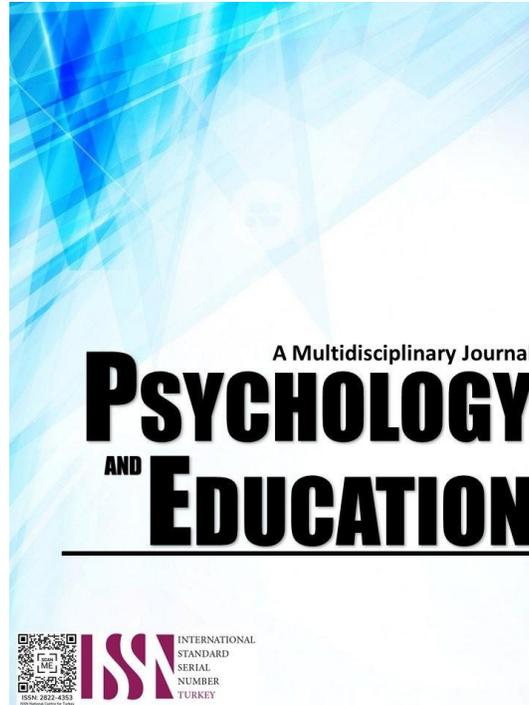


# SELF-DIRECTED LEARNING AND ITS IMPACT ON STUDENTS' ATTITUDE TOWARDS LEARNING



**PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL**

Volume: 47

Issue 1

Pages: 24-31

Document ID: 2025PEMJ4538

DOI: 10.70838/pemj.470102

Manuscript Accepted: 07-24-2025

## Self-Directed Learning and its Impact on Students' Attitude towards Learning

Mary Grace O. Maranguis,\* Ariel A. Asparin  
For affiliations and correspondence, see the last page.

### Abstract

The study aimed to assess the level of self-directed learning in terms of self-reflexivity, collaboration, and engagement. It also ascertained the level of students' attitudes towards learning in terms of communication and active listening. This study was conducted in Quezon, Bukidnon. The study's respondents were the Hundred Forty-nine (149) STE grade 7 students in Quezon Bukidnon Comprehensive National High School, Division of Bukidnon, during the School Year 2024-2025. Furthermore, it determined whether there was a significant association between the level of self-directed learning and students' attitudes towards learning. The results demonstrated a high level of self-directed learning regarding self-reflection, collaboration, and involvement. The study also found a high level of engagement in students' attitudes towards learning, particularly in the areas of communication and active listening. The findings show a considerable relationship between the amount of self-directed learning and students' attitudes toward learning, implying that as one improves, so does the other. The results show that self-directed learners have a more positive attitude toward learning, particularly in the areas of communication and active listening. As a result, the null hypothesis, which predicted no significant association between these factors, was rejected. These findings emphasize the necessity of developing self-directed learning skills to improve students' general attitudes and involvement in the learning process. These findings suggest that teachers can be trained to identify and implement specific interventions or instructional strategies that promote students' self-directed learning, particularly self-reflexivity, collaboration, and engagement.

**Keywords:** *self-directed learning, self-reflexive, collaboration, engagement, communication, active listening, attitude toward learning*

### Introduction

Recent research has focused on traditional teaching methods, which typically emphasize teacher-centered approaches and are increasingly supplemented by strategies that promote self-directed learning. Self-directed learning (SDL) (Mareco, 2018). Individuals who use Self-Directed Learning (SDL) take the initiative to assess their learning needs, create goals, find resources, and track their progress. This instructional technique aims to assist pupils in building lifelong learning capacities, critical thinking skills, and motivation. Furthermore, self-directed learners are often better at setting realistic and attainable goals, which leads to a greater sense of accomplishment. This cyclical process of establishing and achieving goals increases their self-efficacy, an essential component of a positive learning attitude. When students see tangible evidence of their accomplishments, it boosts their confidence in their abilities, generating a love of learning and a motivation to tackle new challenges (Lyman, 2018).

Despite the well-established benefits of self-directed learning, there has been little research on how Self-Directed Learning (SDL) affects students' attitudes toward learning. While some studies have indicated that Self-Directed Learning (SDL) can boost academic achievement and engagement, few have examined how it affects students' perspectives, motivations, and general attitudes (Garrison, 2017). Understanding this relationship is critical since students' views can significantly influence their learning outcomes and motivation to pursue education (Benzon, 2018).

Garrison's previous study (2018) did not assess self-directed learning, which substantially impacted students' attitudes toward learning. According to Garrison's (2018) research, students participating in SDL may have a more positive perspective towards their educational experiences. The result is their increased autonomy and empowerment in leading their learning processes, allowing individuals to pursue hobbies and passions rather than simply following a prescribed curriculum (Lyman, 2018).

This study aims to assess the impact of self-directed learning on students' attitudes toward learning. By analyzing various attitude characteristics, such as motivation, self-efficacy, and curiosity, we will demonstrate how promoting self-directed learning can enhance students' learning experiences. We will use a mixed-methods approach to understand this dynamic better, collecting quantitative and qualitative data. Finally, the study's findings may help educators and policymakers recognize the need to include self-directed learning strategies within the curriculum to create positive attitudes toward lifelong learning.

### Research Questions

This study examined the effects of self-directed learning on students' attitudes toward learning. Specifically, this study aimed to answer the following questions:

1. What is the level of self-directed learning regarding self-reflexive, collaboration, and engagement?
2. What is the student's attitude toward learning regarding communication and active listening?
3. Is there a significant relationship between the level of self-directed learning and students' attitudes towards learning?

## Methodology

### Research Design

This study followed a descriptive-correlational research design. It investigated the impact of self-directed learning on students' attitudes toward learning and assessed students' attitudes toward learning in terms of communication and active listening. The researcher chose this study strategy because it is an effective technique for learning about the characteristics of a population or group and the relationships between its various components. It enables the researcher to describe variables in great detail and study their correlations without implying that one variable caused another.

### Respondents

The study's respondents were the Hundred Forty-nine (149) STE grade 7 students in Quezon Bukidnon Comprehensive National High School, Division of Bukidnon, during the School Year 2024-2025. There are three hundred twenty-nine grade 7 students in the school. However, only one hundred forty-nine (149) Grade 7 STE sections are the chosen respondents of the study, which may provide insights and feedback on the level of self-directedness and the level of students' attitudes towards learning.

Complete Enumeration was employed in this study. Researchers may prefer complete enumeration when looking for deep and thorough insights because it allows data to be obtained from each individual without sampling bias. This method is beneficial when the population is under control, ensuring high precision and reliability of results. Furthermore, detailed enumeration is invaluable when the research context is rapidly changing or the researcher is interested in a specific subgroup within the population, as it enables the collection of all pertinent data points. However, it needs significant resources, including time and money, which researchers must carefully consider. Finally, the decision to use comprehensive enumeration displays a commitment to generating detailed and precise findings, particularly in industries where accuracy is crucial.

### Instrument

This study used an adapted questionnaire from Knox (2018). The instrument has two parts: it is all about the effects of self-directed learning on students' attitudes toward learning. The first part concerns the level of self-directed learning, specifically in terms of self-reflection, collaboration, and engagement. The second part concerns students' attitudes toward learning regarding communication and active listening. Each part of the questionnaire comprises five questions, using five Likert scales to assess the effects of self-directed learning on students' attitudes towards learning.

### Procedure

The Bukidnon Schools Division Superintendent received a formal request to transmit the research instrument to schools, as Valencia Colleges Inc.'s Dean of the School of Graduate and Professional Studies advised. Once the School Division Superintendent has consented, the researcher will send communication letters to the District Supervisors. Following all necessary discussions and clearances, the STE grade 7 students will individually complete the questionnaires. Participants must submit the questionnaire at the designated time and location within the school. The researcher will maintain the confidentiality of the respondents' responses, as they are not compelled to divulge their identities and have not been asked to do so. The questionnaires will be collected on the same day. The questionnaire data were accurately recognized, organized, and summarized. The researcher compiled data from completed questionnaires. Data interpretation and analysis helped produce recommendations, conclusions, and discoveries. The researcher assures the respondents' anonymity by ensuring their personal information and data are kept secret and not released to any third party without their consent. The researcher treats the respondents with respect and integrity, ensuring their rights and welfare are protected throughout the research process.

### Data Analysis

The following statistical tools were applied to analyze and interpret the data of this study:

Mean and standard deviation were used to determine the level of self-directed learning regarding self-reflexive, collaboration, and engagement.

Mean and standard deviation were used to determine students' attitudes toward learning regarding communication and active listening.

Pearson's *r* Correlation was utilized to determine the significant relationship between the effects of self-directed learning and students' attitudes towards learning.

## Results and Discussion

This section presents, analyzes, and interprets data gathered from the respondents. It covers the level of self-directed learning in terms of self-reflexive, collaborative, and engaged. It also includes the student's attitude toward learning regarding communication and active listening. The test of a significant relationship between the level of self-directed learning and student attitude toward learning is also included.



Table 1 shows the level of self-directed learning in terms of self-reflexive. It also shows the indicators, mean, standard deviation, and interpretations.

Table 1. *Level of Self-directed Learning in Terms of Self-reflexive*

<i>Indicator</i>	<i>Mean</i>	<i>SD</i>	<i>Interpretation</i>
The students do their best to excel academically and seek a positive outcome.	4.05	0.938	Involved
The students focus on positive things and maintain good grades.	3.70	0.891	Involved
The student achieves the goals that he set for himself.	3.60	0.938	Involved
The students employ a healthy perspective so that the research students can pass all the subjects.	3.48	0.914	Involved
The student uses her time wisely and puts enough effort into her studies.	3.39	0.952	Moderately Involved
<b>Overall</b>	<b>3.65</b>	<b>0.652</b>	<b>Involved</b>

**Legend:** 5 (4.20–5.00) – Very High, Greatly Involved; 4 (3.40–4.19) – High, Involved; 3 (2.60–3.39) – Moderately High, Moderately Involved; 2 (1.80–2.59) – Low, Less Involved; 1 (1.00–1.79) – Very Low, Not Involved.

Table 1 assesses the extent of self-directed learning regarding self-reflexivity using five indicators. The signal "I am doing my best to excel academically and look for a positive outcome" has the highest mean, with a mean of 4.05 and SD of 0.938, indicating that respondents are very involved in exerting their best efforts to achieve academic excellence and focus on positive results. The result suggests that the responders are firmly committed to educational success and have a proactive mindset.

On the other side, the signal "I use my time wisely and put enough effort into my studies," with a mean of 3.39 and an SD of 0.952, has the lowest mean, indicating modest involvement. The results suggest that, while respondents demonstrate effective time management and effort, there is still potential for improvement in optimizing these techniques for their studies. The overall mean for self-directed learning regarding self-reflexivity is 3.65, SD = 0.652, which is read as "Involved." The result shows that responders generally engage in self-reflexive behaviors that help them learn independently.

Research has demonstrated that reflecting activities improve self-directed learning (SDL) competencies. Tekkol and Demiral (2018) investigated the effects of several reflective activities on SDL competencies among university students in Japanese second language classes. These practices included cooperation, self-reflection, and peer feedback. Their research showed that these reflective activities considerably improved SDL capabilities, with collaboration emerging as the most critical component.

Similarly, Rashid and Asghar (2018) looked into the function of technology-mediated collaborative learning (TMCL) as a reflective practice for developing SDL competencies in preservice teachers. Their findings demonstrated that TMCL had a significant impact on increasing SDL abilities, suggesting that combining technology and collaborative learning can effectively enhance self-directed learning. Suknaisith (2020) investigated postgraduate students' SDL preparedness through mobile learning platforms and reflective practices. The study found that reflective practices helped students monitor and improve their SDL readiness at various stages of the learning process.

Table 2 presents the level of self-directed learning in terms of collaboration, which was evaluated through various indicators, each with its respective mean and standard deviation (SD).

Table 2. *Level of Self-directed Learning in Terms of Collaboration*

<i>Indicator</i>	<i>Mean</i>	<i>SD</i>	<i>Interpretation</i>
The students listen to their classmates during discussions and get an idea.	3.81	1.061	Involved
The students value teamwork and solving challenges.	3.79	0.935	Involved
The students feel good working in a team environment.	3.68	1.013	Involved
The students connect values with their classmates.	3.56	0.949	Involved
The students understand what kind of team environment suits them best.	3.54	0.965	Involved
<b>Overall</b>	<b>3.68</b>	<b>0.593</b>	<b>Involved</b>

**Legend:** 5 (4.20–5.00) – Very High, Greatly Involved; 4 (3.40–4.19) – High, Involved; 3 (2.60–3.39) – Moderately High, Moderately Involved; 2 (1.80–2.59) – Low, Less Involved; 1 (1.00–1.79) – Very Low, Not Involved.

Table 2 presents the level of self-directed learning regarding collaboration, as represented by five metrics. The indicator "I listen to my classmates during discussion and get an idea" has the highest mean of 3.81 and SD of 1.061, showing that respondents actively listen to and gain insights from their peers during talks. The result indicates a strong desire to participate in collaborative learning and benefit from peer relationships.

Conversely, the signal "I understand what kind of team environment suits me best" has the lowest mean, with a mean of 3.54 and an SD of 0.965, although it is still perceived as being involved. This finding shows that, while respondents recognize the necessity of knowing appropriate team environments, they may vary in their ability to identify or adjust to optimal team situations. The total mean for self-directed learning in terms of collaboration is 3.68, and the SD is 0.593, which can be translated as involved. The results suggest that respondents value and actively participate in collaborative techniques, such as cooperation, listening, and connecting with peers.

Oddi (2019) discovered a substantial relationship between students' SDL preparedness and social interactions in online learning environments, implying that collaborative involvement improves self-directed learning ability. Similarly, Manning (2020) observed

that self-directed learning goals and student cooperation benefit online learning performance, emphasizing the relevance of collaborative efforts in developing effective self-directed learning opportunities.

Merriam (2019) found that collaboration is a key facilitator of self-directed learning among undergraduate students, with teamwork and peer interactions playing a significant role in their ability to manage their learning. Furthermore, Malison (2018) found that collaborative procedures, such as questioning, co-construction, and idea sharing, were prevalent during problem-based learning sessions in Malaysian secondary school chemistry lectures, encouraging students to learn independently.

Table 3 presents the level of self-directed learning in terms of engagement, which was evaluated through various indicators, each with its respective mean and standard deviation (SD).

**Table 3. Level of Self-directed Learning in Terms of Engagement**

Indicator	Mean	SD	Interpretation
The students respect others' opinions when engaging them so that students can add some ideas.	4.21	0.841	Greatly Involved
The students maintain a good environment when communicating.	3.64	1.018	Involved
The students actively participate in class activities so that students may have good grades.	3.61	0.966	Involved
The students offer their knowledge to their classmates.	3.50	1.008	Involved
The students mostly asked their teacher for help understanding their lesson.	3.39	1.162	Moderately Involved
<b>Overall</b>	<b>3.67</b>	<b>0.605</b>	<b>Involved</b>

*Legend: 5 (4.20–5.00) – Very High, Greatly Involved; 4 (3.40–4.19) – High, Involved; 3 (2.60–3.39) – Moderately High, Moderately Involved; 2 (1.80–2.59) – Low, Less Involved; 1 (1.00–1.79) – Very Low, Not Involved.*

Table 3 displays the level of self-directed learning in terms of engagement, as shown by five metrics. The signal "I respect others' opinions when engaging them so that I can add some ideas" has the most significant meaning, which is read as "Greatly Involved." The result implies that respondents value respect for others' opinions, which promotes meaningful participation and idea-sharing in collaborative environments. Conversely, the indicator "I mostly ask my teacher for help if I do not understand my lesson" has the lowest mean, which is translated as "Moderately Involved." The results suggest that, while respondents seek support from their teachers when necessary, there is a moderate level of dependency, indicating that self-reliance and problem-solving skills should be further improved.

The overall mean for self-directed learning in terms of engagement is 3.67 with a standard deviation of 0.605, read as "Involved." The result demonstrates that responders generally participate well in activities, respect others' viewpoints, and share their knowledge with their peers.

Morrow (2019) investigated the role of pleasant emotions and autonomy support in learning environments, concluding that SDL situations promote greater student involvement and collaboration than teacher-directed settings. Similarly, Lyman (2018) investigated the association between SDL readiness and social engagement in online learning environments, suggesting that higher SDL readiness correlates with increased peer interaction and mutual regard. Furthermore, Khiat (2021) explored the factors that impact SDL behavior among higher vocational students in Guangdong, China, using a blended learning approach. His findings demonstrated that a supportive organizational climate and a culture of information sharing dramatically boost SDL behaviors, increasing student engagement and collaboration.

**Table 4. Level of Students' Attitude Toward Learning in Terms of Communication**

Indicator	Mean	SD	Interpretation
When communicating, the teacher encourages feedback and questions to ensure mutual understanding.	3.72	0.955	Involved
The students communicate to strengthen understanding and achieve goals.	3.72	0.878	Involved
The students use positive communication to understand their lesson.	3.65	0.968	Involved
When the students initiate discussions of something vital to them and want to make an impact, they invite others to explain their viewpoint.	3.39	0.908	Moderately Involved
The students keep communication confidential when requested.	3.39	0.922	Moderately Involved
<b>Overall</b>	<b>3.57</b>	<b>0.672</b>	<b>Involved</b>

*Legend: 5 (4.20–5.00) – Very High, Greatly Involved; 4 (3.40–4.19) – High, Involved; 3 (2.60–3.39) – Moderately High, Moderately Involved; 2 (1.80–2.59) – Low, Less Involved; 1 (1.00–1.79) – Very Low, Not Involved.*

Table 4 shows students' attitudes toward learning regarding communication, which is assessed using five indicators. The markers "When communicating, the teacher encourages feedback and questions to ensure mutual understanding" with a mean of 3.72 and SD of 0.955, and "I communicate to strengthen understanding and achieve goals" with a mean of 3.72 and SD of 0.878 had the highest means, which are evaluated as "Involved." These findings suggest that students prioritize developing mutual understanding and effective communication to achieve their learning goals.

In contrast, the indicators "When I initiate discussions of something important to me and want to make sure it makes an impact, I invite the other person to explain their viewpoint" with a mean of 3.39, and SD of 0.908 and "I keep communication confidential when requested" with a mean of 3.39, and SD of 0.922 have the lowest means, interpreted as "Moderately Involved." The result means that



while students understand the value of inclusive conversations and secrecy, these characteristics are underemphasized in their communication habits.

The overall mean for students' attitude toward learning in terms of communication is 3.57, with an SD of 0.672, read as "Involved." The result demonstrates that students communicate effectively to improve knowledge and attain learning objectives. However, the comparatively low scores for initiating discussions and keeping confidentiality indicate areas where students should improve their communication skills to provide a more comprehensive approach to successful learning. Effective communication is crucial for enhancing students' attitudes toward learning and achieving educational objectives.

Several studies have confirmed this link. Knox (2018) evaluated the impact of communicative language teaching on Yemeni students' attitudes toward English learning. The findings suggested that students participating in communicative activities had more positive attitudes and motivation, implying that successful communication tactics might significantly impact learners' perspectives and engagement.

Similarly, Litster's (2019) research examined the significance of collaborative learning and communication in enhancing students' attitudes toward learning English as a foreign language. The study discovered that including collaborative communication tasks resulted in better student attitudes and higher achievement levels. These findings support the idea that effective communication in the learning environment improves understanding and favorably influences students' attitudes toward their educational experiences.

Table 5 presents the students' attitude toward learning in terms of active listening, which was evaluated through various indicators, each with its respective mean and standard deviation (SD).

Table 5. *Level of Students' Attitude Towards Learning in Terms of Active Listening*

Indicator	Mean	SD	Interpretation
The students show respect when listening to their teacher.	4.38	0.834	Greatly Involved
When someone says something, the students listen carefully and understand their situation.	3.94	0.860	Involved
The students listen fully and affirm that they understand what the lesson has said.	3.64	0.903	Involved
When the students listen carefully to their teacher's words, they can predict their conclusion.	3.57	0.926	Involved
The students listen carefully without any interruption.	3.14	0.928	Moderately Involved
Overall	3.74	0.623	Involved

Legend: 5 (4.20–5.00) – Very High, Greatly Involved; 4 (3.40–4.19) – High, Involved; 3 (2.60–3.39) – Moderately High, Moderately Involved; 2 (1.80–2.59) – Low, Less Involved; 1 (1.00–1.79) – Very Low, Not Involved.

Table 5 shows how students' attitude toward learning in terms of active listening is assessed using five indicators. The signal "I show respect when listening to my teacher" has the most excellent mean with a mean of 4.38 and SD of 0.834, which is translated as "Greatly Involved." The result suggests that students place a high value on exhibiting respect while listening, which helps to foster a healthy and courteous learning environment. Conversely, the indicator "I listen carefully without interruption" has the lowest mean, which is read as "Moderately Involved." The result shows that pupils occasionally struggle to listen carefully without interrupting, indicating a potential area for growth in developing patience and focus during talks or sessions.

The overall mean for students' attitude toward learning in terms of active listening is 3.74 with a standard deviation of 0.623, read as "Involved." The result demonstrates that children generally engage in active listening, which includes understanding and predicting outcomes. However, the difference between the top and lowest indicators implies that, while students value respect in listening, placing more emphasis on maintaining unbroken focus may improve their active listening skills, thereby boosting their learning results.

Several 2020 studies indicate the value of active listening in improving student engagement and learning results. Manning (2020) launched the "Bridging the Gap" program to teach college students how to listen to opposing viewpoints and engage in conversations across various racial, religious, cultural, and political divides. The program includes retreats and virtual sessions where students practice active listening, feedback, and handling difficult conversations. Participants reported substantial personal development and increased receptivity to different points of view, highlighting the importance of active listening in building involvement and understanding.

Suknaisith's (2020) research also reveals that college campuses are well-positioned to facilitate civil conversation and bridge societal differences. Hicks highlights that young people arrive at college at a critical juncture in their development, frequently transitioning from homogeneous neighborhoods to more varied campuses. The abilities adolescents learn in working across differences, such as active listening, can have long-term implications for their capacity to interact productively in diverse settings.

Table 6 presents the significant relationship between the level of self-directed learning and the student's attitude toward learning. This relationship was evaluated through various indicators, each with an r-value and p-value.

Table 6 demonstrates a substantial association between the level of self-directed learning and the level of students' attitude toward learning, yielding notable results. The measure Self-Reflexive has a significant positive connection r of .702 and p-value of .000, indicating that when students demonstrate more self-reflective activities, their attitudes toward learning improve. Similarly, a



correlation of 0.559 and a p-value of 0.000 indicate a significant positive relationship, suggesting that collaborative efforts are favorably associated with good learning attitudes, albeit to a lesser extent than other factors. The variable engagement, with a r of .736 and p-value of .000, shows a strong and significant positive association, indicating that pupils who are more involved develop stronger attitudes about learning.

Table 6. *Test of Significant Relationship Between the Level of Self-directed Learning and the Level of Students' Attitude Towards Learning.*

<i>Variable</i>	<i>R</i>	<i>p-value</i>	<i>Interpretation</i>
Self-Reflexive	.702	.000	Significant
Collaboration	.559	.000	Significant
Engagement	.736	.000	Significant
Overall	.813	.000	Significant

The overall relationship, with an r of .813 and a p-value of .000, indicates a robust and significant positive correlation between self-directed learning and students' attitudes toward learning. The results imply that a comprehensive improvement in self-directed learning practices has a positive influence on students' overall attitude toward learning. These findings suggest that self-directed learning components have a significant impact on students' attitudes, particularly in terms of engagement and self-reflexive activities. Encouraging and strengthening these areas can substantially benefit how students approach and value their educational experiences. Thus, the null hypothesis is rejected.

Several studies have investigated the relationship between self-directed learning (SDL) and students' attitudes toward learning, with results indicating a significant positive correlation between these constructs. Rashid, T., and Asghar (2018) explored the relationship between self-directed learning, self-efficacy, and academic motivation among public senior high school students in the Philippines. Higher levels of self-directed learning were associated with higher academic motivation, indicating a favorable impact on students' attitudes toward education. Tekkol and Demiral (2018) investigated the association between self-directed learning and problem-solving abilities in nursing students, considering the mediation roles of academic self-efficacy and self-regulated learning. Their research found that increased self-directed learning is connected with higher problem-solving skills, with academic self-efficacy and self-regulated learning as major mediators. These findings suggest that encouraging self-directed learning can result in more positive learning attitudes and outcomes as students gain confidence and initiative in regulating their educational experiences.

## Conclusions

The following conclusions were derived from the results of the study:

The findings show that participants have a high level of self-directed learning across various dimensions. Participants revealed a high level of self-reflexivity, indicating they are adept at judging their learning processes and development. Furthermore, their well-developed cooperation skills indicate a remarkable ability to collaborate successfully with others to improve learning outcomes. Furthermore, the high level of engagement means that participants are actively involved and driven in their educational activities.

The findings also reveal that students have a generally favorable attitude toward learning, particularly in communication and active listening. Their good communication skills indicate that they can express ideas and participate in meaningful debates, whilst their active listening skills demonstrate attentiveness and a desire to hear and absorb information. This high Degree of involvement in both communication and active listening demonstrates a proactive and motivated approach to learning, which enhances their entire learning experience.

The findings show a substantial relationship between the amount of self-directed learning and students' attitudes toward learning, implying that as one improves, so does the other. The result means that Self-directed learners have a more positive learning attitude, especially in areas such as communication and active listening. As a result, the null hypothesis, which predicted no significant association between these factors, was rejected. These findings emphasize the necessity of developing self-directed learning skills to improve students' general attitudes and involvement in the learning process.

Based on the conclusions of the study, the following are recommended:

Self-directed Enhancement Teachers may receive training to examine specific interventions or instructional practices that can enhance students' self-directed learning, particularly in areas such as self-reflexivity, collaboration, and engagement.

School administrators may maintain and strengthen students' positive attitudes toward learning by developing programs that encourage good communication and active listening skills. School administrators could involve faculty in training on student-centered teaching methods, incorporating interactive learning activities, and establishing mentorship programs that promote open dialogue and critical thinking. Administrators may also perform regular assessments to monitor and improve these initiatives, guaranteeing their ongoing success in creating a conducive learning environment.

Curriculum planners may incorporate activities that enhance self-directed learning skills, such as problem-based learning, reflection exercises, and collaborative projects. These exercises may help students improve their self-reflection, teamwork, and involvement, all

of which are linked to positive attitudes toward learning.

## References

- Brookfield, (2018). *Understanding and Facilitating Adult Learning*. Jossey Bass Publishers, San Francisco, California
- Bolhuis, (2018). *Towards Active and Self-directed Learning. Preparing for Lifelong Learning, concerning Dutch Secondary Education*. Paper presented at the Annual Meeting of the American Educational Research Association
- Dawson, (2020). The Collaborative lecture annotation system (CLAS) uses technology to encourage self-directed learning.
- Devi, (2019). Comparison of self-directed learning readiness among students experiencing hybrid and traditional curriculum. *Journal of Clinical and Diagnostic Research*.6. 1047–1050.
- Many, (1996). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology*, 41(1), 417-440. doi:10.1146/annurev.psych.41.1.417
- Eyyam, & Yaratan, (2018). Impact of use of technology in mathematics lessons on student achievement and attitudes. *Social Behavior and Personality: An International Journal*, 42(1), 31-42.
- Garrison, (2018). Developing self-directed learning readiness of future leaders in a military college through instructional innovation, *International Journal of Self-Directed Learning*, 3(1), 24–35.
- Leal, (2018). Engineering students and their learning of mathematics. In the Current state of research on mathematical beliefs XVII. *Proceedings of the MAVI-17 conference* (pp. 85–96)
- Hamidi, (2018). Information technology in education. *Procedia Computer Science*, 3, 369-373.
- Hiemstra, (2018). *Reframing the meaning of self-directed learning: An updated model* (Vol. 45, pp. 155–161). New York: Saratoga Spring
- Guthrie, (2018). The effect of self-directed learning readiness on achievement comparing face-to-face and two-way distance learning instruction. *International Journal of Instructional Media*, 32, 143–155.
- Morrow, (2019). Self-directed learning in pre-vocational secondary education: An analysis of difficulties and success factors in workplace simulations. In *Computer-Supported Collaborative Learning Conference, CSCL*.
- Lyman, (2018). The Impact of Self-directed Learning Strategies on Reading Comprehension, *International Journal of Scientific & Engineering Research*, 3(7).
- Khiat, (2021). Academic performance and the practice of self-directed learning: The adult student perspective. *Journal of Further and Higher Education*, 9486(October), 1–16.
- Knox, (2018). Self-directed learning: a guide for learners and teachers. *Self-directed Learning: A Guide for Learners and Teachers*. p.18
- Litster, (2019). *Breaking Barriers: Research Report*. Long H.B. (2007). *Skills for self-directed learning*.
- Lounsbury, J. W., Steel, R. P., Loveland, J. M., & Gibson, L. W. (2018). An investigation of personality traits about adolescent school absenteeism. *Journal of Youth and Adolescence*, 33(5), 457–466.
- Malison, (2018). An exploratory study of self-directed learning: the differences between it and non-IT employees in Thailand. *Journal of Entrepreneurship Education*, 21(3), 1–16.
- Mareco, (2018). *10 Reasons Today's Students NEED Technology in the Classroom*.
- Merriam, (2019). An investigation of the construct validity of the personality trait of self-directed learning. *Learning and Individual Differences*, 19, 411–418. Lounsbury, J. W., Steel,
- Manning, (2020). Latent Class Analysis of Students' Mathematics Learning Strategies and the Relationship between Learning Strategy and Mathematical Literacy. *Universal Journal of Educational Research*, 3(6), 390–395.
- Oddi, (2019). *The new division of labor. How computers are creating the next job market*. New York, NY: Russell Sage Foundation.
- Skager, (1979). Academic performance and the practice of self-directed learning: The adult student perspective. *Journal of Further and Higher Education*, 41(1).
- Tekkol and Demiral, (2018). Relationship between Student's Self-Directed Learning Readiness and Academic Self-Efficacy and Achievement Motivation in Students. *International Education Studies*, 10(1),
- Suknaisith, (2020). The results of self-directed learning for project evaluation skills of undergraduate students. *Procedia-Social and*



*Behavioral Sciences*, 116, 1676–1682-797

Rashid, T. & Asghar, (2018). Technology use, self-directed learning, student engagement, and academic performance: Examining the interrelations. *Computers in Human Behavior*, 63, 604–612.

Taylor, (2018). Self-Directed Learning: Revisiting an Idea Most Appropriate for Middle School Students. Paper presented at the Combined Meeting of the Great Lakes and Southeast International Reading Association, Nashville, TN, Nov 11-15. [ED 395 287

### **Affiliations and Corresponding Information**

**Mary Grace O. Maranguis**

Quezon Bukidnon Comprehensive National High School  
Department of Education – Philippines

**Ariel A. Asparin, PhD.**

Valencia Colleges (Bukidnon), Inc. – Philippines