

Learning Styles-Based Upgrading Skills Training Guide in TLE- Household Services

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Abstract:

This study explores the influence of learning styles on academic performance in the context of household services education. The research investigates the diverse learning preferences of students and their potential implications for classroom learning and performance. The study involves both learner and teacher respondents, gathering data through surveys and assessments to determine the relationship between learning styles and class performance. The findings reveal that individuals possess unique ways of processing new information, impacting their learning experiences. However, the statistical analysis shows no significant correlation between classroom learning styles and class performance, indicating that academic success is influenced by multiple factors beyond learning styles. The study also identifies best practices employed by teachers in teaching household services, including active listening, teamwork, structured procedures, and peer tutoring. These practices showcase the dedication of educators in creating engaging and inclusive learning environments. The abstract emphasizes the importance of adopting a holistic approach to education, considering various factors such as motivation, engagement, and external influences. It calls for continuous research and collaboration among educators, policymakers, parents, and students to create supportive educational ecosystems that nurture individual potential. Ultimately, the study envisions a future where education is transformative, empowering students to become lifelong learners and active contributors to society.

Keywords: learning styles, academic performance, household services education, classroom learning, best practices

Introduction

Academic performance in school is influenced by various factors, and one significant determinant is a student's learning style. Learning styles refer to an individual's preferred method of processing new information for efficient learning. Each student's learning process is unique, shaped by their backgrounds, strengths, weaknesses, interests, motivation levels, and study methods (Felder & Brent, 2018).

Understanding students' learning behaviors and styles is crucial in the educational process, as it allows educators to tailor their teaching methods accordingly. In recent literature, learning styles have become a popular topic, with several theories proposed to better comprehend the dynamic process of learning.

Republic Act No. 10533, also known as the Enhanced Basic Education Act of 2013, brought significant reforms to the Philippine education system. One of its key features was the addition of two more years to the basic education, resulting in the establishment of the country's first senior high school in 2018. This new program aimed to provide specialized upper secondary education, preparing students for college, work, or business and enabling them to explore their desired fields (Department of Education, Philippines).

Given the diverse social settings within classrooms, students with different learning styles may face challenges when their preferences do not align with their teachers' modes of instruction. This can lead to poor test performance, changes in courses, or even dropping out of school (Felder & Brent, 2018).

This study aims to explore the learning styles of students enrolled in Technology and Livelihood Education (TLE) programs in identified public secondary schools. By analyzing learning styles in this context, the research seeks to identify strategies that could potentially improve students' academic performance in the subject matter.

Literature Review

Academic performance is influenced by various factors, one of which is a student's learning style. Learning styles refer to the cognitive, affective, and psychological behaviors that indicate how individuals perceive, interact with, and respond to the learning environment (Felder & Brent, 2018; Cassidy, 2019). Every learner possesses unique characteristics related to how they comprehend and process new information, leading to preferences for different learning modes.

Education is an organized and systematic effort to promote learning, providing conditions and activities for knowledge acquisition and behavioral change (Sphorer, 2011). Recognizing and understanding students' learning behaviors and styles have become essential aspects of education, as it allows educators to tailor their teaching methods effectively and create a conducive learning environment.

Linda Wong's categorization of learning styles identifies three main types: visual, auditory, and kinesthetic (Wong, 2017). Visual learners prefer seeing information through images, charts, diagrams, and visual aids, while auditory learners excel in obtaining information through hearing and have strong language skills. Kinesthetic learners, on the other hand, learn best through hands-on activities and full-body movement.

Skinner's Behavior Management Theory emphasizes the significance of changing the environment to modify and influence student behavior effectively (Malley, 2018). He advocated for the use of reinforcement (rewards) rather than punishments to shape behavior and improve educational experiences.

The Enhanced Basic Education Act of 2013 in the Philippines brought significant reforms to the educational system, including the establishment of the country's first senior high school program (Department of Education, Philippines). This new program aimed to provide specialized upper secondary education, preparing students for future pursuits in college, work, or business.

Dunn and Dunn proposed a model that identifies five major stimulus strands influencing learning preferences: environmental, emotional, sociological, physical, and psychological factors (Dunn, 2018). The model also considers preferences for tasks and activities, such as listening, reading-writing, touch, and practical doing.

Numerous studies have explored the relationship between learning styles and academic performance. Students with multiple learning styles tend to perform better and achieve higher scores compared to those relying solely on one style (Abidin et al., 2016). Understanding and accommodating individual learning preferences can lead to more effective learning experiences, improved retention, and academic success (Coffield et al., 2019).

Recognizing students' diverse learning styles and preferences is crucial for educators to create inclusive and effective learning environments (Alavi & Toozandehjani, 2017). By aligning teaching methods with students' learning styles, teachers can enhance engagement and promote better academic outcomes.

Learning styles play a significant role in determining students' academic performance. Each individual possesses unique learning preferences that influence how they acquire, process, and retain information. Understanding these preferences can lead to more effective teaching strategies, improved student engagement, and ultimately better academic achievements. Educators must continue to explore and implement research-based approaches to address the diverse needs of their students and foster a culture of success in the classroom.

Methodology

This part contains the research methodology which include the method used, the flow of the study, research locale, research respondents, research instruments, data gathering procedures, statistical treatment of data, scoring procedures and definition of terms.

Design

The researcher made use of the descriptive-correlational method of research in determining the dominant learning style and performance of students in TLE class in the said research locale.

Research Respondents

The respondents of the study were the 5 teachers and 100 students in the identified public secondary school of Talisay City, Cebu and Tabok, Mandaue City. The respondents were chosen through the use of non-random purposive sampling. The inclusion criteria are as follows: a] that they were teachers of the identified public secondary school of Cebu that they have been teaching Technology and Livelihood Education (TLE) in the said research locale c] that they were willing to participate and cooperate in the said undertaking.

The learners who served as respondents of the study are all Grade 10 learners. Hence, we are using simple random sampling for the learners.

Table 1 shows the distribution of respondents.

Table 1
Distribution of Respondents

School	Teachers	Learners	Distribution	
			f	%
Tapul National High School	2	50		
Tabok National High School	3	50		
Total	5	100		

Instruments

The first part of the questionnaire determined the profile of the teachers and learners including age and gender.

This study also utilized a standardized classroom learning style tool developed by Andrew D. Cohen, Rebecca L. Oxford, and Julie C. Chi (Mikk e al., 2009). There are 30 questions based on actual and imagined classroom experience. Each statement is answerable by strongly disagree (1), disagree (2), neutral (3), agree (4) and strongly agree (5). The scores of these groupings were added. The style with the highest score is the classroom learning style of the learners.

The third questionnaire was the level of academic performance of the learners. The 3rd quarter grades of the learners based on printed modules will be used to measure their class performance in TLE.

Data Gathering Procedures

The researcher followed a step-by-step process in the gathering of data.

First, the researcher made a letter addressed to the Schools Division Superintendent of Talisay City and Schools Division Superintendent of Mandaue City for approval of the conduct of the study. After the letter was approved, the researcher personally distributes the questionnaire to the learners. The researcher was asking to sign a waiver form before answering the questionnaire proper. The respondents are given ample time preferably 20 minutes to answer the questionnaire.

Data was collected and subjected to further presentation, analysis, and interpretation of data.

A final draft was submitted for finalization and corrections.

Statistical Treatment of Data

The answers of the respondents were subjected to statistical treatment with the use of the different non-parametric measures:

Simple Percentage. This statistical treatment that used to determine the relevant information taken from learners' age and gender.

Weighted Mean. This statistical treatment that used to determine the dominant learning style and performance of students in TLE class.

Chi-Square. This determined the relationship between learners dominant learning style and level of academic performance.

Pearson R. This determined the relationship between the learners' dominant learning style and level of academic performance.

Table 2: The following are the parametric limits of the study.

Weight	Range	Response Category	Verbal Description
5	4.21 - 5.00	Strongly Agree	this means that the respondents always show the learning style
4	3.41 – 4.20	Agree	this means that the respondents very often show the learning style
3	2.61 – 3.40	Neutral	this means that the respondents sometimes show the learning style
2	1.81 – 2.60	Disagree	this means that the respondents seldom show the learning style
1	1.00 -1.80	Strongly Disagree	this means that the teacher never shows the learning style

Table 3: Rubrics for academic performance of the Learner.

Competency	Descriptor	Grading Scale	f	%	Total
1. Prepare Dining area - List down step by step procedures in dining area preparation. - Demonstrate the correct procedure in table setting and furniture arrangement	Outstanding	13-15			
	Very Satisfactory	10-12			
	Satisfactory	8-9			
	Fairly Satisfactory	7 below			
2. How to Set – up table - Lay out different types of table cloth. - Set – up table appointments according to standards - Demonstrate basic napkin folding - Design a creative table centerpiece.	Outstanding	13-15			
	Very Satisfactory	10-12			
	Satisfactory	8-9			
	Fairly Satisfactory	7 below			

Level of Performance of the Learners

The table presents the level of performance of the learners in Household Services in TLE in the research locale.

Table 4
Level of Performance of the Learners

Competency	Variable	Frequency (n=100)	Percentage (100%)
Prepare Dining area • List down step by step procedures in dining area preparation. • Demonstrate the correct procedure in table setting and furniture arrangement How to Set – up table • Lay out different types of table cloth. • Set – up table appointments according to standards • Demonstrate basic napkin folding • Design a creative table centerpiece.	Level of Performance		
	Advance	23	23
	Proficient	65	65
	Approaching Proficiency	12	12
	Total	100	100

In relations to the performance of the learners, majority of them are in the proficient level with 65 or 65%. It is followed by the learners who are under the advance level with 23 (23%) of them. Learners who are considered as approaching proficiency come in last with 12 or 12% of the entire count of learner-respondents. The findings suggest that most of them have average performance in Household Services in the researcher locale.

Learning style has an important place in the lives of individuals. When the individual knows his/her learning style, s/he will integrate it in the process of learning so s/he will learn more easily and fast and will be successful. Another advantage of the identification of the own learning style by the student is that it will help the student to become an effective problem solver. The more successful the individual is at solving the problems s/he faces, the more control s/he will take over his/her own life. It is important that individuals receive education in areas suitable for their learning styles. A person educated in an area having no relationship to his/her learning style may lack confidence and s/he may be less successful; s/he may as a result become frustrated (Biggs, 2021).

Modular learning helps to keep students up and running with a chance to study for themselves. In furniture and cabinet making, however the key challenge facing modular education is how to offer practical lessons. Since most of the subjects are functional, online/modular learning is therefore not easy. Students believe that only with the current normal education system is it difficult to achieve the furniture and cabinet making competencies. By making it more interactive, modern normal education can be enhanced, showing procedures in real situations, giving concise information, and providing 3D virtual tools to mimic the real situation.

The results of the study indicate that the majority of learners in the Household Services program are performing at a proficient level (65%), followed by those at an advance level (23%), and a smaller percentage of learners are approaching proficiency (12%). This suggests that most of the learners in the researcher's locale have average performance in Household Services. The study also highlights the importance of understanding individual learning styles in the educational process.

Learning style plays a crucial role in how individuals process and retain information. When students are aware of their learning style, they can integrate it into their learning process, enabling them to grasp concepts more easily and achieve success. Moreover, knowing one's learning style helps in becoming an effective problem solver, as students can tailor their approaches to suit their strengths. This empowerment in problem-solving can lead to greater control over one's life and build confidence.

The study suggests that education should cater to individual learning styles to maximize the learning potential of students. When students are educated in areas that align with their learning preferences, they are more likely to feel confident and be successful in their studies. On the other hand, education that does not consider individual learning styles may lead to feelings of frustration and lack of confidence in students, hindering their overall academic performance.

In the context of furniture and cabinet making, the study points out a challenge in providing practical lessons through modular or online learning methods. Since these subjects require hands-on experience, traditional face-to-face instruction may be more effective. However, the study suggests that modern education can enhance the learning experience by making it more interactive, providing real-life scenarios, concise information, and utilizing 3D virtual tools to simulate real situations.

Understanding and accommodating individual learning styles are crucial for promoting effective learning experiences and academic success. By tailoring educational approaches to suit learners' preferences, educators can foster a culture of engagement and confidence in students. While modular and online learning present challenges in certain fields, utilizing interactive and virtual tools can enhance the learning process and bridge the gap between traditional and modern educational methods. By continuously exploring innovative approaches, educators can create inclusive and dynamic learning environments that cater to the diverse needs of their students.

Testing Of Relationship between Classroom Learning Style and Level of Performance of Learners

Table 5 present the results of the testing of relationship between classroom learning style and level of class performance among learner-respondents.

Table 5
Classroom Learning Style and Class Performance

	p-value	Decision	Interpretation
Classroom Learning Style and Class Performance	0.078	Failed to reject Ho	Significant

@ 0.05 level of significance

The testing of relationship between the classroom learning style and class performance among learner-respondents resulted in no correlation given the computed p value of 0.078 tested at 0.05 level

of significance. This means that classroom learning style of the learners is significantly related to their class performance.

The preferred method for a person to process new knowledge for successful learning is referred to as their learning style. Learning styles are concerned with how learners learn rather than what they learn. The learning process differs for each child; even within the same educational setting, learning does not occur at the same level or quality for all students. According to research, people in the learning process take different approaches, and no single method or technique can provide ideal learning conditions for everyone. This may be linked to the diverse backgrounds, abilities, limitations, interests, goals, motivation levels, and research approaches of students. Educators should become more conscious of these varied approaches in order to enhance undergraduate education. Learning styles can be helpful in helping students and teachers understand how to strengthen the way they learn and teach (Tomruk, 2018).

Students' learning styles are influenced by environmental, emotional, and cognitive factors in addition to their prior experiences. The learning style focuses on how students learn rather than what they learn. Finally, understanding the various learning style preferences of students admitted to the program can help to create more productive learning experiences. According to Alavi and Toozaandehjani (2017), students' learning styles will improve their learning. Similarly, students' understanding of their learning style can improve their academic performance. Therefore the academic success of students is a guide to the quality of learning experiences in any school setting, whether primary, secondary or tertiary institutions. Academic success is measured in terms of the remarkable grades of students across their subjects. This can be measured by formative and summative assessment.

Based on the researcher's study, there seems to be a direct connection of the classroom learning style of the learners in the following: visual; auditory; and tactile/bodily kinesthetic when tested for relationship with the class performance of the learner-respondents. This means that the learners' class performance under the first 4 class activities for the third grading period affect their classroom learning style.

The results of the study indicate that there is no significant correlation between the classroom learning style and class performance among the learner-respondents. The computed p-value of 0.078, tested at a significance level of 0.05, suggests that the classroom learning style of the learners is not significantly related to their class performance.

Learning styles refer to how individuals prefer to process and acquire new knowledge, focusing on the method of learning rather than the content itself. People have diverse backgrounds, abilities, interests, and motivations, leading to different approaches to learning. Educators need to be aware of these individual differences to improve the overall undergraduate education experience, as no single teaching strategy can cater to the needs of all students (Tomruk, 2018).

Students' learning styles are influenced by various factors, including environmental, emotional, and cognitive aspects. Understanding these preferences is crucial for creating more productive learning experiences. Research has shown that aligning teaching methods with students' learning styles can improve their academic performance (Alavi & Toozaandehjani, 2017).

In this study, the classroom learning styles tested included visual, auditory, and tactile/bodily kinesthetic preferences. However, the findings do not show a direct connection between these learning styles and class performance for the learner-respondents. This means that how the learners

prefer to learn in the classroom does not significantly impact their overall class performance in the specific activities analyzed during the third grading period.

The study's results imply that other factors, such as study habits, motivation, engagement, and outside influences, may have a more significant influence on the learners' class performance. While understanding learning styles is essential for tailoring instructional approaches, it is not the sole determinant of academic success. Teachers and educators need to consider a holistic approach to support students' academic achievements, incorporating a variety of teaching strategies and addressing individual needs.

It is important to note that this study's findings are limited to the specific context and learner-respondents involved. The relationship between learning styles and academic performance may vary depending on the subjects, teaching methods, and the students' diverse characteristics in different settings. Further research and exploration in a broader range of educational contexts would be valuable to gain a more comprehensive understanding of the relationship between learning styles and academic performance.

While learning styles are crucial considerations in education, the study's results show that they may not directly correlate with class performance in this specific context. Educators should continue to explore and implement a variety of instructional strategies to address the individual needs of their students and foster a positive and conducive learning environment. By considering a holistic approach to education, teachers can support students in achieving their academic goals and reaching their full potential.

Best Practices

Table 6 present the best practices in teaching household services among teacher-respondents.

Table 6
Best Practices

Best Practices	Rank
They listen to the procedure and worked as a team.	1
They followed the step-by-step procedure in setting up the table.	2
They are one of the mediums of teaching to their classmates. Peer tutoring.	3

We all have a way in which we best learn. Odds are, every student in your class has a different preferred learning style, which can make it difficult for you to be the most effective teacher. However, by trying to incorporate various methods into your teaching, you may be able to reach the majority of your students.

Many teaching strategies work for any classroom, no matter what the age of the students or the subject. When a teacher implements a combination of effective teaching strategies, their students have more opportunities to perform better in class (Dean, 2019).

Table 6 presents the best practices in teaching household services as identified by the teacher-respondents. The top three best practices are as follows:

1. Listening to the Procedure and Working as a Team: The teacher-respondents ranked this practice as the most effective. By actively listening to the procedure, students can better understand the steps

involved in household services. Additionally, working as a team fosters collaboration and cooperation among students, allowing them to support and learn from each other.

2. Following the Step-by-Step Procedure in Setting up the Table: This practice ranked second in effectiveness. Following a structured and systematic approach helps students develop a clear understanding of the process involved in setting up a table for household services. This step-by-step method can enhance their learning and retention of the skills required.

3. Peer Tutoring: Peer tutoring was ranked as the third best practice. In this approach, students take on the role of tutors, assisting their classmates in understanding and mastering household services concepts. Peer tutoring not only reinforces the learning of the tutor but also benefits the tutee by receiving personalized support and explanations from their peers.

The diverse learning styles of students present a challenge for teachers to cater to individual needs effectively. However, incorporating various teaching strategies can help reach the majority of students and enhance their learning experiences. While every student has a preferred learning style, it is essential for educators to employ a combination of effective teaching methods to accommodate the different preferences and needs of their students (Dean, 2019).

Implementing a variety of teaching strategies creates a dynamic and engaging learning environment. Some effective teaching strategies that work well in any classroom setting include:

1. Differentiated Instruction: Tailoring instruction to meet individual students' learning styles and abilities. This involves offering various learning materials, activities, and assessments to accommodate diverse learners.

2. Active Learning: Engaging students in activities that require their active participation, such as discussions, debates, hands-on projects, and group work. Active learning encourages students to think critically and apply their knowledge.

3. Visual Aids: Using visual aids such as charts, diagrams, videos, and slideshows to enhance understanding and retention of information. Visual aids appeal to visual learners and provide a clearer representation of concepts.

4. Cooperative Learning: Encouraging students to work in groups to solve problems or complete tasks collaboratively. Cooperative learning fosters teamwork, communication, and social skills.

5. Technology Integration: Utilizing technology in the classroom, such as interactive whiteboards, educational apps, and online resources, to enhance teaching and engage tech-savvy students.

6. Formative Assessment: Using ongoing assessments, such as quizzes, discussions, and feedback, to monitor students' progress and provide timely support and intervention.

7. Socratic Questioning: Encouraging critical thinking by asking thought-provoking questions that challenge students to analyze and evaluate information.

8. Real-Life Application: Relating classroom concepts to real-life scenarios and examples to make learning more relevant and meaningful.

By incorporating a combination of these best practices and effective teaching strategies, teachers can create a dynamic and inclusive learning environment that caters to the diverse needs of their students.

Being flexible and adaptable in their approach will enable educators to connect with and engage their students more effectively, leading to improved learning outcomes and overall student performance.

Conclusion

In conclusion, this study delved into the fascinating realm of learning styles and their impact on academic performance, particularly in the context of household services education. The findings shed light on the diverse learning preferences of students and their potential implications for classroom learning and performance.

The investigation of learning styles revealed that individuals possess unique ways of processing new information, and these preferences can significantly influence their learning experiences. However, the study also demonstrated that the relationship between classroom learning styles and class performance among the learner-respondents was not statistically significant. This highlights the complexity of academic success, which is influenced by a myriad of factors beyond learning styles.

The best practices identified by the teacher-respondents in teaching household services exemplify the dedication and innovation of educators striving to meet the diverse needs of their students. Incorporating active listening, teamwork, structured procedures, and peer tutoring exemplifies the commitment to fostering engaging and inclusive learning environments. These practices demonstrate the importance of employing a variety of teaching strategies to cater to the diverse learning styles present in every classroom.

While learning styles are undeniably essential considerations in education, the study's results emphasize the need for a holistic approach to teaching and learning. Acknowledging and respecting individual differences in learning styles is crucial, but equally important is recognizing the multifaceted nature of academic achievement. Factors such as study habits, motivation, engagement, and external influences also play pivotal roles in shaping students' performance.

Educators are encouraged to continue exploring and adopting best practices that optimize student learning experiences. The dynamic interplay of differentiated instruction, active learning, technology integration, and real-life applications can create a dynamic and engaging classroom atmosphere. Embracing a growth mindset, teachers should remain flexible and adaptable, continuously seeking innovative approaches to inspire and empower their students.

Moreover, this study underscores the importance of continuous research and inquiry in the field of education. Learning is an ever-evolving process, and understanding how students best acquire knowledge is vital for educational advancement. Future studies could explore the influence of learning styles across different academic subjects, grade levels, and cultural contexts to paint a comprehensive picture of the intricate relationship between learning styles and academic performance.

In the pursuit of academic excellence, collaboration among educators, policymakers, parents, and students is imperative. By working together, we can build robust and supportive educational ecosystems that foster a love for learning, celebrate diversity, and nurture the potential of every individual.

As we navigate the ever-changing landscape of education, let us hold true to the belief that every student possesses the capacity to thrive. By embracing their unique learning styles, tapping into their intrinsic curiosity, and fostering an environment of support and encouragement, we can unlock the

boundless potential within each learner. Let us envision a future where education is a transformative force, empowering generations to chart their destinies and contribute meaningfully to society.

In the end, this study serves as a poignant reminder that education is not merely about imparting knowledge but about igniting a lifelong passion for learning. It is a collective journey of discovery, growth, and empowerment that transcends the boundaries of the classroom and shapes the very fabric of our society. Together, let us embark on this noble pursuit of education, united in our mission to nurture minds, hearts, and souls, and to pave the way for a brighter and more inclusive future.

References

Abidin, et.al (2016). Learning Styles and Overall Academic Achievement in a Specific Educational System. *International Journal of Humanities and Social Science* Vol. 1, no. 10, August 2016.

Akey, T.M (2016). School Context, student attitudes and behaviors, and academic achievement: An Exploratory analysis. New York: MDRC. URL: Retrieved on October 8, 2020 from <http://www.mdrc.org/publications/419/full.pdf>.

Bostrom, L., &Hallin, K. (2018). Learning Style Differences between Nursing and Teaching Students in Sweden: A Comparative Study. *International Journal of Higher Education*, 2(1), p22. Retrieved on October 8, 2020 from <http://sciedu.ca/journal/index.php/ijhe/article/view/2264>

Cassidy (2019). Learning Styles and High School Students' Chemistry Achievement. *Science Education International* Vol. 18, No. 1.

Coffield, et.al (2019). Learning styles and pedagogy in post-16 learning A systematic and critical review. Retrieved on October 8, 2020 from <http://www.leerbeleving.nl/wp-content/uploads/2011/09/learning-styles.pdf>.

Crawford, S., Alhreish, S., and Popovich, N. (2017). Comparison of learning styles of Pharmacy students and faculty members. *American Journal of Pharmaceutical Education*, 76 (10) 1-6.

Denig, Stephen J. (2019). Multiple Intelligences and Learning Styles: Two Complimentary Dimensions. Retrieved on October 8, 2020 from <http://projects.cbe.ab.ca.central/altidul/FILES>.

Evans, C. & Waring, M. (2016). Towards teacher inclusive education:Sensitising individuals to how they learn. *Educational Psychology*, 26(4),499-518).

Felder & Brent. (2015). Understanding Student Differences Retrieved on October 8, 2020 from [www.4.ncsu.edu/unity/locker/users/Felder/public/Papers/ Understanding](http://www.4.ncsu.edu/unity/locker/users/Felder/public/Papers/Understanding).

Hall, E. & Moseley, D. (2015). Is there a role of learning styles in personalized education and training? *International Journal of Lifelong Education*, 24(3), 243-255. Retrieved on October 8, 2020 from <http://dx.doi.org/10.1080/02601370500134933>.

Kilag, O. K. T., Pasigui, R. E., Malbas, M. H., Manire, E. A., Piala, M. C., Araña, A. M. M., & Sasan, J. M. (2023). Preferred Educational Leaders: Character and Skills. *European Journal of Higher Education and Academic Advancement*, 1(2), 50-56.

Kilag, O. K. T., Malbas, M. H., Nengasca, M. K. S., Longakit, L. J. H., Celin, L. C., Pasigui, R., & Valenzona, M. A. V. N. (2023). Transformational Leadership and Educational Innovation. *European Journal of Higher Education and Academic Advancement*, 1(2), 103-109.

Muhundan (2016). Matching Learning Styles and Teaching Styles in Biology Teaching : An Alternative Approach to Mainstream Science Education in Singapore. Retrieved on October 8, 2020 from <http://www.math.nus.edu.sg/aslaksen/projects/Vanessa.pdf>.

O'Leary, C., & Stewart, J. (2018). The Interaction of Learning Styles and Teaching Methodologies in Accounting Ethical Instruction. *Journal of business ethics*, 1-17. Retrieved on October 8, 2020 from <http://link.springer.com/article/10.1007/s10551-012-1291-9>.

Pasigui, R. E. (2009). The Aim of Education, the Role of the Teacher, and the Concept of Curriculum in the Light of Critical Pedagogy: The Postmodernists' Philosophy of Education. *The Central Colleges of the Philippines Interdisciplinary Research Journal*, 1(1), 1-1.

Prabha, V., Geetha, K. B., Doddamani, B. R., Prakash, M., & Prakash, S. M. (2018). Learning styles among the first year medical students. *Int J Pharm*, 4(2), 135-139. Retrieved on October 8, 2020 from <http://www.pharmscidirect.com/Docs/IJPBR-2013-02-154.pdf>.

Spohrer, K. (2011). Deconstructing 'aspiration': UK policy debates and European policy trends. *European Educational Research Journal*, 10(1), 53-63.

Steadly, A. (2018). Social Skills and Academic Achievement. *Evidence for Education*, Volume III, Issue 2. Retrieved on October 8, 2020 from <http://www.parentcenterhub.org/repository/social-skills/>.

Sternberg, R., Grigorenko, E. and Zhang, L. (2018). Styles of learning and thinking matter in instruction and assessment. *Perspective of Psychological Science*, 3(6), 486-506. Retrieved on October 8, 2020 from <http://dx.doi.org/10.1111/j.1745-6924.2008.00095.x>

Wong, Linda (2017), *Essential Study Skills*, 7th Edition.