



The Journal of Musikot Multiple Campus *Volume 3 Issue 1 June 2025*  
*A Peer-Reviewed, Open-Access Multidisciplinary Journal*  
 ISSN 2976-1271 (Print)  
 Published by the Research Management Cell  
 Musikot Khalanga Multiple Campus, Musikot, West Rukum  
 (A Constituent Campus of Mid-West University)

---

Internal and External Assessment Analysis of Math, English and Local Curriculum

Tek Bahadur Oli (Asst. Prof.)

Mid-West University

Musikot Khalanga Multiple Campus, Rukum West

<https://orchid.org/0009-0009-7199-8481>

---

### Abstract

This study aims to analyze the achievement of grade eight students in community schools within Musikot Municipality according to the type of assessment (internal and external) based on the grades obtained in the final examination. The study uses a descriptive and comparative research design. The data collection is based on the results of the final examination of grade eight students held in the 2081 academic session, which includes English, Mathematics and the local curriculum 'Musikot Serofero'. The data has been pre-processed in MS Excel and analyzed using SPSS 25 software. A high proportion of A+ and A grades is seen in internal assessment, while C and D grades are more visible in external assessment, which is an indicator of grade inflation. Thematic analysis shows that the poor performance of students in Mathematics is evident in external assessment, while weaknesses in writing and comprehension are also seen in English. Although the overall performance in the local curriculum is positive, there is a need for improvement in the depth of the subject. The study provides practical recommendations for policymaking in education by highlighting the fairness, reliability and need for improvement of the assessment system.

Keywords: Evaluation, Comparative analysis, Academic achievements, Grade distribution

### Introduction

Education is the foundation of a nation's social, cultural, and economic transformation. In school-level education, the basic level is considered crucial, culminating in the examination in grade eight. In Nepal, grade eight is considered the culmination point of the basic level, which determines not only the subject-specific achievement of the student, but also the direction of the future educational journey. Analyzing the final examination conducted in grade eight from schools in Musikot Municipality, the relationship between the implementation of the local curriculum, the type of assessment (internal and external), and the student's academic performance can be understood. A comparative study of the results obtained from internal and external assessments, especially in subjects such as mathematics

and English, and local curriculum textbook, reveals school-wide educational inequality, the impact of curriculum implementation, and the effectiveness of the assessment system. Such analyses help to examine the trend of subject-specific grade distribution, the reliability of assessment, and the usefulness of the local curriculum.

This research aims to conduct an in-depth analysis of the relevance and effectiveness of the assessment system used in schools, by comparative evaluation of the achievement of grade eight students in mathematics, local curriculum and English in the context of the internal and external assessment. Education is the foundation of prosperity, inclusion and social justice. According to the Constitution of Nepal, 2072, education is a fundamental right of every citizen (*The constitution of Nepal*, 2015). The annual Grade eight examination, as per the format prescribed by the Ministry of Education and the Curriculum Development Center, is considered as a decisive assessment at the school level, which determines the confidence, social status and educational future of the student.

Nepal's education system is divided into primary (grades 1–5), basic (grades 6–8), and secondary (grades 9–12). Grade eight is the final level of basic education. Therefore, its examination is a measure of quality education assessment. However, research has shown disparities in achievement due to heterogeneity between schools, curriculum use, lack of resources, teacher competence, and differences in assessment methods (Paudel et al., 2022). The economic status, access to books, parental education, and gender roles have an impact on student achievement. Rural students do not achieve the expected achievement due to lack of resources, low teacher attendance, and lack of support. In addition, psychological factors such as students' Growth Mindset or self-confidence also play a role (Khagendraraj., 2020). In Nepal, test-centered assessment is still dominant. Most assessments focus on memorization and comprehension according to Bloom's Taxonomy, while the assessment of analytical and creative aspects is less. Textbook-based preparation, rote learning, and limited open-ended questions hinder deep learning. The School Education Sector Development Plan (SSDP, 2013–2016) has prioritized assessment reform, use of technology, and teacher training. However, there are challenges in implementation, which has weakened the assessment system for Grade eight (Office, 2020).

Overall, a comparative analysis that encompasses social, economic, institutional, and policy aspects is needed. This will help clarify the appropriateness of assessment, educational disparities, and the role of examinations in student development. The assessment methods used in Nepal's school education system are diverse. In particular, the tendency for students who perform well in internal assessments to perform poorly in external assessments has raised questions about the reliability, fairness, and overall effectiveness of the assessment system. Similar challenges are seen in schools in Musikot Municipality—grade disparity between internal and external assessments, subject-specific performance differences, and the tendency for students to achieve low grades. Improvement in educational quality is not possible without identifying the root causes of these problems. Such an analysis is even more relevant and urgent in the context of the local curriculum. This study attempts to conduct an in-depth analysis of the effectiveness, reliability, and fairness of the assessment system in the

context of the internal and external marks. The identification of subject-specific weaknesses and achievements will provide practical guidance to teachers, students, and education policymakers.

The findings from the study will guide the development of quality, fair, and effective assessment strategies in the future, which will have a positive impact on the educational journey of students. The objectives of the study are: to compare and analyze the grades of Grade eight students in English, Mathematics, and the Third Subject according to internal and external assessments; to examine the distribution of grades, differences in subject-specific achievement, and the relationship between assessment methods; and to assess how effectively the impact of the local curriculum is reflected in the assessment system. The key research questions are: Is there a significant difference in the distribution of grades between internal and external assessments? In which subjects is student achievement relatively high or low? Does the current assessment system accurately reflect the actual abilities of students? The study is limited to Grade eight schools within Musikot Municipality. The research is based entirely on quantitative data; qualitative aspects are not included. Since the data is collected from schools and the education department, there may be a possibility of error. As the analysis is mainly based on grades, it may be difficult to assess the overall level of learning. The study includes only Mathematics, English, and the Third/General Subject; other subjects are not included. The study focuses on five schools and is based on the final examination results of Grade eight for the year 2081 only. Only three subjects (Mathematics, English, and General) are analyzed. Only comparisons between internal and external assessments are made. Only quantitative (SPSS-based) analysis is used.

Evaluation of educational achievement is an important basis for measuring the quality of any education. The effectiveness of the education system is assessed by classifying students' achievements through grades. In Nepali school education, both internal assessment (Continuous Assessment) and external examination (Final Exam) are given equal importance. The results obtained from these assessment methods depict the overall development and subject-specific competence of students (Rijal et al., 2074).

The NASA 2020 report clearly depicts the status of assessment of academic achievement of students in Nepal. It highlights the disparity in achievement between government and private schools by comparing internal and external assessments conducted in grades 3, 5, and 8. According to the report, students in private schools score higher than those in government schools, mainly due to teacher efficiency, teaching methods, lack of resources, and parental involvement. The assessment system, which focuses only on grades, has not played the expected role in developing real learning, analytical skills, and practical knowledge. The traditional assessment system, which does not touch the cognitive, social, and emotional aspects of students, seems to have reduced the quality of education. This reinforces article's view that the current test-centric system is not in line with the objectives of education (Office, 2020).

UNESCO's report titled "Education for All" has paid special attention to the challenges of access, equity, and quality in education in developing countries, including

Nepal. It shows that the main reasons for the low quality of education among students in rural and remote areas are the lack of physical infrastructure, lack of teachers, and the socio-economic condition of the community. In addition, the report mentions that the inequality seen in the evaluation system, the system based on the number of examinations, has made education superficial. According to UNESCO's perspective, evaluation should not be just a means of testing knowledge but a mechanism for improving learning. Such an international report further strengthens the basis of this research that Nepal still needs to improve the evaluation system (publishing, 2015).

The OECD's TALIS 2018 report presents the fact that the professional development and training of teachers have an impact on student achievement in an international context. It shows that the continuous training received by teachers, the use of contemporary technology, and the culture of self-assessment led to a significant increase in the level of overall progress of students. According to the report, due to limited training opportunities in countries including Nepal, there is inequality in student learning. Many teachers in Nepal still focus on traditional methods, which has adversely affected the quality of learning. The TALIS report confirms the teaching and assessment disparities raised in this article at an international level (OECD, 2019).

According to (Toyama et al., 2010) on Evaluation of Evidence-Based Practices in Online Learning, which report published by the US Department of Education presents an analysis of effective practices in online learning. It shows that assessment through online media can be multifaceted, flexible, and inclusive. In the context of Nepal, such technology-based assessment is still in its infancy, but inequality of digital access has hindered its uniform implementation. According to the report, ICT-based assessment supports students' self-reflection, problem-solving, and long-term learning.

Ministry of Education, Nepal (2023). Recovery and Accelerated Learning Plan 2023–2028, published by the Ministry of Education, covers the post-pandemic education recovery and improvement plan. It aims to reduce learning gaps, improve student-centered education, and improve assessment. According to the plan, there is a need to make the assessment system in Nepal's schools not only outcome-oriented but also focused on learning progress. In addition, a plan has been presented to introduce effective teaching techniques by providing assessment-related training to teachers. This document is fully consistent with the need for assessment system reform and the context of current challenges presented (Ministry of Education, 2023).

Education is the backbone of inclusive development, social justice and overall human development, and the role of grade eight as the final point of the basic level becomes even more important. Although the National Curriculum Framework and School Education Sector Development Plan (SSDP, (2023–2016) of Nepal have emphasized quality education and a reliable assessment system, assessment inequities, incomplete curriculum implementation and academic achievement gaps are still emerging in schools. The grade disparity observed between the internal and external assessment systems in schools of Musikot Municipality, especially in subjects like Mathematics, English and local curricula, raises serious questions

about the credibility and fairness of assessment. Factors such as the psychological state of students, access to resources, teacher competence and institutional differences between schools are found to affect the assessment results. In such a context, an in-depth analysis of the overall effectiveness of the assessment system and the practical applicability of the local curriculum seems necessary. Therefore, this study aims to conduct a comparative analysis of the relationship between internal and external assessment of grade eight students in schools in Musikot Municipality, identification of subject-specific achievements and weaknesses, and the reliability, fairness, and effectiveness of the assessment system, which can provide practical recommendations to policymakers, teachers, and stakeholders.

Comparative study of assessment systems to analyze the relationship between internal and external assessment of grade eight students in schools in Musikot Municipality. To formulate recommendations for improving education policy based on the analysis, to provide guidance for policymakers, teachers and schools on the usefulness of local curricula, assessment improvements and to inform policy-makers, teachers and schools.

### **Methodology**

This study adopts a descriptive and comparative research design (Leavy, 2023). In line with the objective of the study, data was collected on the basis of grades obtained by students in the final examinations of Grade eight in the Musikot Municipality in English, Mathematics, and Sero phero. The grades are categorized as A+, A, B+, B, C+, C, D, and NG. Similarly, the type of assessment is divided into Internal and External. The data are related to the schools of the community, which represent the schools operating within the Musikot Municipality. This study adopted a descriptive and comparative research design (Leavy, .(2023The grades obtained by students in the final examination of grade eight in Musikot Municipality were analyzed and compared according to the type of assessment (internal and external).

#### **Population**

The population of this study is the students of grade eight studying in all community schools operating in Musikot Municipality, who took the final examination in the academic session .2080

#### **Sample**

The sample was selected through purposeful method, which included the examination grade data obtained from 5 community schools.

#### **Data Collection and Analysis**

The data was officially collected from the Education Department of Muijs Nagar. The collected grade data was entered into MS Excel and analyzed using SPSS 25 software. Descriptive and inferential statistical methods such as frequency, percentage, cross-tabulation and  $\chi^2$  test were used in the analysis (Muijs, 2004).

The data was collected from the final examinations of Grade eight held in the academic session of 2080, which were officially received from the Municipal Education Department. The collected data was first organized in MS Excel and prepared in the form of tables. Then it was inputted into SPSS 25 software and analysed, because of its efficiency (Daniel Muijs, 2022). Descriptive statistics such as frequency, percentage, cross-tabulation, table and  $\chi^2$  (Chi-square) test were used to test the relationship between different assessment types (Danial Muijs, 2004).

### *Data Analysis*

When analysing the grade distribution, according to the preliminary analysis done in SPSS, D and C grades are more common in external assessment in Mathematics, while A and A+ grades are more common in internal assessment. This means that the performance of students in internal assessment is relatively high, while external assessment has shown relatively realistic results. When comparing by subject, the number of students in D and C+ grades is more in Mathematics, while the number of students obtaining B and C grades in English is significant. Overall, the proportion of students obtaining A and A+ grades is somewhat positive in schools in the Musikot area. When comparing by assessment type, there is a possibility of grade inflation in internal assessment, i.e., there is a possibility that higher marks may be given than the actual skill. In contrast, external assessment seems to clearly reflect the actual level of the student. A correlation analysis using the Chi-square test revealed that the relationship between the assessment type and the grade obtained by the student was significant ( $p < 0.05$ ) (Belbase et al., 2021). This means that whether the assessment method is internal or external has a clear impact on the grade obtained by the student.

### Findings

The main findings of this study show significant differences in student performance across three key subjects—English, Mathematics, and Music overall achievement. In particular, differences between internal and external assessments are evident, which provides a deeper analysis of students' actual abilities and guidance for improvement. Some weaknesses have emerged in English and Mathematics, which indicate the need for improvements in the curriculum and teaching methods. While this study presents a balanced picture of overall achievement, several recommendations are provided for improving and strengthening the assessment system.

Subject	Frequency	Percent	Valid Percent	Cumulative Percent
Valid English	16	33.3	33.3	33.3
Math	16	33.3	33.3	66.7
Musikot	16	33.3	33.3	100.0
Total	48	100.0	100.0	

  

Grade Category	Frequency	Percent	Valid Percent	Cumulative Percent

Valid	A	6	12.5	12.5	12.5
	A+	6	12.5	12.5	25.0
	B	6	12.5	12.5	37.5
	B+	6	12.5	12.5	50.0
	C	6	12.5	12.5	62.5
	C+	6	12.5	12.5	75.0
	D	6	12.5	12.5	87.5
	NG	6	12.5	12.5	100.0
	Total	48	100.0	100.0	

Type		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	External	24	50.0	50.0	50.0
	Internal	24	50.0	50.0	100.0
	Total	48	100.0	100.0	

Frequency		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	6	12.5	12.5	12.5
	4	1	2.1	2.1	14.6
	5	1	2.1	2.1	16.7
	6	2	4.2	4.2	20.8
	7	1	2.1	2.1	22.9
	9	1	2.1	2.1	25.0
	12	1	2.1	2.1	27.1
	15	1	2.1	2.1	29.2
	22	1	2.1	2.1	31.3
	23	2	4.2	4.2	35.4
	29	1	2.1	2.1	37.5
	46	1	2.1	2.1	39.6
	52	1	2.1	2.1	41.7
	54	1	2.1	2.1	43.8
	57	1	2.1	2.1	45.8
	66	1	2.1	2.1	47.9
	70	1	2.1	2.1	50.0
	73	1	2.1	2.1	52.1
	74	1	2.1	2.1	54.2
	85	1	2.1	2.1	56.3
	90	1	2.1	2.1	58.3
97	1	2.1	2.1	60.4	
112	1	2.1	2.1	62.5	
116	1	2.1	2.1	64.6	
122	1	2.1	2.1	66.7	
126	1	2.1	2.1	68.8	

129	1	2.1	2.1	70.8
152	1	2.1	2.1	72.9
154	1	2.1	2.1	75.0
155	1	2.1	2.1	77.1
168	1	2.1	2.1	79.2
170	2	4.2	4.2	83.3
177	1	2.1	2.1	85.4
180	1	2.1	2.1	87.5
186	1	2.1	2.1	89.6
205	1	2.1	2.1	91.7
221	1	2.1	2.1	93.8
222	1	2.1	2.1	95.8
223	1	2.1	2.1	97.9
286	1	2.1	2.1	100.0
Total	48	100.0	100.0	

This study analyzed the marks obtained by students in the final examination of Grade 8, which includes three major subjects — English, Mathematics, and ‘Musikot Serofero’ (a comprehensive achievement assessment under the local curriculum). According to the data obtained, 16 valid statements were obtained in each subject, which is 33.33 percent of the total statements. Such an even distribution made the analysis fair and comparable. Preliminary analysis conducted through SPSS shows that the performance of students is almost equal in all three subjects, which makes the comparative study reliable. The collected data makes it clear that English, Mathematics, and ‘Musikot Serofero’ are all proportionally represented, which shows that no subject has a major impact on the analysis. According to the data obtained, the number of students who get A+ and A grades in the internal assessment is high in the English subject, while B and C grades are more in the external assessment. This shows that the performance of students is shown positively in the internal assessment, but the external assessment has revealed the real weaknesses of the students. This gap indicates the inequality of the assessment system and the lack of writing and comprehension skills. In addition, there is a need for improvement in the methodology and practice of language teaching. 16 details are also available in the subject of mathematics. In this subject, D and C grades are more common in external evaluation, while the number of A and B grades is relatively higher in internal evaluation. Such results indicate that students have a fear of mathematics, weakness, or learning style problems. In addition, the method of evaluation is also different, which has brought a gap in the relationship between actual skills and marks. New strategies are needed to improve the computational and logical abilities of students.

The subject of ‘Musikot Serofero’ represents the overall academic achievement of students. In this subject too, 16 data entries are available, which is 33.33 percent of the total details. Here, the proportion of A, A+ and B+ grades is high. Such results indicate that although the overall performance appears positive, possible subject-specific weaknesses may be hidden. Although the overall achievement shows the general tendency of students, it seems that the overall assessment system still needs to be reviewed to reach thematic depth.



SPSS tables and graphs—especially frequency analysis and bar charts—illustrate the trends in subject-specific achievement. This highlights the relationship between internal and external assessment, and provides the necessary basis for making policy recommendations for improving the assessment system. Such comparative and factual analysis helps to increase the credibility of the assessment system at the school level.

Table:

Subject	Frequency	Percent	Valid Percent	Cumulative Percent
English	16	33.3%	33.3%	33.3%
Math	16	33.3%	33.3%	66.7%
Musikot	16	33.3%	33.3%	100.0%

### Discussion

The frequency analysis of the data shows an equal representation of all three subjects—English, Mathematics, and the Third/General Subject—with each accounting for 33.33% of the total dataset of 16 students. This balance ensures a fair and inclusive basis for subject-wise comparison. The cumulative percentages reaching 100% confirm that no subject has been neglected in the analysis. Furthermore, the grade distribution reveals that all eight grade categories (A+, A, B+, B, C+, C, D, and NG) are evenly represented, each holding 12.5% of the data. While this structure appears equitable, it may not truly reflect actual academic variation due to the symmetrical design of the dataset. A balanced representation of 24 data points each for internal and external assessments (50%-50%) supports a valid comparative study. The internal assessments, however, show a higher concentration of A and A+ grades, while the external assessments record more instances of C, D, and NG grades. This contrast suggests potential leniency in internal evaluation and stricter, possibly more accurate grading in external assessments. The frequency values ranging from 0 to 286 further show significant differences in student performance by assessment type and subject. High frequencies associated with internal A/A+ grades indicate inflated performance levels, while lower frequencies in the external categories suggest areas of academic struggle, particularly in Mathematics and English. These patterns highlight the influence of assessment methods on student outcomes and point to the need for standardization in the grading system. Additionally, the weaknesses in core subjects call for focused interventions, such as ICT-integrated teaching, teacher capacity enhancement, and remedial instruction. There is also a pressing need to establish well-defined and subject-sensitive criteria to assess overall achievement accurately, as current practices appear insufficient.

### Conclusion

This study explored students' academic achievement in three major subjects—English, Mathematics, and the Third/General Subject—based on internal and external assessment data. The findings reveal a diverse grade distribution, with all categories represented, suggesting a wide performance spectrum among students. Despite the balanced inclusion of assessment types, significant differences emerged in grade patterns: internal assessments tended to show higher grades, whereas external assessments reflected more

academic challenges. These discrepancies raise concerns about the reliability and consistency of evaluation practices across schools. Moreover, performance in Mathematics and English appears relatively weak, indicating the need for strategic academic interventions. The overall analysis confirms that while internal assessments may provide flexible grading, external assessments better reflect actual student proficiency. These insights emphasize the importance of revisiting the current assessment framework to ensure fairness and accuracy in evaluating student achievement.

#### Recommendations

To address the identified issues, it is recommended to develop a standardized assessment system that minimizes discrepancies between internal and external evaluations. Targeted interventions should be implemented for students performing below average, including special support classes, counselling, and homework monitoring. Comparative research should be conducted to further examine the effectiveness and reliability of different assessment methods. Enhancing teacher quality through continuous professional development, especially in Mathematics and English, is essential. The use of ICT tools, active learning strategies, and reflective teaching methods should be promoted. Moreover, policy planning at both the school and municipal levels should be informed by data-driven insights from student achievement trends. Finally, the active involvement of parents and the broader community should be encouraged to foster a collaborative environment for student learning and educational improvement.

#### Acknowledgement

I would like to express my heartfelt gratitude to all those who helped me in successfully completing this research work. First of all, I would like to express my special gratitude to the officials of the Musikot Municipality Education Department, whose cooperation made it possible to obtain the necessary examination data. Similarly, I would like to express my gratitude to the principals, teachers and staff of the schools who were directly or indirectly involved in the research. Their cooperation and goodwill made the data collection process smooth. I express my deep respect to my teachers, especially the research supervisor, who provided guidance in terms of research methodology. I also express my special gratitude to my classmates, friends and technical assistants who helped me understand the SPSS analysis process. Finally, I am deeply grateful to my family, whose continuous support, patience and inspiration made this research work possible.

#### References

- Belbase, S., Shrestha, R. D., & Luitel, B. C. (2021). Underachieving Students' Mathematical Learning Experience in the Classrooms in Nepal. *Contemporary Mathematics and Science Education*, 2(2), 1–12, Article ep21010.  
<https://doi.org/10.30935/conmaths/10944>

- The constitution of Nepal*. (2015). Law Books Management Committee.  
<https://lawcommission.gov.np/en/wp-content/uploads/2021/01/Constitution-of-Nepal.pdf>
- Khagendraraj., P. (2020). Influences of parental socio-economic status on academic achievement: A case study of rural communities in Kailali, Nepal1. *Contemporary Research: An Interdisciplinary Academic Journal*, 4 (1), 95-109.  
<https://www.nepjol.info/index.php/craiaj/article/download/32753/25842/95795>
- Leavy, P. (2023). *Reserch design : Quantitative, qualitative, mixed methods, arts based and community based participatory research approaches*. Guilford Press.
- Ministry of Education, S. a. T. (2023). *Recovery and Accelerated Learning (ReAL) Plan 2023–2028*. Government of Nepal. Retrieved from.
- Muijs, D. (2004). *Doing quantitative research in education with SPSS*. Sage.
- Muijs, D. (2022). *Doing Quantitative research in Education with IBM SPSS*. <https://z-library.sk/publisher/Sage%20Publications%20Ltd>
- OECD. (2019). *Teachers and School Leaders as Lifelong Learners*. Paris.
- Office, E. R. (2020). *National Assessment of Student Achievement (NASA): Grade eight Summary Report*. . Government of Nepal, Ministry of Education, Science and Technology Education Review Office (ERO) Sanothimi, Bhaktapur.  
[https://www.ero.gov.np/upload\\_file/files/post/1673576466\\_1947538526\\_NASA%202020%20Report%20final%20for%20Web.pdf?utm\\_source=chatgpt.com](https://www.ero.gov.np/upload_file/files/post/1673576466_1947538526_NASA%202020%20Report%20final%20for%20Web.pdf?utm_source=chatgpt.com)
- Paudel, N., Manandhar, R., & Saharma, L. (2022). Students' Transition from Grade X to CAIE A-Level: In the Context of Mathematics Curriculum in Nepal. *Contemporary Mathematics and Science Education*, 3(2). <https://doi.org/10.30935/conmaths/12228>
- Rijal, R. R., Paudel, N. P., Gautam, S., Bista, S. K., Dahal, D., Khatiwada, T. R., & Chongbang, K. B. (2024). *A Study on Factors of Student Learning Achievements and Dynamics for Better Learning Conditions: A case study focused to grade five in some selected schools*.  
<https://www.doe.gov.np/assets/uploads/files/632761d93738aa7abd6159bc9f642c33.pdf>
- Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies*. <https://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>