

Relationship Between Time Management Skills and Students' Academic Achievement in Chemistry in Senior Secondary Schools in Girei Local Government Area, Adamawa State

By

ADAMU Mohammed

Department of Physical Sciences Education, Faculty of Education, Modibbo Adama University,
Yola

madamu1119@mau.edu.ng

Abstract

The study explored the relationship between time management skills and students' academic achievement in Chemistry in senior secondary schools in Girei Local Government Area, Adamawa State. The study employed the correlational research design and was guided by three objectives, research questions and null hypotheses. The population was 478 representing the entirety of SS2 students who offer Chemistry in the 2025/2026 academic session. A sample of 232 students determined by Yamane (1967) sample size formula were selected by stratified simple random sampling technique. Time management skills were surveyed using a researcher developed Chemistry Time Management Questionnaire (CTMQ) having a reliability coefficient of .82 determined by Cronbach alpha while the academic achievement of the participants were retrieved using Chemistry Achievement Pro forma (CAP). Analysis of data was done using mean, standard deviation, PPMC and multiple regression. Results show weak positive insignificant relationship between time planning and academic achievement ($r = .106, p > .05$) and weak negative insignificant relationship between task prioritization and academic achievement ($r = -.097, p > .05$). The composite analysis however, showed that time planning and task prioritization have a combined positive significant relationship with academic achievement [$F_{(2, 229)} = 3.512, p < .05$]. It was recommended among others that schools should organize workshops and orientation to teach students time management skills holistically rather than isolated skills.

Keywords: Time Management Skills, Students' Academic Achievement, Chemistry, Senior Secondary Schools, Adamawa State.

ADVANCING KNOWLEDGE
• IMPACTING SOCIETY •

Introduction

Science remains central to modern society since it generates knowledge, tools, and technologies that support health, energy, food, water production, and broader sustainable development. Science has recently been emphasized as a key driver for solving global challenges and advancing the Sustainable Development Goals; and has transformed health, energy, food, water, and other essential areas of human well-being (National Academies of Sciences, Engineering, and Medicine, 2022). In this sense, science education is not merely an academic requirement but a foundation for national development, innovation, and informed citizenship. The environment around us is made up of matter; from the air we breathe, to the trees that purifies the environment, and to the soil we walk on and supports the growth of crops for the survival of man. This makes the study of Chemistry particularly crucial for dealing with the transformation of matter in the environment.

Chemistry is important for explaining the composition, structure, properties, and transformation of matter. Chemistry supports agriculture, medicine, industry, material development, environmental protection, and energy solutions, and remains central to many contemporary debates on sustainability and public welfare (National Academies of Sciences, Engineering, and Medicine, 2022; UNESCO, 2024). Chemistry is therefore a gateway subject for learners who will eventually contribute to scientific, technological, and industrial advancement. For secondary school students, strong achievement in Chemistry is especially valuable since it opens pathways into health sciences, engineering, pharmacy, and many other science-related fields.

Despite the importance of Chemistry in virtually every sector of the economy, achievement in science (Chemistry inclusive) remains a global concern. International assessments continue to show that many learners do not reach strong proficiency levels in science. For example, data from PISA 2022 show that 24% of students across OECD countries were low performers in science. The report also notes that reading and science trajectories had been falling for a decade even though science performance did not change significantly between 2018 and 2022 (OECD, 2023). This indicates that weak achievement in science is not peculiar to one country or region but is part of a broader global educational challenge.

In Nigeria, Chemistry achievement has remained persistently low over the years. Nwafor et al. (2024) reported a WAEC Chief Examiner's finding that showed fluctuating credit percentages between 2015-2021 and identified teacher-related and learner-related factors such as inadequate instructional methods, lack of qualified teachers, and weak study habits as part of the reasons for persistent weak achievement in Chemistry. The situation in Adamawa State reflects the wider national concern. It was reported that only an average of 53.38% of students obtained a credit and above in Chemistry in WAEC between 2018-2022 (Adamu & Okoronka, 2025). This means that 46.62% of candidates who sat for Chemistry in WAEC between this period failed to secure admissions into engineering, medical and other

science related disciplines in the universities. The trend of poor academic achievement in Chemistry needs to be terminated or improved by making the right investment in education if Adamawa State and Nigeria in general are committed to the attainment of a “united, strong, and self-reliant nation”- one of the national goals of Nigeria (FGN, 2013).

Studies in Nigeria and nearby settings have tested constructivist, inquiry, cooperative, and practical-oriented strategies, and many of them reported gains in achievement; yet the broader pattern of poor achievement continues to appear in examination-based and school-based studies (Iliya & Ahmed, 2024; Jack & Ogunleye, 2024; Nwafor et al., 2024). WAEC also provides Chief Examiner’s Reports to help schools prepare candidates adequately for subsequent examinations, showing that feedback has been a long-standing intervention mechanism (West African Examinations Council, n.d.). Even so, the recurring concern over Chemistry achievement implies that instructional or examination feedback alone has not solved the challenge. This makes it reasonable to look beyond classroom teaching strategies to learner-centered factors such as time management skills. This is imperative amidst social media distractions among the youths today. Suffice it to note that the inculcation of time management skills does not require intensive resource mobilization. They are teachable, low-cost, and students can apply them immediately across courses without external support. Thus, making them practical and scalable solutions to ameliorating poor achievement in Chemistry.

Time management skills are widely recognized as self-regulated processes that support learning and academic achievement. Patzak et al. (2025) explain time management skills as processes connected to goal-setting, planning, prioritizing, and scheduling, and noted that these behaviors are associated with academic achievement, productivity, wellbeing, and satisfaction. In the academic context, time management skills matters since students are expected to balance lessons, assignments, reading, practical work, and revision within limited time. When students manage time effectively, they are better able to focus on learning tasks, reduce stress, and sustain consistent academic effort, resulting into better achievement. For this study, only time planning and task prioritization are chosen for their complementary roles in ensuring success in life. This implies that without planning, there is nothing to prioritize and without prioritization, planned time get wasted on low-value tasks. Also, students face increased digital distractions and heavier course loads. Hence, planning creates the structure while prioritization creates focus; two essential skills needed to manage competing academic demands effectively.

Time planning refers to the deliberate arrangement of study activities, deadlines, and goals within a specified period so that learning proceeds in an orderly way. Time planning is crucial for success in all works of life. It is commonly said that “people who fail to plan, plan to fail”. Patzak et al. (2025) describe planning as part of effective time management skills while Calonia et al. (2023) show that time planning helps students decide when to study, complete assignments, revise notes, and how to prepare for tests/exams

and practical sessions. In a study, Alyami et al. (2021) found that preplanning and the use of to-do lists or calendars were associated with better GPAs. This indicates that students who plan ahead of time, create and follow to-do list and schedules are more likely to achieve higher achievement than students who refuse to plan, create and follow schedules. While time planning identifies the tasks that should be done, prioritization assigns values and ranks the identified tasks based on importance and urgency so that ample time is allocated to high-impact activities first.

Time prioritization is the ability to rank academic tasks according to importance, urgency, and expected contribution to learning outcomes. Students who prioritize effectively are more likely to use their limited time on tasks that directly influence achievement. Patzak et al. (2025) identified tasks prioritizing as one of the core time-management strategies that support higher achievement. Similarly, Iweala and Wodi (2026) showed that students reported high use of goal-setting and task prioritization which were positively related to academic achievement. In the school setting, prioritization helps students distinguish between essential and less essential activities, focus on difficult or high-value topics first, and allocate sufficient attention to Chemistry tasks such as laboratory preparation, homework, revision, and practice questions.

Against this background, this study is timely and necessary. Since Chemistry achievement remains uneven globally, nationally, and within Adamawa State, it is important to examine how students plan and prioritize their academic tasks and how they relate to their achievement in Chemistry in Girei Local Government Area (Girei LGA). The study is therefore expected to provide local evidence to the growing literature on time management skills and academic achievement and to provide guidance for teachers, school counselors, parents, and education authorities seeking practical ways to improve students' success in Chemistry.

Purpose of the Study

The purpose of the study was to explore the relationship between time management skills and academic achievement of students in Chemistry in senior secondary schools in Girei LGA, Adamawa State. The study precisely examined the relationship between:

- I. Time planning and academic achievement of students in Chemistry in senior secondary schools in Girei Local Government Area.
- II. Task prioritization and academic achievement of students in Chemistry in senior secondary schools in Girei Local Government Area.
- III. Time management skills and academic achievement of students in Chemistry in senior secondary schools in Girei Local Government Area.

Research Questions

The following questions guided the study:

- I. What is the relationship between time planning and academic achievement of students in Chemistry in senior secondary schools in Girei Local Government Area?
- II. What is the relationship between task prioritization and academic achievement of students in Chemistry in senior secondary schools in Girei Local Government Area?
- III. What is the mean achievement of students in Chemistry in senior secondary schools in Girei Local Government Area?

Hypotheses

The following hypotheses were tested at .05 significance threshold.

Ho₁: There is no significant relationship between time planning and students' academic achievement in Chemistry in senior secondary schools in Girei Local Government Area.

Ho₂: There is no significant relationship between task prioritization and students' academic achievement in Chemistry in senior secondary schools in Girei Local Government Area.

Ho₃: There is no significant relationship between time management skills and students' academic achievement in Chemistry in senior secondary schools in Girei Local Government Area.

Literature Review

The Self-Regulated Learning (SRL) theory propounded by Zimmerman (2002) anchored this study. The theory posits that goal attainment depends on self-regulation which are a set of self-generated thoughts, feelings, and behaviours. The SRL has three major assumptions, viz., learners can take action and assume full responsibility for their learning; learners are capable of goal setting, planning to achieve these goals, monitoring and controlling their progress and actions and evaluate results; and that motivation, self-belief, and environmental conditions interact with learners' behaviour, so achievement improves when students manage these factors effectively. Thus, the theory explains why students who plan their time well and prioritize academic tasks are likely to complete assignments on time, prepare for tests systematically, and attain higher academic achievement.

The relationships between time planning, task prioritization, and academic achievement have been established. Lourenco and Paiva (2024) opined that time planning contributes to academic success by reducing procrastination and improving volitional control. This means that time planning converts broad academic goals into concrete and specific study actions. Task prioritization on the other hand, helps learners to devote their best effort on the most important work. When students prioritize properly, they are more likely to submit assignments timely, review high-value content and avoid spending excessive time on low-return activities (Shah et al., 2024).

Empirical studies conducted on time planning and task prioritization between 2020-2026 mostly showed significant positive relationship with academic achievement, although the size and consistency of

the effects varied. A study by Wilson et al. (2021) investigated improving students' achievement and found significant positive relationship between time management and academic achievement. Similarly, Lourenco et al. (2025) examined the perceived instrumentality and time management planning as predictors of academic achievement using the cross-sectional explanatory design with structural equation modelling and found positive relationship between time planning and academic achievement. Other studies with similar findings include Shi and Qu (2022) and Shah et al. (2024). Studies also showed that task prioritization is significant and positively associated with academic achievement. Iweala and Wodi (2026) and Alixandrescu (2025) both studied and found significant positive correlation between task prioritization and academic achievement. However, a study conducted by Pancho et al. (2026) reported no significant relationship between task prioritization and academic achievement. Furthermore, Khan et al. (2020), Jasudha and Singh (2025) and Cyril (2015) all found significant positive relationship between time management skills and academic achievement. On the contrary, Calonia et al. (2023) and Aufa et al. (2025) found no significant positive relationship between time management skills and academic achievement.

In summary, research consistently shows that effective time management skills are critical for academic and workplace performance with planning helping to set clear goals and ensure judicious mobilization and utilization of resources while prioritization provides focus on the most important and urgent tasks which boost performance and productivity. However, most studies lumped all rather than studying separate individual components of time management skills. Consequently, it becomes difficult to ascertain the component with the most impact on academic achievement. There is a dearth of literature in Girei LGA which this study filled by examining both the separate and combined impact of time planning and task prioritization on senior secondary school students' academic achievement in Chemistry. It is hoped that this study does not only deepen the theory around time management but also provide practical tips that help students to be more intentional about their studies for enhanced achievement.

Methodology

The correlational research design was used to examine the relationship between time management skills and students' academic achievement in Chemistry in senior secondary schools in Girei LGA. The choice of this design was considered appropriate and informed by the fact that it allows for the determination of the extent and direction of relationship without control or manipulation of the variables of a study (Busayo, 2020). The population of the study was 478 SS2 students who offered Chemistry in the 2025/2026 academic session; out of which a scaled up sample of 232 students determined by Yamane (1967) sample size formula were selected by stratified simple random sampling technique.

Data was collected over a duration of one week. It began with the introduction of the researcher to the authorities of the sample schools. This was succeeded by orientation course for the research assistants

(Chemistry teachers) and the respondents on the objectives of the study and how to fill the Chemistry Time Management Questionnaire (CTMQ) that has a Cronbach alpha reliability coefficient of .82 and response mode of Strongly Agree (SA) = 5 to Strongly Disagree (SD) = 1. Thereafter, the CTMQs were distributed to the research assistants for onward manual administration to the respondents. The administered CTMQs were retrieved and handed over to the researcher. The participants' academic achievement scores were retrieved from official records using Chemistry Achievement Pro forma (CAP). Pearson Product Moment Correlation (PPMC) was used to answer research questions one and two based on Weak Relationship (WR) = .10-.29, Moderate Relationship (MR) = .30-.49, and High Relationship (HR) = .50-.1.00 cutoffs while mean and standard deviation were used to answer research question three. Also, PPMC was used to test hypotheses one and two while multiple regression was used to test hypothesis three all at .05 significance threshold. A hypothesis was rejected if $p\text{-value} \leq .05$ and vice versa.

Results

Three research questions and null hypotheses were sequentially answered and tested at .05 level of significance respectively.

Research Question One

What is the relationship between time planning and academic achievement of students in Chemistry in senior secondary schools in Girei Local Government Area?

Table 1: Result of the Relationship Between Time Planning and Students' Academic Achievement in Chemistry in Senior Secondary Schools in Girei Local Government Area

	n	Mean	S.D.	R
Time Planning	232	4.289	.382	.106
Academic Achievement	232			

Table 1 shows that the mean and standard deviation of time planning of students who offer Chemistry in senior secondary schools in Girei LGA are respectively 4.289 and .383. The Table further shows a weak positive relationship ($r = .106$) between time planning and students' achievement in Chemistry since the value of r falls within .10-.29.

Research Question Two

What is the relationship between task prioritization and academic achievement of students in Chemistry in senior secondary schools in Girei Local Government Area?

Table 2: Result of the Relationship Between Task Prioritization and Students' Academic Achievement in Chemistry in Senior Secondary Schools in Girei Local Government Area

	n	Mean	S.D.	R
Task Prioritization	232	4.375	.402	-.097
Academic Achievement	232			

Table 2 indicates the mean (4.375) and standard deviation (.402) of task prioritization of students who offer Chemistry in Girei LGA. Since the value of r (-.097) falls within .10-.29, it indicates a weak negative relationship between task prioritization and students' achievement in Chemistry.

Research Question Three

What is the mean achievement of students in Chemistry in senior secondary schools in Girei Local Government Area?

Table 3: Mean and Standard Deviation of Students' Achievement in Chemistry in Senior Secondary Schools in Girei Local Government Area

	n	Mean	S.D.
Academic Achievement	232	63.297	13.505

From the Table 3 above, the mean and standard deviation of students' achievement in Chemistry in senior secondary schools in Girei LGA are shown to be 63.297 and 13.504 respectively. This implies that majority of the students in the Local Government are good Chemistry achievers.

Hypothesis One

Ho₁: There is no significant relationship between time planning and students' academic achievement in Chemistry in senior secondary schools in Girei Local Government Area.

Table 4: Result of Pearson Product Moment Correlation of Time Planning and Students' Achievement in Chemistry in Senior Secondary Schools in Girei Local Government Area

	n	R	P-value	Remark
Time Planning	232	.106	.109	Not significant
Academic Achievement	232			

Table 4 presents the result of analysis of hypothesis one which shows no significant relationship between time planning and students' academic achievement ($r = .106$). Since the p-value (.109) is greater than .05, the null hypothesis was retained.

Hypothesis Two

Ho₂: There is no significant relationship between task prioritization and students' academic achievement in Chemistry in senior secondary schools in Girei Local Government Area.

Table 5: Result of Pearson Product Moment Correlation of Task Prioritization and Students' Achievement in Chemistry in Senior Secondary Schools in Girei Local Government Area

	n	R	P-value	Remark
Task Prioritization	232	-.097	.139	Not significant
Academic Achievement	232			

Table 5 shows a weak negative relationship ($r = -.097$) between task prioritization and students' achievement in Chemistry. This means that students who reported higher levels of task prioritization recorded lower achievement scores and vice versa. The null hypothesis was retained since the p-value (.139) is greater than .05.

Hypothesis Three

Ho₃: There is no significant relationship between time management skills and students' academic achievement in Chemistry in senior secondary schools in Girei Local Government Area.

Table 6a: Summary of ANOVA of Regression Analysis of Correlation Between Time Management Skills and Students' Academic Achievement in Chemistry in Senior Secondary Schools in Girei Local Government Area

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1253.954	2	626.977	3.512	.031 ^b
	Residual	40876.524	229	178.500		
	Total	42130.478	231			

a. Dependent Variable: Academic Achievement

b. Predictors: (Constant), Time Prioritization, Time Planning

Table 6a shows the result of analysis of significant correlation between time management skills and students' academic achievement $F_{(2, 229)} = 3.512$, $p < .05$. The stated hypothesis was rejected since p-value (.031) is less than .05.

Table 6b: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.173 ^a	.030	.021	13.36039

a. Predictors: (Constant), Task Prioritization, Time Planning

Table 6b is the model summary which shows how time management skills account for the variance in academic achievement. The Table indicates that only 2.10% variance in the academic achievement can be attributed to time management skills.

Table 6c: Coefficient of Beta

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	61.662	12.060		5.113	.000
	Time Planning	5.297	2.421	.150	2.188	.030
	Task Prioritization	-4.819	2.298	-.143	-2.097	.037

a. Dependent Variable: Academic Achievement

Table 6c shows the result of multiple regression for the contribution of each of the variables included in the model in predicting academic achievement. The Table reveals that time planning has a

standardized beta coefficient of .150 and significant t-test of .030, $p < .05$ while task prioritization has a standardized beta coefficient of -.143 and significant t-test of .037, $p < .05$. This entails that time planning made a higher unique contribution (15.00%) in explaining students' achievement in Chemistry than task prioritization (14.30%).

Discussion of the Findings

The relationships between time planning, task prioritization, time management skills, and academic achievement were probed and varying results were found. Result shows a weak insignificant relationship between time planning and academic achievement. This implies that having a plan/schedule alone does not guarantee better achievement in Chemistry. Students may plan but fail to execute, suggesting that other components of time management skills such as setting clear and realistic goals, effective execution of plans, prioritization etc. may play a more significant role in determining Chemistry achievement. The researcher found no study that aligns with this finding. However, the dearth of literature on time planning and academic achievement in Girei LGA justifies the conduct of this study in this context. Conversely, studies by Lourenco et al. (2025), Shi and Qu (2022) and Shah et al. (2024) all reported significant positive relationship between time planning and academic achievement.

In addition, task prioritization was found to be weak, negative, and insignificantly related to academic achievement. This indicates that increased engagement with task prioritization was associated with poorer academic achievement. The weak negative relationship may also suggest that some students are prioritizing the wrong tasks/non-academic or less critical tasks, hence the need to train students on the use of tools like the Eisenhower Matrix to be able to distinguish between urgent and important tasks, so that more energy is dissipated on activities that improve academic achievement. The finding is consistent with that of Pancho et al. (2026). On the contrary, Iweala and Wodi (2026) and Aixandrescu (2025) both found positive relationship between task prioritization and academic achievement.

Furthermore, result show a weak but significant relationship between time management skills and academic achievement. This entails that students who plan and prioritize Chemistry tasks are more likely to excel than students with poor planning and prioritization skills. This agrees with Khan et al. (2020), Jasudha and Singh (2025), and Cyril (2015) who all found positive significant relationship between time management skills and academic achievement. In contrast, Calonia et al. (2023) and Aufa et al. (2025) reported no significant relationship between time management skills and academic achievement.

Conclusion

Based on the findings of the study, it was concluded that Chemistry achievement in senior secondary schools in Girei LGA is independent of the isolated time management components. Instead, achievement is tied to the adoption of a holistic time management practices.

Recommendations

It was recommended that students be taught how to effectively plan. This involves drafting plans that are academic, flexible, achievable, and realistic. Thus, the paradigm should shift from creating a plan to executing/implementing a plan. Also, training on task prioritization should be provided especially on the use of Eisenhower Matrix, so that competing academic tasks are scheduled according to urgency and importance. This would enable students to focus and expend more energy on the academic activities that matters most. Furthermore, a holistic approach to time management training should be emphasized rather than isolated individual components.



References

- Adamu, M. & Okoronka, A. U. (2025). Correlation between emotional intelligence factors of self-awareness, self-regulation and academic achievement of post-basic students in chemistry in Adamawa state, Nigeria. *Vunoklang Multidisciplinary Journal of Science and Technology*, 13(4), 70-80. <https://doi.org/10.5281/zenodo.17511633>
- Alixandrescu, R. M. (2025). Developing future military leaders: The impact of time management abilities on academic performance. *Revista Academiei Forțelor Terestre*, 30(3), 1-15.
- Alyami, A., Abdulwahed, A., Azhar, A., Binsaddik, A., & Bafaraj, S. M. (2021). Impact of time-management on the student's academic performance: A cross-sectional study. *Creative Education*, 12(3), 471-485. <https://doi.org/10.4236/ce.2021.123033>
- Aufa, N. I., Sri R, A., Fatimah A, S., Fitriyani, A., & Woro, E. B. (2025). The relationship between time management and academic achievement among university students. *KIAN*, 3(2), 85-95. <https://doi.org/10.56359/kian.v3i2.588>
- Busayo, L. (2020). *Correlational research design: types, examples, and methods*. Formplus. <https://www.formpl.us>
- Calonia, J. T., Pagente, D. P., Desierto, D. J. C., Capiro, R. T., Tembrevilla, J. A. P., Guzman, C. A., & Nicor, A. J. S. (2023). Time management and academic achievement: Examining the roles of prioritization, procrastination, and socialization. *International Journal of Innovative Science and Research Technology*, 8(6), 766-775.
- Cyril, S. (2015). Time management and academic achievement of higher secondary students. [Journal details as available in the source copy].
- Federal Government of Nigeria (2013). *National Policy on Education*. Yaba-Lagos: NERDC press.
- Iliya, M., & Ahmed, M. M. (2024). Effect of Jigsaw II cooperative learning strategy on senior secondary schools chemistry students' academic achievement in Adamawa State, Nigeria. *Vunoklang Multidisciplinary Journal of Science and Technology Education*, 12(1), 189-194. <https://doi.org/10.5281/zenodo.10809568>
- Iweala, & Wodi. (2026). Time management strategies for academic performance among students in public universities in Rivers State. *International Journal of Innovative Educational Research*, 14(1), 1-10.
- Jack, G. U., & Ogunleye, D. O. (2024). Improving secondary school students' academic achievement in chemistry using 7Es constructivist instructional strategy. *International Journal of Innovative Social & Science Education Research*, 12(1), 61-83.
- Jasudha, & Singh, J. (2025). Impact of students' time management on academic achievement. *International Journal for Multidisciplinary Research*, 7(3), 1-3.

- Khan, I. A., Zeb, A., Ahmad, S., & Ullah, R. (2020). Relationship between university students time management skills and their academic performance. *Review of Economics and Development Studies*, 5(4), 853-858. <https://doi.org/10.26710/reads.v5i4.900>
- Lourenço, A. A., & Paiva, M. O. A. (2024). Self-regulation in academic success: Exploring the impact of volitional control strategies, time management planning, and procrastination. *International Journal of Changes in Education*, 1(3), 113-122. <https://doi.org/10.47852/bonviewIJCE42022392>
- Lourenço, A., Valente, S., & Paiva, O. (2025). Perceived instrumentality and time management planning as predictors of academic achievement. *Creative Education*, 16, 1270-1292. <https://doi.org/10.4236/ce.2025.169078>
- National Academies of Sciences, Engineering, and Medicine. (2022). *The importance of chemical research to the U.S. economy*. National Academies Press.
- Nwafor, S. C., Odukwe, O. C., Aghamelu, O. S., & Muoneke, N. M. (2024). Chemistry students' cognitive styles and academic achievement in secondary schools in Nigeria. *Journal of Digital Learning and Distance Education*, 3(3), 992-1000.
- OECD. (2023). *PISA 2022 results (Volume I): The state of learning and equity in education*. OECD Publishing. <https://doi.org/10.1787/53f23881-en>
- Pancho, S., Sanday, M. F., Guiadel, A., & Dimasindel, M. (2026). Correlation between task management skills and academic performance: A basis for designing task-based learning intervention in plane and solid geometry. *IJMERE*, 4(2), 443-457.
- Patzak, A., Zhang, X., & Vytasek, J. (2025). Boosting productivity and wellbeing through time management: Evidence-based strategies for higher education and workforce development. *Frontiers in Education*, 10, 1623228. <https://doi.org/10.3389/educ.2025.1623228>
- Shah, A. A., Idris, M., Ahmad, N., Savaira, & Begum, M. (2024). Effects of time management on male students' academic achievement. *Qlantic Journal of Social Sciences and Humanities*, 5(3), 45-52. <https://doi.org/10.55737/qjssh.679001491>
- Shi, Y., & Qu, S. (2022). The effect of cognitive ability on academic achievement: The mediating role of self-discipline and the moderating role of planning. *Frontiers in Psychology*, 13, 1014655. <https://doi.org/10.3389/fpsyg.2022.1014655>
- UNESCO. (2024, December 2). Launch of the International Decade of Sciences for Sustainable Development (2024-2033). <https://www.unesco.org/en/articles/launch-international-decade-sciences-sustainable-development-2024-2033>
- West African Examinations Council. (n.d.). Frequently asked questions. <https://www.waecnigeria.org/faq?page=0>

Wilson, R., Tranter, D., & Devereux, E. (2021). Improving students' performance with time management skills. *Journal of University Teaching & Learning Practice*, 18(4), Article 16.

Yamane, T. (1967). *Statistics: An introductory analysis*, 2nd edition. New York: Harper and Row.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice*, 41(2), 64-70. https://doi.org/10.1207/s15430421tip4102_2

