

Level of Perception on Learning Retention and Academic Achievement of Elementary Education Students

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Abstract. This study aimed to assess perceptions of learning retention and academic achievement among Elementary Education students at Davao del Sur State College. A descriptive research design was employed, involving 86 respondents. Pearson's r was used to determine the relationship between learning retention and academic achievement. Findings revealed that students demonstrated high learning retention, suggesting they are likely able to achieve mastery through their own learning strategies. Their academic achievement was also found to be very satisfactory, indicating consistent engagement with their studies. However, the results further showed that there is no significant relationship between learning retention and academic achievement among the respondents.

Keywords: Learning retention; Academic achievement; Level of perception; Descriptive research; Elementary education students.

1.0 Introduction

Individual differences play an important role in pupils' academic success. Many efforts have been made to address low academic performance, and different factors contributing to achievement have already been identified. Aside from differences in ability, which are difficult to control, students' academic success may also be affected by their learning styles and how they retain information. Sternberg (1997) suggested that learning styles can be shaped by social factors, indicating that retention may also improve as a result. Thus, educators and researchers need to understand how learning retention supports academic achievement.

Previous studies have shown conflicting results. Pennequin et al. (2010) found a negative relationship between learning retention and academic achievement, while Vettori et al. (2020) reported a positive relationship. On the other hand, Tariq et al. (2016) found no significant relationship between the two. Chiu et al. (2007) explained that differences in context, such as students' socioeconomic and cultural backgrounds, may influence the relationship between learning retention and academic success. These mixed results indicate that the relationship between learning retention and academic performance remains unclear.

Some scholars also emphasized the role of instruction. Bennett (1993) noted that the teaching methods commonly used in schools may not align with how some learners retain information. Similarly, Felder & Brent (2005) stated that when students' learning styles align with teachers' methods, they are more likely to retain knowledge longer and exhibit positive learning attitudes. These ideas show that both learner characteristics and teaching practices

may influence learning retention.

In the Philippines, students often encounter large amounts of information in traditional learning environments. Examinations assume that students can retain what they have learned, underscoring the importance of retention for academic success. However, there is still limited evidence showing how students actually use learning retention strategies in their studies. Given previous research yielding different findings and limited information in the local context, this study aims to examine learning retention and its relationship with academic achievement among students. The results of this study may help improve teaching and learning practices to support better school performance.

2.0 Methodology

2.1 Research Design

This study used a descriptive correlational design as part of a quantitative, non-experimental research strategy. A researcher examined the relationship between two or more variables in a natural setting, without manipulation or control, in a non-experimental design known as correlational analysis. In correlational investigations, researchers examine the correlation between changes in two variables to assess the robustness of the relationships (Creswell, 2013). Therefore, it is appropriate to use a descriptive correlational approach in the study to ascertain how elementary education students perceive learning retention and academic achievement.

2.2 Research Locale

This study was done in Digos City, Davao del Sur. The Davao del Sur State College is located in Matti, Digos City, Davao del Sur, Philippines. In the Philippine province of Davao del Sur, Digos also functions as the provincial capital and a second constituent city, known as the City of Digos. One hundred eighty-eight thousand three hundred seventy-six people called it home as of the 2020 Census. A total of 28,710 hectares (70,900 acres) of land comprised its 26 barangays, of which nine (9) include the poblacion, or urban center. Matti was located on the island of Mindanao, between 6.7681 and 125.3065. At these coordinates, the elevation is thought to be 45.2 meters (148.3 feet) above mean sea level. Davao del Sur State College (DSSC), a public university in the City of Digos, was well-known for its agricultural studies. The college was formerly run by the Southern Philippines Agri-Business and Marine and Aquatic School of Technology (SPAMAST) at the Digos Campus. As a public institution, it was additionally mandated to provide higher technologies and vocational training in the fields of science, agriculture, and industry, in addition to short-term technical or vocational courses. It was also obliged to promote research, advanced studies, and creative leadership in its areas of specialization.

2.3 Research Respondents

The participants in this study were second, third, and fourth-year students enrolled in the Bachelor of Elementary Education program at Davao del Sur State College during the 2022–2023 academic year. Of a total population of 145 students, 86 were selected as the sample, comprising 32 second-year, 40 third-year, and 24 fourth-year students. Stratified random sampling was employed to ensure that each subgroup was represented proportionately. To implement this method, the names and details of eligible Elementary Education students were listed, and participants were selected based on their year level. This sampling technique enabled the researcher to obtain a sample that accurately reflected the study population while ensuring fair representation across subgroups. The proportional allocation was based on the number of students enrolled in each year level at the selected campus.

2.4 Research Instruments

The researcher gathered information from respondents using the survey questionnaire adopted by Verburgh and Elen (2011). The checklist-type survey served as the primary instrument of the study, as it was suitable for collecting quantitative data. It was designed to assess students' perceptions of academic achievement and learning retention. The questionnaire consisted of two sections: the first focused on the respondents' profiles, and the second assessed their perceptions of academic achievement and learning retention. Furthermore, the parameter limitations were established to ensure accurate measurement by computing the Grade Point Averages (GPAs) of each student to obtain the mean score, which represented the academic achievement of the Bachelor of Elementary Education students at Davao del Sur State College.

2.5 Data Gathering Procedure

Before conducting the research survey, the survey questionnaire was carefully prepared. The researcher initially

edited, printed, and organized the items to ensure clarity and accuracy. After obtaining permission, the researcher conducted the study by submitting the research proposal and other relevant information on the perceptions of learning retention and academic achievement among Elementary Education students. This formality ensured the study's legitimacy and earned the respondents' cooperation. The researcher then personally distributed authorization letters to the selected respondents. These letters served as proof of their voluntary participation in the study and confirmed their willingness to provide honest and sincere responses. Once consent was obtained, the researcher formally disseminated the survey questionnaires. The distribution process lasted approximately five to seven days, as the survey was conducted only at one location. After the respondents completed the questionnaires, the researcher collected them and prepared the gathered data for analysis. Once the responses were checked and organized, the data analysis process began to obtain the results needed for the study.

2.6 Data Analysis

For data analysis and interpretation, several statistical tools were used. Frequency and percentage were employed to identify the exact number and distribution of respondents in the study. The mean was utilized to compute and describe the overall responses related to the study objectives. Lastly, the Pearson r correlation coefficient was used to examine the relationship between the independent and dependent variables. This statistical measure, which ranges from -1 to 1, determined the strength and direction of the relationship between learning retention and academic achievement.

2.7 Trustworthiness of the Study

To establish the study's reliability, two components were examined: credibility and confirmability. To ensure credibility, accuracy was strictly observed throughout data collection, particularly during both written and verbal interviews. The researcher avoided drawing conclusions from participants' responses and relied solely on the factual information they provided, excluding any irrelevant details. This aligns with Suter W. N. (2012), who stated that credibility refers to confidence in the trustworthiness of the results and involves evaluating participants' interpretations, supported by multiple sources of evidence such as interview transcripts, field notes, and researcher triangulation. To ensure confirmability and prevent bias, the researcher set aside personal assumptions, opinions, and judgments while analyzing the data. Notes and documentation were consistently maintained throughout the study to support objectivity. Lincoln & Guba (1985) explained that confirmability refers to the extent to which findings are shaped by respondents rather than by the researcher.

3.0 Results and Discussion

3.1 Level of Perception on Learning Retention of the Participants

In Terms of Motivational Practices and Experiences

The students' perceptions of motivational techniques and experiences are displayed in Table 1. The Total Mean of 4.25 in the table shows that students' perceptions of motivational techniques and experiences are Very High. This concept emphasized how educators should consider procedures that enhance students' experiences and motivate them. Generally, student motivation is one of the most critical factors in memory retention.

Table 1. *Level of Students' Perception of Motivational Practices and Experiences*

Indicators	Mean	Interpretation
1. I participate in the given learning activities.	4.51	Very High
2. I answer the given tests and accomplish my assignments.	4.32	Very High
3. I enjoy the teaching strategies employed by the teacher.	4.16	High
4. I communicate with my peers in collaborative group activities.	4.25	Very High
5. I demonstrate awareness of the lesson objectives.	4.08	High
6. I engage myself in class discussion and motivational strategies.	4.18	High
7. I solve assigned tasks like word problems.	4.03	High
8. I listen to my classmates about the experiences they shared.	4.49	Very High
9. I connect presented concepts to real-life settings.	4.21	Very High
10. I ask questions and clarifications for different concepts.	4.22	Very High
Overall Mean	4.25	Very High

The item with the highest weighted mean, "I participate in the given learning activities," was rated as having a very high level of motivational practices, with a weighted mean of 4.51. This indicates that throughout class, students are encouraged to participate in various activities. Field (2018) found a similar result, noting that students are more likely to engage in learning when they can relate to the activities, procedures, and processes involved. Supporting this strategy, Curtis & Lawson (2001) emphasize that instructional practices should occur in relevant

contexts, allowing students to participate in managing learning activities and to demonstrate ownership of their learning.

The items that completed job assignments, shared experiences, and engaged in collaborative group activities also received high ratings, with weighted means of 4.32, 4.49, and 4.25, respectively. This suggests that shared experiences, learning activities aligned with course objectives, and task completion positively influence students' engagement. On the other hand, item number 7, regarding the completion of prescribed tasks such as word puzzles, received the lowest weighted mean. This implies that students may struggle with such tasks, particularly word problems, due to certain inhibitions. Teachers are therefore expected to foster a supportive environment where every student feels motivated to participate actively, exchange ideas, and even challenge their peers' perspectives. As Field (2018) asserts, motivated behaviors and experiences are essential contributors to academic performance.

In Terms of Goal Setting and Accomplishment

Table 2 depicts the extent to which students perceive goal setting and achievement as another aspect of learning retention. This area has a Total Mean of 4.20, which translates to a "high" extent. Goal-setting has been stressed as having the potential to improve learning by ensuring that teachers and students have a clear understanding of the objectives (Bray & McClaskey, 2015).

Table 2. *Level of Students' Perception on Goal Setting and Accomplishment*

Indicators	Mean	Interpretation
1. I participate in the activities needed for the goal accomplishment.	4.42	Very High
2. I demonstrate awareness of the things I must achieve and develop.	4.24	Very High
3. I review and reflect on the processes for goal achievement.	4.21	Very High
4. I utilize strategies and techniques to accomplish the objectives.	4.27	Very High
5. I take part in setting the learning goals and objectives.	4.22	Very High
6. I use self-evaluation to know that set goals have been accomplished.	4.14	High
7. I employ in my practices the values I develop.	4.22	Very High
8. I monitor the progress I make in the given lesson.	4.12	High
9. I established enhancement activities that paved the way for goal manifestation.	4.16	High
10. I see a connection between the goals and their implications.	4.02	High
Overall Mean	4.20	High

The first item, "I participate in the activities required for goal achievement," had the highest weighted mean of 4.42, indicating a very high level of achievement. This suggests that students actively engage in activities that contribute to achieving class goals and objectives. Marija Susak (2016) supports this idea, stating that interaction enables students to learn new information, showcase their skills, develop self-confidence, and apply theoretical concepts. The highest-weighted means were 4.24, 4.22, and 4.27 for demonstrating awareness of goals, defining learning objectives, and utilizing instructional strategies and methods. These values are interpreted as high. These findings are consistent with those of Francis (2017), who highlights the importance of conducting learning activities and applying appropriate teaching strategies to enhance inclusive education and improve student motivation, thereby supporting learning retention.

Meanwhile, the item on understanding the relationship between goals and their implications received a weighted mean of 4.02, also interpreted as high. This highlights the importance of students establishing a clear connection between their objectives and their real-world applications. Hunt (2012) similarly underscores the importance of setting clear and challenging goals to strengthen this connection. Overall, the results indicate that most students recognize the importance of implementing learning activities, applying instructional strategies, and reflecting on class tasks as essential components in retaining information and achieving higher academic performance. These align with students' perceptions regarding goal setting and attainment.

In Terms of Personalized Learning

As shown in Table 3, the percentage of students who perceive individualized learning to be essential has a Total Mean of 4.28, indicating "very high." This paradigm shift transfers the responsibility for the learner's behavior from the state and the teachers' predefined educational plan. Students who are in charge of personalizing their own learning select their own pace of instruction to fit their unique learning needs (Bray & McClaskey, 2015).

Table 3. *Level of Students' Perception of Personalized Learning*

Indicators	Mean	Interpretation
1. I am responsible and in control of my own learning.	4.41	Very High
2. I work well at my own pace in different activities.	4.38	Very High
3. I participate well in hands-on and motivational strategies.	4.17	High
4. I demonstrate excitement when the lessons suit my interests.	4.35	Very High
5. I join activities that motivate me well.	4.34	Very High
6. I engage myself in exploration and discoveries.	4.35	Very High
7. I work with activities that need to be individually accomplished.	4.24	Very High
8. I use my own techniques in solving a set of problems.	4.01	High
9. I express my views and activities that address my needs.	4.17	High
10. I make choices depending on my strengths and weaknesses.	4.38	Very High
Overall Mean	4.28	Very High

The item with the highest weighted mean, "I am responsible and in control of my own learning," had a verbal interpretation of very high with a weighted mean of 4.41. This suggests that, when using tailored learning strategies, students are better able to retain the information presented to them. Students who engage in individualized learning are more likely to achieve mastery by making their own decisions and regulating their progress (Zimmerman, 2002). They are encouraged to develop learning objectives based on what they already know, thereby personalizing the learning process (Tomlinson, 2014). These goals act as a roadmap for their actions, motivating them to pursue their objectives and celebrate their achievements along the way (Locke & Latham, 1990). In the Philippine context, studies also indicate that students' motivation and strategy use significantly affect their memory retention and academic performance (Pillado et al., 2020).

Students often experience a sense of independence, confidence, and belonging when they engage in personalized learning environments that adapt to their specific needs and interests. These settings allow them to progress at their own pace, explore topics that genuinely capture their curiosity, and make informed decisions based on their individual strengths and challenges. Consequently, learners in such environments typically show higher levels of intrinsic motivation, engagement, and overall satisfaction with their learning experiences (Hughey, 2020; Niemiec & Ryan, 2009; Ryan & Deci, 2000).

To encourage students to be more actively involved in designing their own learning paths, the shift toward personalization requires teachers to be flexible and open-minded (Bray & McClaskey, 2015). Moreover, innovative technologies must be integrated into personalized learning to support student-centered approaches that enhance higher-order skills, such as critical thinking and problem-solving. Additionally, Grant and Basye (2014) found that individualized learning encourages teachers to open more opportunities for student growth. In personalized learning, students are typically guided beyond traditional curriculum and grade-level limitations (Zmuda et al., 2015). Therefore, students must invest in their own interests and education.

In Terms of Teaching Strategies and Learning Activities

According to Table 4, students strongly agreed with all of the items. Their comments on instructional strategies and classroom learning activities ranged from a "very high" extent in their verbal responses to a mean of 4.40. Kulasegaram and Rangachari (2018) illustrated how context, the use of a developmentally appropriate teaching strategy, and students' interactions within a predetermined framework all affect learning.

Table 4. *Level of Students' Perception of Teaching Strategies and Learning Activities*

Indicators	Mean	Interpretation
1. My teacher employs strategies that develop learners' numeracy.	4.30	Very High
2. My teacher employs enjoyable activities that encourage me to participate in the classes.	4.30	Very High
3. My teacher applies strategies that develop critical and creative thinking skills.	4.42	Very High
4. My teacher encourages me to ask questions and clarifications on the concepts presented.	4.41	Very High
5. My teacher uses strategies that enhance learners' achievement.	4.45	Very High
6. My teacher relates the lesson to real-life situations and practices.	4.56	Very High
7. My teacher applies knowledge of content within and across curriculum teaching areas.	4.45	Very High
8. My teacher assists and supports me in attaining development and progress.	4.38	Very High
9. My teacher allows me to collaborate with my peers to help me learn better.	4.38	Very High
10. My teacher utilizes strategies that promote higher-order thinking abilities.	4.38	Very High
Overall Mean	4.40	Very High

The use of instructional strategies that emphasize students' numeracy skills and their capacity for critical and

creative thinking increases student engagement and memory retention, according to studies. This highlights an essential step in building a strong foundation to enhance learners' skills. In this millennial era, where individual differences among learners are highly evident, the findings of this study support Angeles' (2018) recommendation that teachers employ a variety of techniques, methods, and approaches to advance student learning by fostering the development of creative and critical thinking skills.

The multidimensional nature of teaching and student learning has been widely recognized in recent years. Researchers emphasize that teachers have a substantial influence on students' academic performance and long-term success (Hattie, 2009; Darling-Hammond, 2000). Numerous studies show that effective teaching extends beyond content delivery to include the creation of supportive, structured learning environments. These environments are often characterized by positive teacher-student relationships, clear organization, and consistent classroom management (Pianta et al., 2012; Marzano, 2003). Collectively, these findings suggest that the quality of teaching practices plays a central role in fostering meaningful learning and sustained academic achievement.

Regarding learning activities, it is essential to support developmentally appropriate instructional practices. This encourages teachers to be mindful of proper instructional planning, including effective lesson management and implementation. The findings of Marco-Bujosa and Levy (2016), which demonstrate that teachers utilize the curriculum in diverse ways and for various purposes, further support this and suggest that adjustments should be made to help students achieve their learning objectives.

In Terms of Educational Resources and Learning Devices

Table 5 presents the extent to which students view learning materials and instructional tools. The overall mean of 4.15 indicates a high degree of agreement regarding students' positive perceptions of educational materials. This suggests that students now have easy access to a wealth of information and that educational resources have become increasingly integrated into daily life. Today's learners have grown up with an expanding range of educational tools readily available. To create a 21st-century classroom that addresses the needs of all learners, modern teachers must consider students' enthusiasm for learning and the role of technology in supporting inclusive education (Francis, 2017). Thus, modernizing teaching approaches enhances memory retention, increases student motivation, and strengthens inclusive learning environments.

Table 5. *Level of Students' Perception of Educational Resources and Learning Devices*

Indicators	Mean	Interpretation
1. The school has a library with accessible resources.	4.14	High
2. The school has laboratory equipment, like computers.	4.24	Very High
3. The teacher uses books for references.	4.40	Very High
4. The teacher utilizes materials like learning workbooks.	4.23	Very High
5. The teacher utilizes educational television.	3.70	High
6. The teacher employs realia to integrate real-life concepts.	4.10	High
7. The teacher utilizes a PowerPoint presentation in the delivery of the lesson.	4.57	Very High
8. The school has a mathematics subject center.	3.96	High
9. The teacher uses videos to deepen the concept understanding.	4.12	High
10. The teacher uses ICT resources to present the given mathematical concepts.	4.07	High
Overall Mean	4.15	High

The indicators with the highest weighted means (4.40, 4.57, and 4.24, respectively) were interpreted as very high in their verbal interpretations. These indicators pertained to the use of books as references, the use of PowerPoint presentations during lesson delivery, and the availability of school laboratory equipment, such as computers. This indicates that, in the current digital era, a wide range of educational resources and learning tools can be used to access vast amounts of knowledge. As technology has become an integral part of students' lives, educators must adapt to innovative teaching methods. Francis (2017) states that teachers who adopt these approaches can fully utilize technology in the classroom for both instructional and motivational purposes. As a result, students who are supported with familiar, relevant tools are more motivated and engaged in learning. Moreover, today's students are surrounded by technology and have quick access to large amounts of information. Technology supports diverse learning approaches by fostering a sense of community and creating meaningful learning experiences that promote engagement and learning. When used appropriately, technology can enhance learning across various subjects, including mathematics, and strengthen engagement in regular education classrooms (Liu et al., 2015; Francis, 2017).

Summary Table of the Level of Perception on Learning Retention

The perception of learning retention is compiled in Table 6. The variables with the highest weighted averages were individualized learning, teaching methodologies, and learning activities, with weighted averages of 4.40 and 4.28, respectively. This indicates that students firmly believe that teachers' teaching strategies, learning activities, and individualized instruction have a significant impact on their ability to retain information. This result aligns with Bray's (2012) assertion that students have a better understanding and mastery of the subjects being taught when they are given the responsibility to direct their own learning.

Table 6. Summary Table on the Level of Perception on Learning Retention

Variables	Mean	Interpretation
1. Motivational practices and experiences.	4.25	Very High
2. Goal setting and accomplishment.	4.20	High
3. Personalized learning.	4.28	Very High
4. Teaching strategies and learning activities.	4.40	Very High
5. Educational resources and learning devices.	4.15	High
Overall Mean	4.13	High

First and foremost, the literature indicates that recent years have seen increased interest in learner-centeredness, suggesting a paradigm shift in education (Quinonez, 2014). This is especially evident in learning activities, where priority has been given to considering learner characteristics, involving students in the learning process, and fostering participation. Students who experienced a customized learning environment had more positive perceptions, which is aligned with the concept of personalized learning.

Indicators that received very high and high student evaluations, particularly those related to motivating behaviors and experiences, goal-setting, and accomplishments, highlight factors that contribute to learning retention. Regarding motivational strategies, Vibulphol (2016) asserts that autonomy-supportive techniques are more evident in classrooms with high levels of motivation and achievement. In contrast, autonomy-limiting practices remain common in classrooms with lower levels of motivation and achievement. Dotson (2016) emphasizes that goal setting should serve as the foundation for directing learning, suggesting that students must create strategies to achieve their goals. However, writing goals alone does not necessarily affect student learning. Students' actions and engagement during learning activities significantly impact their academic performance. Furthermore, progress monitoring provides opportunities for students to value and take ownership of their learning, an essential component of effective goal planning. The activities that students participate in throughout the learning process can significantly influence their overall achievement.

3.2 Level of Academic Achievement of the Participants

Table 7 displays the mean and standard deviation ($SD = 0.20$) of the academic attainment levels of Elementary Education pupils. The overall mean score is 1.59, which corresponds to "Very Satisfactory" in verbal terms. It assumes that, because no two students are the same, teaching and evaluation strategies must change to prevent teaching only to regular students and failing to support those who learn at a slower pace.

Table 7. Level of Academic Achievement of Elementary Education Students

Variable	Mean	SD	Description
Academic Achievement (GPA)	1.59	0.20	Very Good

Today's students are a diverse group of learners with a range of readiness, interests, learning styles, and academic accomplishments. Educational strategies currently based on a highly homogeneous population must adapt to accommodate student diversity. Teaching children who perform differently academically, such as bright students and those who struggle academically, in regular classrooms will always be a challenge for teachers. To meet the needs of all students, teachers currently only make minor adjustments (Lumat, 2015). It is an approach that offers choices and a method of instruction that adjusts to each student's needs while ensuring that each student meets the same learning objective. Additionally, according to Tomlinson (2017), children learn best when their teachers take into account differences in readiness, interests, and learning profiles.

3.3 Relationship Between the Perception of Learning Retention and Academic Achievement

Determining whether learning retention has a substantial association with academic achievement among second, third, and fourth-year elementary education students at Davao del Sur State College is another essential goal of

this study. The correlation between the two variables was calculated using Pearson's correlation coefficient (r).

Table 8. Relationship Between the Students' Perception of Learning Retention and Their Academic Achievement

Variables	Pearson's r	Strength of Relationship	p -value	Remarks
Motivational	.11	Very Low Correlation	.313	Not Significant
Goal Setting	.06	Very Low Correlation	.615	Not Significant
Personalized Learning	.00	Very Low Correlation	.988	Not Significant
Teaching Strategies	.15	Very Low Correlation	.177	Not Significant
Educational Resources	.03	Very Low Correlation	.766	Not Significant
Overall	.84	Very Low Correlation	.477	Not Significant

Table 8 reveals that none of the perception indicators are significantly correlated with the academic performance of Elementary Education pupils, as all p -values exceed the 0.05 level of significance. A negligible correlation was found between learning retention and motivational practices and experiences ($r = 0.11$, $p = 0.313$), suggesting that academic achievement may increase as motivational practices improve; however, the relationship is not statistically significant. Similarly, the results showed a negligible relationship between learning retention and goal-setting and accomplishments ($r = 0.06$, $p = 0.615$), indicating no significant link between the two variables. In terms of personalized learning, the correlation with academic attainment was extremely weak ($r = .002$, $p = .988$). This shows that although academic performance may increase as personalized learning develops, the association remains insignificant. Likewise, the relationship between learning retention, teaching strategies, and academic achievement was very low ($r = .15$, $p = .177$), suggesting no significant relationship despite a slight positive trend.

Moreover, the association between educational resources and academic achievement was also very weak ($r = 0.03$, $p = 0.766$), indicating no significant relationship between the variables. The findings collectively show that students' perceptions across different learning components do not significantly correlate with their academic performance, as indicated by these statistical results. The level of perception was also not significantly associated with the overall GPA ($p = .477$), which is higher than the 0.05 significance level; thus, the null hypothesis cannot be rejected. Although the results imply that learners with higher perceptions of learning components may still perform better academically, the relationships remain statistically insignificant. Other elements may be influencing their academic performance, as some students describe learning as difficult, frightening, and unpleasant, indicating that subject complexity or student challenges may play a more significant role.

4.0 Conclusion

Based on the study's findings, several conclusions were drawn. First, the use of instructional strategies that support students' learning, critical thinking, and creative skills contributes to improved engagement and memory retention. This emphasizes the importance of establishing a strong foundation that enhances learners' abilities. When individualized learning is applied, students tend to retain information better and are more likely to achieve mastery through their own choices. Therefore, it is recommended that students set learning objectives based on their prior knowledge, as these goals can guide them in monitoring their progress and accomplishments. Second, the overall average academic achievement of Elementary Education students is 1.5861, which falls under the Very Satisfactory category. However, other factors may also influence their academic performance, such as the nature of the subject. This suggests that students are highly committed to their chosen field of study. Lastly, motivational practices and experiences, goal-setting and achievement, customized learning, instructional approaches, and learning activities were found to have no significant impact on students' academic performance. In general, the study concludes that none of the measures of learning retention perception show a substantial relationship with the academic achievement of Elementary Education students.

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7.0 Conflict of Interests

Not indicated.

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9.0 References

- Angeles, E. (2018). Significance of learning diversity in the K to 12 curriculum. Sun.Star Pampanga. Retrieved from <https://tinyurl.com/3s25d2d7>
- Bennett, M. J. (1993). Toward Ethnorelativism: A developmental model of intercultural sensitivity. In R. M. Paige (Ed.), *Education for the Intercultural Experience* (pp. 21–71). Intercultural Press.
- Bray, B. (2012). Personalized learning. Retrieved from <http://barbarabray.net/personalized-learning/>
- Bray, B., & McCluskey, K. (2015). Learner voice and choice lead to engagement. Retrieved from <https://tinyurl.com/unu6tfb7>
- Chiu, M. M., Chow, B. W.-Y., & McBride-Chang, C. (2007). Universals and specifics in learning strategies: Explaining adolescent Mathematics, Science, and reading achievement across 34 countries. *Learning and Individual Differences*, 17(4), 344–365. <https://doi.org/10.1016/j.lindif.2007.03.007>
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications. Retrieved from <https://study.sagepub.com/creswellrd4e>
- Curtis, D. D., & Lawson, M. J. (2001). Exploring collaborative online learning. *Journal of Asynchronous Learning Networks*, 5(1), 21–34. Retrieved from <https://tinyurl.com/4v5j6seu>
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8(1), 1–44. <https://doi.org/10.14507/epaa.v8n1.2000>
- Dotson, R. A. (2016). Does goal setting with elementary students impact reading growth? ProQuest LLC. Retrieved from <https://eric.ed.gov/?id=ED567665&>
- Felder, R. M., & Brent, R. (2005). Understanding student differences. *Journal of Engineering Education*, 94(1), 57–72. <https://doi.org/10.1002/j.2168-9830.2005.tb00829.x>
- Field, K. (2018). Teacher and student perceptions of student engagement in a 9th-grade classroom. Doctoral Dissertations. <https://digitalcommons.lib.uconn.edu/dissertations/1731>
- Francis, J. (2017). The effects of technology on student motivation and engagement in classroom-based learning. All Theses and Dissertations. <https://dune.une.edu/theses/121>
- Grant, P., & Basye, D. (2014). *Personalized learning: A guide for engaging students with technology*. Eugene, OR: International Society for Technology in Education. Retrieved from <https://tinyurl.com/5n84y5ut>
- Hughey, J. (2020). Individual personalized learning. New Prairie Press. <https://files.eric.ed.gov/fulltext/EJ1275355>
- Hunt, R. (2012). The effects of goal setting in a developmental Algebra course. Masters Theses & Specialist Projects. <https://digitalcommons.wku.edu/theses/1139>
- Kulasegaram, K., & Rangachari, P. K. (2018). Beyond “formative”: Assessments to enrich student learning. *Advances in Physiology Education*, 42(1), 5–14. <https://doi.org/10.1152/advan.00122.2017>
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. Prentice Hall. Retrieved from <https://tinyurl.com/ye3vsrd5>
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8(1). DOI: <http://dx.doi.org/10.14507/epaa.v8n1.2000>
- Liu, S.-H., Tsai, H.-C., & Huang, Y.-T. (2015). Collaborative professional development of mentor teachers and pre-service teachers in relation to technology integration. *Educational Technology & Society*, 18(3), 161–172. Retrieved from <https://eric.ed.gov/?id=EJ1070041&>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications. Retrieved from <https://tinyurl.com/pbzuxv59>
- Marco-Bujosa, L. M., & Levy, A. J. (2016). Caught in the balance: An organizational analysis of Science teaching in schools with elementary Science specialists. *Science Education*, 100(6), 983–1008. <https://doi.org/10.1002/sce.21239>
- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. <https://tinyurl.com/4j3kuywp>
- Pennequin, V., Sorel, O., Nanty, I., & Fontaine, R. (2010). Metacognition and low achievement in Mathematics: The effect of training in the use of metacognitive skills to solve Mathematical word problems. *Thinking & Reasoning*, 16(3), 198–220. <https://doi.org/10.1080/13546783.2010.509052>
- 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. https://doi.org/10.1007/978-1-4614-2018-7_17
- Pillado, I. A., Futral, M. C. Z., & Comighud, S. M. (2020). Factors on memory retention: Effect on students’ academic performance. <https://tinyurl.com/3mdk4z4m>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Pianta, R., Hamre, B., & Allen, J. (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. DOI: https://doi.org/10.1007/978-1-4614-2018-7_17
- Susak, M. (2016). Factors that affect classroom participation. Rochester Institute of Technology. Retrieved from <https://repository.rit.edu/theses/9370>
- Sternberg, R. J. (1997). *Thinking styles* (1st ed.). Cambridge University Press. <https://doi.org/10.1017/CBO9780511584152>
- Suter, W. N. (2012). *Introduction to educational research: A critical thinking approach* (2nd ed.). Sage Publications. Retrieved from <https://tinyurl.com/yeykbc4b>
- Tariq, S., Khan, M. A., Afzal, S., Shahzad, S. R., Hamza, M., Khan, H. A., Qamar, F., Javed, M., Ashraf, M. F., Mubarak, F., Puri, B. I., Masood, T., Kazim, F., Shaukat, T., & Shaikh, S. (2016). Association between academic learning strategies and annual examination results among medical students of King Edward Medical University. *Annals of King Edward Medical University*, 22(2). <https://doi.org/10.21649/akemu.v22i2.1290>
- Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all learners* (2nd ed.). ASCD. <https://tinyurl.com/3mm2z755>
- Vettori, G., Vezzani, C., Bigozzi, L., & Pinto, G. (2020). Upper secondary school students’ conceptions of learning, learning strategies, and academic achievement. *The Journal of Educational Research*, 113(6), 475–485. <https://doi.org/10.1080/00220671.2020.1861583>
- Vibulphol, J. (2016). Students’ motivation and learning, and teachers’ motivational strategies in English classrooms in Thailand. *English Language Teaching*, 9(4), 64–75. <https://doi.org/10.5539/elt.v9n4p64>
- Zimmerman, B. J. (2002). “Becoming a self-regulated learner: An overview.” *Theory Into Practice*, 41(2), 64–70. Retrieved from <https://tinyurl.com/4csy4jr>
- Zmuda, A., Ullman, D., & Curtis, G. (2015). *Learning personalized: The evolution of the contemporary classroom*. Jossey-Bass. San Francisco, CA