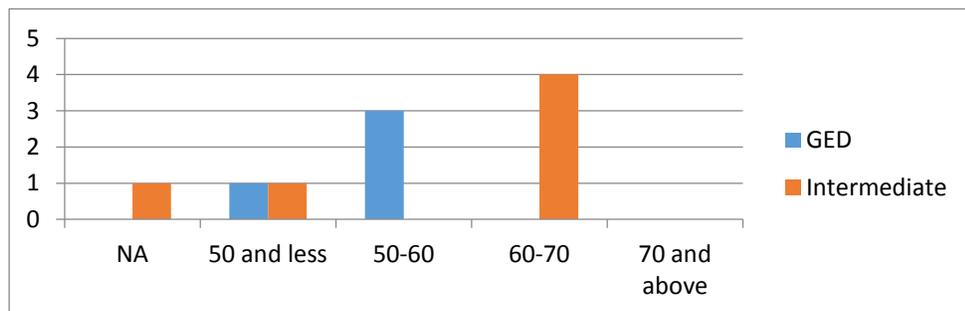
Table 4.06ai, 4.06aii and 4.06aiii shows the grades/percentage range obtained by the students in the course Math for Business. The comparison between the scores of 20 students (3 GED and 17 HSSC/Intermediate) show that a total of 4 students from High School type (Intermediate/HSSC) who had scored in 60-70 and 70 and above range in Grade 10 scored A range grades in Math for Business while only 1 student with GED qualifications scored in A range for Math for Business and had Grade 10 qualifications in 60-70 and 70 and above range (Table 4.06ai; Fig 4.06ai). In Table 4.06aii and Fig 4.06aii a total of 4 students (Intermediate/HSSC) who had scored in 60-70 range and 70 and above in Grade 10, secured a B or C grade in Math for Business, the number was 0 for GED students who had scored in 60-70 range or 70 and above in Grade 10 scored a B grade in Math for Business. Table 4.06aiii does not give a clear demarcation in terms of previous qualification and current performance

Table 4.06ai

Math for Business(A , A+and A-)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	0
50 and less	0	0
50-60	0	0
60-70	1	2
70 and above	0	2
total	1	4
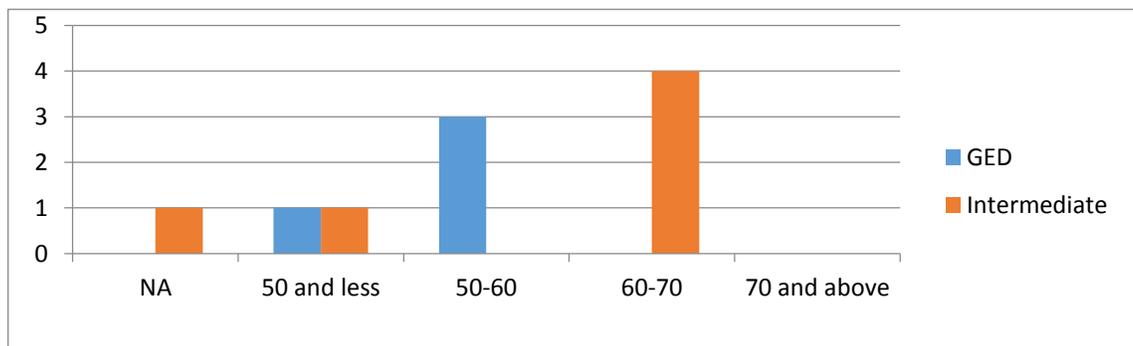
Fig 4.06ai

Table 4.06aii

Math for Business(A , A+and A-)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	0
50 and less	0	0
50-60	0	0
60-70	1	2
70 and above	0	2
total	1	4

Fig 4.06aii
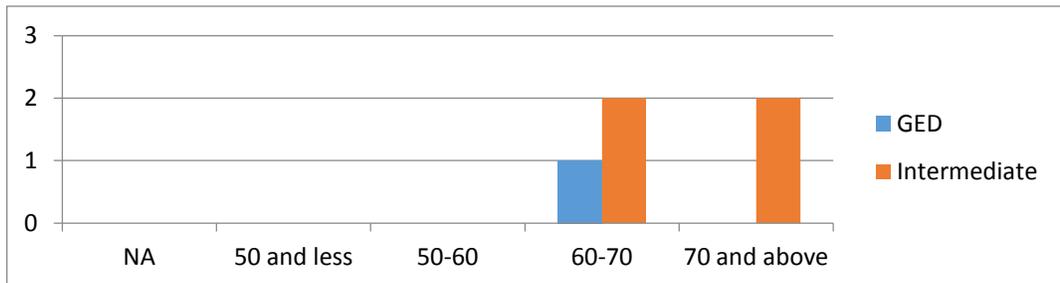
Table 4.06aiii

| **Marks %\ Previous Qualifications**	**GED**	**Intermediate**
NA	0	1
50 and less	0	1
50-60	0	1
60-70	0	1
70 and above	0	1
total	0	5

Fig 4.06aiii
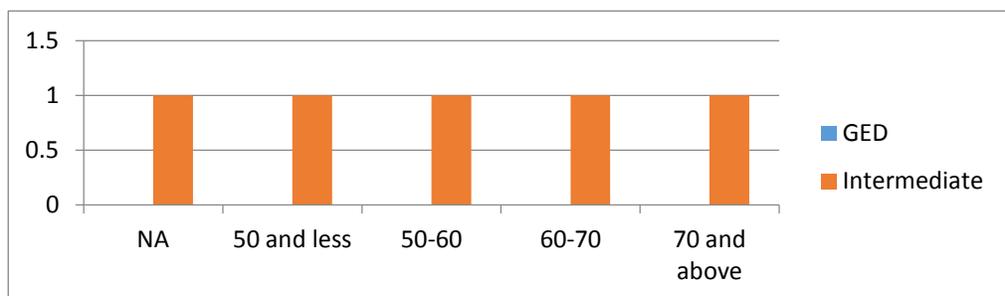
Table 4.07ai, 4.07aii and 4.07aiii shows the grades/percentage range obtained by the students in the course Logic and critical thinking. The comparison between the scores of 32 students (9 GED and 23 HSSC/Intermediate) show that a total of 4 students from High School type (Intermediate/HSSC) who had scored in 60-70 and 70 and above range in Grade 10 scored A range grades in Logic while no students with GED qualifications scored in A range for Logic and had Grade 10 qualifications in 60-70 and 70 and above range (Table 4.07ai; Fig 4.07ai). In Table 4.07aii and Fig 4.07aii a total of 4 students (Intermediate/HSSC) who had scored in 60-70 range and 70 and above in Grade 10, secured a B or C grade in Logic, the number was 2 for GED students who had scored in 60-70 range or 70 and above in Grade 10 scored a B grade in Logic. Table 4.07aiii does not give a clear demarcation in terms of previous qualification and current performance

Table4.07ai

Logic(A , A+and A-)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	0
50 and less	0	0
50-60	0	0
60-70	0	2
70 and above	0	2
total	0	4

Fig 4.07ai
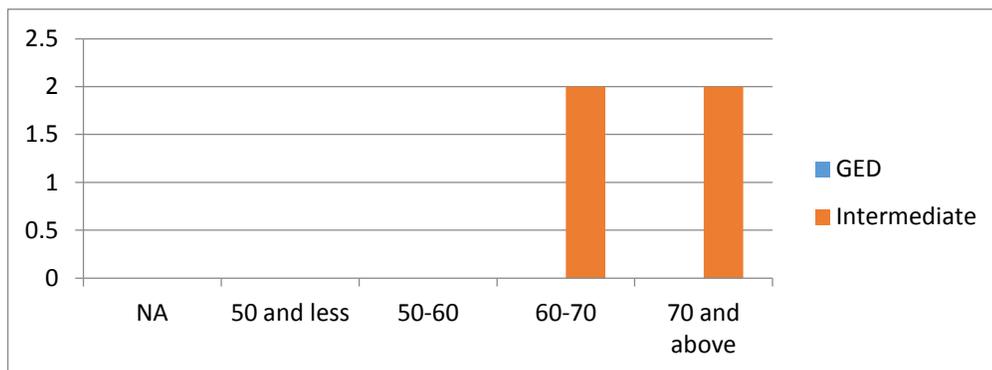
Table 4.07aii

Logic(B's and C's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	2
50 and less	0	2
50-60	2	4
60-70	1	2
70 and above	1	2
total	4	12

Fig4.07aii
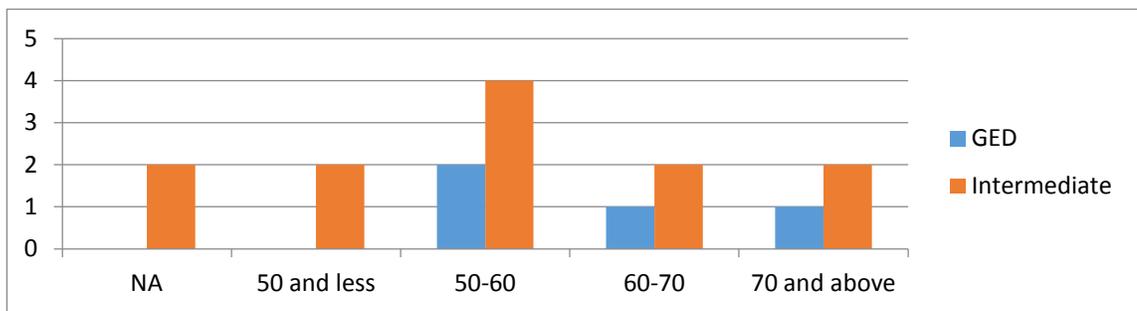
Table 4.07aiii

| Logic(F's , D'sand W's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	1
50 and less	2	0
50-60	2	3
60-70	0	3
70 and above	1	0
total	5	7

Fig 4.07aiii
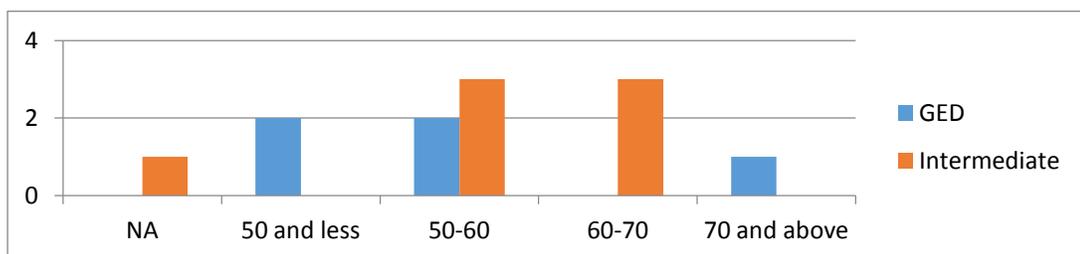
Table 4.08ai, 4.08aii and 4.08aiii shows the grades/percentage range obtained by the students in the course Microeconomics. The comparison between the scores of 45 students (21 GED and 24 HSSC/Intermediate) show that a total of 3 students from High School type (Intermediate/HSSC) who had scored in 60-70 and 70 and above range in Grade 10 scored A range grades in Microeconomics while 1 student with GED qualifications scored in A range for Microeconomics and had Grade 10 qualifications in 60-70 and 70 and above range (Table 4.08ai; Fig 4.08ai). In Table 4.08aii and Fig 4.08aii a total of 7 students (Intermediate/HSSC) who had scored in 60-70 range and 70 and above in Grade 10, secured a B or C grade in Microeconomics, the number was 2 for GED students who had scored in 60-70 range or 70 and above in Grade 10 scored a B grade in Microeconomics. Table 4.08aiii does not give a clear demarcation in terms of previous qualification and current performance.

Table 4.08ai

Microeconomics(A , A+and A-)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	0
50 and less	0	0
50-60	0	0
60-70	1	1
70 and above	0	2
total	1	3

Fig 4.08ai
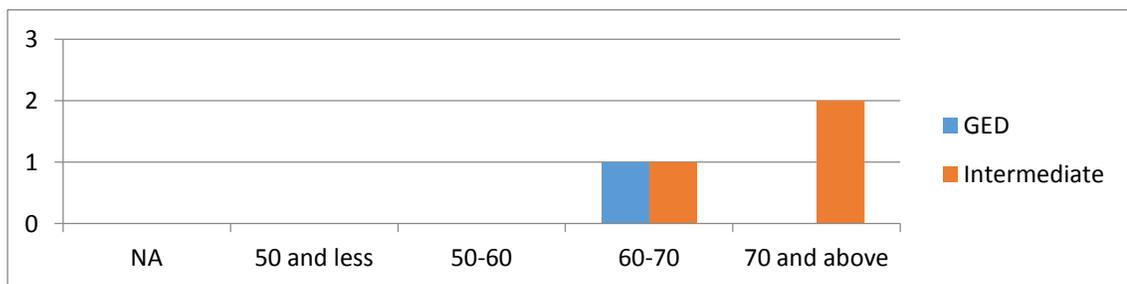
Table 4.08aii

Microeconomics(B's and C's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	1	3
50 and less	1	2
50-60	4	3
60-70	0	5
70 and above	2	2
total	8	15

Fig 4.08aii
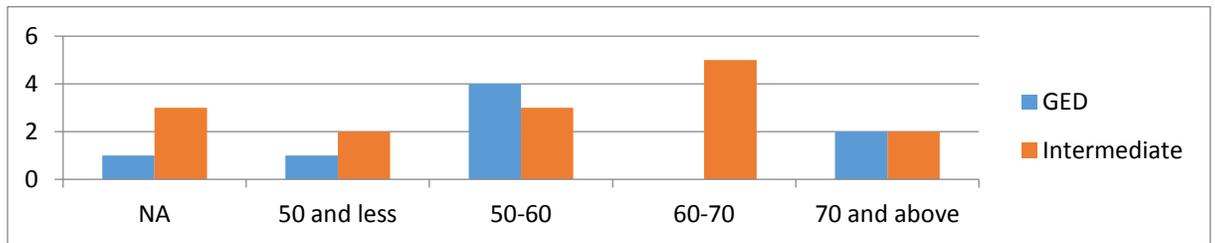
Table 4.08aiii

Microeconomics(F's , D'sand W's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	1	0
50 and less	6	2
50-60	1	3
60-70	3	1
70 and above	1	0
total	12	6

Fig 4.08aiii
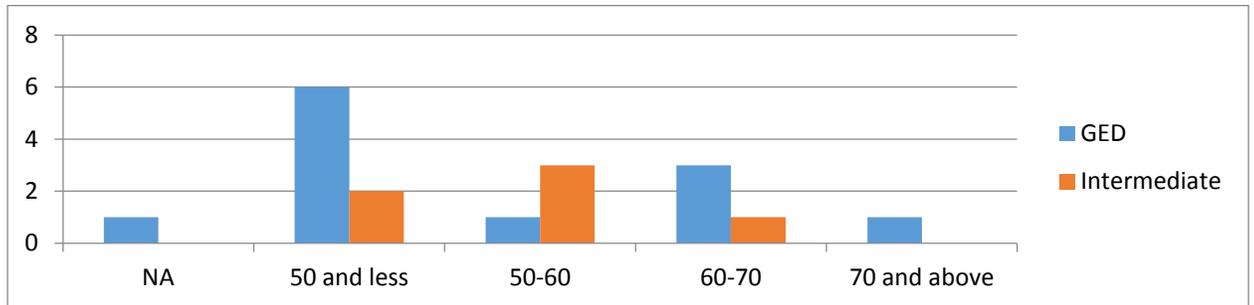
Table 4.09ai, 4.09aii and 4.09aiii shows the grades/percentage range obtained by the students in the course English Writing Skills. The comparison between the scores of 46 students (21 GED and 25 HSSC/Intermediate) show that no students from High School type (Intermediate/HSSC) who scored in 60-70 and 70 and above range in Grade 10 scored A range grades in English Writing Skills and no student with GED qualifications scored in A range for English Writing Skills and had Grade 10 qualifications in 60-70 and 70 and above range (Table 4.09ai; Fig 4.09ai). In Table 4.09aii and Fig 4.09aii a total of 10 students (Intermediate/HSSC) who had scored in 60-70 range and 70 and above in Grade 10, secured a B or C grade in English Writing Skills, the number was 3 for GED students who had scored in 60-70 range or 70 and above in Grade 10 scored a B grade in English Writing Skills. Table 4.09aiii does not give a clear demarcation in terms of previous qualification and current performance.

Table 4.09ai

English Writing Skills (A , A+and A-)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	0
50 and less	0	0
50-60	0	1
60-70	0	0
70 and above	0	0
total	0	1

Fig 4.09ai
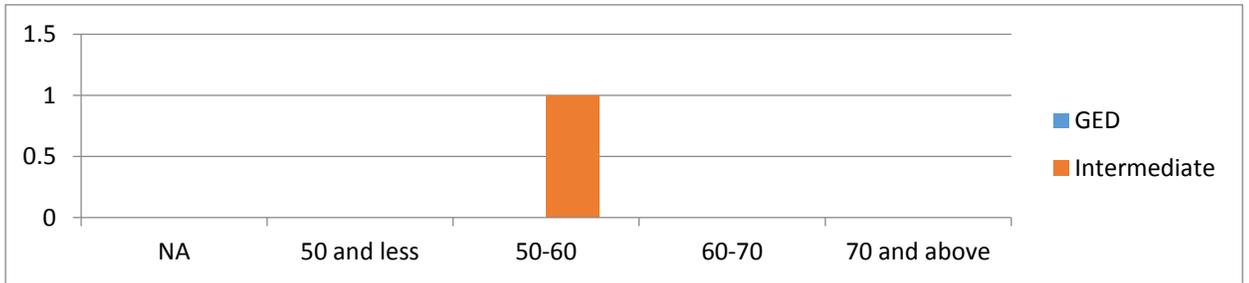
Table 4.09aii

English Writing Skills(B's and C's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	2	2
50 and less	2	2
50-60	4	5
60-70	1	6
70 and above	2	4
total	11	19

Fig 4.09aii
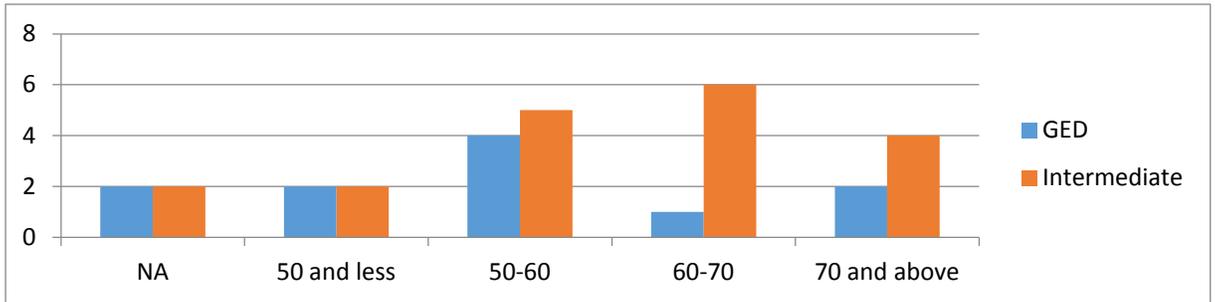
Table 4.09aiii

| English Writing Skills(F's , D'sand W's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	1
50 and less	5	2
50-60	1	1
60-70	3	1
70 and above	1	0
total	10	5

Fig 4.09aiii
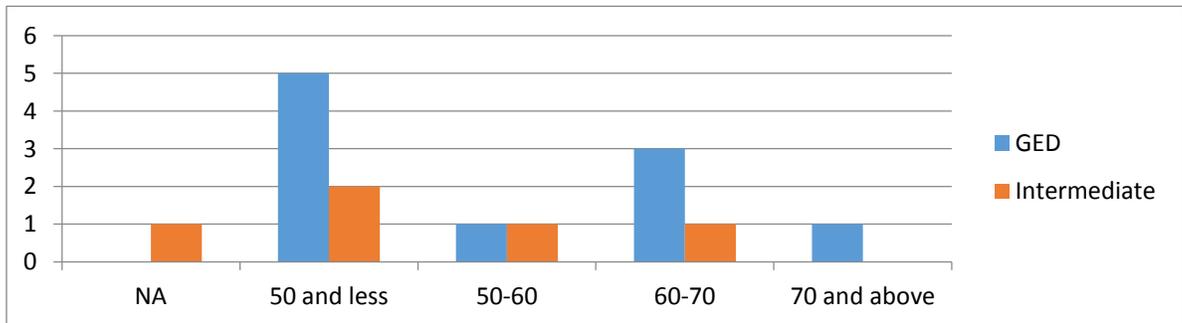
Table 4.10ai, 4.10aii and 4.10aiii shows the grades/percentage range obtained by the students in the course IT in Business. The comparison between the scores of 26 students (5 GED and 21 HSSC/Intermediate) show that 3 students from High School type (Intermediate/HSSC) who scored in 60-70 and 70 and above range in Grade 10 scored A range grades in IT in Business and no student with GED qualifications scored in A range for English Writing Skills and had Grade 10 qualifications in 60-70 and 70 and above range (Table 4.10ai; Fig 4.10ai). In Table 4.10aii and Fig 4.10aii a total of 3 students (Intermediate/HSSC) who had scored in 60-70 range and 70 and above in Grade 10, secured a B or C grade in IT in Business, the number was 2 for GED students who had scored in 60-70 range or 70 and above in Grade 10 scored a B grade in IT in Business. Table 4.10aiii does not give a clear demarcation in terms of previous qualification and current performance.

Table 4.10ai

IT in Business(A , A+and A-)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	0
50 and less	0	0
50-60	0	0
60-70	0	1
70 and above	0	2
total	0	3

Fig 4.10ai
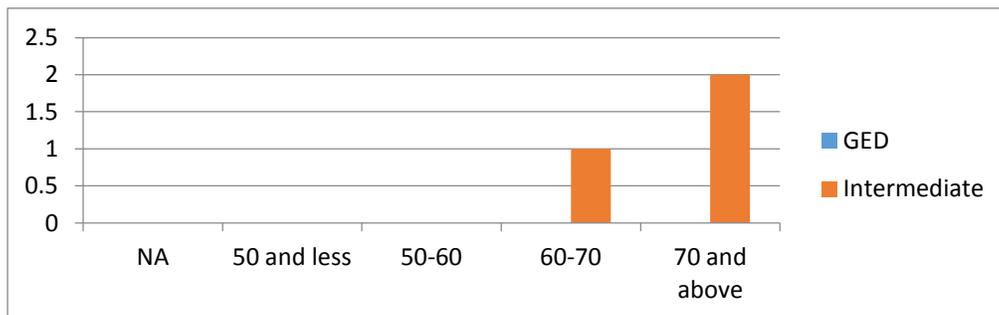
Table 4.10 aii

IT in Business(B's and C's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	1	2
50 and less	0	1
50-60	0	3
60-70	0	3
70 and above	2	0
total	3	9

Fig 4.10 aii
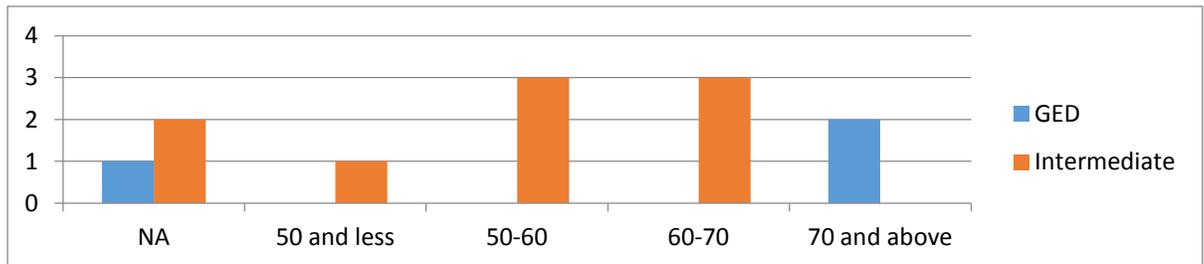
Table 4.10aiii

IT in Business(F's , D'sand W's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	1
50 and less	2	2
50-60	0	2
60-70	0	3
70 and above	0	1
total	2	9

Fig 4.10 aiii
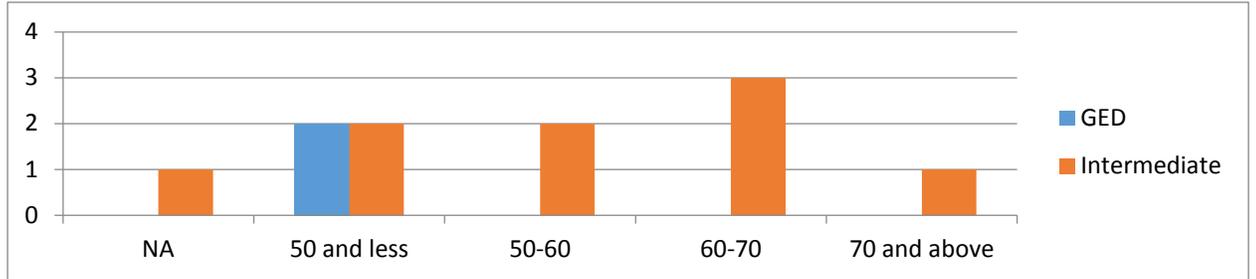
Table 4.11ai, 4.11aii and 4.11aiii shows the grades/percentage range obtained by the students in the course Middle East Culture and Society. The comparison between the scores of 39 students (3 GED and 26 HSSC/Intermediate) show that 7 students from High School type (Intermediate/HSSC) who scored in 60-70 and 70 and above range in Grade 10 scored A range grades in Middle East Culture and Society and no student with GED qualifications scored in A range for Middle East Culture and Society and had Grade 10 qualifications in 60-70 and 70 and above range (Table 4.11ai; Fig 4.11ai). In Table 4.11aii and Fig 4.11aii a total of 4 students (Intermediate/HSSC) who had scored in 60-70 range and 70 and above in Grade 10, secured a B or C grade in Middle East Culture and Society, the number was same for GED students who had scored in 60-70 range or 70 and above in Grade 10 scored a B grade in Middle East Culture and Society. Table 4.11aiii does not give a clear demarcation in terms of previous qualification and current performance.

Table 4.11ai

Middle East Culture and Society(A , A+and A-)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	1
50 and less	0	0
50-60	0	2
60-70	0	3
70 and above	0	4
total	0	10

Fig 4.11ai
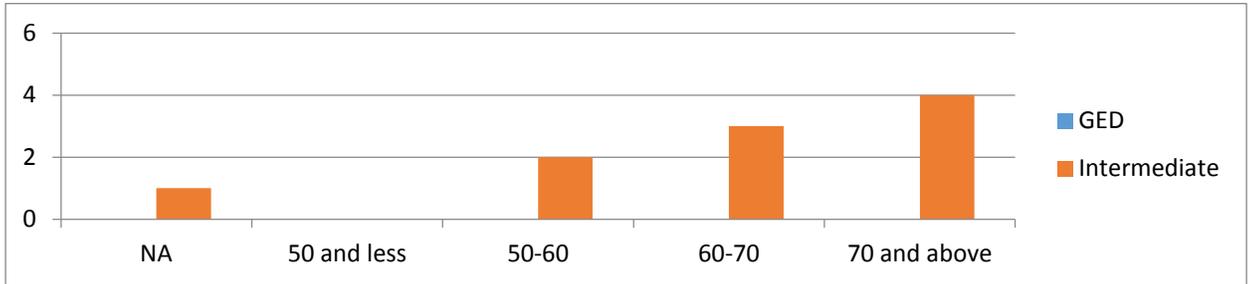
Table 4.11aii

Middle East Culture and Society(B's and C's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	1	1
50 and less	1	3
50-60	2	5
60-70	1	3
70 and above	3	1
total	8	13

Fig 4.11aii
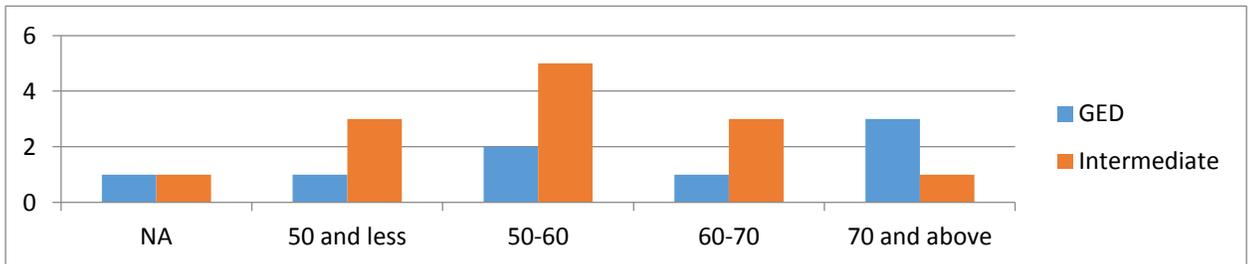
Table 4.11aiii

| Middle East Culture and Society(F's , D'sand W's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	1	1
50 and less	3	1
50-60	0	0
60-70	1	1
70 and above	0	0
total	5	3

Fig 4.11aiii
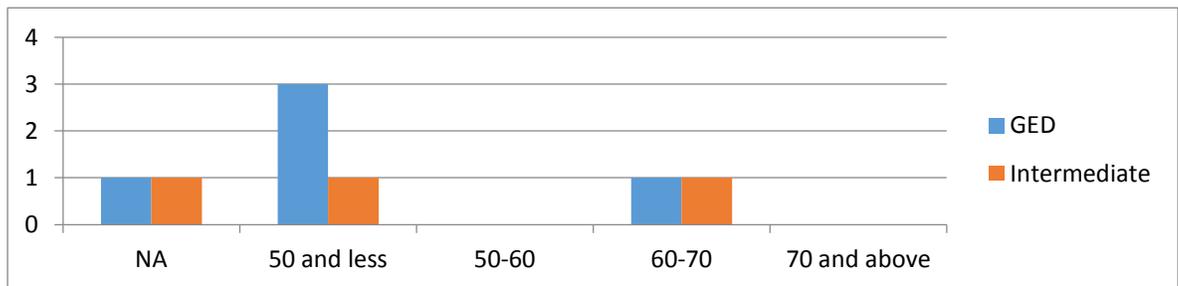
Table 4.12ai, 4.12aii and 4.12aiii shows the grades/percentage range obtained by the students in the course Management Principles. The comparison between the scores of 45 students (23 GED and 22HSSC/Intermediate) show that 3 students from High School type (Intermediate/HSSC) who scored in 60-70 and 70 and above range in Grade 10 scored A range grades in Management Principles and 1 student with GED qualifications scored in A range for Management Principles and had Grade 10 qualifications in 60-70 and 70 and above range (Table 4.12ai; Fig 4.12ai). In Table 4.12aii and Fig 4.12aii a total of 7 students (Intermediate/HSSC) who had scored in 60-70 range and 70 and above in Grade 10, secured a B or C grade in Management Principles the number was 3 for GED students who had scored in 60-70 range or 70 and above in Grade 10 scored a B grade in Management Principles. Table 4.12aiii does not give a clear demarcation in terms of previous qualification and current performance.

Table 4.12ai

Management Principles(A , A+and A-)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	0
50 and less	0	0
50-60	0	0
60-70	1	1
70 and above	0	2
total	1	3

Fig 4.12ai
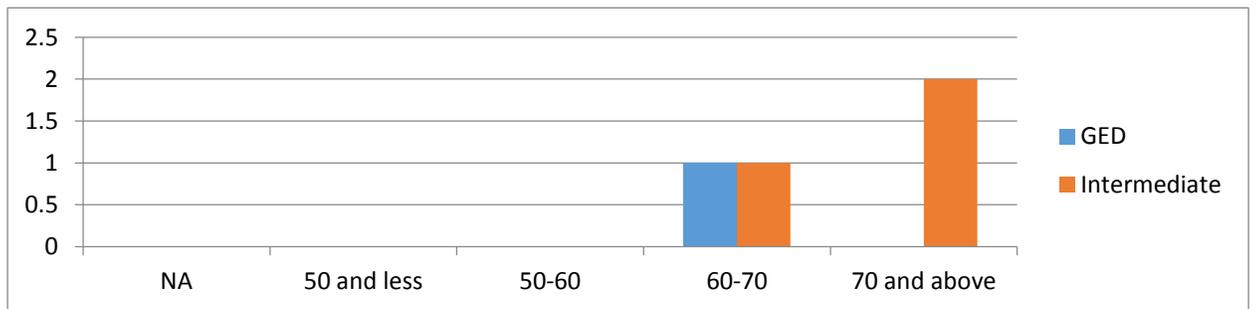
Table 4.12aii

Management Principles(B's and C's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	1	2
50 and less	0	3
50-60	4	6
60-70	1	6
70 and above	2	1
total	8	18

Fig 4.12aii
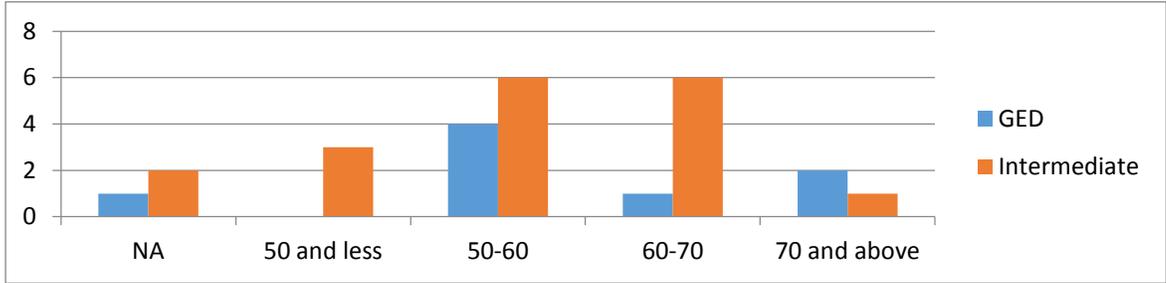
Table 4.12aiii

Management Principles(F's , D'sand W's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	2	0
50 and less	7	1
50-60	1	1
60-70	2	0
70 and above	1	0
total	13	2

Fig 4.12aiii
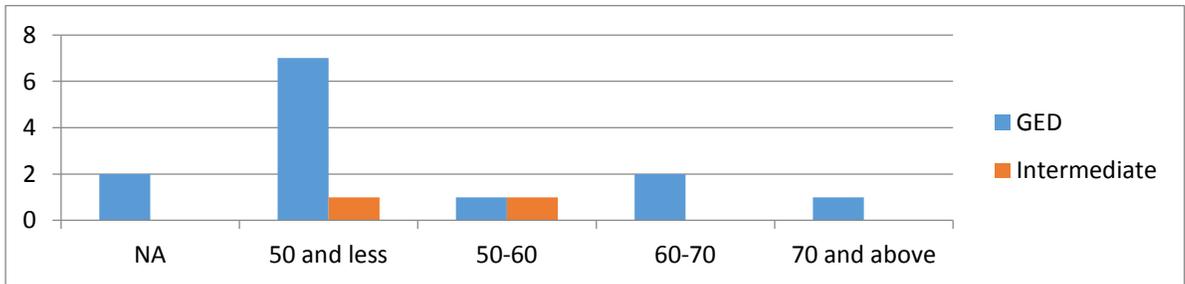
Table 4.13ai, 4.13aii and 4.13aiii shows the grades/percentage range obtained by the students in the course Personal Management & Communications. The comparison between the scores of 38 students (22 GED and 16 HSSC/Intermediate) show that 4 students from High School type (Intermediate/HSSC) who scored in 60-70 and 70 and above range in Grade 10 scored A range grades in Personal

Management & Communications and 1 student with GED qualifications scored in A range for Personal Management & Communications and had Grade 10 qualifications in 60-70 and 70 and above range (Table 4.13ai; Fig 4.13ai). In Table 4.13aii and Fig 4.13aii a total of 6 students (Intermediate/HSSC) who had scored in 60-70 range and 70 and above in Grade 10, secured a B or C grade in Personal Management & Communications, the number was 4 for GED students who had scored in 60-70 range or 70 and above in Grade 10 scored a B grade in Personal Management & Communications. Table 4.13aiii does not give a clear demarcation in terms of previous qualification and current performance.

Table 4.13ai

Personal Management and Communication(A , A+and A-)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	1
50 and less	0	1
50-60	1	0
60-70	1	2
70 and above	0	2
total	2	6

Fig 4.13ai
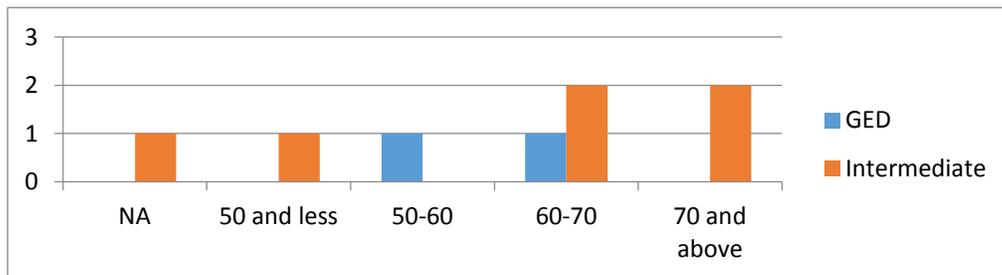
Table 4.13aii

Personal Management and Communication(B's and C's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	2	2
50 and less	2	2
50-60	3	6
60-70	1	4
70 and above	3	2
total	11	16

Fig 4.13aii
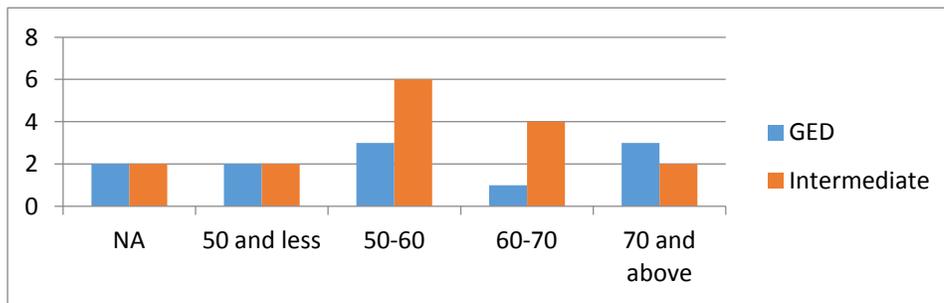
Table 4.13aiii

Personal Management and Communication(F's , D'sand W's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	0
50 and less	2	0
50-60	0	0
60-70	1	0
70 and above	0	0
total	3	0

Fig 4.13aiii
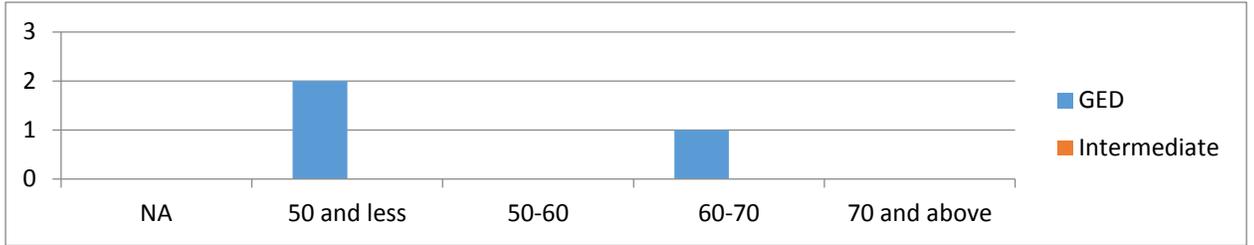
Table 4.14ai, 4.14aii and 4.14aiii shows the grades/percentage range obtained by the students in the course Oral Communication and Presentation Skills. The comparison between the scores of 27 students (16 GED and 11HSSC/Intermediate) show that 5 students from High School type (Intermediate/HSSC) who scored in 60-70 and 70 and above range in Grade 10 scored A range grades in Oral Communication and Presentation Skills and 1 student with GED qualifications scored in A range for Oral Communication and Presentation Skills and had Grade 10 qualifications in 60-70 and 70 and above range (Table 4.14ai; Fig 4.14ai). In Table 4.14aii and Fig 4.14aii a total of 1 students (Intermediate/HSSC) who had scored in 60-70 range and 70 and above in Grade 10, secured a B or C grade in Oral Communication and Presentation Skills the number was 2 for GED students who had scored in 60-70 range or 70 and above in Grade 10 scored a B grade in Oral Communication and Presentation Skills. Table 4.14aiii does not give a clear demarcation in terms of previous qualification and current performance.

Table 4.14ai

Oral Communication and Presentation Skills(A , A+and A-)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	1	1
50 and less	0	0
50-60	1	0
60-70	1	2
70 and above	0	3
total	3	6

Fig 4.14ai
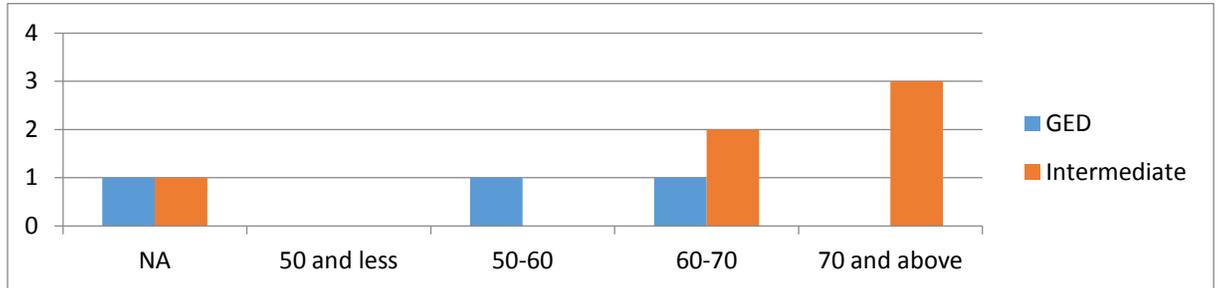
Table 4.14aii

Oral Communication and Presentation Skills(B's and C's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	0
50 and less	0	2
50-60	3	4
60-70	0	1
70 and above	2	0
total	5	7

Fig 4.14aii
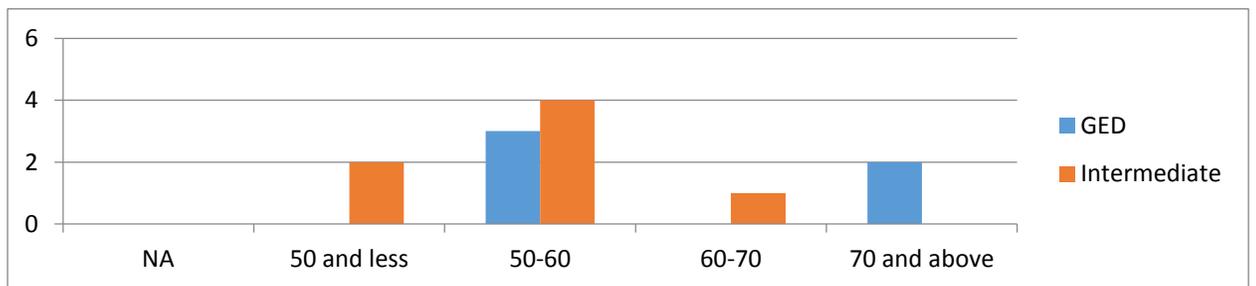
Table 4.14aiii

| Oral Communication and Presentation Skills (F's , D'sand W's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	0
50 and less	2	1
50-60	0	1
60-70	1	1
70 and above	0	0
total	3	3

Fig 4.14aiii
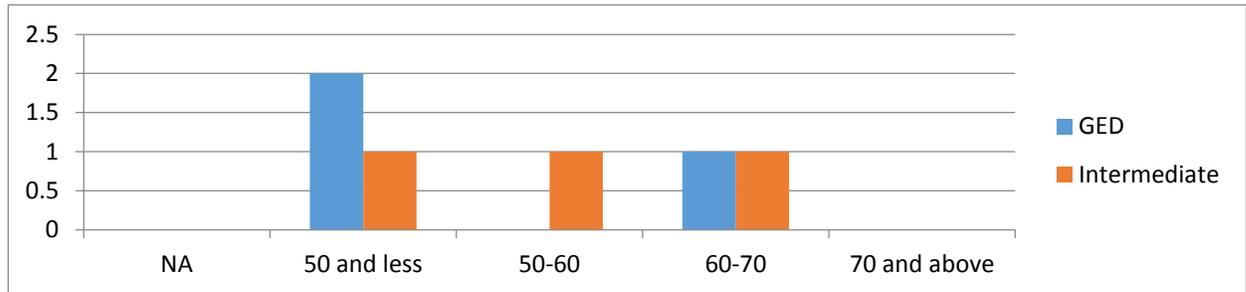
Table 4.15ai, 4.15aii and 4.15aiii shows the grades/percentage range obtained by the students in the course Macroeconomics. The comparison between the scores of 224 students (8 GED and 16 HSSC/Intermediate) show that 4 students from High School type (Intermediate/HSSC) who scored in 60-70 and 70 and above range in Grade 10 scored A range grades in Macroeconomics and 1 student with GED qualifications scored in A range for Macroeconomics and had Grade 10 qualifications in 60-70 and 70 and above range (Table 4.15ai; Fig 4.15ai). In Table 4.15aii and Fig 4.15aii a total of 4 students (Intermediate/HSSC) who had scored in 60-70 range and 70 and above in Grade 10, secured a B or C grade in Macroeconomics the number was 1 for GED students who had scored in 60-70 range or 70 and above in Grade 10 scored a B grade in Macroeconomics. Table 4.15aiii does not give a clear demarcation in terms of previous qualification and current performance.

Table 4.15ai

Macroeconomics(A , A+and A-)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	1
50 and less	0	0
50-60	0	0
60-70	1	2
70 and above	0	2
total	1	5

Fig 4.15ai
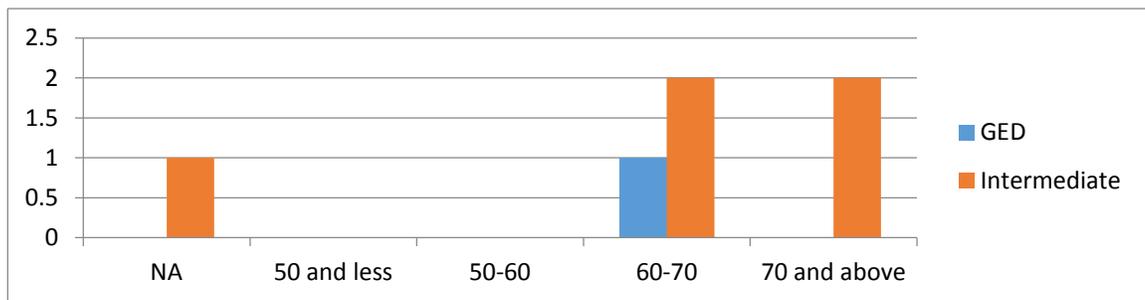
Table 4.15aii

Macroeconomics(B's and C's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	0
50 and less	1	2
50-60	2	2
60-70	1	3
70 and above	0	1
total	4	8

Fig 4.15aii
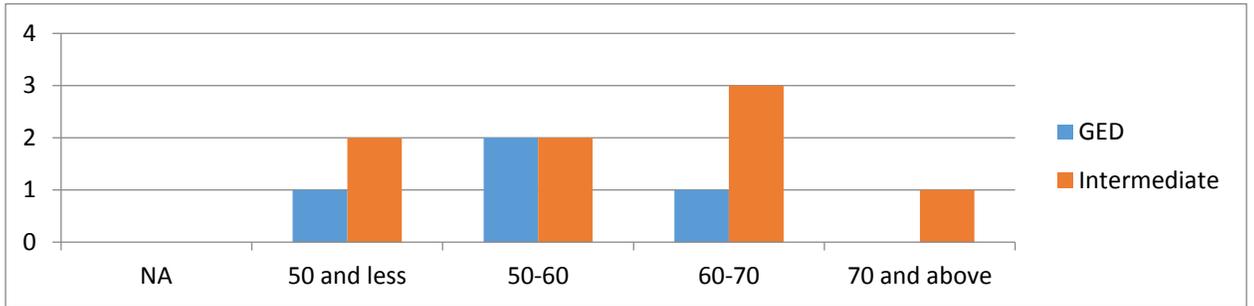
Table 4.15aiii

Macroeconomics (F's , D'sand W's)		
Marks %\ Previous Qualifications	**GED**	**Intermediate**
NA	0	0
50 and less	0	1
50-60	2	1
60-70	0	1
70 and above	1	0
total	3	3

Fig 4.15aiii
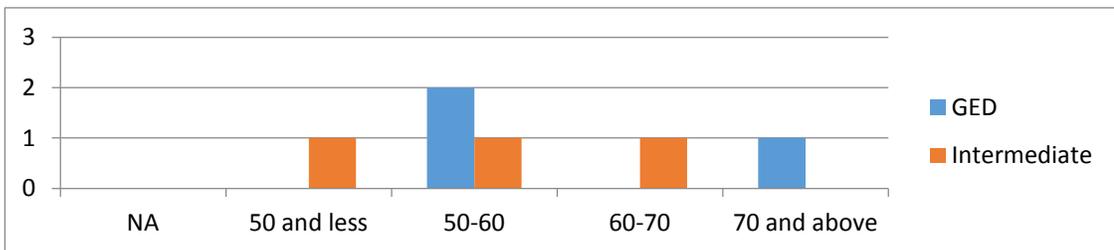
Table 4.16
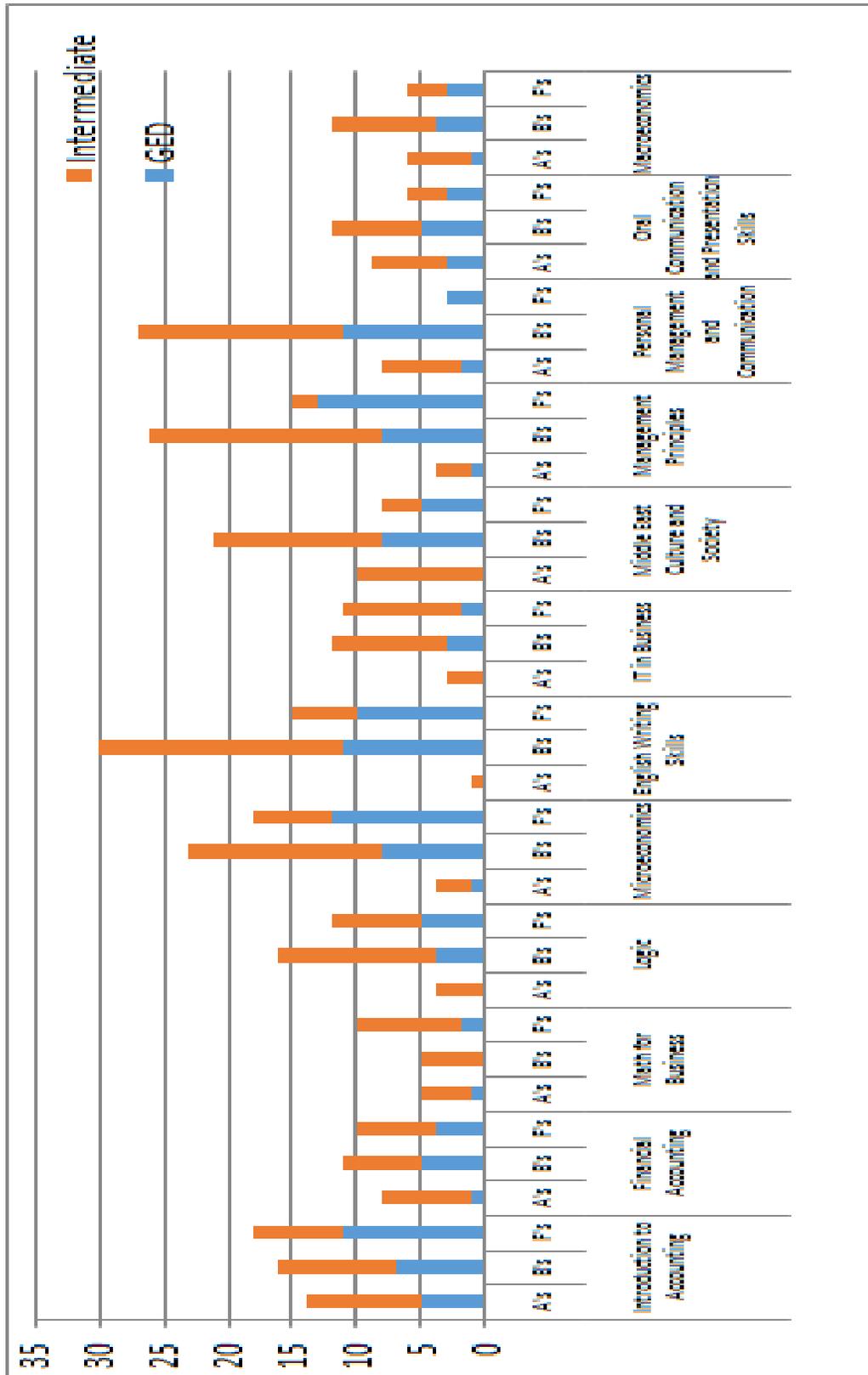
Table 4.16 provides a bird's eye view of all 12 courses and a bar chart showing performance of Higher Secondary School Certificate-HSSC (Intermediate) students exceeding that of GED students.

For uniformity is data, the sample size was further reduced in order to have same Intermediate/HSSC and GED students in 5 courses so a more accurate comparison could be made. The reason for the sample size being small is due to the reason that the off-shore campus based in U.A.E is a small branch campus with total new enrollments in the Bachelor of Business Administration program not exceeding 50 during one year.

Introduction to Accounting (sample size 36 with 18 students from GED and 18 students from Intermediate/HSSC)

Table 4.17a

Introduction to Accounting	Previous Qualifications	GPA
GED	51	3.5
GED	68.7	4
GED	82.5	3.5
GED	41.9	0
GED	36	0
GED	42	1.5
GED	49.3	2
GED	56.6	2.5
GED	48	2.25
GED	55	2
GED	60.5	2.5
GED	71.2	1.5
GED	61	2.5
GED	73	1.75
GED	50	0
GED	48.5	3.5
GED	53.3	2.5
GED	55	0

Table 4.17b

Introduction to Accounting	Previous Qualifications	GPA
Intermediate	83.7	4
Intermediate	83.2	4
Intermediate	82.4	4
Intermediate	76.3	3.75
Intermediate	68.4	3.5
Intermediate	67.5	3.75
Intermediate	66.7	2.5
Intermediate	65.8	3.25
Intermediate	62	3.75
Intermediate	61.8	1.75
Intermediate	60.2	2
Intermediate	60	3
Intermediate	59.14	0
Intermediate	57.6	2
Intermediate	55.3	2.75
Intermediate	55.2	3.25
Intermediate	54.6	1.5
Intermediate	54	1.5

Table 4.17c

	GED Prev. Quif marks	intermediate Prev. Quif marks	GPA (GED)	GPA(inter)
Mean	55.75	65.21	1.97	2.79
SD	12.03	10.02	1.29	1.13

In the case of Intermediate/HSSC students the correlation between the previous qualification and the GPA is double the GED students (r^2 value 0.4577 and 0.2273 showing a stronger relation in-comparison) and moreover standard deviation of Intermediate/HSSC students is less than GED (1.128(Inter) and 1.2916 (GED)) indicates that the data is not wide spread and they are more closer to the average 2.79

which is further indicating that more Intermediate/HSSC students are with better grades in Accounting. (4 F grades (GED) and 1 F grade (Intermediate Pakistani System/HSSC)). The trend is seen in Fig 4.17a and Fig 4.17b.

Fig 4.17a

$y = 0.051x - 0.8699$
$R^2 = 0.2253$

◆ Series1
— Linear (Series1)

Fig 4.17b

$y = 0.0762x - 2.1771$
$R^2 = 0.4577$

◆ Series1
— Linear (Series1)
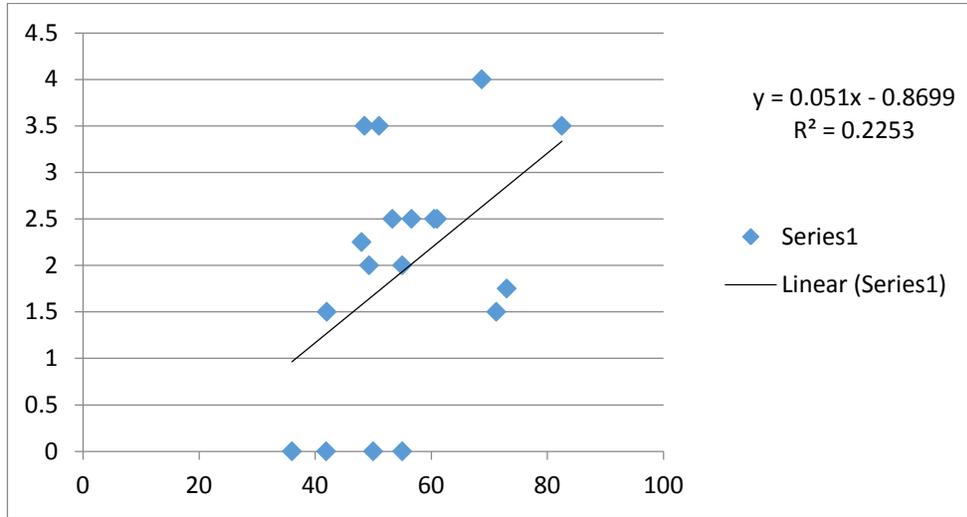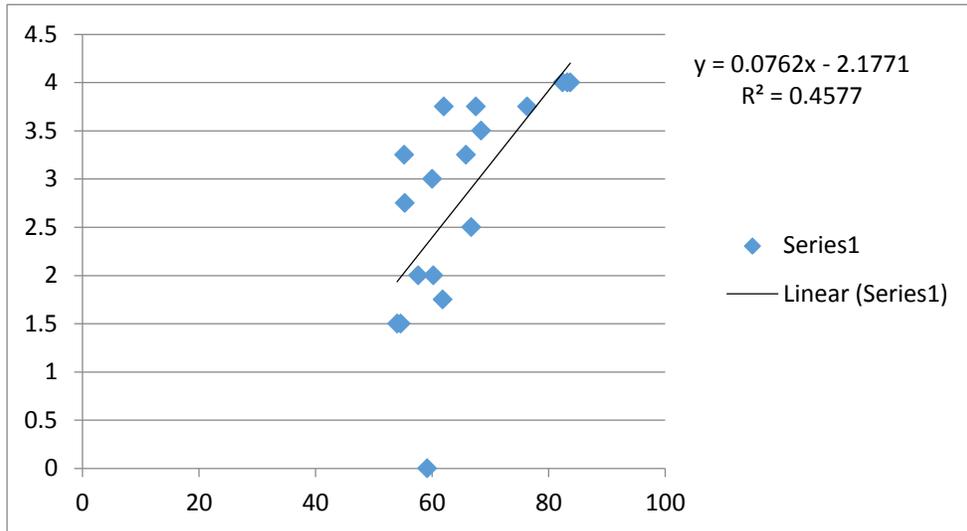
Microeconomics (sample size 34 with 17 students from GED and 17 students from
Intermediate/HSSC)

Table 4.18a

GED- Previous Qualifications	GPA
51	3.25
68.7	3.75
82.5	3
41.9	0
36	0
42	1.75
49.3	2.5
56.6	2.75
55	2.25
60.5	1.5
71.2	2.5
61	1.5
73	0
50	0
48.5	1.5
53.3	2.5
55	0

Table 4.18b

Intermediate- Previous Qualifications	GPA
83.7	3.5
83.2	2.75
67.5	3
66.7	1.5
65.8	2
62	3
61.8	2.25
60.2	2.75
60	2
57.6	1.5
55.3	1.5
55.2	2.75
54	1.5
50	3
49.5	1.5
48.3	3
48.3	0

Table 4.18c

	GED Prev. Quif marks	Intermediate Prev. Quif marks	GPA (GED)	GPA(inter)
Mean	56.21	60.54	1.69	2.21
SD	12.23	10.63	1.28	0.88

Fig 4.18a

$$y = 0.0407x - 0.5938$$
$$R^2 = 0.1511$$

Fig 4.18b

$$y = 0.0375x - 0.0617$$
$$R^2 = 0.2025$$
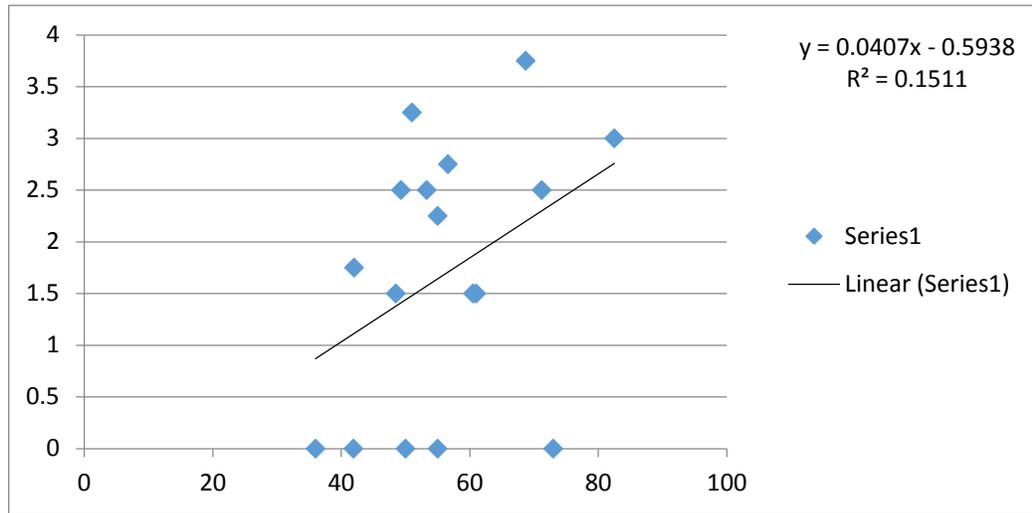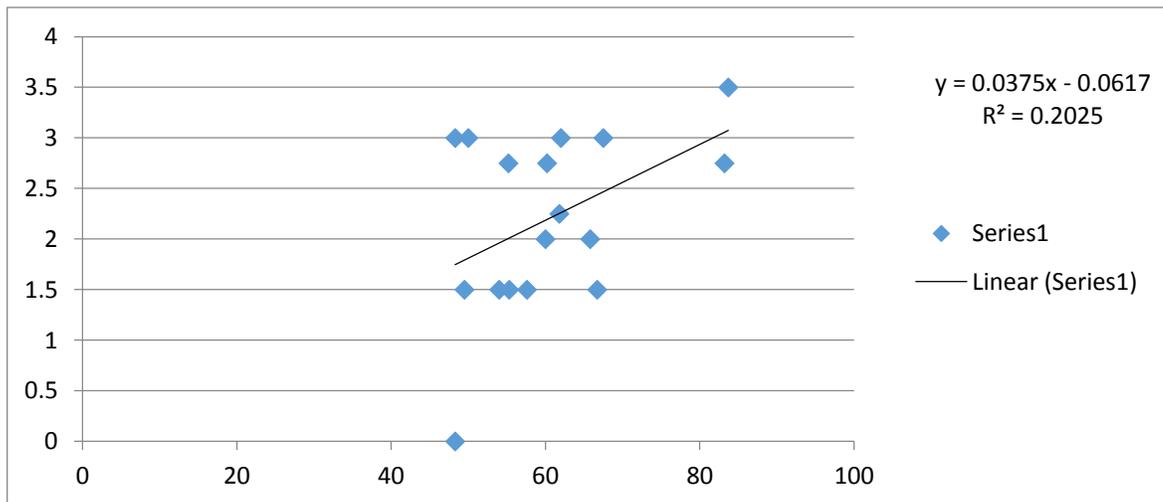
The GPA for Intermediate/HSSC students is clustered within the range 1.5 to 3.5 with one F grade, whereas GED students' range is between 0 to 3.75 with a lot of fluctuation (4 F grades and 4 grades above 3.5 GPA). This can be observed from the standard deviation 1.2(GED) and 0.88 for Intermediate/HSSC students (Table 4.18c). Though the correlation for Intermediate/HSSC students is marginally better than for

72

GED students (0.20(inter) and 0.15(GED)) but the SD comparison shows that the data for intermediate students is closer to the mean GPA (2.2-intermediate higher than GED) from which we can say that the positive correlation trend in Intermediate/HSSC students is more uniform than in GED students.

English Writing Skills (sample size 34 with 17 students from GED and 17 students from Intermediate/HSSC)

Table 4.19a

GED-Previous Qualifications	GPA
51	2.5
68.7	2.75
82.5	2
36	0
42	1.75
49.3	2.75
56.6	2.5
48	2.75
55	2
60.5	1.5
71.2	2.5
61	0
73	1.75
50	0
48.5	1.5
53.3	2.25
55	0

Table 4.19b

Inter -Previous Qualifications	GPA
83.7	3
83.2	3.25
82.4	3
76.3	2.75
68.4	2.75
67.5	2.75
66.7	2
65.8	2.75
62	2.75
61.8	1.75
60.2	2.75
60	2.25
59.14	3.5
57.6	1.5
55.3	2.25
55.2	2.75
54.6	2.5
54	2.5

Table 4.19c

|	GED Prev. Quif marks	intermediate Prev. Quif marks	GPA (GED)	GPA(inter)
Mean	56.21	65.21	1.69	2.60
SD	11.87	10.02	1.04	0.52

Fig 4.19a
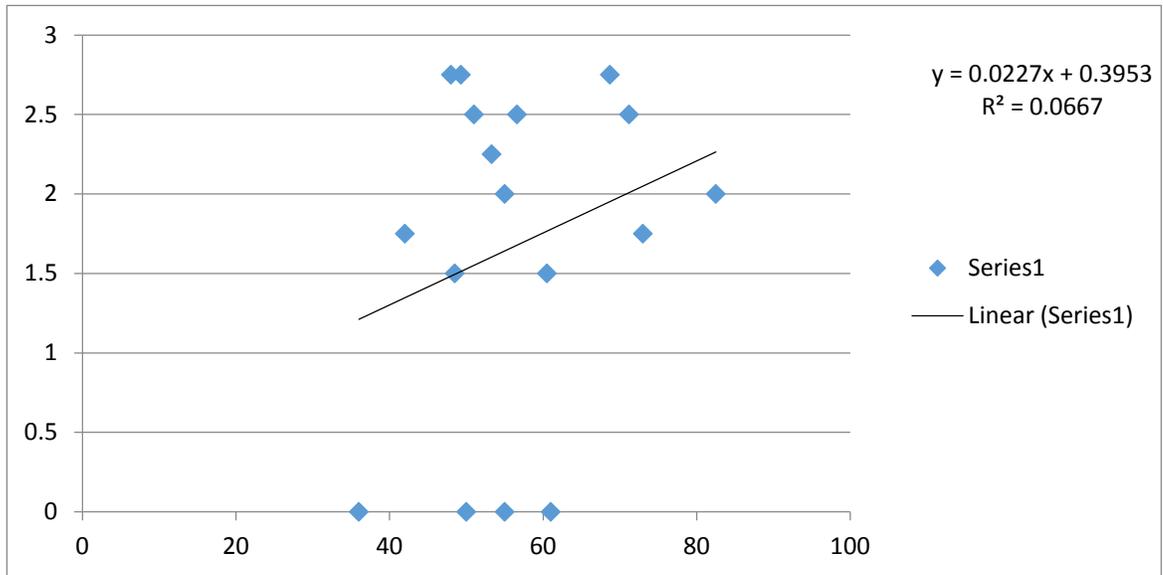
Fig 4.19b
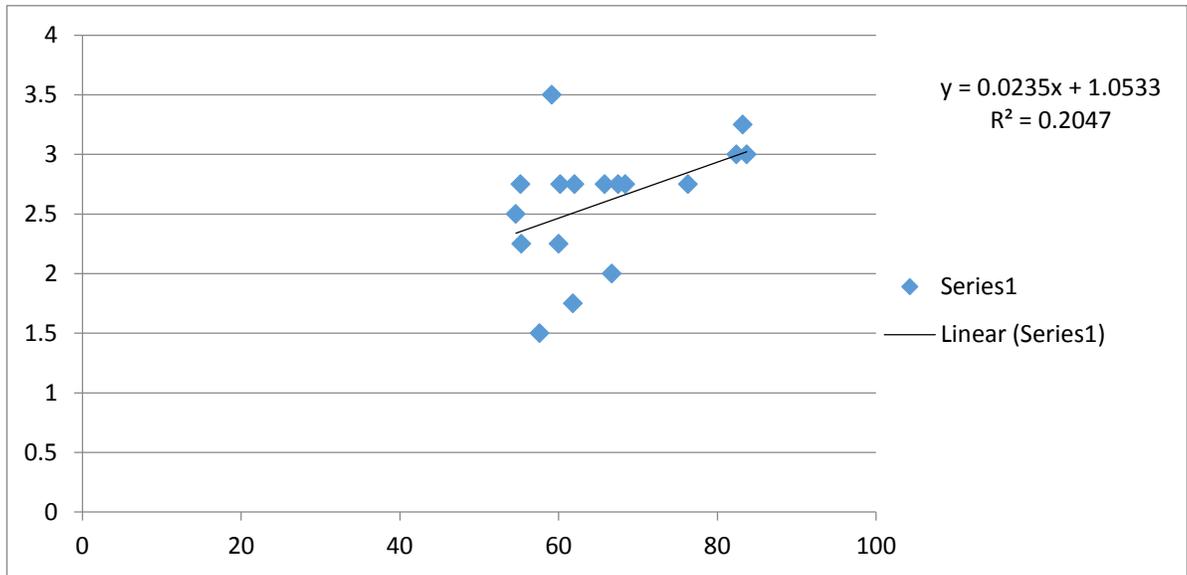
The correlation value r (r for GED student is 0.066 and Intermediate/HSSC students 0.204) of Intermediate/HSSC students is more than three times the value of GED students, which is a clear indicator showing that the positive

correlation between the prequalification marks and English Writing Skills GPA is much stronger in the case of Intermediate/HSSC students than GED students. With a lower standard deviation 0.515 and a much stronger mean 2.60 makes it more evident that the GPA in the case of intermediate student is more evenly spread and are much closer to the average compared to the mean GPA(1.69) of GED student with lots of variation shown in the data (high Standard deviation 1.04) (see Table 4.19c). Moreover there are no students with F grade in intermediate whereas 4 students with F grade are found in GED.

Management Principles (sample size 36 with 18 students from GED and 18 students from Intermediate/HSSC)

Table 4.20a

Management Principles	
GED -Previous Qualifications	GPA
51	2.5
68.7	3.5
82.5	2.75
41.9	0
36	0
42	0
49.3	0
56.6	2.75
48	0
55	2
60.5	2
71.2	1.75
61	0
73	2.5
50	0
48.5	1.75
53.3	2.75
55	0

Table 4.20b

Inter-Previous Qualifications	GPA
82.4	3.75
83.7	3.5
62	3.5
68.4	3.25
67.5	3.25
76.3	3
60	3
55.2	3
60.2	3
48.3	2.75
54	2.75
55.3	2.75
54.6	2.75
49.5	2.5
50	2.5
65.8	2.5
66.7	2.5
57.6	2.25

Table 4.20c

	GED Prev. Quif marks	intermediate Prev. Quif marks	GPA (GED)	GPA(inter)
Mean	55.75	62.08	2.50	2.92
SD	12.03	10.64	1.30	0.41

Fig 4.20a

$y = 0.0684x - 2.4647$
$R^2 = 0.3978$

◆ Series1

—— Linear (Series1)

Fig 4.20b

$y = 0.0257x + 1.3191$
$R^2 = 0.4431$

◆ Series1

—— Linear (Series1)
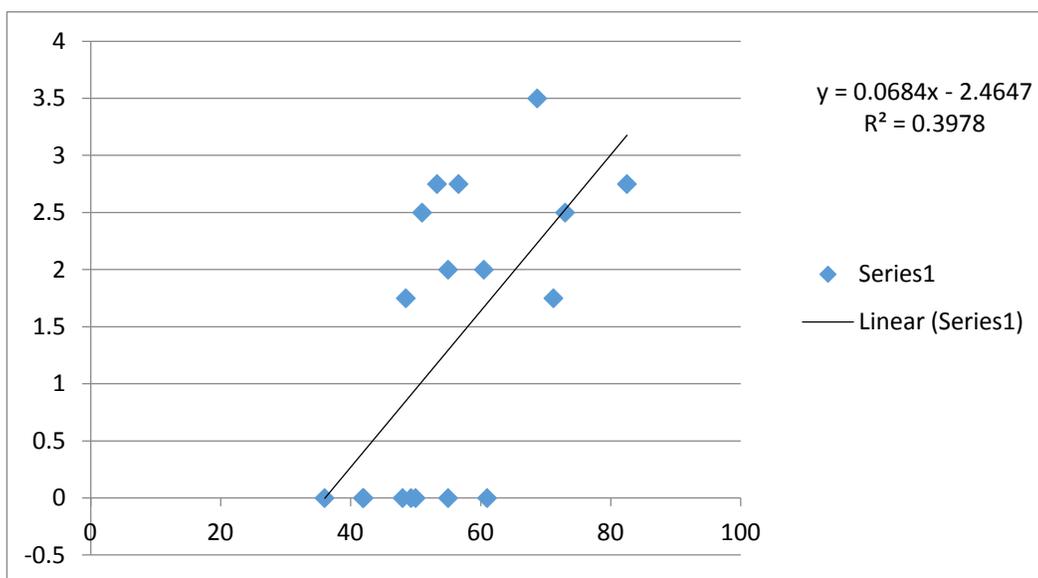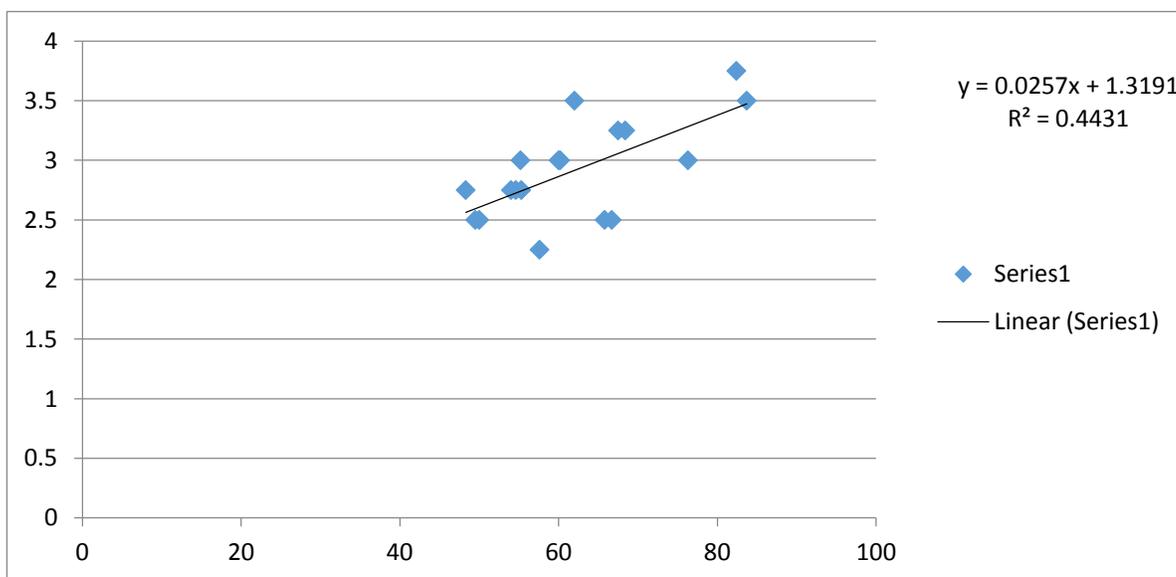
Both GED and Intermediate/HSSC students show a positive correlation between the prequalification marks and the GPA of the course Management Principles. But the distribution of marks is more wide spread in the case of GED students; this is observed from the GPA of GED students which is ranging between 0

to 3.5 with most of the data concentrated little over 1.5 and 2.75 (see Fig 4.20a and Fig 4.20b), and with more extreme grades (7 F grades). On the other hand, Intermediate/HSSC students show a closer range with nearly 90% of the data within a range of 2.5 to 3.5 GPA, and a high average 2.9. Also, Intermediate/GED students with a higher percentage in the prequalification are scoring better grades compared to GED students(GED student with 68.7% securing A- grade and 82.5 securing B- are some example to show the inconsistent performance of GED Students)

Personal Management (sample size 28 with 14 students from GED and 14 students from Intermediate/HSSC)

Table 4.21a

Personal Management and Communication	
GED -Previous Qualifications	GPA
51	2.5
68.7	3.5
82.5	3
41.9	0
36	0
49.3	2
56.6	3
55	3
60.5	2.25
71.2	2.25
61	0
73	3.25
48.5	3
53.3	3.5

Table 4.21b

Inter - Qualification	GPA
82.4	3.75
76.3	3.25
68.4	3.5
67.5	3.75
66.7	3
65.8	3.25
61.8	2.5
60.2	3
60	3
57.6	3
55.3	3.25
54	3.25
50	3
49.5	3

Table 4.21c

|	GED Prev. Quif marks	intermediate Prev. Quif marks	GPA (GED)	GPA(inter)
Mean	57.75	62.54	2.23	3.18
SD	12.77	9.45	1.29	0.33

Fig 4.21a
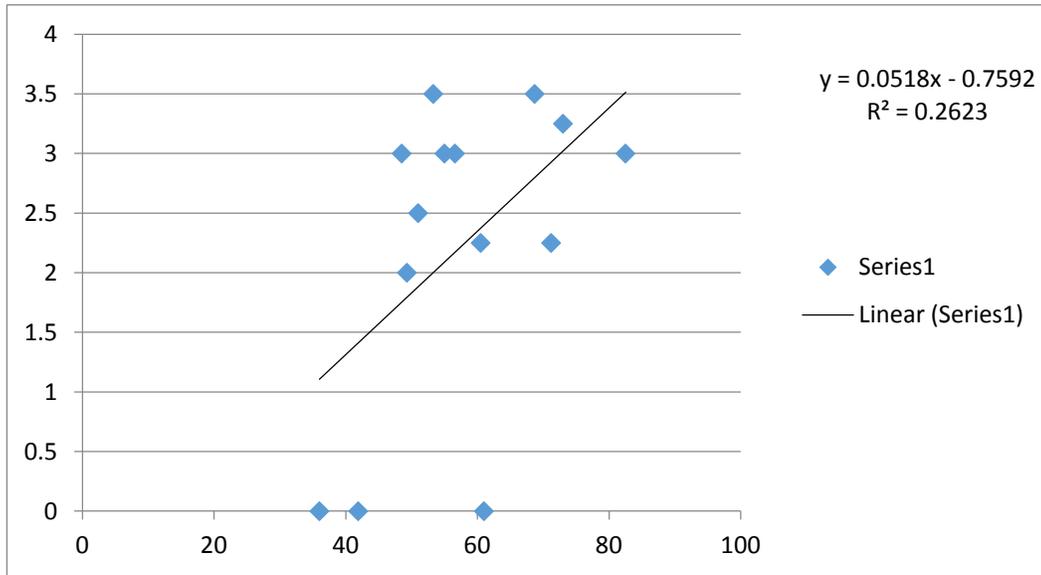
Fig 4.21b
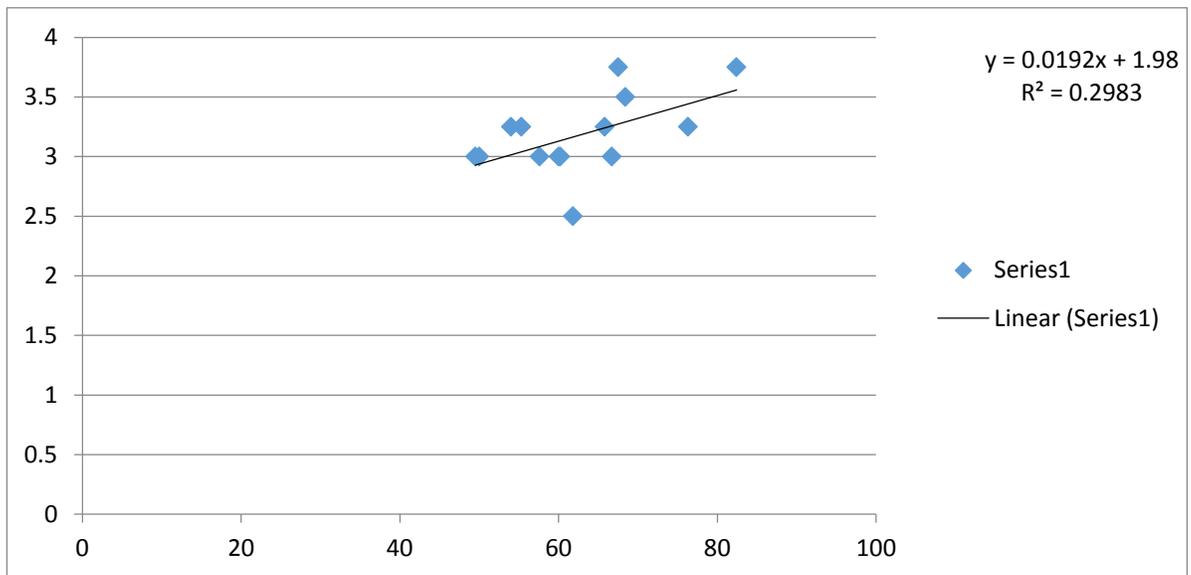
Intermediate/HSSC students' grades are closer (within range 2.5 to 3.75) with no failures, whereas GED students show a fluctuating performance with 3 F grades and GPA varying between 2 and 3.5 and as a result the standard deviation is high(SD of GED –GPA is 1.29) compared to that of Intermediate/HSSC students' standard deviation (SD of Intermediate –GPA is 0.33).There is little difference between the correlation r value between GED and Intermediate/HSSC students (GED r2 value is 0.26 and intermediate r2 value is 0.29), this is due to the varying grades of GED Students and that is the reason for a high standard deviation value. And from the scattered plot it can be clearly seen that the data is wide spread in the case of GED Students' performance and for intermediate Students' performance it's grouped within a tight zone.

Table 4.22

Inter Pre Qulf	Total GPA		GED pre Qulf	Total GPA
83.7	14		82.5	11.25
82.4	14.5		73	6
76.3	12		71.2	8.25
68.4	13		68.7	14
67.5	12.75		61	4
66.7	8.5		60.5	7.5
65.8	10.5		56.6	10.5
62	13		55	8.25
61.8	7.75		55	0
60.2	10.5		53.3	10
60	10.25		51	11.75
57.6	7.25		50	0
55.3	9.25		49.3	7.25
55.2	11.75		48.5	8.25
54.6	9.5		42	5
54	8.25		36	0

Fig 4.22a

$y = 0.1695x - 0.1321$
$R^2 = 0.4929$

Fig 4.22b

$y = 0.168x - 2.5914$
$R^2 = 0.2219$
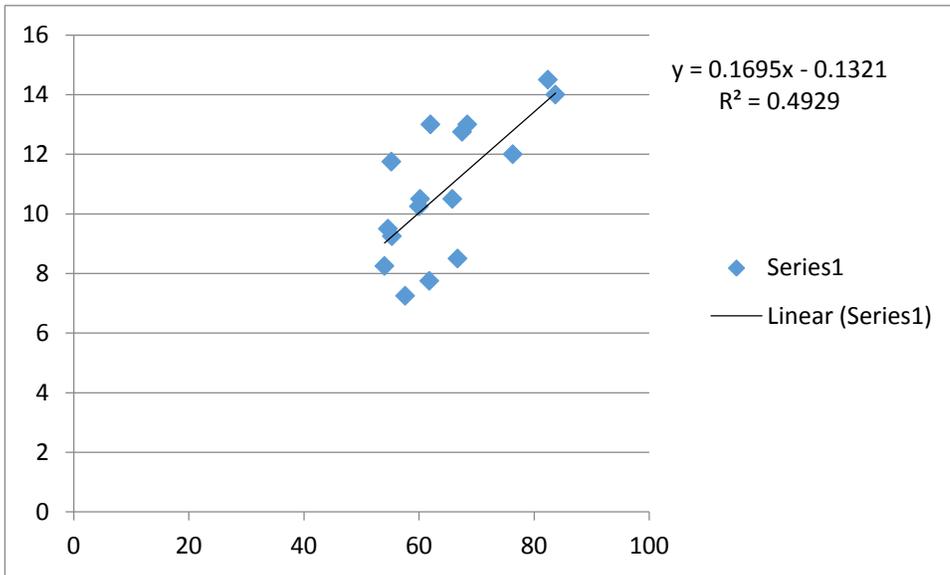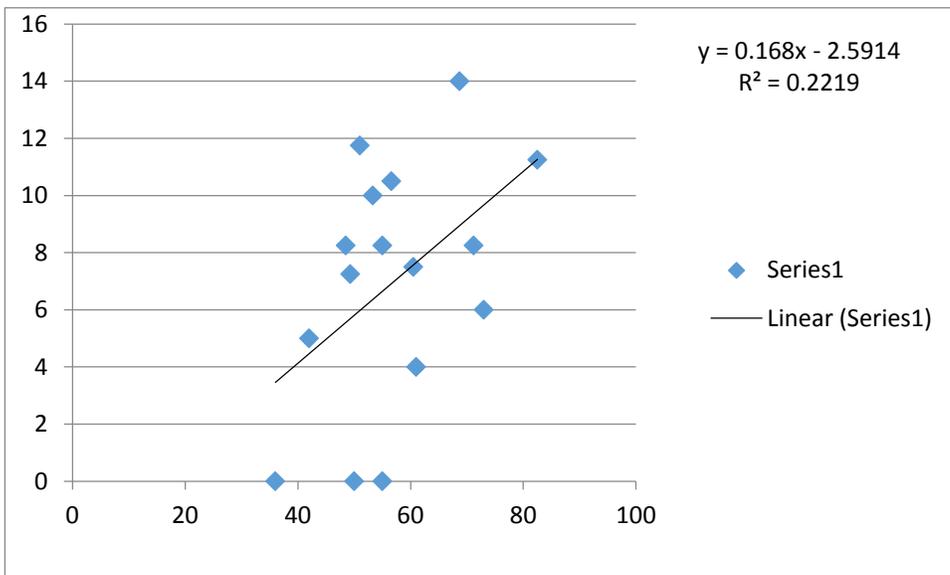
Finally the researcher has taken a sample of 32 students comprising of 16 GED and 16 intermediate with four common courses namely Introduction to

Accounting, Microeconomics, English Writing Skills and Management Principles (Table 4.22). The GPA of the 4 course was added and plotted against their prequalification marks to obtain the scattered diagram and the linear regression lines. A strong positive correlation can be seen between the prequalification marks of Intermediate/HSSC students and the total of GPA of the 4 courses (r^2 value is 0.492). On the other hand, though the correlation is positive in the case of GED Students (r^2 value is 0.221) but lots of variation can be found among the data with extreme data points like 3 candidates failing in 3 courses and 1 student having a total of 14 GPA points, with the rest of the students are within the range of 4 and 12. In the case of Intermediate/HSSC students not only the correlation r values is strong in comparison with GED students, but also they are clustered close within the range 7.75 and 14.5. So it is apparent that the positive trend that's seen in intermediate students are more stronger and uniform than in GED students, this is due to their strong foundation in intermediate studies.

Regarding the research questions posed in Chapter 1 the results as discussed in Chapter 4 do show a relationship between high school type and academic performance in an undergraduate business program. However the findings would have been more significant with a bigger sample size. The academic performance of students enrolling in the business program after completing Intermediate/HSSC shows a more stable trend as compared to students joining the undergraduate business program after completing their GED.

Chapter 5: Conclusion and Recommendations

The objective of this study was to identify if any significant differences existed between students/learners with a HSSC/Intermediate qualification and those who had a GED prequalification before entering university. The study though is unique for the off shore campus, however, it has its shortcomings especially in terms of sample size due to the small number of enrollments at the off shore campus. It would also be advisable to conduct a study spanning over the entire duration of the program of study for the set of students used in this research. The study can also study the influence of a number of other background factors as socioeconomic background, gender, gap in schooling as well as the type of courses where a difference might be more significant such as courses like Math, Calculus, Statistics or Accounting might show a greater correlation between high school type of students and their grades in college. In recent time, it has been demonstrated repeatedly that girls in general are outperforming boys all over the World.

The study can also form the groundwork for related research domains including admission policies and procedures related to grading across different high school types. The study can be a source of information for trouble areas for the students and allow for planning support measures for students coming from a high school type that puts them at a disadvantage.

The study can also provide relevant information for all branch/offshore/branch campuses in United Arab Emirates, as these off shore campuses often struggle with retaining quality students and faculty members. Often branch campuses have been forced to recruit students who in normal circumstances would not be considered eligible for admission. Most branch campuses due to their need for surviving in the United Arab Emirates are unable to replicate the conditions at their parent campus and hence unable to provide the facilities and the services available at the parent campus. Most students who would not be accepted in the parent campus get

admission at the branch campuses and lead to a culture of awarding passing grades to enable students to graduate (Altbach, 2010).

Merely considering the high school type and grades in high school as a predictor of academic performance in the college is not enough. Poor performance in college/university can also lead to a major problem of student retention or increasing dropout rates. Bean and Eaton (2000) have suggested an integrated model of causes of dropping out of students from college. Their model characterizes variables such as high school experiences (this could be considered as high school type for the purpose of the current research), students' intentions, academic goals, students' academic standing and social integration, students' attitude towards their institution as well as their interactions and relationships within their institution. Astin (1997) focuses on patterns of engagement exhibited by successful students and their involvement in both academic and intellectual pursuits as well as development of higher cognitive skills. Further study can include a stronger qualitative component in the form of a case study or observations done in classroom situations so that several factors that might be playing a role in the grades being acquired by the students. The current study could have included a qualitative component of studying settlement patters of students along with their GPA from high school in order to study the prediction of academic success.

One of the central differences between the traditional high school diploma and the GED is the age pattern that characterizes each path. Further research can also take into consideration as to why are students opting for GED instead of a regular/traditional HSSC/Intermediate/A Levels. Is it because of ease of availability or is it easier? Interviews or focus groups can be a good source of information to investigate why more students are opting for GED as a high school type. Most GED candidates spend relatively little time preparing for the exams—substantially less time than is spent in a typical year in high school.

The present research with a greater database can have immense potential for important changes to be brought about at the institutional level. It can help policy

makers in understanding whether a shift in policy change is required when GED students are increasing in numbers at this offshore campus. The role of the institution can be studied as well if the data available is significant i.e. how can an institute support the students who come from a certain high school type? What coaching and counseling services are available at the offshore campus? Does the institution offer one on one coaching facilities for at risk students? In case such facilities are not available, does the institute plan on providing these facilities? Are high school scores accurately able to predict future academic performance? Colleges can include enriched programs as well as supplementary education in courses which show a more significant difference between students from different high school types. Based on the findings and results, it is not a straightforward answer as even though the high school GPA is considered a predictor of college performance, but it cannot be considered in isolation.

The researcher believes that this study should be conducted on a wider platform including more offshore campuses based in U.A.E, so that a cross sectional view can also be available for comparison as well as certain challenges are exclusive and unique to offshore campuses based in this region and hence it would be beneficial to pool information resources to benefit at a greater level.

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