

Learners' Disposition on the Student Learning Desire and Academic Integrity

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Abstract

This study determined the relationship between learners' dispositions, on the learners learning desire and academic integrity. Specifically, it determined the level of the learners' personal dispositions; intellectual dispositions; learning desire; and the learners' academic integrity. Also, the study investigates whether a learner's disposition has a significant relationship on learner's desire to learn and academic integrity.

This study is a descriptive study that employed a mixed-methods approach, combining both quantitative and qualitative research to determine the relationship between learners' dispositions, the learners' learning desire, and academic integrity. For quantitative, it involved two hundred and ten (210) selected Grade 8 students from Mayuro National High School, Itlutan National High School, and Rosario Integrated National High School and three (3) learners selected for qualitative analysis. Data was collected through a survey questionnaire and an interview guide.

Based on the data presented and interpreted, it revealed that the level of learners' personal disposition was interpreted as "Very Great Extent." As well as the learners' intellectual disposition was evaluated to a "Very Great Extent." Also, the learners' learning desire was "Very Great Extent"; Moreover, the learners' learning integrity was assessed to a "Very Great Extent". The study found a significant relationship between learners' disposition and learning desire, as well as between the learners' disposition and learners learning integrity.

In conclusion, there is a significant relationship between learners' disposition on the learners learning desire, and learning integrity. This study rejected the null hypothesis. This means that learners respond positively to engaging teaching methods like playful styles, short videos, and props and to a positive learning environment with active participation through quizzes, competitions, and recognition.

The researcher recommends that teachers provide attainable challenges to build learners' confidence, incorporate open-ended questions for problem analysis, encourage mistakes and improvement, provide more examples in discussions, and create activities that showcase practice and effort. They may also design lessons that showcase various instructional methods, focus on intellectual skills, and create a fun learning environment. Additionally, teachers should consider understanding how personal disposition interacts with intellectual skills to influence learning desire and integrity. Future researchers should also gain a deeper understanding of how personal disposition influences learning desire and integrity.

Keywords: learners' dispositions; academic integrity; learning desire

1. Introduction

Science is a complex and challenging subject that requires learners to be actively engaged in the learning process. In 2023, Science and Math subject are ranked lowest in the PISA 2018 (OECD, 2019). Many students struggle with Science and achieve low grades and low scores on the tests. This may be due to a number of factors, including lack of interest in science, difficulty of understanding on the subject matter, and negative prior experiences. It is also possible that some students have a negative disposition towards science, which may be contributing to their low performance.

Being interested in the learning area is important to showcase our abilities and strengths. Having a positive attitude can create good and positive outcomes.

Learner's learning dispositions are the personal qualities and attitudes that students bring to the learning process. It is related to students' emotions, feelings, and motivations. Martha Washington said "I have learned from experience that the greater part of our happiness or misery depends on our dispositions and not on our circumstances". With this statement being happy on what we are doing, motivated and optimistic can results good output.

In line with this study, the researcher believed that learners who were open to new ideas and willing to take risks were more likely to engage in science inquiry.

The researcher wanted to determine how disposition of individuals and their desire to learn, as well as learning integrity are interconnected to have a good performance in science. Aside from that, to better understand how learners' attitudes, beliefs, and motivations can influence their academic success.

1.1 Statement of the Problem

Specifically, this study sought to answer the following questions:

1. What is the level of learners' personal disposition in terms of:
 - 1.1. self-efficacy;
 - 1.2. motivation;
 - 1.3. grit;
 - 1.4. conscientiousness; and
 - 1.5. attitudes towards science?
2. What is the level of learners' intellectual disposition terms of:
 - 2.1. metacognition;
 - 2.2. critical-thinking skills;
 - 2.3. creativity;
 - 2.4. curiosity; and
 - 2.5. problem-solving skills?
3. What is the level of student learning desire in terms of:
 - 3.1. academic resistance;
 - 3.2. growth mind-set;
 - 3.3. self-regulation;
 - 3.4. self-reflection;
 - 3.5. learning autonomy?
4. What is the level of learners learning integrity in terms of:
 - 4.1. self-acquisition;
 - 4.2. resilience to change;
 - 4.3. resourcefulness; and
 - 4.4. academic flexibility?
5. Is there a significant relationship between learners' disposition and learners learning desire?
6. Is there a significant relationship between learners' disposition and learners learning integrity?

7. What is the students' disposition they possess towards learning desire and academic integrity?

2. Methodology

Since the study focus on the relationship between learners' disposition on the learners learning desire and learning integrity, the method applied is descriptive. Descriptive method is to describe specific behavior as it happens in the environment, one of this is the personal and intellectual dispositions of the students. This type of research is used to gather information about the current status of phenomena to describe "what exists" in a given situation with respect to variables or education (Librarianship Studies, 2022).

3. Results and Discussion

This chapter presents the findings from the analysis of the data, and discusses the results that were yielded from the treatment of the data that was gathered in this study.

Level of Learners' Personal Disposition

The level of learners' personal disposition includes the following: self-efficacy, motivation, grit, conscientiousness, and attitudes towards science. Each table is composed of the statement, mean, standard deviation and the verbal interpretation of the study.

Level of Learners' Personal Disposition in terms of Self-Efficacy

The table 1 illustrates the level of learners' personal disposition in terms of self-efficacy.

Table 1 *Level of Learners' Personal Disposition in terms of Self-Efficacy*

STATEMENTS	MEAN	SD	REMARKS
<i>I can learn anything I set my mind to.</i>	4.26	0.60	<i>Strongly Agree</i>
<i>I am not afraid to challenge myself.</i>	4.09	0.78	<i>Agree</i>
<i>I can persevere in the face of challenges.</i>	4.23	0.65	<i>Strongly Agree</i>
<i>I can learn from my mistakes.</i>	4.48	0.66	<i>Strongly Agree</i>
<i>I am capable of achieving my goals.</i>	4.51	0.60	<i>Strongly Agree</i>
<i>Weighted Mean</i>	4.30		
<i>SD</i>	0.43		
<i>Verbal Interpretation</i>	<i>Very Great Extent</i>		

The students are strongly agree with their ability to succeed in science, because they are capable of achieving their goals (M=4.51, SD=0.66). On the other hand, some of the students agree that they are capable in facing challenges (M=4.09, SD=0.78).

The weighted mean score of 4.30 and a standard deviation of 0.43 for the level of learners' personal disposition in terms of self-efficacy was interpreted as Very Great Extent. The data shows that students with high self-efficacy are more likely to excel. Self-efficacy has a great contribution in Science, and teachers need to have a positive outlook among the students to conquer challenges in life and encourage them to aim high in achieving their goals.

Level of Learners' Personal Disposition in Terms of Motivation

The table 2 illustrates the level of learners' personal disposition in terms of motivation.

Table 2 *Level of Learners' Personal Disposition in Terms of Motivation*

STATEMENTS	MEAN	SD	REMARKS
<i>I am motivated to learn science because I enjoy it.</i>	4.35	0.58	<i>Strongly Agree</i>

<i>I am motivated to learn science because I want to learn new things about the world around me.</i>	4.55	0.59	Strongly Agree
<i>I am motivated to learn science because I want to learn about the natural world and become more informed about the world around me.</i>	4.56	0.59	Strongly Agree
<i>I am motivated to learn science to develop my critical thinking skills.</i>	4.58	0.59	Strongly Agree
<i>I am motivated to learn science because I want to challenge myself.</i>	4.45	0.68	Strongly Agree
<i>Weighted Mean</i>		4.49	
<i>SD</i>		0.44	
<i>Verbal Interpretation</i>		Very Great Extent	

Based on the learner's response, learners are strongly agree that they are motivated to learn science to develop their critical thinking skills ($M=4.58$, $SD=0.59$). Additionally, the learners they are strongly agree that they are motivated because they enjoyed studying ($M=4.35$, $SD=0.58$). The study shown that student engagement is a strong factor.

The study shown that the level of learners' personal disposition in terms of motivation attained a weighted mean score of 4.49 and a standard deviation of 0.44 and was verbally interpreted as Very Great Extent. The study shows that students are motivated to learn science to develop critical thinking skills, while enjoyment may be a stronger driver of learning.

Level of Learners' Personal Disposition in Terms of Grit

Table 3 Level of Learners' Personal Disposition in Terms of Grit

STATEMENTS	MEAN	SD	REMARKS
<i>I have overcome setbacks to conquer a significant challenge.</i>	4.30	0.59	Strongly Agree
<i>Setbacks don't discourage me.</i>	4.19	0.65	Agree
<i>I have achieved a goal that took years of work.</i>	4.53	0.57	Strongly Agree
<i>I am a hard worker.</i>	4.38	0.69	Strongly Agree
<i>I finish whatever I begin.</i>	4.46	0.58	Strongly Agree
<i>Weighted Mean</i>		4.36	
<i>SD</i>		0.35	
<i>Verbal Interpretation</i>		Very Great Extent	

The level of learners' personal disposition in terms of grit was shown in table 6. Learners are strongly agree that they have the ability to tackle long-term goals ($M=4.53$, $SD=0.57$). On the other hand, learners are agree that setbacks don't discourage them ($M=4.19$, $SD=0.65$).

The level of learners' personal disposition in terms of grit attained a weighted mean score of 4.36 and a standard deviation of 0.35 and was Very Great Extent among the respondents. It shows that learners characteristic for science success, revealing a strong foundation in perseverance and the ability to tackle long-term goals.

Emphasizing setbacks as learning opportunities and celebrating effort can cultivate a more resilient learning environment. Sharing stories as successful scientist and providing challenging tasks with supportive guidance that empower students to achieve their science learning goals.

Level of Learners' Personal Disposition in Terms of Conscientiousness

The table 4 illustrates the level of learners' personal disposition in terms of conscientiousness.

Table 4 *Level of Learners' Personal Disposition in Terms of Conscientiousness*

STATEMENTS	MEAN	SD	REMARKS
<i>I am organized and efficient in my work.</i>	4.19	0.59	Agree
<i>I am careful and detail-oriented.</i>	4.32	0.62	Strongly Agree
<i>I am reliable and trustworthy.</i>	4.39	0.61	Strongly Agree
<i>I am hardworking and persistent.</i>	4.34	0.70	Strongly Agree
<i>I set goals for myself and work to achieve them.</i>	4.41	0.73	Strongly Agree
Weighted Mean		4.31	
SD		0.46	
Verbal Interpretation		Very Great Extent	

The learners strongly agree on setting goals for themselves and work hard to achieve them ($M=4.41$, $SD=0.73$). Some learners agree that being organized and efficient at work may develop their conscientious mind ($M=4.19$, $SD=0.59$).

The level of learners' personal disposition in terms of conscientiousness was interpreted as Very Great Extent and attained a weighted mean score of 4.31 and a standard deviation of 0.46. The study reveals that learners have a strong foundation in hard-work and setting goals to accomplish tasks. However, they need improvement in organization and time management skills. Utilizing strategies like workshops, organizers, and study schedules can support learners in developing strong organizational skills.

Level of Learners' Personal Disposition in Terms of Attitudes Towards Science

The level of learners' personal disposition in terms of attitudes towards science is shown in table 5.

Table 5 *Level of Learners' Personal Disposition in Terms of Attitudes Towards Science*

STATEMENTS	MEAN	SD	REMARKS
<i>Science is something that I enjoy very much.</i>	4.13	0.66	Agree
<i>Doing science labs or hands-on activities is fun.</i>	4.40	0.59	Strongly Agree
<i>I enjoy talking to other people about science.</i>	4.30	0.71	Strongly Agree
<i>Science is useful for solving the problems of everyday life.</i>	4.31	0.77	Strongly Agree
<i>Science helps us understand today's world.</i>	4.54	0.61	Strongly Agree
Weighted Mean		4.33	
SD		0.46	
Verbal Interpretation		Very Great Extent	

The study shows that learners have a positive attitude in Science. Students strongly agree that Science really helps them to understand the world and its surroundings ($M=4.54$, $SD=0.61$). Some are agreed that they enjoy the Science very much ($M=4.13$, $SD=0.59$).

The level of learners' personal disposition in terms of attitude towards science attained a weighted mean score of 4.33 and a standard deviation of 0.46 and was Very Great Extent among the respondents. The study found that science helps students to understand the world, but there is room for improvement in enhancing student enjoyment.

Level of Learners' Intellectual Disposition

The following table shows the level of learners' intellectual disposition in terms of metacognition, critical-thinking skills, creativity, curiosity, and problem-solving skills.

Level of Learners' Intellectual Disposition in Terms of Metacognition

The level of learners' intellectual disposition in terms of metacognition was illustrate in table 6.

Table 6 Level of Learners' Intellectual Disposition in Terms of Metacognition

STATEMENTS	MEAN	SD	REMARKS
<i>I set specific goals before I begin a task.</i>	4.55	0.62	Strongly Agree
<i>I ask myself periodically if I am meeting my goals.</i>	4.52	0.59	Strongly Agree
<i>I am consciously focusing my attention on important information.</i>	4.52	0.65	Strongly Agree
<i>I slow down when I encounter essential information in my research.</i>	4.43	0.63	Strongly Agree
<i>I am aware of what strategies I use when I study.</i>	4.46	0.56	Strongly Agree
Weighted Mean		4.48	
SD		0.42	
Verbal Interpretation		Very Great Extent	

Learners strongly agree on setting specific goal first to succeed in every task ($M=4.55$, $SD=0.62$). On the other hand, learners are strongly agree that they experience slowing down when there are important information needed for research ($M=4.43$, $SD=0.63$).

The level of learners' intellectual disposition in terms of metacognition attained a weighted mean score of 4.48 and a standard deviation of 0.42 and was Very Great Extent among the respondents. These shows a strong foundation in student metacognition. Students are good at setting goals and strategizing their learnings. However, they need more attention to fully retain key information during research tasks.

Level of Learners' Intellectual Disposition in Terms of Critical-Thinking Skills

The level of learners' intellectual disposition in terms of critical-thinking skills was illustrate in table 7.

Table 7 Level of Learners' Intellectual Disposition in Terms of Critical-Thinking Skills

STATEMENTS	MEAN	SD	REMARKS
<i>I can identify and analyze problems.</i>	4.05	0.62	Agree
<i>I can evaluate evidence and conclude.</i>	4.11	0.60	Agree
<i>I can think critically about the information that I am presented with.</i>	4.28	0.64	Strongly Agree
<i>I think critically about the opinions of others.</i>	4.15	0.78	Agree
<i>I can think critically about my own beliefs and values.</i>	4.24	0.69	Strongly Agree
Weighted Mean		4.16	
SD		0.47	
Verbal Interpretation		Great Extent	

Based from the given table, learners strongly agree to they are critical thinkers when it comes on analyzing the information presented to them ($M=4.28$, $SD=0.64$). Meanwhile, learners agree that they can identify and analyze the problems that they encounter ($M=4.05$, $SD=0.62$).

The level of intellectual disposition on the academic performance in Science terms of critical-thinking skills attained a weighted mean score of 4.16 and a standard deviation of 0.47 and was Great Extent among the respondents. This indicates that learners have critical thinking skills in science. However, there is room for improvement in problem-solving skills.

Level of Learners' Intellectual Disposition in Terms of Creativity

The table 8 illustrates the level of learners' intellectual disposition in terms of creativity.

Table 8 Level of Learners' Intellectual Disposition in Terms of Creativity

STATEMENTS	MEAN	SD	REMARKS
<i>I develop new and original ideas in my academic or intellectual work.</i>	4.37	0.65	Strongly Agree
<i>I can come up with new solutions to problems, even when those problems are complex or challenging.</i>	4.41	0.60	Strongly Agree
<i>I can learn from my mistakes and use them as opportunities to grow and develop my intellectual creativity.</i>	4.63	0.56	Strongly Agree
<i>I can think of alternative solutions to a problem.</i>	4.44	0.57	Strongly Agree
<i>In my daily life, I think critically and creatively.</i>	4.32	0.80	Strongly Agree
Weighted Mean		4.43	
SD		0.42	
Verbal Interpretation		Very Great Extent	

The learners are strongly agree that learning from mistakes provides an opportunity to grow and to develop their intellectual creativity ($M=4.63$, $SD=0.56$). It shows that learners positively accept challenges they encounter in life. However, it suggests that learners need encouragement to apply their creative and critical thinking skills to everyday situations ($M=4.32$, $SD=0.80$) yet was remarked strongly agree.

The level of intellectual disposition in terms of creativity attained the weighted mean of 4.43 and standard deviation of 0.42 and was Very Great Extent among the respondents. It revealed that learners foster creativity to this way it will transform them to create a meaningful task and create a positive environment.

Level of Learners' Intellectual Disposition in Terms of Curiosity

Table 9 illustrates the level of learners' intellectual disposition in terms of curiosity.

Table 9 Level of Learners' Intellectual Disposition in Terms of Curiosity

STATEMENTS	MEAN	SD	REMARKS
<i>I have a broad range of interests.</i>	4.26	0.62	Strongly Agree
<i>I am open to fresh viewpoints and thoughts.</i>	4.30	0.61	Strongly Agree
<i>I don't mind pushing my intellectual limits.</i>	3.89	0.63	Agree
<i>I constantly seek out new knowledge and experiences.</i>	4.32	0.73	Strongly Agree
<i>I have a constant need to inquire.</i>	4.17	0.86	Agree
Weighted Mean		4.18	
SD		0.51	
Verbal Interpretation		Great Extent	

The learners are strongly agree that they continually seek opportunities to learn new things while experiencing new experiences ($M=4.32$, $SD=0.73$). On the other hand, learners are agree that they have no problem stretching their intellectual boundaries ($M=3.89$, $SD=0.63$).

The level of learners' intellectual disposition in terms of curiosity attained the weighted mean of 4.18 and standard deviation of 0.51 and was interpreted Great Extent among the respondents. The study reveals that students with a curious mind, particularly those who constantly seek out new knowledge and experiences, are more likely to engage in Science.

Level of Learners' Intellectual Disposition in Terms of Problem-Solving Skills

The level of learners' intellectual disposition in terms of problem-solving skills was illustrated in table 10.

Table 10 *Level of Learners' Intellectual Disposition in Terms of Problem-Solving Skills*

STATEMENTS	MEAN	SD	REMARKS
<i>I think about and assess potential solutions to issues.</i>	4.21	0.75	Strongly Agree
<i>I have the ability to keep an eye on things and change how I solve problems as necessary.</i>	4.19	0.67	Agree
<i>I reflect on my approach to tackling problems and grow from my errors.</i>	4.21	0.83	Strongly Agree
<i>I can collaborate well with others by using my problem-solving abilities.</i>	4.29	0.67	Strongly Agree
<i>I am competent in recognizing and categorizing issues.</i>	4.21	0.70	Strongly Agree
Weighted Mean		4.22	
SD		0.48	
Verbal Interpretation		Very Great Extent	

The table shows that learners are strongly agree that they are using their problem-solving skills to work well with others in collaboration ($M=4.29$, $SD=0.67$). This implies that learners perform very well in collaborative and cooperation. In addition, learners agree that they possess the capacity to monitor situations and modify their approach to problem-solving when needed ($M=4.19$, $SD=0.67$).

In this study, the level of learners' intellectual disposition in terms of problem-solving skills obtained the weighted mean of 4.22 and standard deviation of 0.48 and being interpreted as Very Great Extent. This study indicates a strong basis in students' problem-solving abilities. Students perform very well in collaborative and cooperation, which are essential for success. However, they need to improve their adaptability, as they need to be able to change their approach based on new information or unexpected results.

Demonstrating learning strategies, open-minded and problem-solving will enhance the problem-solving skills of learners. However, they need to focus on critical thinking skills by incorporating open-ended inquiry-based learning, problem-solving activities, and modeling critical thinking, educators can empower students to become well-rounded and effective critical thinkers, fostering a love for science and equipping them with necessary intellectual tools.

Level of Learners' Learning Desire

The following table shows the level of student learning desire in terms of academic resistance, a growth mindset, self-regulation, self-reflection, and learning autonomy.

Level of Learners' Learning Desire in Terms of Academic Resistance

The table 11 illustrates the level of learners' student learning desire in terms of academic resistance.

Table 11 *Level of Learners' Learning Desire in Terms of Academic Resistance*

STATEMENTS	MEAN	SD	REMARKS
<i>Challenges are opportunities to improve and broaden my knowledge of science.</i>	4.52	0.59	Strongly Agree
<i>Connecting between my schoolwork and my desires for the future keeps me inspired and involved in my</i>	4.46	0.62	Strongly Agree

scientific classes.

Despite any perceived limitations, I believe that I can improve my scientific talents with hard effort and determination.

4.22

0.77

Strongly Agree

In science class, I feel free to express my opinions and ask questions, which fosters a supportive and cooperative learning atmosphere.

4.31

0.56

Strongly Agree

Comparing my learning experience in science to others motivates me to learn from different perspectives and pushes me to do better.

4.37

0.54

Strongly Agree

Weighted Mean

4.36

SD

0.39

Verbal Interpretation

Very Great Extent

The learners strongly agreed that challenges provide them opportunities to enhance and broaden learner's scientific knowledge ($M=4.52$, $SD=0.59$). In addition to this, they also strongly agree that through hard work and determination, they may develop their scientific abilities despite any perceived limitations ($M=4.22$, $SD=0.77$).

The level of learners' learning desire in terms of academic resistance attained a weighted mean score of 4.36 and a standard deviation of 0.39 and was Very Great Extent among the respondents. Students view challenges as opportunities for growth and academic resistance, but need to improve self-efficacy. Strategies include highlighting success stories, emphasizing effort, and providing mastery opportunities. Implementing these can empower students to persevere and achieve success in science.

Level of Student Learning Desire in Terms of Growth Mind-Set

Table 12 illustrates the level of student learning desire in terms of growth mind-set.

Table 12 Level of Student Learning Desire in Terms of Growth Mind-Set

STATEMENTS	MEAN	SD	REMARKS
<i>When I don't immediately understand something in science, it's not a sign of my intelligence that I haven't practiced enough.</i>	3.94	1.02	Agree
<i>I like taking on complex science topics because I know that with perseverance and determination, I can learn and get better even if I struggle at first.</i>	4.18	0.74	Agree
<i>When I don't immediately understand something, it's not a sign of my intelligence that I haven't practiced enough.</i>	3.95	0.94	Agree
<i>I'm open to receiving feedback and suggestions from others, even if they differ from my approach because it helps me learn and grow.</i>	4.38	0.68	Strongly Agree
<i>Celebrating the successes of others motivates me to work harder and achieve my own goals.</i>	4.58	0.56	Strongly Agree
<i>Weighted Mean</i>		4.19	
<i>SD</i>		0.53	
<i>Verbal Interpretation</i>		Great Extent	

The learners' strongly agree that the students' enjoyment of others' achievements inspires them to put

in more effort and accomplish their own goals ($M=4.58$, $SD=0.56$). On the other hand, it's not an indication that they haven't practiced science enough when they don't grasp a concept right away. It's not an indication that they haven't practiced science enough when they don't grasp a concept right away.

The level of learners' learning desire in terms of growth mind-set attained a weighted mean score of 4.19 and a standard deviation of 0.53 and was Great Extent among the respondents. The study with a growth-oriented approach and celebrating others' successes will develop their desires to learn Science.

Level of Learners' Learning Desire in Terms of Self-Regulation

Table 13 illustrates the level of learners' learning desire in terms of self-regulation.

Table 13 Level of Learners' Learning Desire in Terms of Self-Regulation

STATEMENTS	MEAN	SD	REMARKS
<i>I can set realistic and achievable goals for myself in Science class.</i>	4.42	0.75	Strongly Agree
<i>I manage my time effectively when completing Science assignments and studying for tests.</i>	4.33	0.66	Strongly Agree
<i>I can stay focused and avoid distractions when working on science tasks, even when they are challenging.</i>	4.41	0.69	Strongly Agree
<i>I monitor my understanding of science concepts and identify areas where I need more time to learn.</i>	4.37	0.63	Strongly Agree
<i>I adjust my study strategies and approaches based on the complexity of the Science material and my own learning needs.</i>	4.51	0.63	Strongly Agree
Weighted Mean		4.39	
SD		0.47	
Verbal Interpretation		Very Great Extent	

The students strongly agree that they can adapt study techniques and methods to own learning needs and the difficulty of science subject ($M=4.51$, $SD=0.63$). On the other hand, learners agree that efficient manage of time to finish science homework and prepare for exams ($M=4.33$, $SD=0.66$).

The level of learners' learning desire in terms of self-regulation attained a weighted mean score of 4.39 and a standard deviation of 0.47 and was Very Great Extent among the respondents. The study shows that learners want to be in charge of their own learning. They're good at changing their study habits for different topics, but managing their time could be better. Teachers can help by running workshops on time management, setting goals, and using tools like calendars and to-do lists. This will give students the skills to take control of their learning and do their best in science.

Level of Learners' Learning Desire in Terms of Self-Reflection

The level of learners' learning desire in terms of self-reflection was illustrate in table 14.

Table 14 Level of Learners' Learning Desire in Terms of Self-Reflection

STATEMENTS	MEAN	SD	REMARKS
<i>After completing an assignment or test, I reflect on my strengths and weaknesses in understanding the material.</i>	4.58	0.53	Strongly Agree
<i>When I encounter a concept in science that I find challenging, I ask myself questions to deepen my understanding and identify areas for improvement.</i>	4.30	0.65	Strongly Agree
<i>I think about different techniques and strategies</i>	4.25	0.67	Strongly Agree

<i>that I could employ to improve my learning outcomes.</i>			
<i>I think about different techniques and strategies that I could employ to improve my learning outcomes.</i>	4.20	0.71	Agree
<i>I think about different techniques and strategies that I could employ to improve my learning outcomes.</i>	4.46	0.57	Strongly Agree
Weighted Mean		4.34	
SD		0.47	
Verbal Interpretation		Very Great Extent	

Learners assess their comprehension of the material by analyzing their strengths and weaknesses after finishing an assignment or test. It yielded the highest mean score ($M=4.58$, $SD=0.53$) and was remarked as Strongly Agree. On the other hand, the learners agree, considering the various techniques and strategies they may use to enhance learning results ($M=4.20$, $SD=0.71$).

Learners assess their comprehension of the material by analyzing their strengths and weaknesses after finishing an assignment or test. It yielded the highest mean score ($M=4.58$, $SD=0.53$) and was remarked as Strongly Agree. On the other hand, the learners agree, considering the various techniques and strategies they may use to enhance learning results ($M=4.20$, $SD=0.71$).

The level of learners' learning desire in terms of self-reflection attained a weighted mean score of 4.34 and a standard deviation of 0.47. It was interpreted to a very great extent. The study shows a strong desire among students to reflect on their learning. Learners identify strengths and weaknesses, a key aspect of self-reflection. However, some struggle to apply reflection strategically.

Level of Learners' Learning Desire in Terms of Learning Autonomy

Table 15 describes the level of learners' learning desire in terms of learning autonomy.

Table 15 Level of Learners' Learning Desire in Terms of Learning Autonomy

STATEMENTS	MEAN	SD	REMARKS
<i>I feel confident setting my learning goals and choosing resources that work for me.</i>	4.46	0.59	Strongly Agree
<i>My learning environment encourages me to try different learning strategies and explore independently.</i>	4.38	0.62	Strongly Agree
<i>When I encounter difficulties learning, I can find solutions and overcome them on my own.</i>	4.25	0.60	Agree
<i>I regularly reflect on my learning progress and adjust my approach as needed.</i>	4.32	0.68	Strongly Agree
<i>I have more control over my learning than situations with strict instructions and guidance.</i>	4.30	0.60	Strongly Agree
Weighted Mean		4.33	
SD		0.44	
Verbal Interpretation		Very Great Extent	

The table shows that learners confident establishing goals for their studies and selecting reliable sources ($M=4.46$, $SD=0.59$). It shows that they are constant in setting their goals in life. Conversely, though learners agree that they face challenges in their studies, they resolve the problems and go beyond to resolve

them on their own ($M=4.25$, $SD=0.60$). With this, it is shown that there is room for improvement in independent problem-solving.

The level of learners' learning desire in terms of learning autonomy attained a weighted mean score of 4.33 and a standard deviation of 0.44, and was interpreted to a Very Great Extent. The study shows a strong desire among students to take charge of their learning.

Level of Learners' Learning Integrity

The following table shows the level of learners' learning integrity in terms of self-acquisition, resilience to change, resourcefulness and academic flexibility.

Level of Learners' Learning Integrity in Terms of Self-Acquisition

The table 16 illustrates the level of learners' learning integrity in terms of self-acquisition.

Table 16 *Level of Learners' Learning Integrity in Terms of Self-Acquisition*

STATEMENTS	MEAN	SD	REMARKS
<i>I actively seek opportunities to learn new skills and knowledge independently.</i>	4.37	0.54	Strongly Agree
<i>I find it easy to stay motivated and dedicated to learning things independently.</i>	4.43	0.60	Strongly Agree
<i>I am confident in finding reliable learning resources and information sources.</i>	4.28	0.74	Strongly Agree
<i>I can overcome challenges and difficulties when learning new things on my own.</i>	4.33	0.60	Strongly Agree
<i>I enjoy the process of self-acquisition and believe it helps me achieve my personal and professional goals.</i>	4.38	0.62	Strongly Agree
Weighted Mean		4.34	
SD		0.45	
Verbal Interpretation		Very Great Extent	

The learners' strongly agree that it is getting easier to maintain their motivation and commitment to learning on their own ($M=4.43$, $SD=0.60$). On the other hand, the learners strongly agreed that they are confident in their ability to find reliable sources of knowledge and information ($M=4.28$, $SD=0.74$).

Based on the table, it obtained the mean score of 4.34 and a standard deviation of 0.45 and was Very Great Extent. This study shows that students are enthusiastic about self-directed learning, they might lack the critical skills to evaluate the credibility of information sources.

Level of Learners' Learning Integrity in Terms of Resilience to Change

The level of learners' learning integrity in terms of resilience to change is illustrated in table 17.

Table 17 *Level of Learners' Learning Integrity in Terms of Resilience to Change*

STATEMENTS	MEAN	SD	REMARKS
<i>When faced with changes in teaching methods or learning materials, I quickly adapt and continue learning effectively.</i>	4.49	0.59	Strongly Agree
<i>I see unexpected shifts in learning as opportunities to grow and broaden my understanding.</i>	4.44	0.58	Strongly Agree
<i>When I struggle to adjust to new approaches, I</i>	4.38	0.72	Strongly Agree

<i>remain motivated and seek strategies to overcome challenges.</i>			
<i>I am comfortable collaborating with different groups, even if adjusting my usual learning style is required.</i>	4.32	0.67	Strongly Agree
<i>Even when learning feels unfamiliar or challenging, I persist and try to find ways to engage with the new material.</i>	4.41	0.61	Strongly Agree
Weighted Mean		4.39	
SD		0.45	
Verbal Interpretation		Very Great Extent	

Learners strongly agree that when they encounter changes in instructional techniques or learning materials, they quickly adapt and continue learning effectively ($M=4.49$, $SD=0.59$). On the other hand, learners strongly agree that when they struggle to adjust to new approaches, the students remain motivated and seek strategies to overcome challenges ($M=4.38$, $SD=0.72$).

The study showed that the level of learners' learning integrity in terms of resilience to change attained weighted mean of 4.39 and standard deviation of 0.45, and interpreted to a very great extent. It revealed that adapting to changes in teaching methods or materials while remaining motivated and seeking strategies to overcome challenges.

Level of Learners' Learning Integrity in Terms of Resourcefulness

The level of learners' learning integrity in terms of resourcefulness was illustrated in table 18.

Table 18 Level of Learners' Learning Integrity in Terms of Resourcefulness

STATEMENTS	MEAN	SD	REMARKS
<i>When I encounter a complex concept, I can think of different ways to learn and understand it beyond what is presented in the textbook or lecture.</i>	4.38	0.56	Strongly Agree
<i>I am comfortable utilizing various resources like online platforms, libraries, or experts to supplement my learning.</i>	4.24	0.77	Strongly Agree
<i>I can adapt my learning materials and tools to fit my individual needs and preferences.</i>	4.39	0.61	Strongly Agree
<i>When facing limited resources or unexpected challenges in science learning, I can find creative solutions to keep moving forward.</i>	4.35	0.67	Strongly Agree
<i>I am open to learning from different people and perspectives, even if their approaches to learning differ from mine.</i>	4.47	0.64	Strongly Agree
Weighted Mean		4.35	
SD		0.44	
Verbal Interpretation		Very Great Extent	

The table shows that learners strongly agree that they should be receptive to learning from a variety of sources and viewpoints, even if their methods of instruction vary ($M=4.47$, $SD=0.64$). In addition, learners strongly agree that they feel at ease using a variety of resources, such as online platforms, libraries, or experts to supplement their learning ($M=4.24$, $SD=0.77$).

The level of learners' learning integrity in terms of resourcefulness attained a weighted mean score of 4.35 and a standard deviation of 0.44, and was very great extent among the respondents. Study shows that the learners are open to learning from different perspectives, even if their approaches differ. They are comfortable using online platforms, libraries, or experts to supplement their learning.

Level of Learners' Learning Integrity in Terms of Academic Flexibility

The Table 19 illustrates the level of learners' learning integrity in terms of academic flexibility.

Table 19 *Level of Learners' Learning Integrity in Terms of Academic Flexibility*

STATEMENTS	MEAN	SD	REMARKS
<i>I am comfortable adjusting my study schedule and learning pace in science based on my understanding and workload.</i>	4.30	0.60	Strongly Agree
<i>Depending on the topic or my personal needs, I can easily switch between different learning strategies (e.g., visual, auditory, kinesthetic).</i>	4.20	0.68	Agree
<i>I am open to trying new learning approaches or technologies suggested by teachers, even if they differ from my usual methods.</i>	4.45	0.57	Strongly Agree
<i>I can effectively adapt and continue learning when faced with unexpected changes.</i>	4.28	0.80	Strongly Agree
<i>I am confident in modifying my learning goals or expectations, when necessary, based on feedback or individual challenges.</i>	4.44	0.62	Strongly Agree
Weighted Mean		4.32	
SD		0.47	
Verbal Interpretation		Very Great Extent	

Based on the table, learners strongly agree that they are open to trying new learning approaches or technologies suggested by teachers, even if they differ from usual methods ($M=4.45$, $SD=0.57$). Moreover, learners strongly agree that they effortlessly shift between various learning strategies (e.g., visual, auditory, and kinesthetic) based on the subject matter or individual needs ($M=4.20$, $SD=0.68$).

The study shows that the level of learners' learning integrity in terms of academic flexibility attained the weighted mean of 4.32, and a standard deviation of 0.47, was interpreted to a very great extent. This shows that learners are open trying new technologies and are able to switch between different learning strategies based on topic or personal needs.

Significant Relationship Between Learners' Disposition and Learners' Learning Desire

The following table reveal the relationship of the learners' disposition to the learners learning desire and learners learning integrity, showing the p-value, strength of relationship, and analysis.

Table 20 presents the significant relationship between the learners' disposition and learners learning desire.

Table 20 *Significant Relationship Between Learners' Disposition and Learners' Learning Desire*

Learners Personal Disposition	Learners Learning Desire
	Academic Resistance
	Growth Mindset
	Self-regulation
	Self-reflection
	Learning Autonomy

<i>Self-efficacy</i>	Pearson Correlation	0.237	0.425	0.379	0.442	0.476
	Sig. (2-tailed)	0.034	0.000	0.001	0.141	0.358
	N	344	344	344	344	344
	Strength	Weak	Moderate	Weak	Moderate	Moderate
	Analysis	Significant	Significant	Significant	Not Significant	Not Significant
<i>Motivation</i>	Pearson Correlation	0.381	0.29	0.418	0.547	0.471
	Sig. (2-tailed)	0.000	0.000	0.001	0.000	0.000
	N	344	344	344	344	344
	Strength	Weak	Weak	Weak	Moderate	Moderate
	Analysis	Significant	Significant	Significant	Significant	Significant
<i>Grit</i>	Pearson Correlation	0.395	0.324	0.415	0.411	0.428
	Sig. (2-tailed)	0.008	0.000	0.000	0.07	0.265
	N	344	344	344	344	344
	Strength	Weak	Weak	Moderate	Moderate	Moderate
	Analysis	Significant	Significant	Significant	Not Significant	Not Significant
<i>Conscientiousness</i>	Pearson Correlation	0.43	0.332	0.386	0.49	0.381
	Sig. (2-tailed)	0.008	0.000	0.000	0.07	0.265
	N	344	344	344	344	344
	Strength	Moderate	Weak	Weak	Moderate	Weak
	Analysis	Significant	Significant	Significant	Not Significant	Not Significant
<i>Attitudes towards science</i>	Pearson Correlation	0.409	0.27	0.346	0.356	0.192
	Sig. (2-tailed)	0.148	0.000	0.021	0.568	0.985
	N	344	344	344	344	344
	Strength	Moderate	Weak	Weak	Weak	Very Weak
	Analysis	Not Significant	Significant	Significant	Not Significant	Not Significant
Learners Intellectual Disposition						
<i>Metacognition</i>	Pearson Correlation	0.446	0.317	0.377	0.467	0.359
	Sig. (2-tailed)	0.000	0.000	0.001	0.000	0.000
	N	344	344	344	344	344
	Strength	Moderate	Weak	Weak	Moderate	Weak
	Analysis	Significant	Significant	Significant	Significant	Significant
<i>Critical</i>	Pearson Correlation	0.495	0.486	0.394	0.328	0.381

<i>Thinking</i>	Sig. (2-tailed)	0.000	0.206	0.000	0.000	0.000
	N	344	344	344	344	344
	Strength	Moderate	Moderate	Weak	Weak	Weak
	Analysis	Significant	Not Significant	Significant	Significant	Significant
<i>Creativity</i>	Pearson Correlation	0.384	0.426	0.3	0.436	0.179
	Sig. (2-tailed)	0.008	0.000	0.229	0.000	0.000
	N	344	344	344	344	344
	Strength	Weak	Moderate	Weak	Moderate	Very Weak
<i>Curiosity</i>	Analysis	Significant	Significant	Not Significant	Significant	Significant
	Pearson Correlation	0.527	0.634	0.396	0.323	0.286
	Sig. (2-tailed)	0.000	0.558	0.000	0.000	0.000
	N	344	344	344	344	344
<i>Problem-solving skills</i>	Strength	Moderate	Strong	Weak	Weak	Weak
	Analysis	Significant	Not Significant	Significant	Significant	Significant
	Pearson Correlation	0.478	0.325	0.371	0.247	0.177
	Sig. (2-tailed)	0.000	0.392	0.000	0.000	0.000
	N	344	344	344	344	344
	Strength	Moderate	Weak	Weak	Weak	Very Weak
	Analysis	Significant	Not Significant	Significant	Significant	Significant

The self-efficacy, motivation, grit, and conscientiousness of learners' personal dispositions, except for attitudes towards science and metacognition, critical-thinking skills, creativity, curiosity, and problem-solving skills of learners' intellectual dispositions, were observed to have a significant relationship to the academic resistance of learners learning desire. This is based on the computed *r* values obtained from the tests. Furthermore, the *p*-values obtained were less than the significance level of alpha 0.05, hence there is significance. This means learners with these positive dispositions are less likely to resist learning.

The learners' personal disposition and intellectual disposition except for Critical Thinking, Curiosity, and Problem-solving skills was observed to have significant relationship to the Growth Mind-set of learners learning desire. This is based on the computed *r* values obtained from the tests. Furthermore, the *p*-values obtained were less than the significance alpha 0.05, hence there is a *significance*.

The learners' disposition except creativity was observed to have significant relationship to the self-regulation of learners learning desire. Creativity obtained a *p*-value of 0.229, hence there is no significance. Furthermore, the other variables of learners' personal and intellectual obtained *p*-values that is less than the significance level of 0.05, hence there is a significance.

While the learners' disposition except for Self-efficacy, Grit, Conscientiousness, and Attitudes towards science was observed to have significant relationship to the Self-reflection and Learning Autonomy

of learners learning desire. Self-efficacy, Grit, Conscientiousness, and Attitudes towards science obtained p-values greater than the alpha level of significance 0.05, so that there is no significance. This is based on the computed r values obtained from the tests. Furthermore, the p-values obtained were less than the significance alpha 0.05, hence there is a significance.

The results of the study obviously show a significant relationship between learners' dispositions and their learning desire. Positive intellectual and personal traits are associated with higher levels of motivation, growth mindset, self-regulation, reflection, and autonomy in learners.

Significant Relationship Between Learners' Disposition and Learners Learning Integrity

The significant relationship between the learners' disposition and learners learning integrity were presented in table 24.

The learners' personal disposition except for self-efficacy, grit, and conscientiousness, attitudes towards science was observed to have significant relationship to the self-acquisition of learners' learning integrity.

Moreover, all indicators of a learner's intellectual disposition such as motivation, critical thinking, creativity, curiosity, and problem-solving skills have a *significant relationship* to self-acquisition. These skills greatly contribute to a learner's ability to independently acquire knowledge and skills and to be self-directed learners. This is based on the computed r values obtained from the tests. Furthermore, the p-values obtained were less than the significance alpha 0.05, hence there is a significance.

In addition, the learners' personal disposition and intellectual disposition except for creativity was observed to have *significant relationship* to the resilience to change of learners learning integrity. This is based on the computed r values obtained from the tests. Furthermore, the p-values obtained were less than the significance alpha 0.05, hence there is a significance.

Table 21 Significant Relationship Between Learners' Disposition and Learners Learning Integrity

Learners Personal Disposition		Learning Integrity			
		Self-Acquisition	Resilience to change	Resourcefulness	Academic Flexibility
<i>Self-efficacy</i>	Pearson Correlation	0.478	0.405	0.514	0.599
	Sig. (2-tailed)	0.123	0.000	0.057	0.575
	N	344	344	344	344
	Strength	<i>Moderate</i>	<i>Moderate</i>	<i>Moderate</i>	<i>Moderate</i>
	Analysis	<i>Not Significant</i>	<i>Significant</i>	<i>Not Significant</i>	<i>Not Significant</i>
<i>Motivation</i>	Pearson Correlation	0.579	0.451	0.539	0.365
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	344	344	344	344
	Strength	<i>Moderate</i>	<i>Moderate</i>	<i>Moderate</i>	Weak
	Analysis	<i>Significant</i>	<i>Significant</i>	<i>Significant</i>	<i>Significant</i>
<i>Grit</i>	Pearson Correlation	0.367	0.504	0.46	0.352

<i>Conscientiousness</i>	Sig. (2-tailed)	0.083	0.000	0.031	0.482
	N	344	344	344	344
	Strength	<i>Weak</i>	<i>Moderate</i>	<i>Moderate</i>	<i>Weak</i>
			<i>e</i>	<i>e</i>	
	Analysis	<i>Not Significant</i>	<i>Significant</i>	<i>Significant</i>	<i>Not Significant</i>
	Pearson Correlation	0.432	0.486	0.511	0.336
	Sig. (2-tailed)	0.083	0.000	0.031	0.482
	N	344	344	344	344
	Strength	<i>Moderate</i>	<i>Moderate</i>	<i>Moderate</i>	<i>Weak</i>
			<i>e</i>	<i>e</i>	
<i>Attitudes towards science</i>	Analysis	<i>Not Significant</i>	<i>Significant</i>	<i>Significant</i>	<i>Not Significant</i>
	Pearson Correlation	0.23	0.317	0.359	0.071
	Sig. (2-tailed)	0.598	0.018	0.413	0.786
	N	344	344	344	344
	Strength	<i>Weak</i>	<i>Weak</i>	<i>Weak</i>	<i>Very Weak</i>
	Analysis	<i>Not Significant</i>	<i>Significant</i>	<i>Not Significant</i>	<i>Not Significant</i>
	Pearson Correlation	0.464	0.523	0.491	0.369
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	344	344	344	344
	Strength	<i>Moderate</i>	<i>Moderate</i>	<i>Moderate</i>	<i>Weak</i>
<i>Critical Thinking</i>			<i>e</i>	<i>e</i>	
	Analysis	<i>Significant</i>	<i>Significant</i>	<i>Significant</i>	<i>Significant</i>
	Pearson Correlation	0.372	0.533	0.476	0.326
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	344	344	344	344
	Strength	<i>Weak</i>	<i>Moderate</i>	<i>Moderate</i>	<i>Weak</i>
			<i>e</i>	<i>e</i>	
	Analysis	<i>Significant</i>	<i>Significant</i>	<i>Significant</i>	<i>Significant</i>
	Pearson Correlation	0.273	0.182	0.302	0.282
	Sig. (2-tailed)	0.003	0.268	0.004	0.000
<i>Creativity</i>	N	344	344	344	344
	Strength	<i>Weak</i>	<i>Very Weak</i>	<i>Weak</i>	<i>Weak</i>

	Analysis	Significa nt	Not Significa nt	Significa nt	Signific ant
<i>Curiosity</i>	Pearson	0.217	0.273	0.44	0.381
	Correlation				
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	344	344	344	344
	Strength	Weak	Weak	Moderat e	Weak
<i>Problem-solving skills</i>	Analysis	Significa nt	Significa nt	Significa nt	Signific ant
	Pearson	0.225	0.543	0.458	0.168
	Correlation				
	Sig. (2-tailed)	0.000	0.000	0.000	0.003
	N	344	344	344	344
	Strength	Weak	Moderat e	Moderat e	Very Weak
	Analysis	Significa nt	Significa nt	Significa nt	Signific ant

The learners' personal disposition except self-efficacy, attitudes towards science for was observed to have *significant relationship* to the resourcefulness of learners learning integrity. This is based on the computed r values obtained from the tests. Furthermore, the p-values obtained were less than the significance alpha 0.05, hence there is a significance.

4. Conclusion and Recommendations

On the basis of the foregoing findings, the following conclusions were drawn,

From the findings, we can infer that there is a significant relationship between the learners' disposition and learners learning desire. The null hypothesis is rejected, this means that students have a strong desire for learning when it's presented in an engaging and enjoyable.

Also, there is significant relationship between learners' learning disposition and learners' learning integrity. The null hypothesis is rejected. This means that a strong learning disposition can positively contribute to learners' overall approach to learning and academic success.

Based on the findings, the study resulted the following recommendations.

1. Teachers may provide attainable challenges or tasks that help build the learners' confidence.
2. Teachers may incorporate open-ended questions that require learners to identify and analyze problems to develop critical thinking and problem-solving skills.
3. Teachers may encourage students to analyze their mistakes and identify areas for improvement.

Reference:

- Librarianship Studies. (2022, October 10). Descriptive research. <https://www.librarianshipstudies.com/2022/10/descriptive-research.html>
- OECD (2019), PISA 2018 Results (Volume I): What Students Know and Can Do, PISA, OECD Publishing, Paris, retrieved from <https://doi.org/10.1787/5f07c754-en>.
- Gimbel, P. (2022). On Sabbatical: A Backward Glance. <https://core.ac.uk/download/518020824.pdf>