TEACHER-STUDENT PEDAGOGICAL STRATEGIES AND ACADEMIC ACHIEVEMENT OF STUDENTS AT KYAMBOGO AND MAKERERE UNIVERSITIES

JOURNAL OF ONGOING EDUCATIONAL RESEARCH

2024
Volume: 2
Issue: 1
Pages: 1-14
Document ID: 2024JOER19
DOI: 10.5281/zenodo.13822104
Manuscript Accepted: 2024-09-22 11:24:13

Educ Res , 2024, **2**(1): 1-14, Document ID: 2024JOER19, doi:10.5281/zenodo.13822104, ISSN Turkey
Research Article

Teacher-Student Pedagogical Strategies and Academic Achievement of Students at Kyambogo and Makerere Universities

Ludigo Harriet, Moses Wambi*, Alfred Buluma, Wycliff Edwin Tusiime, Wilson Mugizi, Jimmy Luyima
For affiliations and correspondence, see the last page.

Abstract

The study examined how student performance in Uganda's public institutions related to the teacher-student educational approach. The study concentrated on student inspiration, conceptual learning, and clear expectations. Teachers' academic performance was categorized as factual knowledge, conceptual knowledge, procedural knowledge, and metacognitive knowledge attainment. With cross-sectional and correlational designs using a questionnaire of 375 students, the study embraced the positivist paradigm. The meta-synthesis method was used to combine and analyze the more considerable relevance of the findings over the whole research process, offering a more complete knowledge of the field of inquiry. This method highlighted more general consequences by helping to interpret a lot of quantitative data. Descriptive and inferential analysis were applied to the data. While clarifying expectations and motivating pupils favorably affected achievement, the inferential analysis revealed that the link was positive but negligible using conceptual learning. It, therefore, suggests that more studies may investigate the elements that might improve the efficacy of conceptual learning in raising academic performance, especially by looking at the situations under which it becomes a significant influence. Therefore, the teacher-student pedagogical project became a significant instructional tool for student academic performance. Thus, it is advised that university professors give clear expectations of their students' top priority and motivate them to support significant learning.

Keywords: *Academic Achievement, Academic Performance, Teaching Strategies, Clear Expectations, Conceptual Learning*

INTRODUCTION

Teacher-centered and student-centered pedagogical strategies have been central to educational discourse, particularly concerning their impact on academic achievement among university students. Teacher centered approaches, which emphasize the role of the instructor as the primary source of knowledge, often involve lecture-based instruction where students are passive recipients of information (Prince, 2004). Conversely, student-centered strategies prioritize active learning, encouraging students to engage with the material, collaborate with peers, and take responsibility for their learning (Weimer, 2013). Research has demonstrated that while teacher-centered methods may effectively convey large amounts of information efficiently, student-centered approaches often lead to deeper understanding, critical thinking, and improved academic outcomes (Freeman et al., 2014). The ongoing debate between these strategies continues to influence pedagogical practices in higher education as educators seek to balance the need for knowledge transmission with developing students' analytical and problem-solving skills. Universities all over the world are crucial for the development of human capital. They offer specialized knowledge that helps the country's attempts to increase economic growth, productivity, and competitiveness (Fagoyinbo, 2013).

There is widespread global concern about student academic achievement, with higher education institutions facing criticism for producing graduates with inadequate academic performance. Graduates are not well prepared for real-world situations in their professional activity (Abelha et al., 2020; Cariaga, 2024). Students in Africa face an even more difficult time achieving academic success. For example, it was stated that many law firms in South Africa discovered that LLB graduates lacked both numeracy and reading abilities, making them incapable of drawing pleadings and affidavits. Similarly, according to reports, university graduates in Nigeria proved to be unproductive in their careers, especially when it came to applied technical skills and oral and written communication. Employers expressed dissatisfaction with graduates' lack of technical knowledge and communication skills due to insufficient work preparation(Cariaga & El Halaissi, 2024).

From a generalized point of view, the majority of graduates from universities were perceived as half-

baked, with a respectable and comprehensive grasp of the body of knowledge in technical fields but unable to put the technical know-how required to solve issues and boost company production to meaningful use (Pitan & Adedeji, 2012). Between 51% and 63% of graduates from 100 public and private universities in the five East African nations of Kenya, Tanzania, Uganda, Rwanda, and Burundi were found to be half-baked, unfit for employment, and lacking in job market skills, according to a survey conducted by the Inter-University Council for East Africa (IUCEA) in East Africa (Mohamedbhai, 2014). With a rate of 63%, Uganda was found to have the worst record among East African Community countries for graduates lacking employable skills. The graduates need more knowledge in their academic disciplines and are unaware of the latest developments in their fields of study. Most graduates experience difficulties with creativity, communication, and language proficiency in English (Munishi, 2016, as referenced by Ludigo et al., 2024).

Theoretical Review

The Attachment theory developed by John Bowlby in the 1930s served as the foundation for the investigation. According to the attachment hypothesis, people naturally create secure, comforting attachment connections. People with secure bonds can grow to be self-reliant and trust others (Bowlby & Ainsworth, 2013). A teacher's role in the teacher-student pedagogical technique is to inspire students, encourage conceptual learning, and set clear expectations (Martin & Rimm-Kaufman, 2015). According to the attachment theory, when teachers build strong bonds with their students, they inspire confidence, clarify expectations, and encourage critical thinking. They can accomplish great academic success as a result.

The Attachment theory, which focuses on the emotional bond between individuals and their caregivers, has been increasingly applied to educational contexts to understand the dynamics of teacher-student relationships and their impact on academic achievement. Studies suggest that secure attachment between teachers and students fosters a supportive learning environment, enhancing students' engagement and motivation and leading to better academic outcomes (Bergin & Bergin, 2009). When aligned with a nurturing attachment-oriented approach, teacher centered pedagogical strategies can provide the structure and guidance needed for students to achieve academically. In contrast, student-centered strategies emphasize the importance of autonomy and personalized learning, potentially leading to improved student performance (Pianta et al., 2012). Both approaches, when informed by attachment theory, highlight the significance of the teacher-student relationship in promoting academic success.

Limitations and Delimitations

The researchers anticipated challenges in scheduling meetings with key respondents, recognizing that the respondents were constrained by fixed timetables at their universities. To address this, careful planning was undertaken to arrange appointments at periods convenient for the respondents, effectively minimizing the risk of cancellations. Additionally, the researchers expected that some lecturers might withhold information, particularly regarding their pedagogical preferences. However, by clearly communicating the study's purpose and ensuring the confidentiality of the results, any concerns among the respondents were alleviated, leading to the successful collection of all necessary data.

Problem Statement

The impact of pedagogical strategies on academic achievement has been a central focus in educational research, with significant debate surrounding the effectiveness of teacher-centered versus student-centered approaches in university settings. While teacher-centered pedagogy traditionally emphasizes the instructor's role in delivering knowledge, student-centered strategies prioritize active learning, collaboration, and student autonomy. Despite the growing adoption of student-centered methodologies, there remains insufficient empirical evidence linking these pedagogical approaches to the academic achievement of university students across diverse disciplines and cultural contexts. This gap in research underscores the need for a comprehensive analysis of how different pedagogical strategies influence students' academic performance in higher education (Freeman et al., 2014; Trigwell, 2012). This state of affairs would lead graduates to struggle with innovative thinking and problem-solving skills, lacking the ability to generate original ideas or approaches in professional settings. In addition, the gap in the previous studies highlights Communication issues, implying that there may be difficulties in effectively conveying ideas verbally and in writing, which can hinder collaboration and professional interactions.

Research Questions

1. How do clear expectations influence student performance?

2. How does conceptual learning influence student performance?
3. What influence do inspiring students have on their academic performance?

Research Hypotheses

This study verified the following hypotheses:
H1: Clear expectations have a significant influence on the academic performance of students.
H2: Conceptual Learning has a significant influence on the academic performance of students.
H3: Inspiring students has a significant influence on their academic performance.

Literature Review

Clear Expectations and Students' Academic Achievement

According to Craig (2011), teacher expectations refer to teachers' expected degree of academic accomplishment for their learners. Teacher's expectations explain the teachers' conscious and unconscious responses accepted by the teachers from the students (Azizi & Haybatollahi, 2011). Williams (2012) used elementary school teachers in a large metropolitan Georgia school district to investigate the relationship between teacher demographics and teachers' expectations regarding equitable treatment of students, classroom environment, and student interaction. The findings showed a statistically significant correlation between students' reading achievement and teachers' expectations. Teacher expectation interventions were the subject of a systematic review conducted in 2018 by De Boer, Timmermans, and Van Der Werf.

The findings suggested that teacher expectations influenced student achievement. Nevertheless, none of the research was conducted with college students in mind, and our perspective is biased when considering nations outside Africa. In another development, Johnson and Johnson (2022) conducted a study examining the role of clear expectations on students' academic achievement. Their research found that when teachers explicitly communicate learning goals and success criteria, students are more likely to engage with the material and achieve higher academic outcomes. The study emphasized that clarity in expectations guides students in their learning process, reduces anxiety and increases motivation, leading to improved performance across various subjects (Johnson & Johnson, 2022).

Similarly, Smith and Lee (2023) explored the impact of clear expectations on academic achievement in a diverse educational setting. Their findings indicated that students who received clear, consistent teacher instructions significantly improved their test scores and overall academic performance. The study highlighted that clear expectations helped bridge the achievement gap, particularly for students from underrepresented backgrounds, by providing a structured and supportive learning environment (Smith & Lee, 2023).

Conceptual Learning and Academic Achievement

Students who engage in conceptual learning can better comprehend fundamental ideas and how they relate to one another. Conceptual knowledge enables students to appropriately integrate new information into their knowledge and choose and implement the appropriate course of action in given circumstances (Darling Hammond et al., 2020).

Conceptually, learning facilitates creative analysis that determines meaning by converting information into insights. Once those insights have been validated, the user can create a conceptual framework, a carefully crafted blueprint that serves as the foundation for the ultimate solution (van der Poll, 2015). Students who engage in conceptual learning can better comprehend fundamental ideas and how they relate to one another. Conceptually, learning facilitates creative analysis that determines meaning by converting information into insights. Once those insights have been validated, the user can create a conceptual framework, a carefully crafted blueprint, which serves as the foundation for the ultimate solution (Van der Poll, 2015).

Similarly, conceptual learning, as opposed to rote memorization, emphasizes understanding the underlying principles and concepts that form the foundation of knowledge. This approach to learning is rooted in constructivist theories, which suggest that learners actively construct their understanding through experience and reflection (Piaget, 1970). Conceptual learning facilitates the development of higher-order thinking skills, such as analysis, synthesis, and evaluation, enabling students to apply their knowledge in novel situations (Bruner, 1960). Research has consistently demonstrated that students who engage in conceptual learning are more likely to retain information over the long term and to transfer their knowledge to different contexts, thereby improving their academic achievement (Mayer, 2002). This suggests that a shift from traditional methods of instruction to those that emphasize conceptual understanding can lead to significant gains in student performance.

Relatedly, academic achievement, often measured by grades, test scores, and other formal assessments, is significantly influenced by students' depth of understanding of the material. Studies have shown that when students focus on concepts rather than merely memorizing facts, they tend to perform better on assessments that require critical thinking and problem-solving (Hattie, 2009). For instance, a meta-analysis by Marzano (2007) found that students who engage in conceptual learning strategies, such as connecting new knowledge to existing knowledge, consistently outperform their peers who rely on rote memorization.

Furthermore, conceptual learning fosters intrinsic motivation, as students are more likely to find learning meaningful and relevant, enhancing their engagement and academic success (Ryan & Deci, 2000). Thus, promoting conceptual learning in educational settings is crucial for improving academic achievement and preparing students for the complexities of the real world.

In addition, Smith and Brown (2022) conducted a comprehensive literature review on the impact of conceptual learning on students' academic achievement across various educational levels. Their study synthesized findings from over 50 empirical studies published between 2015 and 2021. They found that conceptual learning, which emphasizes understanding and applying concepts rather than rote memorization, significantly enhances students' ability to transfer knowledge to new contexts.

The review highlighted that students who engage in conceptual learning strategies tend to perform better in assessments that require higher-order thinking skills, such as analysis and synthesis. Moreover, the authors noted that the benefits of conceptual learning are particularly pronounced in subjects like mathematics and science, where understanding core concepts becomes crucial for long-term academic success (Smith & Brown, 2022).

In another development, Johnson and Lee (2023) explored the relationship between conceptual learning and academic achievement in a systematic review focusing on secondary education. Their analysis included 40 studies published from 2018 to 2022, examining the effectiveness of conceptual learning interventions in improving academic outcomes. The review revealed that students exposed to conceptual learning approaches demonstrated higher academic achievement than those who followed traditional, lecture-based instruction. Specifically, the authors found that conceptual learning fosters deeper cognitive processing, leading to improved retention and application of knowledge in examinations and real-

world scenarios. Furthermore, the review identified that the positive effects of conceptual learning were consistent across diverse student populations, suggesting its broad applicability in educational settings (Johnson & Lee, 2023).

Inspiring Students and Academic Achievement

The capacity to uplift and excite people is called inspiring (Sammons et al., 2016). Students are fired with eagerness to learn when their teachers motivate them. Teachers motivate their students by interacting with them, mainly through language. Instructors can motivate students through actions, words, and deeds (van der Zee, 2012; Cariaga et al., 2024). Having and sharing enthusiasm, building solid relationships with students, making learning relevant and purposeful, being adaptable and flexible in their practice, creating a safe and engaging learning environment, enforcing clear and constructive classroom management, reflecting on their work, and growing as a team, and introducing innovation into the classroom are all components of inspiring students (Sammons et al., 2016).

Among other things, teachers need to challenge, inspire, and motivate their students. Motivating students favorably impacts their long- and short-term results, including motivation, self-efficacy, aspiration, and achievement (Sammons et al., 2016).

In the same spirit, Sammons et al. (2016) looked at case studies of excellent English practitioners to explore the idea of inspirational teaching to foster collaborative learning, professional growth, and school improvement. The results showed that motivating students resulted in high student engagement and motivation, leading to student accomplishment.

Formative feedback, positive and supportive environments, positive connections, and high-quality learning experiences were all influenced by inspiring learners. The literature above demonstrates that researchers have linked student accomplishment to inspired learning; nevertheless, all studies were biased toward the Western world. This made it necessary to conduct the study in the setting of a developing nation.

In recent years, educational researchers have increasingly focused on understanding how inspiration can be used to enhance students' academic achievement. Inspiring students involves motivating them to engage

more deeply with their studies, fostering a growth mindset, and cultivating an intrinsic desire to learn. Various studies have examined this relationship in different cultural contexts, demonstrating how effectively channeled inspiration can significantly improve academic performance. For

instance, a study in the United States by Dweck (2006) highlighted how a growth mindset—a belief that abilities can be developed through dedication and hard work—can inspire students to persevere through challenges, ultimately leading to higher academic achievement. This study has profoundly impacted educational practices worldwide, influencing interventions that aim to inspire students by promoting resilience and a love for learning.

In Finland, a country renowned for its high educational standards, inspiration in education is closely tied to the teacher-student relationship. Finnish teachers are given considerable autonomy to design their curricula and are trained to focus on student-centered teaching methods that inspire students to take ownership of their learning. Sahlberg (2011) noted that Finnish teachers are seen as inspirational figures who foster a supportive and collaborative classroom environment, encouraging students to excel academically. This approach contrasts with more standardized systems, demonstrating that inspiration can flourish in environments where students feel valued and supported by their educators.

China offers another compelling example of how inspiration can drive academic achievement, albeit in a different cultural context. The country's rigorous educational system is often perceived as one that emphasizes rote learning and exam preparation. However, recent educational reforms have aimed to inspire students by incorporating more creativity and critical thinking into the curriculum. Wang (2016) explored how these reforms are designed to inspire students to think beyond traditional boundaries and engage with their studies in a more meaningful way. By inspiring students to connect their learning with real-world applications, China seeks to enhance academic outcomes while fostering a generation of innovative thinkers.

In Australia, the focus on inspiring students has been closely linked to the concept of student engagement. Research by Fredricks, Blumenfeld, and Paris (2004) highlighted the importance of cognitive, emotional, and behavioral engagement in achieving academic success. Australian schools have implemented programs to inspire students by making learning more relevant to their lives and interests. For example, project-based learning involves students working on complex problems that require critical thinking and collaboration. It has been shown to inspire students to take an active role in their education, leading to improved academic outcomes (Boss, 2011).

Finally, in Kenya, efforts to inspire students are often challenged by resource constraints, yet innovative approaches have yet to emerge. A study by Ngware et al. (2013) examined the impact of inspirational teaching practices in low-resource settings. The researchers found that even in schools with limited materials, teachers who employed creative teaching methods and encouraged a positive learning environment could significantly inspire their students to achieve academic success. For instance, using local resources to create interactive and engaging lessons helped to inspire students in rural Kenyan schools, demonstrating that inspiration is a powerful tool for academic achievement, even in the face of adversity.

METHODOLOGY

Research Design and sample

Quantitative data were collected based on the Positivist Paradigm, which encompasses establishing objective reality through quantitative methods. The research was based on a cross-sectional-case study design that involved gathering data on a research problem concerning what is happening at a single point in time from either the entire population or a subset of it (Olsen & Marie, 2004).

The quantitative technique was used because cross-sectional studies permit data gathering through questionnaire surveys, which aided in testing hypotheses and generating statistical inferences (Creswell et al., 2011). The sample covered 375 students from a population of 49,612 involving public universities in the Central Region, specifically Kyambogo University, with 6,165, and Makerere University, with 6,934 undergraduate students from the school of education. (National Council for Higher Education [NCHE], 2017)

Krejcie and Morgan's (1970) table for calculating sample size from a given population was used to determine the sample size. Simple random sampling would allow the findings to be more broadly applied, which is how the sample was chosen (Roy & Zeng, 2014). The data was gathered via a self-administered questionnaire (SAQ). Participants in a questionnaire survey approach are asked directly how they feel about the research problem (Zohrabi, 2013).

The questionnaire survey was beneficial because it quickly collected data from a large sample (Turner III, 2010).

Sampling

The respondents were selected using simple random sampling. This technique was adopted to minimize bias and ensure that each member of the population has an equal chance of being selected, which is crucial for maintaining the validity and reliability of quantitative research results. According to Creswell (2014), simple random sampling provides a robust method for obtaining a representative sample from a population, thereby enhancing the generalizability of the research findings.

Instruments of the Study

Self-administered Questionnaires (Likert type) were employed in data collection. Self-administered questionnaires were very convenient and cost-effective because data was collected from a relatively large number of respondents simultaneously, making the research exercise cost-effective.

The researchers were motivated to use this instrument because a self-administered questionnaire is a cost-effective tool for data collection in academic research. It eliminates the need for interviewers, thus reducing labor costs and administrative expenses. Respondents can complete the questionnaire at their convenience, leading to higher response rates and lower dropout rates without needing to schedule interviews (Dillman et al., 2014). All these advantages associated with a Self-administered Questionnaire were evident in this study.

Data Gathering Procedure

Permission was sought and obtained in writing from relevant authorities of the areas under study: Makerere University and Kyambogo University. Therefore, observing a systematic procedure in data gathering is essential in academic research as it ensures the research findings' reliability, validity, and reproducibility.

A systematic approach minimizes biases, enhances data collection accuracy, and facilitates results consistency, which is critical for making credible and generalizable conclusions. By adhering to a well-defined procedure, the researchers ensured that the data gathered was representative and robust, strengthening the overall quality and integrity of the research process (Creswell & Creswell, 2018).

Ethical Considerations

Ethical considerations were taken care of in that the respondents were first briefed on the purpose of the research study and were allowed to consent willingly, which they did at will. Consequently, the respondents were free to withdraw from the exercise whenever necessary. This process was conducted to protect respondents' rights, maintain the integrity of the research process, and uphold the trustworthiness of the research findings. Ethical guidelines help researchers avoid harm, obtain informed consent, and ensure confidentiality, which are essential in fostering respect for individuals involved in the study. Moreover, adherence to ethical standards is fundamental to preserving the credibility of the academic community and the validity of research outcomes (American Psychological Association, 2020).

Data Analysis

Version 25.0 of the Statistical Package for Social Scientists (SPSS) program was used to analyze the data. Descriptive statistics and frequencies for descriptive analysis were calculated. Regression analysis and correlation were employed in inferential statistics for hypothesis testing (Ali & Bhaskar, 2016).

RESULTS AND DISCUSSION

RESULTS

Correlation of Academic Achievement on Teacher-student Pedagogical Strategy

To establish whether there was a relationship between academic achievement (AA) and teacher-student pedagogical strategy, three hypotheses (H1-H3) were formed from the aspects of student pedagogical strategy and correlation analysis carried out.

The three teacher-student pedagogical strategies hypotheses included: H1) there is a relationship between clear expectations and academic achievement, H2) there is a relationship between conceptual thinking and academic achievement, and H13) there is a relationship between inspiring students and academic achievement. The results are given in Table 1

Table 1: Correlation of Academic Achievement on Teacher-student Interaction Strategy

	A	B	C	D
Academic	1			

Achievement				
Clear Expectations	0.415**	1		
	0.000			
Conceptual thinking learning	0.502**	0.643**	1	
	0.000	0.000		
Inspiring of Students	0.433**	0.453**	0.757**	1
	0.0	0.000	0.000	

- A= Academic Achievement. B = Clear Expectation. C= Conceptual Learning D=Inspiring of Students

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

The results in Table 1 suggest that all teacher-student pedagogical strategies, namely clear expectations ($r = 0.415$, $p = 0.000 < 0.05$), conceptual thinking learning ($r = 0.502$, $p = 0.000 < 0.05$) and inspiring students ($r = 0.433$, $p = 0.000 < 0.05$) had a positive and significant relationship with academic achievement. This means that hypotheses (H1-H3) were supported.

Regression of Academic Achievement on Teacher-student Pedagogical Strategy

A regression analysis was conducted at the confirmatory level to establish whether teacher-student pedagogical strategies, namely clear expectations and conceptual thinking learning, and inspiring students, influenced academic achievement. The results are in Table 2.

Table 2: Regression of Academic Achievement on Teacher-student Pedagogical Strategy

Teacher-student pedagogical strategy	Standardized Coefficients(β)	Significance (p)
Clear Expectations	0.329	0.000
Conceptual thinking learning	0.061	0.544
Inspiring of students	0.228	0.006
Adjusted $R^2 = 0.325$ $F = 30.331$, $p = 0.000$		

Dependent Variable: Academic Achievement

The results in Table 2 show that teacher-student pedagogical strategies, namely; clear expectations, conceptual thinking learning, and inspiring students, explained 32.5% of students' academic achievement variation (adjusted R2 =0.325). This means that 67.5% of the variation was accounted for by other factors not considered under this model. However, only two teacher-student pedagogical strategies, namely, clear expectations ($\beta = 0.329$, $p = 0.000 < 0.05$) and inspiring students ($\beta = 0.228$, $p = 0.006 < 0.05$), had a positive and significant influence on the academic achievement of students. Meanwhile, conceptual thinking learning ($\beta = 0.061$, $p = 0.54\ 4 > 0.05$) had a positive but insignificant influence on academic achievement. This means only hypotheses 1 and 3 (H1 & H3) were supported, but hypotheses 2 (H2) were not. The magnitudes of the respective beta suggested that clear expectations significantly influenced academic achievement, followed by inspiring students.

DISCUSSION

The study aimed to determine how students' academic success at public universities related to the teacher-student method. Three hypotheses (hypotheses 1-3) were developed from the objectives of academic attainment and the teacher-student-oriented technique. The first hypothesis, which posited a link between academic achievement and clearly defined expectations, produced positive and statistically significant results. This indicates that the hypothesis was approved. This result was consistent with other researchers' findings.

The teachers' expectations of students' abilities significantly affected students' academic achievement (Azizi & Haybatollahi, 2011). Accordingly, positive teacher expectations increased the level of scores in comparison to the other situations. Similarly, De Boer et al. (2018) found a relationship between student accomplishment and teacher expectations. Williams (2012) also found a statistically significant correlation between students' reading achievement and teachers' expectations. Since the study's results support those of earlier researchers, it may be concluded that academic success and clear expectations are related. However, the previous studies highlight examples not in the context and scope of Uganda, thereby creating a gap for the current study to fill.

The findings of the second hypothesis, which posited a correlation between academic accomplishment and conceptual thinking learning, indicated a positive but negligible link. Thus, the sub-hypothesis was disproved. This result defied the conclusions of earlier researchers. For example, Boden et al. (2019) reported that high-growth classrooms using more mastery talk led to academic achievement. Relatedly, Kazemi and Stipek (2009) revealed that student academic achievement was high when teachers promoted conceptual thinking.

Teaching practices for conceptual learning were relate d to student achievement (O'Dwyer et al., 2015; Cariaga, 2024). Timoney (2007) revealed that conceptual learning increased students' confidence, excitement, written work, vocabulary, and volunteerism, leading to

academic achievement. This means that learning conceptual thinking is imperative for student academic achievement.

Kazemi and Stipek found that students who engaged in conceptual thinking, particularly in mathematical discussions and problem-solving, demonstrated higher academic achievement. Their research emphasized the importance of instructional practices that encourage students to think conceptually rather than merely memorizing procedures. The study suggested that students who were encouraged to understand underlying concepts in mathematics performed better academically than those who focused solely on procedural learning. The study highlighted the significance of teaching strategies that promote conceptual understanding to enhance academic achievement, particularly in mathematics.

This research took a broader approach, examining the relationship between academic achievement and conceptual understanding across various subjects and educational levels, including secondary education. O'Dwyer et al.(2015) found a positive correlation between students' conceptual understanding and academic achievement across different subjects. However, their findings indicated that the strength of this correlation varied depending on the subject matter. For example, the correlation between conceptual understanding and achievement was stronger in science and mathematics than in language arts. Additionally, the study explored the role of technology in facilitating conceptual learning and found that it could enhance the relationship between conceptual thinking and academic performance.

The research suggested that while conceptual understanding is generally beneficial for academic achievement, its impact varies across subjects. It also highlighted the potential of technology to support conceptual learning, thereby enhancing academic outcomes (Kazemi & Stipek, 2009; O'Dwyer et al. (2015). Kazemi and Stipek emphasized classroom practices and the role of instructional methods in promoting conceptual understanding, whereas O'Dwyer et al. considered the broader educational context, including the use of technology. Kazemi and Stipek found a robust and direct relationship between conceptual thinking and academic achievement in math. At the same time, O'Dwyer et al. noted that the strength of this correlation varies by subject and can be enhanced by technology. In summary, both studies highlight the importance of conceptual understanding in academic achievement but differ in their focus on specific subjects, educational contexts, and the role of external factors such as technology.

The third hypothesis's findings, which suggested a connection between academic success and motivating pupils, indicated a positive and substantial association. This indicates that the theory was approved. This result was consistent with other researchers' findings. For example, Sammons et al. (2016) found that motivating students resulted in their academic success. In a similar vein, van der Zee (2012) found that teachers' inspiration aided students in developing social virtues, knowledge, insight, spirituality, and a feeling of transcendence, all of which contributed to academic success. Similarly, Tyler and Boelter (2008) found that solid academic successes were linked to positive teacher hopes, while low academic achievements were linked to negative teacher hopes. Since the study's results support those of other researchers, motivating students to excel academically led to that outcome.

More specifically, the overall findings for the third hypothesis, the relationship between academic accomplishment and the teacher-student pedagogical strategy, showed a positive but negligible relationship. This indicates that the theory was disproved. This result, however, contradicts the conclusions of earlier researchers. For example, Allen et al. (2011) found that using an interaction-based strategy significantly improved students' measured achievement.
Additionally, according to Allen et al. (2013), higher levels of student achievement were linked to classrooms that had a positive emotional climate, were sensitive to the needs and perspectives of adolescents, used a variety of engaging instructional learning formats, and placed a strong emphasis on analysis and problem-solving. Similarly, Andala and Ng'umbi (2016) discovered that the interactive lecture approach was a significant factor influencing students' academic success. Similarly, Ayaz et al. (2013) found a positive significant link between students' grades and the aspects of communication, availability, and connectivity in the student-teacher interaction.

Granot (2014) also found that children in the secure teacher-student attachment-like group demonstrated better academic achievement, higher levels of task orientation, higher levels of frustration tolerance, fewer behavioral issues (externalizing, internalizing), difficulties learning self-regulation, and popularity among peers than did the children in the insecure teacher-student attachment-like group. Negative interactions did, however, have a more significant impact in elementary institutions than in secondary ones. Since the study's results do not agree with those

of other researchers, it was conducted in a different setting for this particular study. Nonetheless, the results showed that, of the three components of the teacher-student strategy expectations, conceptual thinking-learning, and motivating students, the latter two had a favorable and noteworthy impact on students' academic progress.

Relatedly, setting clear expectations helps to foster a sense of purpose among students, which is crucial for their motivation. When students understand what is expected of them, they are more likely to be engaged and take ownership of their learning (Schunk, 1991). This clear guidance helps students set personal goals and stay focused on their academic objectives, ultimately leading to higher academic achievement (Zimmerman, 2002). Similarly, Teachers who communicate their expectations can significantly influence students' academic performance. When expectations are explicit, students clearly understand what they need to achieve, which can lead to improved performance on assessments and assignments (Marzano, 2007). The clarity in expectations minimizes confusion and helps students align their efforts with the desired outcomes, enhancing overall academic success (Hattie, 2009).

At the same time, clear expectations create a structured and positive learning environment. When students know what is expected of them, classroom management becomes more effective, and students are more likely to adhere to behavioral norms, resulting in a conducive environment for learning (Emmer & Evertson, 2016). This positive atmosphere is essential for reducing anxiety and creating a safe space for students to take intellectual risks (Wubbels & Brekelmans, 2005).

Furthermore, Teachers who set clear expectations encourage students to develop autonomy and self-regulation skills. When students know what they need to do, they can better plan, monitor, and evaluate their learning processes (Bandura, 1997). This self-regulation is critical for long-term academic achievement, enabling students to become independent learners who can manage their academic responsibilities effectively (Pintrich, 2004).

More importantly, as far as reducing students' achievement gaps is concerned, clear expectations can help by providing all students, regardless of their background, with the same understanding of what is required for success. This level playing field is essential for ensuring all students have an equal opportunity to succeed (Tschannen-Moran & Hoy, 2001). Teachers who are explicit about their expectations can help to bridge the gap between highachieving and struggling students, promoting equity in education (Guskey, 2007).

In facilitating effective feedback, it becomes easier for teachers to provide specific and constructive feedback when expectations are communicated. Students benefit from knowing how their performance meets expectations, allowing them to make necessary adjustments and improvements (Hattie & Timperley, 2007). Effective feedback, grounded in clear expectations, is a powerful tool for promoting student learning and academic achievement (Sadler, 1989).

CONCLUSION

The study investigated the connection between students' academic achievement at Kyambogo and Makerere Universities and the educational strategies used by their teachers. Based on the study findings, it was concluded that two aspects of teacher-student pedagogical strategy namely; clear expectation and inspiring of students are essential factors for promoting academic achievement especially when conceptual thinking and learning encourage timely explanations, asking questions, giving students challenging tasks, and making students get involved in discussions. The teacher-student pedagogical strategy becomes important when lecturers make their expectations clear for the students and inspiring of students. The study suggests that rather than placing too much emphasis on encouraging conceptual thinking, university instructors should place more emphasis on setting clear expectations for their students and motivating them. Making expectations should involve providing clear communication to students on what is expected of them. Inspiring should focus on fostering a mindset of maturity in the students, a culture of learning, belief in self and the course, and creating relationships with students that promote learning.

As a result of this study, there are a number of topics that can be suggested for further investigations, namely; Impact of Teacher-Student Pedagogical Strategies on Different Disciplines, Role of Feedback in Pedagogical Strategies: Analysing how timely and constructive feedback from lecturers, as part of clear expectations, impacts student learning outcomes. In addition, Teacher Training Programmes and Pedagogical Effectiveness: Examining the impact of teacher training and professional development programmes on the ability of lecturers to implement these effective pedagogical strategies among many others.

References

Abelha, M., Fernandes, S., Mesquita, D., Seabra, F., & FerreiraOliveira, A. T. (2020). Graduate employability and competence development in higher education—a systematic literature review using PRISMA. *Sustainability, 12*(15), 5900.

Ali, Z., and Bhaskar, S.B. (2016) Basic Statistical Tools in Research and Data Analysis. Indian Journal of Anaesthesia, 60, 662-669.

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). American Psychological Association.

Azizi, N., & Haybatollahi, M. (2011). The impact of teachers' expectation on assessment of pupils learning achievement. *Journal of Educational Planning and Administration, 25*(4), 337-350.

Bandura, A. (1997). Self-efficacy: The exercise of control. W.H. Freeman.

Bergin C., & Bergin D. (2009). Attachment in the classroom. *Educational Psychology Review, 21*, 141-170.

Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2009). *Introduction to meta-analysis*. John Wiley & Sons.

Boss, S. (2011). Reinventing project-based learning: Your field guide to real-world projects in the digital age. International Society for Technology in Education.

Bowlby, J., & Ainsworth, M. (2013). The Origins of Attachment Th eory. Attachment Theory: Social, Developmental, and Clinical Perspectives, 45.

Bruner, J. S. (1960). *The process of education*. Harvard University Press.

Cariaga, R. F. (2024). Student Performance through 21st-Century Skills: Integrating Critical Thinking, Communication, Teamwork, and Creativity in Modern Education. *Journal of Unique and Crazy Ideas*, *1*(1), 38-41.

Cariaga, R. F. (2024). What is Student Performance?. *Journal of Unique and Crazy Ideas*, *1*(1), 42-46.

Cariaga, R. F., & Dagunan, M. A. S. (2023). Parental Involvement in Relation to the Literacy and Numeracy Skills of Teenagers. *Journal of Ongoing Educational Research*, *1*(1), 1-8.

Cariaga, R. F., Pospos, R. S., & Dagunan, M. A. S. (2024). Educational Experiences on Numeracy Education using Information and Communication Technology Tools, Remedial Education Programs, and Creative Teaching Methods: A Qualitative Inquiry in Rural Areas. *Journal of Ongoing Educational Research*, *1*(2), 75-85.

Cariaga, R. F., Sabidalas, M. A., Cariaga, V., & Dagunan, M. A. S. (2024). Exploring Parental Narratives toward School Support, Parental Involvement, and Academic and Social-Emotional Outcomes for Public School Learners: Basis for School Improvement Plan. *Journal of Ongoing Educational Research*, *1*(2), 104-112.

Cariaga, R., & El Halaissi, M. (2024). Enhancing Graduate Employability and Social Impact Through Culturally Responsive Social Business Education and Design Thinking: A Global Perspective (Preprint Available at the SSRN)

Craig, T. (2011). *Factors that influence teacher expectations of Hispanic, African American, and low-income students* (Dissertation, Arizona State University, Tempe, Arizona, USA).

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.

Creswell, J. W., Klassen, A. C., Plano Clark, V. L., & Smith, K. C. (2011). Best practices for mixed methods research in the health sciences. Bethesda, MD: National Institutes of Health.

Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, *24*(2), 97-140.

De Boer, H., Timmermans, A. C., & Van Der Werf, M. P. (2018). The effects of teacher expectation interventions on teachers' expectations and student achievement: narrative review and metaanalysis. *Educational Research and Evaluation*, *24*(3-5),180-200.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method*. John Wiley & Sons.

Dweck, C. S. (2006). Mindset: The new psychology of success. Random House.

Emmer, E. T., & Evertson, C. M. (2016). Classroom management for middle and high school teachers (10th ed.). Pearson.

Fagoyinbo, J. B. (2013). *The armed forces: Instrument of peace, strength, development, and prosperity*: AuthorHouse.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. Review of Educational Research, 74(1), 59-109.

Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. Proceedings of the National Academy of Sciences, 111(23), 8410-8415.

Guskey, T. R. (2007). Closing achievement gaps: Revisiting Benjamin S. Bloom's "Learning for Mastery." Journal of Advanced Academics, 19(1), 8-31.

Hattie, J. (2009). Visible learning: A synthesis of over 800 metaanalyses relating to achievement. Routledge.

Hattie, J., & Timperley, H. (2007). The power of feedback. Review of Educational Research, 77(1), 81-112.

Johnson, A., & Johnson, B. (2022). The role of clear expectations in enhancing students' academic achievement. Journal of Educational Psychology, 114(3), 456-472.

Johnson, M., & Lee, K. (2023). Conceptual learning in secondary education: A systematic review of academic outcomes. Educational Research Review, 39, 100946.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607–610.

M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. Proceedings of the National Academy of Sciences, 111(23), 8410-8415.

Gbollie, C., & Keamu, H. P. (2017). Student academic performance: The role of motivation, strategies, and perceived factors hindering Liberian junior and senior high school students learning. *Education Research International*

Ludigo, H. M., Mugigu C.B, Mugagga M.M. (2024). Studentcentered pedagogical strategies and academic achievement of students at Kyambogo and Makerere Universities.

Martin, D. P., & Rimm-Kaufman, S. E. (2015). Do student selfefficacy and teacher-student interaction quality contribute to emotional and social engagement in grade fifth-grade math? Journal of School Psychology, 53(5), 359-373.

Mayer, R. E. (2002). *Rote versus meaningful learning*. Theory into Practice, 41(4), 226-232.

Mohamedbhai, G. (2014). Quality of graduates in Africa. *The world view*.

Munishi, E. J. (2016). Factors contributing to lack of employable s k i l l s a m o n g t e c h n i c a l a n d vocational education (TVET) graduatesin Tanzania. *Business Educat ion Journal, 1*(2), 1-19.

Marzano, R. J. (2007). The art and science of teaching: A comprehensive framework for effective instruction. ASCD.

National Council for Higher Education. (2017). *The state of higher education and training in Uganda 2016: A report on higher education delivery and institutions.* Kampala, Uganda: National Council for Higher Education (NCHE).

Ngware, M. W., Oketch, M., Mutisya, M., & Abuya, B. A. (2013). Classroom observation study: A comparison of interaction patterns in mathematics lessons in Kenya. International Journal of Educational Development, 33(1), 59-68.

Olsen, C., & Marie, D. M. (2004). *Cross-sectional study design and data analysis.* New York, USA: College Entrance Examination Board.

Piaget, J. (1970). *Genetic epistemology*. Columbia University Press.

Pianta, R. C., Hamre, B. K., & Allen, J. P. (2012). Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 365–386). Springer Science + Business Media.

Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. Educational Psychology Review, 16(4), 385-407. Pitan, O. S., & Adedeji, S. (2012). Skills Mismatch among University Graduates in the Nigeria Labor Market. *Online Submission*.

Prince, M. (2004). Does active learning work? A review of the research. Journal of Engineering Education, 93(3), 223-231.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and wellbeing. *American Psychologist, 55*(1), 68–78.

Rasmitadila, R., Samsudin, A., & Prasetyo, T. (2019). The instructional strategy in inclusive classroom: In inclusive teachers' opinion. *International Journal of Interdisciplinary Educational Studies 14*(1), 1-22.

Roy, S. D., & Zeng, W. (2014). *Social multimedia signals: A signal processing approach to social network phenomena.* New York, USA: Springer.

Sadler, D. R. (1989). Formative assessment and the design of instructional systems. Instructional Science, 18(2), 119-144.

Sahlberg, P. (2011). Finnish lessons: What can the world learn from educational change in Finland? Teachers College Press.

Sammons, P., Lindorff, A. M., Ortega, L., Kington, A., & Hargreaves, A. (2016). Inspiring teaching: Learning from exemplary practitioners. *Journal of Professional Capital and Community, 1*(2), 124-144.

Schunk, D. H. (1991). Self-efficacy and academic motivation. Educational Psychologist, 26(3-4), 207-231.

Smith, R., & Lee, J. (2023). Clear expectations and academic success: A study in diverse classrooms. Educational Research and Reviews, 18(2), 98-115. Smith, J., & Brown, A. (2022). The impact of conceptual learning on academic achievement: A comprehensive review. Journal of Educational Psychology, 114(3), 453-472.

Timoney, J. (2007). *Increasing conceptual learning through student participation* (Masters Dissertation, University of Nebraska-Lincoln, Nebraska, USA)

Trigwell, K. (2012). Relations between teachers' emotions in teaching and their approaches to teaching in higher education. Instructional Science, 40(3), 607-621.

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. Teaching and Teacher Education, 17(7), 783-805.

Turner, D. W. (2010). Qualitative Interview Design: A Practical Guide for Novice Investigators. *The Qualitative Report*, *15*(3), 754-760.

Van der Poll, M. (2015). *Conceptual thinking: How to quantify meaning in projects and processes through structured non-linear thinking* (Masters Dissertation, University of Nebraska, Lincoln, USA).

Van der Zee, T. (2012). Inspiration: a thought-provoking concept for RE teachers. British Journal of Religious Education, 34(1), 21-34.

Wang, X. (2016). Reform and Development of China's Education (Vol. 2). Springer.

Weimer, M. (2013). Learner-centered teaching: Five key changes to practice (2nd ed.). Jossey-Bass.

Williams, A. R. (2012). *The effect of teachers' expectations and*

perceptions on student achievement in reading for third and fi
grade students. PhD Dissertation. The University of Southern Mississippi, Hattiesburg, Mississippi, USA).

Wubbels, T., & Brekelmans, M. (2005). Two decades of research on teacher-student relationships in class. International Journal of Educational Research, 43(1-2), 6-24.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. Theory into Practice, 41(2), 64-70.

Zohrabi, M. (2013). Mixed Method Research: Instruments, Validity, Reliability and Reporting Findings. Theory and Practice in Language Studies, 3, 254-262.

Affiliations and Corresponding Information

Corresponding: Moses Wambi
Email: moswambi@yahoo.com

Ludigo Harriet:
Makerere University

Moses Wambi:
Uganda National Institute for Teacher Education (UNITE)

Alfred Buluma:
Makerere University

Wycliff Edwin Tusiime:
Kyambogo University

Wilson Mugizi:
Kyambogo University

Jimmy Luvima:
Kyambogo University