

The Transition Challenge: Does Primary Leaving Examination (PLE) Performance influence Secondary School Performance?

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ABSTRACT

The transition from primary level education to secondary level education is a critical phase in the academic journey of students. This study investigates the relationship between Primary Leaving Examination (PLE) performance and subsequent academic performance in Senior One across thirteen (13) selected topmost performing and second best performing secondary schools in Uganda. This study analyzed secondary data about performance of students in senior one in the year 2023 and their previous performance in PLE of the year 2022. This was collected from records of 4,331 students from thirteen (13) selected topmost and second best performing secondary schools in Uganda. Results of the statistical analysis found that while a general positive correlation exists between Primary Leaving Examination (PLE) performance and Senior One (S.1) performance, notable exceptions exist challenging the assumption that early academic success guarantees future excellence. The study provided actionable insights for educationalists, policy makers, parents among other key stakeholders that could contribute to the broader discourse on educational outcomes and student potential for success.

Keywords: Academic Success, Secondary Schools, Primary Leaving Examinations, PLE performance, Secondary School Performance.

INTRODUCTION

Academic performance at the primary level is widely considered a predictor of success at subsequent educational stages (Navarro-Soria et al., 2021; van der Zanden et al., 2018). In Uganda, pupils undergo the Primary Leaving Examinations (PLE) at the end of their primary school cycle, which determines their placement into secondary education (MoES, 2009; Uganda Investment Authority, 2019). It has actually become a norm amongst topmost and second-best performing schools to admit in Senior one (S.1) students that performed well at primary level, hoping that these would equally perform well at secondary level. There is however a growing anecdotal evidence that high-achieving pupils in PLE outperform their peers in secondary school even when the secondary school environment favors all of them (Lethbridge, 2013). This phenomenon raises questions about the predictive validity of PLE scores and their role in assessing students' future academic potential. This study seeks to explore whether a positive link exists between PLE scores and academic performance in Senior One particularly among secondary schools in Uganda.

Purpose of the Study

To examine the relationship between PLE performance and Senior One academic performance.

Specific Objectives

1. To examine the level of academic performance of Senior One Students for the year 2023 in selected secondary schools in Uganda and their previous performance at primary level 2022.
2. To establish the extent to which PLE scores predict Senior One grades in selected secondary schools in Uganda.
3. To provide recommendations to schools and education institutions' stakeholders on how to enhance student performance at secondary education level.

METHODOLOGY

A longitudinal study design was adopted to collect secondary data about senior one performance of 2023 and PLE performance of 2022. This was meant to examine the academic performance of students at senior one to detect any change(s) in performance that could have occurred compared to the previous year's performance strength at primary level.

Secondary data was collected from records of thirteen (13) selected topmost performing and second best performing secondary schools in Eastern, Central and South western regions of Uganda including single sex, mixed, rural and urban schools. Records of 4,331 students were obtained from these schools comprising their Senior One average performance scores for the year 2023 and their previous PLE aggregates for academic year 2022.

The data was then analyzed using Statistical Package for Social Scientists (SPSS) version 26.0.

RESULTS

Table 1: Biodata of Students in Selected Secondary Schools

Biodata of school		No. of schools	No. of students	Percent
School Category	Topmost performing	5	2,342	54.1
	2nd best performing	8	1,989	45.9
	Total	13	4,331	100.0
Student Gender	Female	—	3,104	71.7
	Male	—	1,227	28.3
	Total	—	4,331	100.0
School Gender Foundation	Single	8	2,458	56.8
	Mixed	5	1,873	43.2
	Total	13	4,331	100.0
School Location	Urban	6	2,163	49.9
	Rural	7	2,168	50.1
	Total	13	4,331	100.0
Average School S.1 Class Enrollment	Topmost performing	5	469	-
	2 nd best level performing	8	249	-
	Single	8	308	-
	Mixed	5	375	-
	Urban	6	361	-
	Rural	7	310	-
	All schools	13	334	-

Source: Secondary Schools' records 2023

The analysis involved 13 secondary schools comprising of 5 topmost performing schools and 8 2nd best performing schools; 8 single schools and 5 mixed schools; 6 urban schools and 7 rural schools. The study involved 4,331 students out of which 71.7% (3,104 students) were females and 28.3% (1,227 students) were males; 54.1% (2,342 students) were from topmost performing schools and 45.9% (1,989 students) were from 2nd best performing schools.

In addition, 56.8% (2,458 students) were from single schools and 43.2% (1,873 students) were from mixed school; 49.9% (2,163 students) were from urban schools and 50.1% (2,168 students) were from rural schools.

The study found that the average S.1 class enrollment in all the selected schools is 334 students. However, this enrollment varied across different types of secondary schools with topmost performing schools having the highest number (469 students) against 249 students in 2nd best level performing schools. Mixed schools had a higher-class enrollment of 375 students against 308 students in single sex schools. Urban schools had a higher enrollment students against 310 in rural areas.

Table 2: Performance of Students in Selected Schools

Descriptive Statistics	No. of students	Min	Max	Mean
PLE exam scores 2022	4,331	4	32	10 ± 4 <i>Agg.</i>
Average performance in S1 in 2023	4,331	13%	95%	65% ± 10%

Source: Secondary Schools' records 2023

All the 4,331 students involved in the study had obtained different aggregates in primary leaving examinations (PLE) ranging from 4 to 32 aggregates.

Majority of the students however had passed in grade 1 at PLE level with a mean aggregate of 10±4 (6-14 Aggregates). After reaching in senior one, it was observed that schools recorded various student scores ranging from an average of 13% to 95% for the whole year of S.1 with most students having 65±10% (55%-75%).

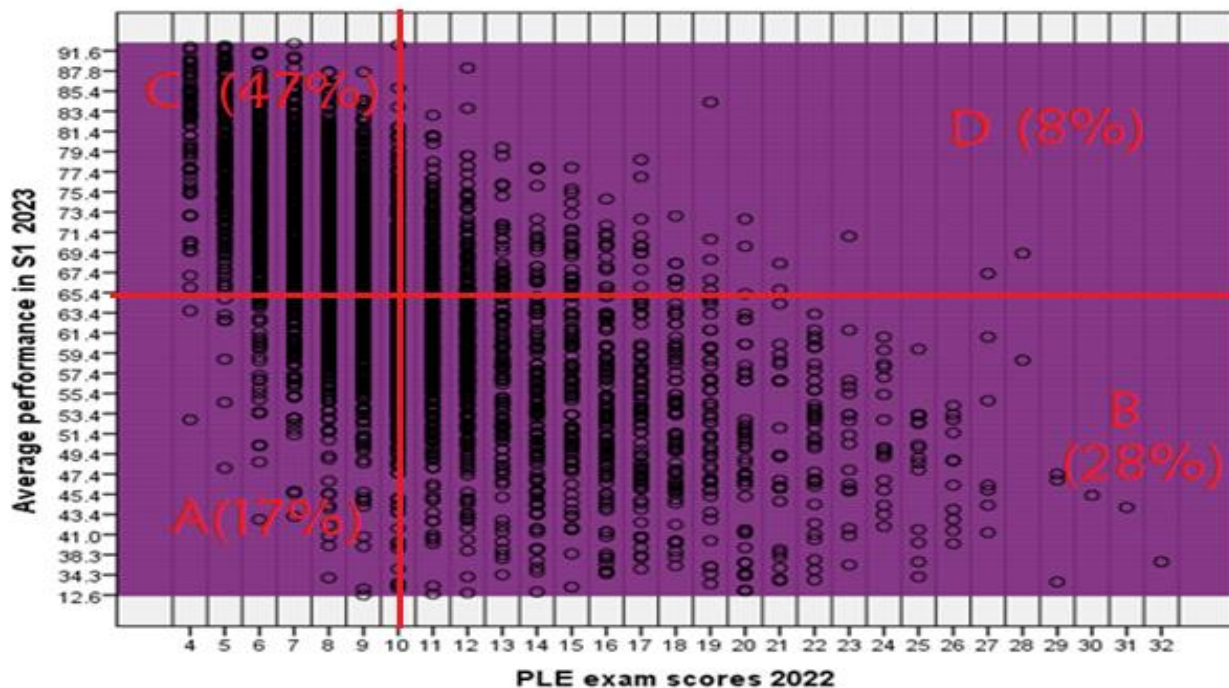
Table 3: Does PLE Performance influence Secondary School Performance?

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.833 ^a	.693	.665	4.390
a. Predictors: (Constant), PLE exam scores 2022				

Source: Secondary Schools' records 2023

The study finds that indeed PLE performance is a predictor of students' performance at secondary level. The results in table 3 show that there is a positive significant relationship ($R=.833$) between PLE performance and secondary performance. This implies that the higher the student achieved in PLE exams, the higher the performance at secondary level and the lower the PLE performance, the lower the performance at secondary level. The coefficient of determination (R-square) which determines the proportion of change in secondary performance that can be explained by the PLE performance, indicates that 69.3% of the variations in student performance at secondary level is explained by his/her previous performance at primary seven level. This means that 30.7% of the variations in S.1 performance is explained by other factors other than PLE performance. The predictive power of PLE performance underscores the need to prioritize primary education as the foundation for academic success at higher levels of the academic journey.

Figure 1: Graphical Presentation of the Average Performance of S.1 students in selected topmost and second best performing secondary schools against their respective 2022 PLE performance.



Note: Quadrant A=Best performer at PLE (≤ 10 aggregates); Poor performer at S.1 ($< 65\%$).
 Quadrant B=Poor performer both at PLE and S.1
 Quadrant C=Best performer both at PLE and S.1
 Quadrant D=Poor performer at PLE; best performer at S.1
 * '10 aggregates' is the average PLE performance in all the 13 selected schools
 * '65%' is the average S.1 performance in all the 13 selected schools

A keen observation in the scatter plot as per Figure 1 reveals intriguing patterns of student performance in the transition from primary to secondary education in the 13 selected secondary schools. While a general positive correlation exists between Primary Leaving Examination (PLE) performance and Senior One (S.1) performance, notable exceptions challenge the assumption that early academic success guarantees future excellence. Nearly half (47%) of students who performed well at PLE continued excelling in S.1 as per quadrant 'C', while 28% of those who struggled at PLE remained low performers at secondary level as per quadrant 'B'.

However, a significant 17% of students who were top PLE performers (≤ 10 aggregates) registered a sharp decline in S.1, scoring below 65% as per quadrant 'A'. This unexpected drop suggests possible chances of engaging in examination malpractice activities or challenges in adjusting to secondary school including changes in teaching methods or other school factors. Conversely, 8% of students with poor PLE results (> 10 aggregates) excelled in S.1, scoring above 65% as per quadrant 'D'. This proves that secondary schools may provide an opportunity for academic turnaround through improved learning environments and student growth.

These anomalies offer great hope to pupils who struggle at the primary level, proving that PLE performance alone does not determine their entire academic future. The fact that some students with high PLE aggregates (initially poor performers) later excel in secondary school suggests that with hard work, the right learning environment and motivation, academic performance improvement is possible. It shows that students can still thrive if they adapt well to secondary school education, receive proper guidance and develop better study habits. This should encourage struggling pupils to stay determined as their secondary school journey could be a fresh start with new opportunities for academic success.

DISCUSSIONS

The positive and significant relationship between PLE performance and secondary school performance indicates that a strong foundation at the primary level is essential for continued success. However, since PLE performance explains only 69.3% of the variations in S.1 performance, it indicates that PLE performance alone does not determine students' entire academic future. Other factors tied to the school characteristics may also play a significant role.

CONCLUSIONS

The study concludes that while early academic success is a strong predictor of future excellence, it is not always guaranteed. This is evidenced by the 17% of top PLE performers (≤ 10 aggregates) who experienced a significant drop in Senior One performance (scoring below 65%).

The observed decline could signal the practice of drilling in primary schools, where teaching is narrowly focused on passing examinations rather than fostering a deeper understanding. This underscores the need for a shift from rote learning to comprehensive teaching methods that better equip pupils for long-term academic success.

In addition, the 17% decline among top PLE performers could be an indicator that some schools are still engaged in examination malpractices for purposes of passing exams. This underscores the need to address possible malpractice challenges in primary schools for a better transition as well as addressing potential adjustment difficulties and variations in teaching methods.

On the other hand, the 8% of students who improved significantly despite weak PLE scores demonstrate that a secondary school can be a turning point for academic growth when the right support systems are in place.

RECOMMENDATIONS

Efforts should be made to enhance the quality of primary education, particularly in underperforming schools, to build a solid academic foundation for secondary-level success. Research findings indicate that Primary Leaving Examination (PLE) results are significant predictors of secondary school performance, highlighting the need to strengthen early education. Mwesigwa (2025), in his new article published in the New Vision, suggests that key interventions such as strengthening school management, incorporating co-curricular activities, and fostering a positive school culture could significantly improve performance in primary schools, including those in rural areas. These measures would help pupils' transition effectively to secondary education with the necessary skills and knowledge to succeed.

Pupils should be encouraged to understand that academic performance is not fixed and that their abilities can improve with effort, perseverance, and the right strategies at later stages of their education journey. A growth mindset fosters resilience, motivation and a willingness to embrace challenges, all of which contribute to long-term academic success. Schools should integrate mentorship programs, career guidance, and motivational sessions to help pupils develop a positive attitude towards learning. Mwesigwa (2025) underscores the importance of instilling confidence in pupils', particularly in rural schools where self-doubt often limits potential. He highlights how Mbarara Municipal School, Uganda has successfully used structured co-curricular activities and academic competitions to boost pupils' self-esteem and belief in their abilities. Furthermore, he emphasizes that well-managed schools, with strong teacher-pupils engagement and parental involvement create an environment where learners feel supported and encouraged to improve continuously. Therefore, school administrations should implement policies that promote personalized learning, teacher mentorship and a culture of perseverance to ensure pupils develop a growth-oriented academic mindset.

The role of school leadership in shaping academic performance cannot also be overstated. Effective accountability, oversight and a positive attitude among administrators, teachers and parents could significantly contribute to pupils' success. Schools should prioritize capacity-building programs for headteachers and school administrators to enhance curriculum implementation, decision-making and resource management.

While examinations remain an essential measure of academic progress, overemphasis on exam preparation often undermines the acquisition of practical skills. Schools should adopt competency-based learning that equips pupils with problem-solving abilities, creativity and adaptability. Teachers should be trained to incorporate hands-on learning experiences and critical thinking exercises into their teaching methodologies to ensure pupils develop a well-rounded education. Mwesigwa (2025) warns against rote learning, stating that pupils who merely memorize content without understanding often struggle at secondary level, leading to performance declines despite excelling in PLE.

Policy Implications

The strong predictive power of PLE performance on secondary school success highlights the need for robust policies that enhance primary education quality, especially in under-resourced and rural areas. There is therefore need to strengthen the foundation at primary level by introducing capacity-building programs for primary school teachers, improving infrastructure and increasing access to teaching and learning materials in underperforming primary schools. Mwesigwa (2025) emphasizes that faith-based schools have excelled due to policies that emphasize strong leadership and structured educational programs. Government and private stakeholders should as well support leadership training programs to foster visionary education management in not only primary schools but also secondary schools.

Likewise, primary schools should prioritize holistic learning approaches over drilling methods that focus solely on examination performance. Emphasis should be placed on fostering critical thinking, conceptual understanding and problem-solving skills to ensure pupils are equipped to adapt to advanced educational environments. Parents and schools should collaborate to promote a balanced academic experience that values both competence and examination success, ensuring smoother transitions to secondary education.

The integrity of the education system is paramount in maintaining public trust and ensuring fair opportunities for all pupils. Statistical anomalies in exam results often raise concerns about possible malpractices. Policy makers need to put in place strong mechanisms for addressing the observed possible malpractice activities in primary schools to facilitate better transition in performance at later stages of education journey. The government, in collaboration with examination bodies, should strengthen monitoring mechanisms, enforce strict regulations against cheating and promote ethical exam practices. Schools should also be encouraged to instill academic honesty among pupils to uphold the credibility of national assessments. Mwesigwa (2025) questions the sudden rise and fall of top-performing pupils in national exams, suggesting that examination malpractices and rote learning could be factors contributing to this inconsistency. A strict crackdown on malpractices will ensure that pupils' academic progress reflects genuine ability rather than artificial success.

Suggested areas for further Study

- Future studies could include more schools from all regions of Uganda and examine trends over several years to enhance generalizability and assess temporal changes in performance patterns.
- Further studies should investigate the relationship between PLE performance and secondary level performance in private secondary schools.
- Future studies should also track multiple cohorts over time to assess the consistency of the relationship between PLE and secondary school performance.
- Further studies also need to investigate the relationship between PLE performance and overall secondary performance in Uganda Secondary Education (UCE) examinations since the current study focused on only S.1 Performance.

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