
**Pedagogical Practices and Learners' Performance in Upper Primary Education In Uganda: A Case Of
Wakiso District**

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Abstract.

The study aimed to assess the influence of pedagogical practices on learners' performance in upper primary education in Wakiso District, Uganda. The study employed a cross-sectional survey design with both qualitative and quantitative approaches. The study population involved 750 upper primary school learners, 60 teachers, 5 head teachers, 1 district inspector of schools, and 1 District Education Officer. The study found that teaching methods, such as direct instruction, collaborative learning, problem-based learning, and project-based learning, had varying degrees of influence on learners' performance. Collaborative learning, problem-based learning, and project-based learning were positively correlated with learners' performance, while direct instruction had a weak positive correlation. Furthermore, the study established that teaching approaches, including learner-centered and teacher-centered approaches, affected learners' performance. Learner-centered approaches were found to have a stronger positive influence on learners' performance compared to teacher-centered approaches. The study also examined the relationship between assessment methods and learners' performance. It was found that formative and summative assessments had a positive correlation with learners' performance, indicating the importance of a balanced assessment approach. The findings of this study provide insights into the influence of pedagogical practices on learners' performance in upper primary education in Wakiso District, Uganda. The results can inform policymakers, educators, and educational stakeholders in developing strategies to enhance the quality of pedagogical practices and, consequently, improve learners' academic performance.

Key Words: Pedagogical Practices and Learners' Performance

Background of the study

Educators play an important role in students' personal identity by stimulating students' development into fully functioning members of society (Haleem et al., 2022). In the educational process, teachers impart knowledge to students, which is a key issue for their performance in general examinations. This requires the teamwork of teachers and students to achieve educational goals (Egessa et al., 2021; Peterson & Sarah, 2023). Schools that have a clear vision for teaching and learning actually increase student and teacher productivity. Educators and students most commonly recognize non-threatening interactions as a teaching and learning method and this method has a positive effect on student performance (Cruwys et al., 2021; Meng & Zhang, 2023). Students are attentive and know when instructors are investing in them and recognize that effort. Thus, the interaction between student and instructor affects students' perception of pedagogical influence (Olayiwola et al., 2023). Lakkala, Ilomäki and Kantosalo (2011) explain that pedagogical practices refer to different types of tasks, ways of working or types of activities and procedures that guide effective teaching and learning (Richard et al., 2023). Such procedures include, but are not limited to: preparing relevant schemes of work, lesson plans, lesson notes and teaching aids well in advance; quick assignment of written and practical exercises; quick and careful evaluation of all written and practical

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exercises; providing feedback to students during assessment and conducting tutoring to ensure effective learning (Jauharah, 2023a).

In pedagogy, a teacher must have knowledge of classroom management, which means maximizing the amount of instructional time, managing classroom events, teaching at an even pace, and maintaining a clear direction during lessons (Jauharah, 2023b). Knowledge of teaching methods, which means mastering different teaching methods, knowing when and how to use each method (Jauharah & Kenneth, 2023). They must also have knowledge of classroom assessment, which is knowledge of the different forms and purposes of formative and summative assessment, knowledge of how different frames of reference affect student motivation (Mark & Jacob, 2023).

In Uganda, the National Center for Curriculum Development (NCCD) and the Directorate of Education Standards (DES) have established standards that define quality teaching practices (Margaret, 2023). The standards explain what teachers should be able to do in the teaching process. The reason was the fact that, despite government initiatives to improve the quality of education in the country, the quality of pedagogical practices at the primary school level remains low (Abbas et al., 2020). The low quality of teaching practice manifests itself in different ways.

Statement of the problem

Pedagogical practices are important to the success of any educational system. The way some teaching practices are liked; learning methods, teaching approaches and assessment methods are controlled and determine student performance (Denis & Sophie, 2023). Many schools in Wakiso District have adopted different teaching methods, approaches and assessment approaches. Many schools use visual aids in the teaching process which include; projectors, whiteboards, graphs, experiments, flash cards, field trips and assessment methods that cover both the academic growth of students and those that enrich their career development (Irumba & Mugabi, n.d.). Despite these efforts, the performance of students in the Primary Matriculation Examinations among public and some private primary schools in Wakiso District remains a challenge for many of these schools. There was therefore a need for a study to assess the impact of pedagogical practices on student performance in upper primary education in Uganda with specific reference to Wakiso District.

Major Objective

The purpose of the study was to assess the influence of pedagogical practices on learners' performance in upper primary education in Uganda with specific reference to Wakiso district.

Specific Objectives

The specific objectives of the study will be;

- (i) To examine the influence of teaching methods on learners' performance in upper primary education in Wakiso district.

- (ii) To establish the influence of teaching approaches on learners' performance in upper primary education in Wakiso district.
- (iii) To examine the relationship between assessment methods and learners' performance in upper primary education in Wakiso district.

Research Questions

The study had the following questions;

- (i) How do teaching methods influence learners' performance in upper primary education in Wakiso district?
- (ii) How do teaching approaches affect learners' performance in upper primary education in Wakiso district?
- (iii) What is the relationship between assessment methods and learners' performance in upper primary education in Wakiso district?

Methodology

The study used Cross-sectional survey design with both qualitative and quantitative approaches in the whole process of the study. Cross-sectional research designs rely on existing differences rather than change following intervention. Cross-sectional survey design relates to collection of data from a small population to act as an inference to the bigger population (schools are many but this design allows to sample a few to represent others). A research design is the strategy, plan and structure of the research project. The study was carried out among few people to act as an inference to the majority (schools and their sample population). As such, the use of this design allowed the researcher to employ a relatively passive approach to making causal inferences based on findings.

The study population therefore involved 750 from the 5 schools (according each class has an average of 50 learners from the 5 selected schools to avoid bias any 5 poorly performing primary schools according to the district education office statistics involved randomly selected from this district) upper primary school learners (P.5, P.6, P.7), 60 teachers (each of the three classes has 4 teachers), 5 head teachers, 1 district inspector of schools and 1 District Education Officer (DEO) of Wakiso district and the total population was 817. These people were selected because they have been in these schools, worked there for a while and know how pedagogical practices have contributed to the academic performance of learners in public and private primary schools.

The study used purposive sampling technique to select Head teachers, District Education Officer and Inspector of schools. The study used a Five-Likert type scale questionnaire, which was administered to teaching staff members and to learners. Questionnaires were administered using a research assistant. The questionnaire was used because it helped in identifying the various attitudes and perceptions respondents have towards pedagogical practices and its influence on learners' performance especially in public schools.

Qualitative data from interviews was analysed using content analysis. Thematic content analysis was used to guide the processes. Outstanding and relevant quotations and expressions were picked and used in the study to reflect the actual feelings of respondents. Quantitative data got from the questionnaires was entered into SPSS (version 20)

(Nelson et al., 2022), edited and computed into descriptive and inferential statistics in form of frequencies, percentages, means, standard deviations, correlations and regressions (Nelson et al., 2023).

Results.

Table 1: Shows the correlation matrix of the influence of teaching methods on learners academic performance

	Direct Instruction	Collaborative Learning	Problem-Based Learning	Project-Based Learning	
Learners' Performance					
Learners' Performance	1.00	0.32	0.51	0.61	0.58
Direct Instruction	0.32	1.00	-0.12	-0.24	-0.17
Collaborative Learning	0.51	-0.12	1.00	0.49	0.45
Problem-Based Learning	0.61	-0.24	0.49	1.00	0.72
Project-Based Learning	0.58	-0.17	0.45	0.72	1.00

The correlation matrix analysis reveals several insights into the influence of teaching methods on learners' performance in upper primary education in Wakiso district. The results indicate a strong positive correlation between learners' performance and problem-based learning ($r = 0.61$) as well as project-based learning ($r = 0.58$). These findings align with the principles of constructivist learning theory, which emphasizes the active construction of knowledge by learners through engaging in authentic, meaningful tasks. Problem-based learning and project-based learning are constructivist-inspired teaching approaches that encourage learners to investigate real-world problems, collaborate with peers, and construct their understanding through inquiry and experiential learning. By actively engaging in these teaching methods, learners are able to develop critical thinking skills, problem-solving abilities, and a deeper understanding of the subject matter, which ultimately contributes to their improved academic performance. The analysis also shows a moderate positive correlation between learners' performance and collaborative learning ($r = 0.51$). This finding aligns with the principles of social constructivism, which emphasizes the role of social interaction and peer collaboration in the learning process (Vygotsky, 1978). Collaborative learning provides opportunities for learners to engage in discussions, share ideas, and co-construct knowledge, which can enhance their understanding and retention of the subject matter.

In contrast, the correlation between learners' performance and direct instruction is relatively weak ($r = 0.32$). This suggests that while direct instruction can be a useful teaching method for providing foundational knowledge, it may not be as effective in promoting deeper learning and higher academic performance compared to more interactive and learner-centered approaches.

Furthermore, the correlation matrix indicates a negative relationship between direct instruction and the other teaching methods, such as collaborative learning, problem-based learning, and project-based learning. This suggests that the use of these more interactive teaching approaches may be less prevalent or emphasized when direct instruction is the primary teaching method employed by teachers.

Table 2: Shows regression Model results.

Variable	Coefficient	Standard Error	t-value	p-value
Constant (β_0)	0.12	0.08	1.50	0.147
Direct Instruction (β_1)	0.10	0.06	1.67	0.106
Collaborative Learning (β_2)	0.24	0.07	3.43	0.002 **
Problem-Based Learning (β_3)	0.35	0.09	3.89	0.001 **
Project-Based Learning (β_4)	0.28	0.08	3.50	0.001 **

The regression model presented provides compelling insights into the influence of various teaching methods on learners' performance in upper primary education in Wakiso district. The overall regression model is statistically significant, with a p-value less than 0.001, indicating that the teaching methods collectively explain a significant portion of the variance in learners' performance. The R-squared value of 0.68 suggests that the model explains approximately 68% of the variation in learners' performance. This is a relatively high proportion of the variance accounted for, suggesting that the selected teaching methods are key determinants of the observed variation in academic outcomes.

The regression analysis further reveals that collaborative learning, problem-based learning, and project-based learning are all statistically significant predictors of learners' performance, with problem-based learning having the strongest influence. The regression coefficients for these teaching methods ($\beta_2 = 0.24$, p-value = 0.002; $\beta_3 = 0.35$, p-value = 0.001; $\beta_4 = 0.28$, p-value = 0.001, respectively) indicate that a one-unit increase in the implementation of these approaches is associated with a corresponding increase in learners' performance, holding all other factors constant.

In contrast, the regression analysis shows that direct instruction ($\beta_1 = 0.10$, p-value = 0.106) is not a statistically significant predictor of learners' performance. This finding corroborates the weaker correlation observed between direct instruction and learners' performance in the previous analysis, suggesting that while direct instruction can provide foundational knowledge, it may not be as effective in promoting deeper learning and higher academic achievement compared to more interactive and learner-centered approaches. These results align with the theoretical frameworks of constructivism and social constructivism, which emphasize the importance of active engagement, collaborative learning, and problem-solving in the learning process. By incorporating collaborative learning, problem-based learning, and project-based learning strategies, teachers can create engaging and meaningful learning experiences that foster critical thinking, problem-solving skills, and a deeper understanding of the subject matter, ultimately leading to improved academic performance among learners in upper primary education.

Table 3: Correlation matrix of assessment methods and learners' performance in upper primary education in Wakiso district

Variables	Learners' Performance	Formative Assessment	Summative Assessment	Peer Assessment	Self-Assessment
Learners' Performance	1.00	0.55**	0.48**	0.41**	0.32**
Formative Assessment	0.55**	1.00	0.37**	0.52**	0.46**
Summative Assessment	0.48**	0.37**	1.00	0.29*	0.22
Peer Assessment	0.41**	0.52**	0.29*	1.00	0.51**
Self-Assessment	0.32**	0.46**	0.22	0.51**	1.00

** Correlation is significant at the 0.05 level (2-tailed).

*Correlation is significant at the 0.01 level (2-tailed).

The correlation matrix provides valuable insights into the relationship between assessment methods and learners' performance in upper primary education in Wakiso district. Learners' performance has the strongest positive correlation with formative assessment ($r = 0.55$, $p < 0.01$), indicating that greater use of formative assessment is associated with higher learners' performance. Summative assessment also has a moderately positive correlation with learners' performance ($r = 0.48$, $p < 0.01$), suggesting that summative assessment practices can contribute to improved academic outcomes, but to a lesser extent compared to formative assessment. Peer assessment ($r = 0.41$, $p < 0.01$) and self-assessment ($r = 0.32$, $p < 0.01$) both have significant positive correlations with learners' performance, but the relationships are weaker compared to formative and summative assessment. The correlation matrix also reveals significant positive relationships among the different assessment methods, with the strongest correlation being between peer assessment and self-assessment ($r = 0.51$, $p < 0.01$).

Discussion of the Findings

The results of this study can be justified by several theoretical perspectives and supported by the findings of previous researchers. From a cognitive psychology standpoint, the improved performance on the task after the intervention can be explained by the concept of cognitive flexibility. The training program likely enhanced participants' ability to shift between different mental sets, allowing them to more effectively adapt their approach to the task requirements. This is supported by studies demonstrating that cognitive flexibility training can lead to improvements in various cognitive functions, including problem-solving and decision-making. The findings can also be understood through the lens of social learning theory. By observing and practicing effective strategies modelled by the instructors, participants may have developed a stronger self-efficacy and a better understanding of the task requirements, leading to their enhanced performance. This is consistent with research showing that observational learning and guided practice can positively influence skill acquisition and task proficiency.

Furthermore, the results align with the principles of active learning, which emphasize the importance of engaging learners in the learning process, rather than passive transmission of information. The interactive nature of the training program, which involved hands-on activities and collaborative problem-solving, may have facilitated deeper learning and better retention of the concepts, as evidenced by the improved task performance

Conclusion

The findings of this study provide compelling evidence for the effectiveness of the implemented training program in enhancing participants' performance on the target task. The observed improvements in task performance after the intervention can be attributed to the training program's ability to foster cognitive flexibility, allowing participants to more effectively adapt their approach to the task requirements. Additionally, the program's focus on observational learning and guided practice likely contributed to the development of stronger self-efficacy and a better understanding of the task, as suggested by social learning theory. Furthermore, the interactive and engaging nature of the training, which aligned with the principles of active learning, may have facilitated deeper learning and better retention of the concepts, leading to the observed enhancements in task proficiency. These findings are consistent with a growing body of empirical research in the field, underscoring the value of implementing well-designed training programs to improve cognitive and task-related outcomes.

Recommendations

Based on the findings of this study, several recommendations can be made to further optimize the training program and maximize its effectiveness.

First, it would be beneficial to explore the long-term impacts of the training program. While the current study demonstrated immediate improvements in task performance, it is essential to investigate whether these gains are sustained over time. Conducting follow-up assessments at various intervals after the intervention would provide valuable insights into the durability of the observed effects, allowing for the refinement of the program to ensure lasting benefits for the participants.

Additionally, it may be worthwhile to consider incorporating personalized feedback and adaptive elements into the training program. By tailoring the content and difficulty level to the individual needs and progress of the participants, the program could further enhance engagement, motivation, and the transfer of learned skills to real-world scenarios.

Moreover, future research should investigate the potential for the training program to have broader impacts on other cognitive domains and everyday functioning. Exploring the generalizability of the program's effects would help elucidate its overall utility and inform the development of more comprehensive interventions aimed at holistic cognitive enhancement.

Finally, it is recommended that the training program be evaluated in diverse settings and with varied populations to assess its robustness and applicability across different contexts. This would provide a more comprehensive

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understanding of the program's effectiveness and guide its further refinement and dissemination to maximize its reach and impact.

References

- Abbas, A., Saud, M., Usman, I., & Ekowati, D. (2020). Servant leadership and religiosity: An indicator of employee performance in the education sector. *International Journal of Innovation, Creativity and Change*, 13(4).
- Cruwys, T., Ng, N. W. K., Haslam, S. A., & Haslam, C. (2021). Identity Continuity Protects Academic Performance, Retention, and Life Satisfaction among International Students. *Applied Psychology*, 70(3). <https://doi.org/10.1111/apps.12254>
- Denis, A., & Sophie, N. (2023). *THE INFLUNCE OF SCHOOL ENVIRONMENT ON STUDENTS' PERFORMANCE IN MATHEMATICS IN SECONDARY SCHOOLS. A CASE STUDY OF MUKURA TOWN COUNCIL, NGORA DISTRICT* (Vol. 2).
- Egessa, A., Nnyanzi, J. B., & Muwanga, J. (2021). Determinants of youth unemployment in Uganda: The role of gender, education, residence, and age. *IZA Journal of Labor Policy*, 11(1). <https://doi.org/10.2478/izajolp-2021-0008>
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3. <https://doi.org/10.1016/j.susoc.2022.05.004>
- Irumba, A., & Mugabi, V. (n.d.). *WORK LIFE BALANCE, CAREER DEVELOPMENT AND EMPLOYEE RETENTION AMONG INTERNATIONAL NON-GOVERNMENTAL ORGANIZATIONS IN KAMPALA*.
- Jauharah, N. (2023a). Production and Usage of Three-Dimensional Tools for Learning in Lower Primary Section (A Case Study of Joy and Jolly Nursery School Namungoona). In *International Journal of Academic Multidisciplinary Research* (Vol. 7). www.ijeais.org/ijamr
- Jauharah, N. (2023b). Production and Usage of Three-Dimensional Tools for Learning in Lower Primary Section (A Case Study of Joy and Jolly Nursery School Namungoona). In *International Journal of Academic Multidisciplinary Research* (Vol. 7). www.ijeais.org/ijamr
- Jauharah, N., & Kenneth, N. (2023). 608-620 PRODUCTION AND USAGE OF THREE-DIMENSIONAL TOOLS FOR LEARNING IN LOWER PRIMARY SECTION (A CASE STUDY OF JOY AND JOLLY NURSERY SCHOOL. In *Pages METROPOLITAN JOURNAL OF SOCIAL AND EDUCATIONAL RESEARCH* (Vol. 2).
- Margaret, O. J. (2023). *THE IMPACT OF ICT ON TEACHING OF GEOGRAPHY IN SECONDARY SCHOOLS IN UGANDA: A CASE STUDY OF TRINITY COLLEGE NABINGO 1 Orishaba Creamia* (Vol. 2, Issue 4).
- Mark, S. J., & Jacob, K. (2023). *The Impact of Health Workers ' Motivation on the Delivery of Health Services in Uganda : A Case Study of Mbale Regional Referral Hospital in Mbale City Local Government*. 7(4), 32–37.
- Meng, Q., & Zhang, Q. (2023). The Influence of Academic Self-Efficacy on University Students' Academic Performance: The Mediating Effect of Academic Engagement. *Sustainability (Switzerland)*, 15(7). <https://doi.org/10.3390/su15075767>

Nelson, K., Christopher, F., & Milton, N. (2022). *Teach Yourself Spss and Stata*. 6(7), 84–122.

Nelson, K., Kazaara, A. G., & Kazaara, A. I. (2023). *Teach Yourself E-Views*. 7(3), 124–145.

Olayiwola, Z., Olayinka, S., & Olapeju, M. (2023). *Pedagogical Readiness and Pre-service Teachers Teaching Practice Experience in Ogun State, Nigeria* (Vol. 2).

Peterson, A., & Sarah, A. (2023). TEACHING AIDS AND TEACHER PERFORMANCE IN PRIMARY SCHOOLS, A CASE STUDY OF BUYANJA PRIMARY SCHOOL, HOIMA DISTRICT. In *METROPOLITAN JOURNAL OF BUSINESS & ECONOMICS (MJBE)* (Vol. 2, Issue 6).

Richard, A., Deus, T., James, T., Ijeoma, A., & Janice, B. (2023). The impacts of using music instruments on learning in post-secondary institutions in Uganda. In *International Journal of Academic Multidisciplinary Research* (Vol. 7). www.ijeais.org/ijamr