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School Student Academic Performance in Nepal: An Analysis Using the School Education Exam (SEE) Results

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Abstract

Student academic performance is the most important indicator of educational development in every nation. The main purpose of this study was to analyze the academic performance of the grade 10 students in terms of their overall performance and its relationship with socio-demographic factors through the use of a quantitative research method. A total of 541 students (341 community and 200 private students) from seven local governments in the Dhankuta district were randomly selected to collect the data related to their socio-demographic characteristics and subject-wise score using a data collection template. The data were descriptively and inferentially analyzed in the support of SPSS. The key findings of the study revealed that the performance of most of all community school students (66%) is under a satisfactory level than private and they (85%) are very poor in Mathematics subjects than others. This study also concluded that there is also a wider gap in student performance between theory and practical subjects. Students from municipal government and Bramin/Chetri ethnic groups are doing better performance than others. The study finally, found that school type, local government type, nature of examination, and age & ethnicity of students make a significant difference in student achievement whereas gender does not.

Introduction

There is a growing body of study on student performance around the world, especially focused on factors affecting student performance. The topic is exciting even more interesting among researchers, policymakers, educational planners, and program practitioners in developing countries, where the student academic performance is very poor (Thapa, 2015; Shahzadi & Ahmad, 2011). However, there has been an inadequate study on the issue of identifying the level of student performance from the perspective of subject-wise, nature, of course, type of school, and type of local government, and socio-demographic variables such as age, gender, and ethnicity in the context of new federal government system in Nepal.

Student academic performance is one of the key indicators of quality education (Joy, 2013; Lee et al., 2013; Shatzer et al., 2013). It is argued that student academic performance has been considered as an output of the learning process and its quality (World Bank, 2018). Student academic performance is related to the level of performance in terms of learning based knowledge, skills, and experience in line with learning objectives of the curriculum (Levpuscek & Zupancic, 2008; Nemeth & Long, 2012). Many scholars claim that student performance is the overall net result of their cognitive and non-cognitive attributes as well as the socio-cultural context where the learning activities take place (Lee & Stankov, 2016; Liem & Tan, 2019). Thus, student performance is the level of proficiency attained in academic work or as formally acquired knowledge in school subjects, which is often represented by the percentage of marks obtained by students in examinations. Thus, we cannot neglect the value of academic performance anywhere in the world because it links with social value and means for a successful life in the future (Insah et al., 2018).

Regarding the level of student academic performance, many reports show that student academic performance is not satisfactory in the global context. The World Bank (2018) states that a large number of schoolchildren do not have basic skills like simple transaction processes, simple community hoarding boards/announcements, or understanding bus schedules in the world. The World Bank further presents shreds of evidence of low students' academic performance of the different nations. Similarly, the 5th Asia-Pacific Meeting on Education 2030 also highlights that maximum school children do have basic literacy and numeracy skills in the Asia region (UNESCO Asia-Pacific, 2020).

In the context of Nepal as well, the report of the National Assessment of Student Achievement (NASA) shows that the learning performance of students is decreasing year by year and currently it is less than 50 percent (ERO, 2019). The report further presents evidence that student performance of grades 3, 5, and 8 students is at a low level. In the examination of the grade 10 School Education Exam (SEE) in the academic year 2018, a large number of students scored below 2.0 GPA out of 4 (MoEST, 2019). Moreover, there is also a gap in students' performance between the community and private schools in Nepal. In the examination of SEE 2018, 4 percent of students of community schools obtained GPA 3:20 to 4 whereas 40.84 % of students of private schools obtain the same grade (Dixit, 2019). She further claims that students from private schools have done outstanding performance than community schools. Thapa (2015) also found that students from private schools in Nepal have performed better than similar students from community schools in the grade 10 examination. These shreds of evidence show that school students' performance is not at a good level.

The level of student academic performance is affected by a series of factors including socio-demographic factors (Waters & Marzano, 2006). Many reports and studies conclude that there is a significant relationship between socio-demographic factors and students' performances in the global context (Henderson, 1988; Shumox & Lomax, 2000). However, in Nepal, there are no studies that examined the grade 10 SEE students from inferentially testing the relationship between students' performance and student-related variables such as age, gender, ethnicity, type of school, and type of local government that manages school level education in their areas and descriptively presenting the overall school education examination result in terms of local government type as well. Therefore, this study attempts to fulfill the gap in the literature by analyzing the result of grade 10 SEE students of the academic year 2020 from the approach of not only descriptive but also inferential.

This study will be helpful for the local, province, and central government for developing policy, guidelines for the improvement of school education with a new innovative improvement program in new the provision of new federal government and letter grading system. This study will also be a millstone to examine and revisit the policy of the school education examination system and newly introduced policy on SEE administration in the context of COVID that provisioned the school to conduct grade 10 School Education Examination (SEE) and submit the final score of students to the central government through district office (EDCU) for the approval of score and result publication. Keeping this above-mentioned discussion, this study answers the two research questions; what is the level of student academic performance of grade 10 SEE students in terms of the type of school, type of local government, nature of examination system, and students factors (age, gender, and ethnicity)?, and Is there a significant difference in student achievement due to of the type of school, type of local government, nature of examination system, and students factors (age, gender, and ethnicity)?

The purpose of the study is two folds: first, to describe the grade 10- SEE student academic performance in terms of the type of school (public & private), type of local government (rural municipality & municipality), nature of examination (theoretical & practical), gender (male & female), age (right age (14 years) and & above right age), ethnicity (Bramin, Chhetri, Dalit & Janajati) and second, to examine the relationship between SEE student academic performance and socio-demographic factors such as type of school (public & private), type of local government (rural municipality & municipality), nature of examination (theoretical & practical), gender (male & female), age (right age (14 years) and & above right age), ethnicity (Bramin, Chhetri, Dalit & Janajati).

Literature Review

Understanding Student Performance: Multiple Perspectives

Unequal differences in student performance are not a new phenomenon in the world as old as a formal schooling system. These differences in learning are based on various student-related, school-related, policy-related, and parents related factors. So, disparities in learning have attracted many researchers, thinkers, and philosophers. The school of behaviorist thought advocates the view that environmental factors are the major responsible factors for student performance (Zhou & Brown, 2015). This view indicates that student performance is related to performing their behavior in the school context and responding to their behaviors. Student learning is the interaction between students and their external environment, and so, student performance is based on external variables such as reinforcement, learning environment, and practice (Kelly, 2012). This school of thought ignores the value of intelligence and cognitive power in learning and takes the learning as a passive process only (Matlin, 1994).

On the other hand, the school of cognitive suggests the view that student learning is based on innate mental processes and intelligence (Bowles & Gintis, 2002). This view focuses that learning is the active process of

constructing new knowledge through the process of reorganization of previous knowledge. Thus student performance is taken as a process where a student is an intelligent person and he/she can construct new knowledge based on the receiving experience and information. However, this school of thought does not focus on the value of social interaction, support in learning, interaction and tools of instruction, and many cultural backgrounds of the students (Zhou & Brown, 2015).

Similarly, other different theories and models have also advocated different perspectives on students' performance. For instance, the socio-cultural theory of Vygotsky (1978) advocates that students learning depends on the quantity and quality of interpersonal & social interaction process, cultural differences, and tools or code of instruction whereas the theory of cultural reproduction of Bourdieu (1973) states that school does not only reproduce cultural content and value of elite group but also symbolically impose to the non-elite group. The theory of cultural deprivation, on another side advocates, that elite and lower class group school children are doing poor performance due to their insufficient cultural resources (Deutsch, 1967). In addition to that, the theory of family effect states that student performance is related to their family background and factors (Coleman et al., 1966). The theory of school effectiveness similarly, states that students' performance depends on the school's overall effectiveness and leadership (Edmond, 1979). Likewise, the theory of differential treatment also indicates that student performance varies due to the unequal treatment in the teaching and learning process in terms of the fund, teaching and learning materials, and teacher quality, teaching and learning facilitation practices, and school management and leadership (Fuller, 1986). Thus, the above-mentioned different theories show that school student performance is not only a matter of individual student but also the social, cultural, contextual, economic, and political subject.

Socio-demographic Factors and Student Performance

Many research studies claim that there is a significant relationship between socio-demographic factors of the students and their academic performance (Casanova et al., 2005; Mathema & Bista, 2006). Age is one of the significant socio-demographic factors that affect student performance (Baba et al., 2013; Pesta et al., 2016; Schreiber et al., 2017, Benner, et al., 2016). But some studies claim that age does not significantly affect student performance (Momanyi et al. 2015). Similarly, some scholars claim that gender affects the student performance (Keith et al., 2006; Cole & Espinoza, 2008; Jaeger & Eagan, 2007; Huang et al., 2000; Schreiber et al, 2017) but others few research studies have shown that students learning does not vary due to the gender of students (Kaur, et. al., 2010; Olanipekun, 2015). In addition to age and gender, many studies claim that the ethnicity of the students does powerfully affect their academic performance (Lee, 2007; Jobbis, 2014; Maestri, 2017; Kingdon & Cassen, 2010). Student performance also varies due to the type of school (Mathema & Bista, 2006; Thapa, 2015; ERO, 2019; Newhouse & Beegle, 2006). But, Harry (2016) claims that type of school does not make a difference in student achievement. In above mentioned contradictory view of different scholars, this paper test the claims of different scholars in terms of age, gender, the ethnicity of students and type of school that students are studying, and the type of local government that governs the school of selected students.

School Education Provision and Practice in Nepal: Community and Private School

Nepal government has currently implemented the provision of two levels of school education in the formal education system: first, basic education that starts from the Early Child Development (ECD) program to grade 8, and second, secondary education that starts from grades 9 to 12 (MoEST, 2018). In Nepal, school education typically begins at the age of 3-4 years through ECD education and ends at the age of sixteen with grade 12. This is a new provision of the school education system that replaced the concept of the school education system from grade one to ten. According to the Education Act (1971), there is a provision of two types of schools in Nepal: community school and private school. The act further clearly defines the community school as a school that receives governmental funds after its approval.

On the other hand, a private school is defined as the school that does not receive any funds from any government after approval from the government. It denotes that community schools are running with the support of the governmental fund, services, and program but private schools are managing schools from their fee paid by students. Despite the difference in fund source and medium of language instruction, both schools are using the same curriculum throughout the school education (Mathema & Bista, 2007). As per the data of MoEST (2019), there are 27704 (80%) community schools and 6787 (20%) private schools in Nepal. Despite the lack of funds and technical support from the government, the number of private schools has drastically increased after 1990 and has attracted a significant number of students (Neupane, et al. 2018). Altogether 34491 schools are being

managed by 753 local governments in Nepal after devolving power and jurisdiction on the school education system by new constitution promulgated in 2015. This devolution took place in Nepal after six decades of a highly centralized education system. Based on the changes in managing school education, the Local Government Operating Act (2017) has provisioned 23 rights for managing school education in coordination with the province and state government.

School Education Examination (SEE) in Nepal

The School Education Examination (SEE), traditionally called School Leaving Examination (SLC) is equivalent to grade 10 in Nepal. This is an annual examination system and it has been conducted at the national level. Nepal government started to conduct this examination since 1934 (NEB, 2020). The SEE is the most important examination in Nepal from different perspectives. First, the SEE has been taken as the output level of school education and one of the key quality indicators of both community and private schools (Bhatta, 2005). Second, this examination is credential and prerequisites for entering higher education and any job employment and professional growth after entering the government jobs as well (Mathema & Bista, 2006; Thapa, 2015). Third, the SEE examination result also powerfully influences the policymaker, government actor, program implementation practitioners, and school-level stakeholders to revisit the way of pedagogical practices that adopted in the past (Singh, 2004). Based on these importances, the result of SEE has drawn high attention to policymakers, planners, school stakeholders, parents, supervisors, journalists, and the entire nation. Therefore, the performance of students in the SEE has been a matter of great concern to all in Nepal.

Course Nature and Grading System

SEE examination consists of six compulsory subjects with two elective subjects chosen by the student. The mandatory subjects are English, Nepali, Math, Science, Social Studies and Environment, Population, and Health (NEB, 2020). The total score for each subject is 100. Regarding the nature of examination, 5 major subjects (English, Nepali, Science and Social Studies and Environment, Population & Health) have both practice and theory examination that consists of 25 % practical and 75 % theoretical examinations but Math subject has only theoretical (NEB, 2020). This examination has been evaluated in the letter grading system since 2015. Before 2015, this examination was based on a percentage system. All studies conducted in the past are only related to a percentage grading system but this study is a first and new study that analyzes SEE results from the letter grading system. The letter grading system of grade 10 = SEE has been provisioned in nine levels as presented in Table 2.

Table 1. Grading System in SEE in Nepal

SN	Grade	Letter Grade	Description
1	3.65-4.00	A+	Outstanding
2	3.25-3.65	A-	Excellent
3	2.80-3.25	B+	Very Good
4	2.40-2.80	B-	Good
5	2.00-2.40	C+	Satisfactory
6	1.60-2.00	C-	Acceptable
7	1.20-1.60	D+	Partially Acceptable
8	0.80-1.20	D	Insufficient
9	0.0-0.80	E	Very Insufficient

Source: Curriculum Development Center (CDC) Nepal. (2014).

Change of SEE Process in the Context of COVID Pandemic in 2020

SEE is the national level examination and annually conducted in March in Nepal. As a regular plan, grade 10-SEE had been scheduled for its administration with all necessary preparation such as developing and distributing question set and answer paper, appointing an exam supervisor, and many more. But, the examination had been postponed due to lockdown caused by COVID -19 as per the decision of the government. To address the postponed examination from an alternative way, the government of Nepal decided to collect students' scores of grade 10 SEE students from the final examination that had conducted by schools before the SEE exam in every year, in a certain format through releasing Evaluation, Publication, and Approval Guideline

of Grade 10- SEE Students (NEB, 2020). The guideline has provisioned a committee having three members: headteacher, class teacher, and senior teacher of the school to approve the score of students of the final examination. The final examination of grade 10 had conducted by the school themselves in their school before the SEE examination. The guideline further suggests school to submit students' scores to EDCU and EDCU has been requested to review and approve the school data. Under this process, the Nepal government has already published the result of grade 10 SEE students and this study used this data in sample areas with the approval.

The Trend of SEE Result in Nepal

The result of SLC now called SEE in Nepal is not satisfactory. The failure is more common than success in the SLC examination in the percentage evaluation system and overall SLC result status is around 45 percentage only (Mathema & Bista, 2006; MoEST, 2019; Thapa, 2015). After the letter grading system as well, student performance is not satisfactory as presented in Table 2.

Table 2. Status of SEE in Nepal

Grade	Year 2018	Year 2019	Year 2020	Differences 2019-2018	Difference 2020-2019
GPA 0-0-0.8	0.0	0.0	1.5	1.5	0.0
GPA 0.80-1.20	0.6	1.0	0.0	-1.0	0.4
GPA 1.20-1.60	8.7	9.9	0.1	-9.8	1.2
GPA 1.60-2.00	24.6	21.6	3.7	-17.9	-3.0
GPA 2.00-2.40	21.6	22.0	16.9	-5.2	0.5
GPA 2.40-3.00	55	55	22.2	-32.3	-0.9
GPA 3.00-3.20	16.7	16.8	24.8	8.0	0.0
GPA 3.20-3.60	11.9	13.8	20.1	6.3	1.9
GPA 3.60-4.00	11.5	11.1	16.3	5.2	-0.4
GPA 4.00-4.50	4.4	3.8	16.5	12.7	-0.5
GPA 4.50-5.00	45	45	78	32.3	0.9

Source: MoF, 2020 and Adhikari, 2020

Table 2 presents the result status of SEE of three academic years 2018, 2019, and 2020 and differences between 2019-2018 and 2020-2019. Maximum SEE students are at only a satisfactory level. Based on the data, only 45 % of students are over the satisfactory level in the academic year 2018 and 2019 whereas 78 % of students in the academic year 2020. By analyzing the differences between the academic year 2018-2019 in over satisfactory level, there is a difference by 0.9 % only whereas 32.3% in 2019-2020. One of the reasons for increasing results in the academic year 2020 is the provision of adopting the student score from schools rather than center-based examination in the context of Covid-19 (Adhikari, 2020).

Evidence on Study on Students Performance in Global Context

In the global context, lots of researches have been carried out in the areas of students' performance. Most of the studies are related to factors affecting student performance (Caponera & Losito, 2016). The majority of studies investigated the great impact of school context including teacher-related factors on student performance (Walker, 1976; Schulz et al. 2010; Winnaar et al. 2015). On the other side, some studies have also shown that students related factors (Han et al., 2015; Lemberger et al. 2015) and socioeconomic factors (Hair et al., 2015; Boyle & Sadler, 2016) significantly affect the student performance. However, there is a high consensus among the researchers that suggest that students related, school-related, and parents related factors affect student performance. Similarly, there is a practice of Program for International Student Assessment (PISA) for identifying the level of students of grade 7 and above in reading, mathematics, and science. The report of PISA shows that the mean score of many countries is not at a satisfactory level (Schleicher, 2019). The further report shows that most of the children including 79 high and middle counties representative students were not complete the basic reading-related task in 2018. It shows that student performance is a serious issue in the global context as well. In addition to the PISA, Trends in International Mathematics and Science Study (TIMSS) is also the practice to study the science and math performance of grades 4, 5, and 8 student performance in the international context. Martin et al. (2015) present the fact that there is a slow increase in science performance in the world in the TIMSS report. These shreds of evidence also guide to study the SEE students' performance in the context of Nepal.

Evidence on Study on Students Performance in Nepal

There are a handful of studies on student performance in Nepal. The New ERA (1995) conducted a study in primary schools of eight districts and found that there is a positive relationship between parental education & regularity of students' and students' performance whereas a negative relationship between gender & time spent in household activities and students performance. The METCON (1995), similarly also found that distance between student home and their school affects student performance.

Another study conducted by CERID (2002a) also found that cost per student and school condition affect the school student performance. Shrestha (2014) also conducted a study in high and low performing schools and found the school environment plays a significant role in high performing schools. Another study conducted by the Rural Development Society (2017) also found similar findings that school initiative plays an important role in student performance. In these areas, CERID (2002b) also conducted a study related to the areas of determining factors for student performance and found that time spent by the teachers in the classroom highly affects student performance.

The above-mentioned studies are based on the data collected from primary school and related to exploring factors influencing student performance only. To analyze the student performance achievement score, EDSC (1997, 1999, 2001, 2003) collected the student performance data from schools through random sampling and multiple regression approaches and found the unavailability of students textbook and distance of schools from district education office significantly affect the student performance. These studies also showed that students' performance in grades 3 and 5 was very poor. Subedi (2004) also presented the fact that the performance of grades 9 and 10 students was below 50 % and there is a great impact of classroom size, the availability, and use of resources on student performance.

Similarly, Bhatta (2005) conducted a large scale study to explore the determinates of SLC/SEE student performance using ordinary least square (OLS) and logistic regressions and found that there is a minimal gap in students performance between public and private schools and the performance of both schools is affected by students, teachers, and community factors. In the history of Nepal, Mathema and Bista (2006) conducted a first in-depth a large scale based study to study on SLC/SEE student performance from the perspective of finding causes of poor performance and found that incidence of poor performance or underperformance is common in SLC examination in all subjects and overall grade. The study also shows that are serious disparities in student performance in terms of gender, school type, geographical location, and language group, and socio-economic status of the parents. After the establishment of the Education Review Office, under the Ministry of Education, National Assessment of Students Performance (NASA) was also conducted in grade 3, 5, and 8 in different academic years from 2011 to 2019 and the reports show that student performance is under preference level in all grades and socio-demographic factors play the significant role students performance (ERO, 2019).

This above-mentioned evidence is insufficient in terms of study areas, study population and study nature, study purpose in the context of the letter grading system, and newly implemented three types of the government system and decentralizing power & rights on managing school education from central to local government. Therefore, this paper contributes to the areas of research on student performance of secondary level students by describing the level of grade 10-SEE student performance and examining the relationship between students' factors and their student performance. Moreover, the finding of this paper directly supports policymaker to revisit the policy of school education examination revised model and secondary education teaching and learning practice.

Method

A quantitative research design was adapted to analyze the student academic performance for drawing the generalizable findings from the large size samples of students at one point in time (Creswell, 2012).

Participants

The participants were Grade 10 SEE students of community and private school of Dhankuta district in province one, Nepal. The total study population was 2748 grade 10 SEE students. The total population has been presented in Table 3.

Table 3. Number of Study Population and Participants

Name of Local Government	No of Total SEE Students			No of Participants for the Study		
	Community School	Private School	Total	Community School	Private School	Total
Dhankuta Municipality	445	306	751	64	155	219
Mahalaxmi Municipality	398	0	398	58	0	58
Pakhribas Municipality	274	46	320	40	23	63
Chhatharjorpati Rural Municipality	266	43	309	38	22	60
Sahidbhumi Rural Municipality	367	0	367	53	0	53
Sagurigadhi Rural Municipality	330	0	330	48	0	48
Chaubise Rural Municipality	273	0	273	40	0	40
Total	2353	395	2748	341	200	541

Sampling Strategies

After preparing the sample frame, the sample size was determined by the formula of Yamane (1976). As per calculation using the formula, 541 students (314 community school students and 200 private school students) were selected through stratified random sampling with disproportional allocation method as per the total number of schools available in the respective seven local governments in the support of Excel.

Instrument

To collect the data, the data collection tool entitled 'Information of Compiled Score of Students from Final Evaluation-SEE Grade 10' developed and used by NEB for approving grade 10 results in Nepal in the academic year 2076 was used. The tool was divided into two parts. The first part was designed to obtain information related to grade 10 SEE students and their school, like gender, ethnicity, and date of birth of students and type of school, location of school under local government. The next part of the tool was designed to obtain subject wise final scores of the students in both theory and practical. Moreover, the researcher with the permission and approval of the Unit Chief of EDCU collected the data as per the data collection tool and sample list.

Results

Description of Academic Performance Level of Grade 10 Students

This section descriptively presents the level of student performance of grade 10 SEE students in terms of the type of school, type of subjects, type of local government and gender, ethnicity & age in Table 4-7. Table 4 contains the percentage of students who achieved different grades in terms of the type of school in the area of the overall grade, theory subject, and practical subject. The table shows that overall, 57 % of students have achieved the 2.40 – 4 GPA. It indicates that maximum grade 10 SEE students have received a good level in an overall context. But by comparing the level of community and private school, only 34% percent of students of community schools have received the GPA 2.40 – 4.00 out of 4 whereas 97 % of the students from the private school received. It indicates that the performance of maximum community school students is under a good level and also shows that there is a wider gap in the performance of community and private school students in the SEE exam.

Table 4 also describes the fact that 54 % of students have not achieved good performance in theory subject in terms of overall status whereas 99 % of students achieve good performance in practical subjects. Similarly, 78 % of students of community school students have achieved below good level i.e. 2.40 GPA in theory subject whereas 86 % of students of private school students have achieved over a good level. But, there is a similarity in practical subjects where almost all students from both types of schools have received good performance. Thus, it

indicates that there is a wider gap in the performance of theory subjects and practical subjects and the performance level of a community school in theory subject is very poor.

Table 4. Performance Level of Students based on School Type

Areas	Sub-Area	Level B- to A+	Level C+ to E
Overall	Total	57	43
	Theory	46	54
	Practical	99	1
Community School	Total	34	66
	Theory	22	78
	Practical	99	1
Private School	Total	97	3
	Theory	86	15
	Practical	100	0

Table 5 also descriptively presents the level of student performance in terms of local government type that governs school education up to the secondary level. The table shows that 67 % of students of municipal local government achieved an over satisfactory level i.e. 2.40-4.00 GPA whereas 42 % of students of rural municipal local government only achieved level one. By comparing the theory and practical subjects, 56 % of students from municipal local government and 28 % from rural municipal local government achieved over a good level i.e. 2.40-4.00. But, all most all students from both types of government achieved a good level in practical subjects. Thus, it describes that the performance level of students of municipal local government is better than rural municipal local government.

Table 5. Performance Level of Students based on Local Government Type

Areas	Sub-Area	Level B- to A+	Level C+ to E
Municipal Government	Total	67	33
	Theory	56	44
	Practical	100	0
Rural Municipal Government	Total	42	58
	Theory	28	72
	Practical	98	2

Table 6 similarly presents the fact the level of student' performance at grade 10 examination in terms of subject type and school type. The table presents the fact that 60 % of students did not achieve a satisfactory level performance in Mathematics subject whereas the maximum students got good level performance in Nepali, English, Science, and Social. In addition to that, the performance level of students in Nepal is better than in other subjects.

Table 6. Performance Level of Students based on Subject Type and School Type

Areas	Sub-Area	Level B- to A+	Level C+ to E
Total	English	58	42
	Nepali	66	34
	Math	40	60
	Science	58	42
	Social	61	39
	English	34	66
Community	Nepali	49	51
	Math	15	85
	Science	35	65
	Social	40	60
Private	English	100	0
	Nepali	95	5
	Math	82	18
	Science	96	4
	Social	96	5

By comparing the community and private school, maximum students from community school did not achieve a good level i.e. 2.40-4.00 GPA in all major five subjects i.e. English, Nepali, Math, Science, and Social whereas maximum students from private schools achieved a good level in all those subjects. Community school students are doing better in Nepali subjects than other subjects whereas in English subjects by private school students. The lowest percentage of students achieved a good level in Mathematics subject in both types of schools. But, there is a wider gap in the performance level of Mathematics as well. Thus, this describes that community school student performance level in English, Nepali, Math, Science, and Social is very and maximum students from both types of school are very poor in Mathematics than other subjects.

Table 7 also descriptively presents the level of student performance based on social-demographic variable age, gender, and ethnicity. The table presents that 66 % of students aged 14 years achieved over a satisfactory level i.e. 2.00-2.40 GPA. Similarly, the table also presents the fact that the performance of girls is better than boys because 59 % of girls achieved an over satisfactory factory level whereas 56 % of boys only achieved the same level. But, there is a minor gap in student achievement between boys and girls. The table further shows that the performance level of Brahmin/Chhetri is better than other ethnic background students as 73 % of Brahmin/Chhetri students achieved a good performance level i.e. 2.40-4.00 GPA. Thus, this table shows 3 facts: firstly, 14 years aged students are doing better than over-aged students i.e. over 14 years. Second, girls are doing better in grade 10 examinations than boys in not a wider gap. Third, students from the Brahmin/Chhetri ethnic group are doing better than other ethnic background students.

Table 7. Performance Level of Students based on Age, Gender, and Ethnicity

Areas	Sub-Area	Level B- to A+	Level C+ to E
Age	14 years	66	34
	15-20 years	54	46
	20 years above	20	80
Gender	Boys	56	44
	Girs	59	41
	Bramin/Chhetri	73	27
Ethnicity	Janajati	52	48
	Dalit	45	55
	Others	59	41

Student Performance Differences from Age, Gender, Ethnicity, School and Local Government

This section inferentially presents the result of the relationship between student performance and other socio-demographic variables in Table 8 to 12. Table 8 answers the research question: is there a significant difference between the mean score of boys and girls, community school and private school, and municipal local government & rural municipal local government in SEE result?

Table 8 tests the research hypothesis: there is a significant difference in the student performance of community school and private school. 'Equal variances assumed' has been considered due to the f value = 7.508 and p-value = 0.006 under Levine's test for equality of variances. The table presents t value = -21.368, df = 539 and p-value = .000 which is less than 0.05. It implies that the research hypothesis is rejected. It implies that there is a difference in the mean score of community school and private school in the School Education Examination (SEE). Thus, school type makes a difference in school student performance.

Table 8 also tests the answers to the research question: is there a significant difference between student performance scores of municipal government and rural municipal government? Due to f value = 18.349 and p-value = .000, 'Equal variances not assumed' has been considered. Based on this consideration, t value = 6.664, df = 488.257 and p-value = .000 which is less than 0.05. It implies that the research hypothesis is rejected i.e. there is a difference in performance due to the type of local government. Thus, the type of local government makes a difference in student performance. Table 8 similarly presents the test result of the research hypothesis i.e. there is no significant difference between the performance of boys and girls. As per the F value = 0.004 and P-value = 0.953 under Levine's test for equality of variances, t value has been considered as per 'Equal variances not assumed'. By considering this, this table presents t value = -1.143, df = 538.950 and p-value = 0.254. It table shows the fact that p-value = 0.254 is higher than 0.05 and it implies that the research hypothesis is retained. That's why; this analysis claims that gender does not make a difference in the performance of students.

Table 8. Inferential Analysis of Difference on Students' Performance in terms of Gender, School Type, and Local Government Type

Indicator	Levene's Test for Equality of Variances	F	Sig.	t	df	Sig. (2-tailed)
School Type	Equal variances assumed	7.508	.006	-21.368	539	.000
	Equal variances not assumed			-22.771	497.096	.000
Local Level	Equal variances assumed	18.349	.000	6.320	539	.000
	Equal variances not assumed			6.664	488.257	.000
Gender	Equal variances assumed	.004	.953	-1.143	539	.254
	Equal variances not assumed			-1.143	538.950	.254

Table 9 inferentially presents the result of two hypotheses: there is no significant difference in student performance due to their age and there is a significant difference in the performance of students across the ethnic background. From the perspective of ethnicity and student performance, Table 9 presents p-value = .000 which is less than 0.05. So, it indicates that there is a significant difference in the performance of students due to differences in their ethnic identity. Similarly, Table 9 also presents a p-value = 0.001 which is less than 0.005 and it implies that the hypothesis is rejected. It shows that there is a difference in student performance due to their age. Thus, the age and ethnicity of the students make a difference in school student performance.

Table 9. Inferential Analysis of Difference in Students' Performance in terms of Ethnicity and Age

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Ethnicity	61.722	3	20.574	8.255	.000
Age	34.820	2	17.410	6.861	.001

Based on the differences presented in Table 9, multiple comparisons through the Tukey table have been presented in Table 10. The table shows that the p-value of the group (Bramin/Chhetri and Janajati) and the p-value of the group (14 years and 15-20 years students) are lower than 0.05. So, it implies that students from the group of Brahmin/Chhetri and Janajati and a group of 14 years and 15-20 years students are doing better than other groups of students.

Table 10. Multiple Comparisons of Differences on Student Performance as per Ethnicity and Age Group

Indicator	Mean Difference (I-J)	Std. Error	Sig.
Ethnicity (Brahmin/Chhetri)	.72401*	.15916	.000
Age (14 years and 15-20 years students)	.47351*	.14931	.005

Table 11 also tests the hypothesis: there is no significant difference in the mean score of the theoretical subject and practical subjects. Table 11 presents that t value = -45.673, df = 540 and p-value = .000 which is less than 0.005. So, the research hypothesis is rejected and implies that there is a significant difference between the mean score of practical subjects and theoretical subjects.

Table 11. Inferential Analysis of Difference on Students' Performance in terms of Nature of Examination

Indicator	t	df	Sig. (2-tailed)
Pair of Theory and Practical Subject Score	-45.673	540	.000

Thus, there is a significant difference in school student performance due to their type of school, type of local government that governs schools, nature of examination, age, and ethnicity. But gender does not make a difference in student performance.

Discussion

The paper has concluded different facts that contribute to a lively discussion among all stakeholders regarding accountability toward students' achievement and the school examination system for improving teaching and learning practices and the examination system. First, the study presents the fact that maximum students achieve good academic performance i.e. 2.40 - 4.00 out of 4 GPA in grade 10 SEE. This level is better than in the past one. But, many stakeholders claim that one of the reasons for increasing performance level is changing modality in examination i.e. conducting school-based examination rather than national level and misuse of authority in the verification process on students score by school mainly private schools (Adhikari, 2020). In addition to that, the performance level of community school students is very poor than private school students. This finding is similar to the findings of Mathema & Bista (2006). They conclude that 90 % of private schools are at a high-performance level whereas 30% for the public schools in a good performance. Many other studies also claim that private schools students are doing better performance than community schools (ERO, 2019; Thapa 2015; Kindgdom, 1996).

Second, the study further finds that there is a wider gap in student performance between theories based examination and practical based examination. The wider gap between theory-based performance and practical examination based performance is not acceptable from the line of student learning accountability and examination system. Third, the study also concludes that student achievement of municipal local government is better than rural municipal local government. This establishes the new fact in the governance system as well. Fourth, the study claims that one-third of students are underperformance level in Mathematics subject. This result also supports the result of other past studies (ERO, 2019; Mathema & Bista, 2006; Bhatta, 2005). They also found that most of the school students have historically performed under a satisfactory level in Mathematics subject. Fifth, the study finds that 14 years aged students are doing a better performance in grade 10 examination than the overage group of students. In the Nepalese education system, 14 years of children should enroll in grade 10. Thus, this indicates that the appropriate age of students determines a higher degree of student performance. It is supported the view of Momanyi et al. (2015) and they claim that the right age and appropriate age of students have significantly determined the level of secondary level students in Kenya. Sixth, the study also shows that students from the Brahmin/Chhetri ethnic community are doing better results than other students from other ethnic backgrounds because the ethnic background is related to their socio-cultural and economic factors.

Finally, the study also inferentially tests some hypothesis and concludes that there is a significant relationship between age, ethnicity, school type, local government type & examination nature, and school student performance. It implies that there is a significant difference in school student performance due to these variables. This finding is similar to the findings of different scholars in the past as well. Momanyi et al. (2015), Schreiber et al. (2017), and Navarro et al. (2015) claim that age is one of the powerful factors that determine the students' performance. Similarly, ERO (2019), Mathema & Bista (2006), and Desai et al. (2008) found that there is a significant difference in student achievement of private and community school. Thus this finding is correlated with the findings of Pestana et al. (2016) and they also claim that the socio-demographic variable significantly makes a difference in student achievement.

Conclusions and Recommendations

The primary focus of the study is to analyze the school student performance using grade 10 SEE the results of the academic year 2020. The study descriptively and inferentially analyses the SEE result of the sampled population to present the fact on the academic performance of SEE students in Nepal. The study descriptively and inferentially analyzes the SEE result in terms of school type, local government type, nature of examination (practical and theory), and nature of subjects, age, gender, and ethnicity. The study concludes that the performance of most of all community school students is underperformance and satisfactory level only and they are very poor in the subject of Mathematics than others. There is also a wider range of gaps in student performance between theory subjects and practical subjects. Performance of 14 years aged students and students from municipal local government & Brahmin/Chhetri ethnic background are doing better performance than others. The study finally concludes that the school of students, local government type that governs the school of student, nature of examination, student age, and ethnicity make a significant difference in student achievement whereas gender does not.

The findings of the study will be the backbone of the school education policy in the history of Nepal in the context of COVID 2019. The findings of the study imply that local government should take the federal new

structural model of governance an opportunity to bring the wider changes in school education through formulating new policy related to the school education learning reform movement at public schools. It equally recommends bringing changes in the school examination and verification system as well. This finding also recommends revisiting the policy on student marking system in the practical exam as well because there is a wider gap in performance in theory and practical subjects. Similarly, this study recommends the government to focus on rural municipal government schools than municipal government in delivering educational resources because rural municipal students are at a satisfactory level only. Thus, this study supports all governments to develop and revisit the policy, guidelines related to school level teaching and learning practices, and school examination systems.

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References

- Adhikari, P. (2020). Abuse of Rights in Evaluation. *Gorkhapatra Daily*. <https://old.gorkhapatraonline.com/epaper/view?paper=gorkhapatra&today=2020-08-26>
- Baba, I., Aliata M. I., & Patric, B. A. (2013). Demographic Factors and Students' Academic Achievement in Tertiary Institutions in Ghana: A study of Wa Polytechnic. *Journal of Education and Practice*, 4(20), 76-80. <https://www.iiste.org/Journals/index.php/JEP/article/view/7903>
- Benner, A. D., Boyle, A. E., & Sadler, S. (2016). Parental involvement and adolescents' educational success: The roles of prior achievement and socioeconomic status. *Journal of Youth Adolescence*, 45(1), 1053-1064. 10.1007/s10964-016-0431-4
- Bhatta, S. D. (2004). A Descriptive Analysis of the Disparities in School Performance in the SLC Exams. *SLC Study Report # 1*. Kathmandu, Nepal: The Education Sector Advisory Team, Ministry of Education and Sports.
- Bourdieu, P. (1973). Cultural Reproduction and Social Reproduction. In R. Brown (Ed.) *Knowledge, Education, and Cultural Change*, 56-68. <https://edu301s2011.files.wordpress.com/2011/02/cultural-reproduction-and-social-reproduction.pdf>
- Bowles, S. & Gintis, H. (2002). Schooling in Capitalist America Revisited. *Sociology of Education*, 75(1), 1-18. 10.2307/3090251
- Caponera, E. & Losito, B. (2016). Context factors and student achievement in the IEA studies: evidence from TIMSS. *Large-scale Assess Education*, 4(12), 1-22. 10.1186/s40536-016-0030-6.
- Casanova F. P., Linares, M. C. G, Torre, M. J. & Carpio, M. (2005). Influence of family and socio-demographic variables on students with low academic achievement. *Journal of Educational Psychology*, 25(4), 423-435. doi.org/10.1080/01443410500041888
- CDC. (2014). *Secondary Education Curriculum*. <https://lib.moecdc.gov.np/elibrary/pages/view.php?ref=567&k=CERID>.
- CERID. (2002a). School Effectiveness Study in Nepal: A Synthesis of Indicators. *Formative research project study report 5*. Research Center for Educational Innovation and Development.
- CERID. (2002b). Effective Classroom Teaching/Learning – Phase 1: Classroom Delivery. *Formative research project study report 4*. Kathmandu: Research Center for Educational Innovation and Development.
- Cole, D. & Espinoza, A. (2008). Examining the Academic Success of Latino Students in Science Technology Engineering and Mathematics (STEM) Majors. *Journal of College Student Development*, 49(4), 285-300. 10.1353/csd.0.0018
- Coleman, J., et al. (1966). Equality of Educational Opportunity. *Equity and Excellence*, 6(5), 19-28. doi.org/10.1080/0020486680060504
- Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (4th Ed.). PHI Learning.
- Desai, S., A. Dubey, R. Vanneman, & R. Banerji. (2009). Private Schooling in India: A New Educational Landscape. *India Policy Forum*, 5(1), 1-58.
- Deutsch, M. (1967). *The Disadvantaged Child*. New York: Basic Books.
- Dixit, S. (2019). Seeing through SEE Results. *Setopati*. <https://en.setopati.com/view/149213>
- Edmonds, R. (1979). Effective Schools for the Urban Poor. *Educational Leadership*, 37(1), 15-28. <http://www.midwayisd.org/cms/lib/TX01000662/Centricity/Domain/8/2.%20Edmonds%20Effective%20Schools%20Movement.pdf>


- EDSC. (1997). *National Assessment of Grade 3 Students*. A report submitted to the Ministry of Education and Sports. Educational and Developmental Service Center
- EDSC. (1999). *National Assessment of Grade 5 Students*. A report submitted to the Academy for Education and Sports. Educational and Developmental Service Center
- EDSC. (2003). *National Assessment of Grade 5 Students*. A report submitted to the Research and Development Section of the Department of Education, Ministry of Education and Sports. Educational and Developmental Service Center
- EDSC. (2001). *National Assessment of Grade 3 Students*. A report submitted to the Research and Development Section of the Department of Education, Ministry of Education and Sports. Educational and Developmental Service Center.
- Education Act-1972. (2017). 9th Amendment. The Law Commission. <http://www.lawcommission.gov.np/np/ERO>.
- ERO. (2019). *National Assessment of Student Achievement, 2018: Main Report*.<http://ero.gov.np/category/10>
- Fuller, B. (1986). Raising School Quality in Developing Countries: What Investments Boost Learning. The World Bank. <https://eric.ed.gov/?id=ED296920>
- Hair, N. L., Hanson, J. L., Wolfe, B. L., & Pollak, S. D. (2015). Association of child poverty, brain development, and academic achievement. *JAMA Pediatrics*, 169(1), 22–29.
<https://jamanetwork.com/journals/jamapediatrics/fullarticle/2381542>
- Han, S. Y., Capraro, R. M., & Capraro, M. M. (2015). How science, technology, engineering, and mathematics (STEM) project-based learning (PBL) affects high, middle, and low achievers differently: The impact of student factors on achievement. *International Journal of Science and Mathematics Education*. 1-25. 10.1007/s10763-014-9526-0
- Harry, L. (2016). The Effects of School Type on Academic Performance–Evidence from the Secondary Entrance Assessment Exam in Trinidad. *ERIC*. <https://eric.ed.gov/?id=ED586316>
- Henderson, A. T. (1988). Good news: An ecologically balanced approach to academic improvement. *Educational Horizons*, 66(2), 60-67. 10.2307/42925895
- Huang, G., Taddese, N., & Walter, E. (2000). Entry and persistence of Women and Minorities in college science and engineering education: Research and Development Reports.
<https://files.eric.ed.gov/fulltext/ED566411.pdf>
- Insaah, B; Mumuni, A; & Patrick, B. (2018). Demographic Factors and Students' Academic Achievement in Tertiary Institutions in Ghana: A study of Wa Polytechnic. *Journal of Education and practice*, 4(20), 76-80.<https://www.iiste.org/Journals/index.php/JEP/article/view/7903>
- Jaeger A. J. & Eagan M. K. (2007). Exploring the Value of Emotional Intelligence: A Means to Improve Academic Performance. *NASPA Journal*, 44(3), 512-53. 10.2202/0027-6014.1834
- Jobbins, D. (2014 March 28). Ethnicity has the greatest impact on degree grades: Report. University World News. <https://www.universityworldnews.com/post.php?story=20140329102323216#:~:text=The%20analysis%20shows%20a%20significant,tuition%20fees%20from%202012%2D13>.
- Joy, T. H. E. (2013). Conceptual Framework of Teachers' Competence In Relation To Students' Academic Achievement. *International Journal of Networks and Systems*, 2(3), 15-20.
<http://warse.org/pdfs/2013/ijns01232013.pdf>
- Kaur, K., Chung, H. T. & Lee, N. (2010) Correlates of Academic Achievement for Master of Education Students at Open University Malaysia. [Paper Presentation]. 6th Pan-Common wealth Forum on Open Learning, 24th - 28th November 2010, Kochi, India. <http://eprints.oum.edu.my/480/>
- Keith, P. M., Byerly, C., Floerchinger, H., Pence, E. & Thornberg, E. (2006). Deficit and resilience perspectives on performance and campus comfort of adult students. *College Student Journal*, 40 (3), 546- 556. https://pdfs.semanticscholar.org/9a7e/1be9f2fc9468557ddde26a4bdbd93c019588.pdf?_ga=2.40394858.954059579.1599281388-181216952.1585046901.
- Kelly, J. (2012). *Learning Theories*. The Peak Performance Center. <http://thepeakperformancecenter.com/educational-learning/learning/theories/>
- Kingdon, G. & Robert Cassen, R. (2010). Ethnicity and low achievement in English schools. *British Educational Research Journal*, 36(3), 403-431. <http://www.jstor.com/stable/27823617>
- Kingdon, G. (1996). The Quality and Efficiency of Public and Private Education: A Case Study of Urban India. *Oxford Bulletin of Economics and Statistics*, 58(1): 57 – 82. 10.1111/j.14680084.1996.mp58001004.x
- Lee, H. (2007). The Effects of School Racial and Ethnic Composition on Academic Achievement During Adolescence. *The Journal of Negro Education*, 76(2), 154-172. www.jstor.org/stable/40034554?seq=1
- Lee, J., & Stankov, L. (2016). *Non-cognitive psychological processes and academic achievement*. Rutledge
- Lee, J., Liu, X., Amo, L. C., & Wang, W. L. (2013). Multilevel Linkages between State Standards, Teacher Standards, and Student Achievement: Testing External versus Internal Standards-Based Education Models. *Educational Policy*, 28(6), 780–811. <http://doi.org/10.1177/0895904813475708>
- Lemberger, M., E., Selig, J. P., Bowers, H., & Rogers, J. E. (2015). Effects of the student success skills program on executive functioning skills, feelings of connectedness, and academic achievement in a predominantly

- Hispanic, low-income middle school district. *Journal of Counseling Development*, 93(1), 25- 37. doi:10.1002/j.1556-6676.2015.00178.x
- Levpuscek, M. P., & Zupancic, M. (2008). Math Achievement in Early. *Journal of Early Adolescence*, 20(10), 1–30. <http://doi.org/10.1177/0272431608324189>
- Liem, G. A. D., & Tan, S. H. (2019). Asian education miracles: In search of socio-cultural and psychological explanations. New York: Rutledge
- Local Government Operating Act. (2017). The Law Commission. <http://www.chainpurmun.gov.np/en/content/local-government-operation-act-2074-0>
- Maestri, V. (2017) Can ethnic diversity have a positive effect on school achievement? *Education Economics*, 25(3), 290-303, DOI: 10.1080/09645292.2016.1238879
- Martin, M. O.; Mullis, I. V. S.; Foy, P. & Hooper, M. (2015). TIMSS 2015 International Results in Science. TIMSS & PIRLS. <http://timssandpirls.bc.edu/timss2015/international-results/wpcontent/uploads/filebase/full%20pdfs/T15-International-Results-in-Science-Grade-8.pdf>
- Mathema, K.B. & Bista M.M. (2006). Study on Student Performance in SLC. Ministry of Education: Research Report. https://www.moe.gov.np/assets/uploads/files/SLC_Report_Main_English.pdf
- Matlin, M.W. (1994). *Cognition*. Harcourt Brace College Publishers.
- METCON. (1995). *BPEP Strategy for Remote Areas*. METCON Consultants.
- MoEST. (2018). School Structure in Nepal. Educational Information. EDUCATION%20GOVERNANCE%20AT%20LOCAL%20GOVERNMENTS%20IN%20NEPAL.pdf
- MOEST.(2019). High-Level National Education Commission Report. https://www.academia.edu/38190989/Nepal_High_Level_National_Education_Commission_Report_2019_for_reforming_higher_education_and_school_level_education
- MOF. (2020). Economic Survey 2018/19: Annual Report. https://mof.gov.np/uploads/document/file/Economic_Survey_2076-77.pdf
- Momanyi, J. M.; Too, J. & Simiyu, C. (2015). Effect of Students' Age on Academic Motivation and Academic Performance among High School Students in Kenya. *Asian Journal of Education and e-Learning* 3(5), 337-342. <https://ajournalonline.com/index.php/AJEEL/article/view/3130>
- Navarro, J. J.; Rubio, J. G.; and Oliveros, P. R. (2015). The Relative Age Effect and Its Influence on Academic Performance. *PLOS ONE*, 10(10) 1-18. DOI:10.1371/journal.pone.0141895
- NEB. (2020). Evaluation, Publication, and Approval Guideline of Grade 10- SEE Students. <https://www.see.gov.np/>
- Nemeth, J., & Long, J. G. (2012). Assessing Learning Outcomes in U.S. Planning Studio Courses. *Journal of Planning Education and Research*, 32(4), 476–490. [1177/0739456X12453740](https://doi.org/10.1177/0739456X12453740)
- Neupane, P., Pokharel, T., Dhungana, H., Poudyal, T., Ghimire, I.P., Gupta, A. & Poudel A. (2018). Political Economy Analysis of Emerging Education Governance at Local Level in Nepal. Lalitpur: Nepal Administrative Staff College and The Asia Foundation. <https://nasc.org.np/sites/default/files/POLITICAL%20ECONOMY%20ANALYSIS%20OF%20EMERGING%20EDUCATION%20GOVERNANCE%20AT%20LOCAL%20GOVERNMENTS%20IN%20NEPAL.pdf>
- New ERA. (1995). *BPEP Achievement Study*. New ERA.
- Newhouse, D. & Beegle, K. (2006). The Effect of School Type on Academic Achievement: Evidence from Indonesia. *The Journal of Human Resources*, 41(3), 529-557. www.jstor.org/stable/40057268?seq=1
- Olanipekun, S. S. (2015). Analysis of Students' Academic Performance in General English in Kwara State College of Education (Tech.), Lafiagi, Nigeria. *Open Access Library Journal*, 2(2), 1-7. <http://dx.doi.org/10.4236/oalib.1101262>
- Pestanaa, L., Duarteb, J. & Coutinhob, E. (2016). Socio-demographic variables determine the academic performance of Adolescents. [Conference Paper]. 2nd International Conference on Health and Health Psychology. <http://dx.doi.org/10.15405/epsbs.2016.07.02.19>
- Rural Development Society Chabahil & Molung Foundation. (2017). A Study on Factors of Student Learning Achievements and Dynamics for Better Learning Conditions: A case study of selected schools. A report submitted to the Ministry of Education Nepal. <https://www.doe.gov.np/assets/uploads/files/632761d93738aa7abd6159bc9f642c33.pdf>
- Schleicher, A. (2019). PISA 2018: Insight and Interpretations. OECD. <https://www.oecd.org/pisa/PISA%202018%20Insights%20and%20Interpretations%20FINAL%20PDF.pdf>
- Schreiber, D.; Agomate, J. C.; & Oddi, B. (2017). The Impact of Demographic Influences on academic Performance and Student Satisfaction with Learning as Related to Self-Esteem, Self-Efficacy, and Cultural Adaptability within the Context of the Military. *International Journal of Learning, Teaching, and Educational Research*, 16(4), 67-90. <https://www.ijlter.org/index.php/ijlter/article/download/903/pdf>

- Schulz, W., Ainley, J., Fraillon, J., Kerr, D., & Losito, B. (2010). ICCS 2009 international report: Civic knowledge, attitudes, and engagement among lower-secondary school students in 38 countries. Amsterdam: International Association for the Evaluation of Educational Achievement (IEA). https://heefa.net/files/ICCS_2009_International_Report.pdf
- Shahzadi, E., and Ahmad, Z. (2011). A study on the academic performance of university students.[Conference paper].8th International Conference on Recent Advances in Statistics. 10.13140/2.1.3949.3126
- Shatzer, R. H., Caldarella, P., Hallam, P. R., & Brown, B. L. (2013). Comparing the effects of instructional and transformational leadership on student achievement: *Implications for practice, Educational Management Administration & Leadership*, 42(4), 445–459. 10.1177/1741143213502192
- Shrestha, K. N. (2014). Genuine Efforts for Quality in some Community Schools Some case studies. Report submitted to the Ministry of Education.
- Shumox, L., & Lomax, R. (2001). Parental efficacy: Predictor of parenting behavior and adolescent outcomes. *Parenting*, 2(2): 127-150. 10.1207/S15327922PAR0202_03
- Singh, G. B. (2004). A Comparative Study of School Leaving Examinations in SAARC Countries. SLC Study Report # 2, Kathmandu: The Education Sector Advisory Team, Ministry of Education, and Sports.
- Subedi, B. R. (2004). Predicting Student Achievement: A Multilevel Analysis of Classrooms and Schools. *Journal of Education and Development*, 21(1), 19 – 32. <https://www.cerid.org/?s=pub&a=download&id=65cf876c6a7dc7c242b958995e46fb4f>
- Thapa, A. (2015). Community and private school performance in Nepal: An Analysis Using the SLC Examination. *Education Economics*, 23(1), 47-62. 10.1080/09645292.2012.738809
- Thapa, A. (2015). Community and private school performance in Nepal: An Analysis Using the SLC Examination. *Education Economics*, 23(1), 47-62. <https://doi.org/10.1080/09645292.2012.738809>
- UNESCO Asia-Pacific (2020).The 5th Asia-Pacific Meeting on Education 2030 (APMED2030) Proceedings. <https://apa.sdg4education2030.org/index.php/node/424>
- Vygotsky, L. (1978). Interaction between learning and development. *Readings on the development of children*, 23(3), 34-41. https://www.oerafrica.org/sites/default/files/L%20%26%20L%20reader_section%20one-reading_4.pdf
- Walker, D. A. (1976). The IEA six subject survey: An empirical study of education in twenty-one countries. Amsterdam: International Association for the Evaluation of Educational Achievement (IEA).
- Waters, T. J., & Marzano, R. J. 2006. School district leadership that works: The effect of superintendent leadership on student achievement. *Mid-Continent Research for Education and Learning*, 5(9), 135-156. <https://files.eric.ed.gov/fulltext/ED494270.pdf>
- Winnar, L. D., Frempong, G., & Bignaut, R. (2015). Understanding school effects in South Africa using multilevel analysis: Findings from TIMSS 2011. *Journal of Research in Educational Psychology*, 13(1), 151–170. doi:10.14204/ejrep.38.16036
- World Bank (2018). Learning to Realize to Education's promise. <https://www.worldbank.org/en/community/wdr2018>
- Yamane, T. (1967). *Statistics: An Introductory Analysis* (2nd Ed.). Harper and Row. <https://www.gbv.de/dms/zbw/252560191.pdf>
- Zhou, M., & Brown, D. (2015). *Educational Learning Theories* (2nd Ed.). Education Open Textbook. <https://oer.galileo.usg.edu/cgi/viewcontent.cgi?article=1000&context=education-textbooks>

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