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Analysis of Students' Learning Style and Teachers' Instructional Strategies Toward Understanding of Learners' Differences

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A B S T R A C T

Understanding the diverse learning styles of students and employing effective teaching strategies are important aspects of enhancing the educational experience and fostering a more inclusive learning environment. This paper delves into the intricate relationship between student learning styles and educator's teaching approaches by conducting a survey in Calawitan National High School (Akle High School) at Akle, San Ildefonso, Bulacan by gathering a total of 30 respondents, 20 Senior High School Students and 10 Educators, we explored how Learning Styles and Teaching Strategies influence the learning process and impact student outcomes. The study commences by examining the concept of learning styles, delving into various models and frameworks that categorize learners based on their preferred modes of receiving, processing, and retaining information. These models, including Visual, Auditory, Reading/Writing, and Kinesthetic learning styles, provide valuable insights into the unique ways in which individuals absorb and engage with knowledge. Subsequently, teaching strategies encompass a range of approaches, from Direct Instruction, Inquiry-based, Cooperative, and Differentiated Instruction.In conclusion, the study underscores the significance of understanding student learning styles and employing effective teaching strategies as cornerstones of effective and inclusive education. By aligning instructional methods with individual learning preferences, educators can foster a more engaging and enriching learning experience for all students.

Keywords: Learning Style , Multisensory, Teacher's Instructional strategies, Learners' Differences

Introduction

Learners had their own styles and techniques depending on their capabilities in understanding and adapting knowledge. Educators also had their strategies on how they delivered the lesson in a way where the students learned the easiest way. But what was the best learner's style that students could use to gain the educator's goal of teaching them what they needed, and what were the best strategies that educators could apply. It was important to know the learning characteristics of students to increase the effectiveness of the learning process in studying the differences of lessons to understand the differences in learning styles and teaching techniques. In this study, the learning strategies that students used, their learning styles, and whether their learning strategies changed according to their preferred teaching strategies were analyzed.

Background of the Study

A learning style was a learning strategy that was unique to each individual and was thought to allow that individual to learn best. Learning styles were defined as "the complex manner in which, and conditions under which, learners most effectively perceived, processed, stored, and recalled what they were attempting to learn" (James and Gardner, 1995). Students learned in a variety of ways; each student had different preferences or learning styles in the way they processed information. One of the challenges for teachers was to develop effective teaching strategies and methodologies that could improve learning activities and students' academic performance. A good teacher had to change their behavior to develop skills and character that would help them achieve their goals for themselves and the community. The students obtained more information, retained more knowledge, and performed better when students' learning styles were aligned with teachers' teaching styles. Felder (as cited in Damavandi) stated that students understood and recalled better when the teachers' teaching styles matched the learning styles of the students. Students' learning methods might also have helped them achieve good academic success. Some recent studies had found that students' learning styles impacted their academic performance, and some writers believed that it was critical to understand their learning styles to enhance students' academic success. When different teachers' teaching styles and students' learning styles were considered seriously, it could assist in developing students with sufficient knowledge and abilities to achieve academic success.

Statement of the Problem

1. What is the Student's Learning Style at Calawitan National High School Annex?

2. What are the Educator's Teaching Strategies at Calawitan National High School Annex?
3. What are the survey results of Students and Educators?
4. Is there any significance between the Student's Learning Style and Educator's Teaching Strategies?

Theoretical Framework

The theoretical framework underpinning the investigation into students' learning styles and educators' teaching strategies concerning the understanding of learner differences was multifaceted, drawing upon several fundamental principles: Individual differences, Instructional variety, Learner-centered instruction, and Assessment. This foundation acknowledged the inherent variability among learners in terms of cognitive abilities, diverse learning styles, and individual preferences, all of which played pivotal roles in shaping their optimal methods of comprehension and assimilation of knowledge.

Educators, in response to these divergent learning profiles, embraced a spectrum of teaching strategies encompassing varied instructional methodologies, a diverse array of learning materials, and a rich tapestry of activities. Assessment served as a critical tool in this endeavor, acting as a compass to navigate the landscape of learner disparities, aiding in the identification of individual differences, and offering a means to meticulously track and evaluate the progress of learners over time.

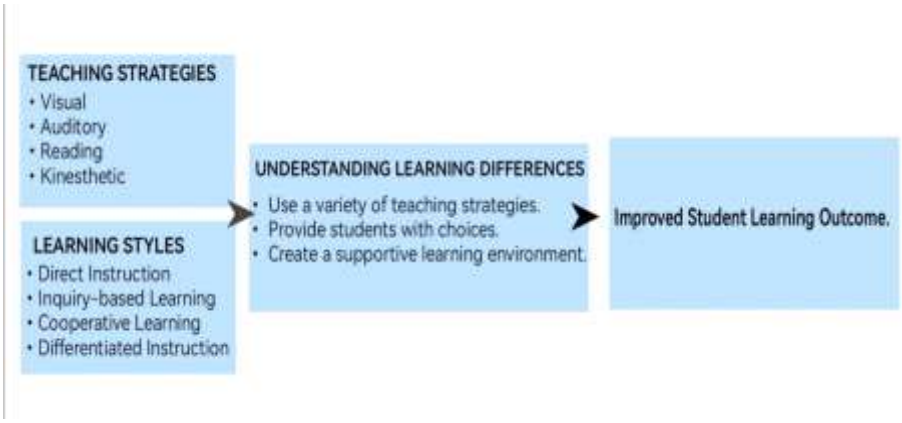
Understanding learner differences pivoted significantly upon the exploration and delineation of learning styles, serving as conduits through which individuals preferred to perceive, internalize, and process information. Among the myriad learning style theories, the VARK model, conceived by Neil Fleming in 1987, surfaced as one of the predominant paradigms. This model, encapsulated in the acronym VARK representing Visual, Auditory, Reading, and Kinesthetic preferences, provided a lens through which distinct learner archetypes were delineated. Visual learners exhibited a penchant for visual stimuli, benefiting from aids such as diagrams and charts. Auditory learners thrived in auditory settings, deriving value from sources like lectures and audio recordings. Kinesthetic learners, on the other hand, found their learning prowess augmented through tactile experiences and hands-on activities.

Leveraging this comprehensive understanding of learning styles, educators endeavored to sculpt pedagogical environments that were all-encompassing, accommodating the diverse spectra of learners effectively. By blending an amalgam of teaching methodologies – from traditional lectures to interactive demonstrations and collaborative group activities – educators aimed to bridge the gaps across different learning preferences, ensuring an inclusive and engaging learning environment. Furthermore, educators took a holistic view of learner differences, extending beyond learning styles to encompass variances in prior knowledge, individual interests, and the rich tapestry of cultural backgrounds. By weaving these diverse threads into the fabric of instructional design, educators aspired to curate a learning ecosystem that was not only adaptive but also deeply engaging, thereby facilitating enhanced efficacy in the learning process for all students.

The theoretical framework for analyzing "Student's Learning Style and Educator's Teaching Strategies Towards Understanding of Learning Differences" integrates key principles vital for comprehending the intricate dynamics between students' learning styles and educators' teaching methodologies within the realm of learning differences.

Within this framework, the emphasis lies on comprehensively understanding how students' diverse learning styles intersect with educators' varied teaching strategies. By recognizing and addressing these intersections, the goal is to optimize educational experiences, enhancing both academic achievements and the overall quality of education within the learning environment.

Conceptual Framework



The following conceptual framework illustrates the relationship between student learning styles, educator's teaching strategies, and understanding learner differences:

The framework demonstrated that when educators comprehended student learning styles and implemented tailored teaching strategies, they were able to establish a more comprehensive and efficient learning environment that accommodated the needs of all students. This comprehensive approach

encompassed the diverse range of learning styles, enabling educators to modify their teaching methods, instructional materials, and activities to cater to various preferences. This holistic approach aimed to address individual learner needs, fostering an environment conducive to effective learning. Consequently, this inclusive approach was believed to have positively influenced student learning outcomes, potentially resulting in enhanced academic performance and a deeper assimilation of knowledge among students.

Methodology of the Study

This chapter presented the research design and methodologies, including the population and the sample of the study, research instrument, and statistical treatment of data.

Research Design

The researchers' chosen type of study is Quantitative research, a systematic and objective approach to research that uses numerical data to interpret numerical data to draw conclusions about a population. The researchers used Correlation to know and describe the impact of different teaching strategies to the learning styles of every student based on their experience. The researchers conducted a face-to-face survey where the respondents chose the answers that expressed their opinion regarding their Learning Styles and Teaching Strategies.

Population and Sample of the Study

In this study, the researchers used Simple Random Sampling. The researchers gave out 12 questionnaires for 20 Senior High Students and 12 questionnaires for 10 Educators, a total of 30 respondents at Calawitan National High School (Akle High School). The population is Akle, San Ildefonso, Bulacan and the sample is the Calawitan National High School (Akle High School) Students that are currently enrolled as Senior High School Students for academic year 2023-224.

The respondents are composed of both male and female, studying in the school that was being mentioned. The result of this sample helped the researchers determines and analyzed the gap between Student's learning style and Educator's strategies of teaching.

Research Instrument

The researchers studied Analysis of Student's Learning Style and Educators Teaching Strategies Towards Understanding of Learner's Differences further through a face-to-face survey. The type of research instrument that the researchers used is a Survey that are distributed to the Students and Educators of Calawitan National High School (Akle High School) in Akle, San Ildefonso, Bulacan. The data collected was used to analyze patterns and trends. The researchers compared the teaching strategies of educators who had students with a variety of learning needs to the teaching strategies of educators who doesn't had students with a variety of learning needs. The findings of this research would be used to develop interventions to helped students with different learning needs succeed.

Statistical Treatment of Data

To make the research precise, the researchers applied the percentage formula which determined and evaluated the survey findings, which served as our baseline for the following part of the paper. The following statistical treatment data were used to interpret the data gathered from the respondent of the study, and we also used Pearson Correlation Coefficient (R) to measure linear correlation.

1. Simple Percentage. The democratic variables of the respondents were analyzed using the simple percentage with the following formula:

2. Weighted Mean. This statistical tool was used to compute the weight of the responses in the questionnaire assigned by the respondents during the actual data gathering procedure. The formula for the weighted mean as follows:

WM = $\sum FW\ N$

Where:

WM = Weighted mean

$\sum$ - Summarization symbol

F = Frequency for each option

W = Assigned weight

N = Total number of frequencies

The following are the corresponding verbal interpretations for the weighted mean.

Weighted Means/Equivalent	Corresponding Remarks
4.20 – 5.00	**Absolutely Agree**
3.40 – 4.19	**Agree**
2.60 – 3.39	**Not Really**
1.80 – 2.59	**Disagree**
1.00 – 1.79	**Absolutely Disagree**

3. Likert Scale. The following Likert Scale Scale serves as the guide for interpreting the data gathered.

Scale	Weighted Means/Equivalent	Corresponding Remarks
5	**4.20 – 5.00**	**Absolutely Agree**
4	**3.40 – 4.19**	**Agree**
3	**2.60 – 3.39**	**Not Really**
2	**1.80 – 2.59**	**Disagree**
1	**1.00 – 1.79**	**Absolutely Disagree**

4. Pearson R. It can range from -1 to 1. An r on -1 indicates a perfect negative linear relationship between two variables, an r of 0 indicates no linear relationship and an r of 1 indicates a perfect positive linear relationship between variable x and y.

$$r = \frac{\sum(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum(x_i - \bar{x})^2 \sum(y_i - \bar{y})^2}}$$

RESULTS AND DISCUSSION

This chapter comprises diagrammatic, tabular, and textual presentations. It also consists of the analysis and interpretation, findings, and results from this study.

Diagrammatic Presentation

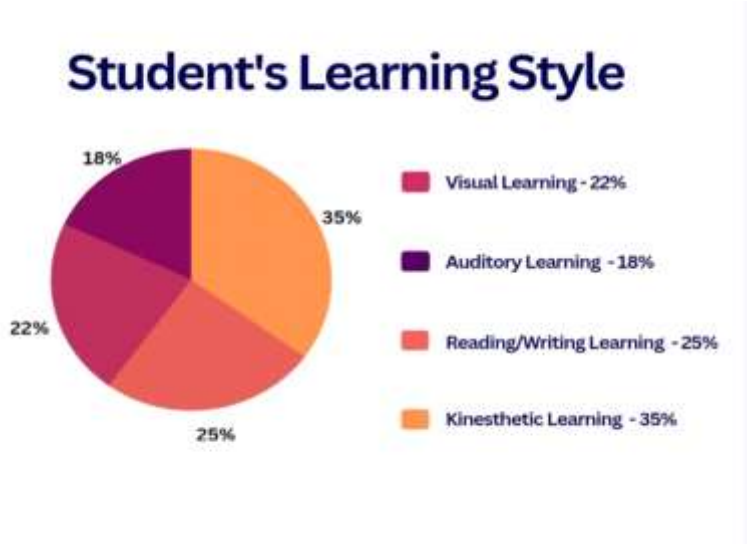


Figure no.1

Paragraph 1: Analysis

Figure 1 portrays an insightful glimpse into the learning preferences of surveyed students, delineated by percentages. What emerges is a tapestry of diverse inclinations among the student body. A substantial 35% gravitate towards kinesthetic learning, signaling a strong proclivity for hands-on, experiential learning. Following closely, a formidable 25% exhibit a penchant for reading/writing, suggesting comfort and efficacy with written materials. Visual learners, constituting 22%, lean towards graphical aids for comprehension. In contrast, auditory learners, comprising the smallest segment at 18%, favor spoken methods for absorbing information.

Paragraph 2: Summary &Conclusion

The study reveals diverse learning preferences among students, with 35% favoring kinesthetic learning, 25% preferring reading/writing, 22% favoring visual aids, and 18% favoring spoken methods. These students exhibit a preference for hands-on, experiential learning. To knowing students' learning styles helps teachers to tailor their lessons according to their needs. In essence, this figure underscores the nuanced landscape of learning styles, advocating for an educational approach that caters to the varied needs of students, recognizing and embracing their individual preferences.

Paragraph 3: RRLS

Learning is the lasting modification of behavior brought about by life experiences. As a result, the idea of learning styles has gained popularity in recent literature, with numerous theories regarding learning styles proposed to better understand the dynamic process of learning. Experiential learning theory defines learning as "the process whereby knowledge is created through the transformation of experience". This could have to do with the diverse backgrounds, aptitudes, aspirations, hobbies, motivation levels, and study strategies of the pupils. After investigating the various learning styles and the unique requirements of kinesthetic learners, teachers can support kinesthetic learners more successfully. Examining these problems along with the main obstacles to kinesthetic learning will assist them with organizing fundamental English ideas, such prewriting.

İlçin, N., Tomruk, M., Yeşilyaprak, S. S., Karadibak, D., & Savcı, S. (2018). The relationship between learning styles and academic performance in TURKISH physiotherapy students. BMC Medical Education, 18(1). https://doi.org/10.1186/s12909-018-1400-2

Figure no. 2

Paragraph 1: Analysis

In Figure 2, we get a glimpse into the diverse teaching strategies employed by educators, each with its own share of the pie. Topping the list is direct instruction at a substantial 36%, reflecting a traditional teaching style where educators play a central role in imparting knowledge. Following closely, differential instruction claims 24%, suggesting a more personalized approach that caters to individual learning needs. Cooperative learning takes up a respectable 20%, underscoring the importance of collaboration in the classroom. On an equal footing, inquiry-based learning also commands 20%, emphasizing a hands-on, student-driven approach.

Paragraph 2: Summary &Conclusion

The study reveals diverse teaching strategies, with direct instruction being the most common (36%), followed by differential instruction (24%), cooperative learning (20%), and inquiry-based learning (20%), each with its own unique approach to teaching. Matching instruction to students' learning styles can be an effective way to improve academic performance. This breakdown sheds light on the rich tapestry of teaching methods in use, showcasing a mix of styles aimed at engaging students with diverse preferences and learning styles.

Paragraph 3: RRLS

Teaching style also reflects the instructor's presence, as well as the nature and caliber of the student interaction, according to Reinsmith (1994). Therefore, our ability to communicate our instructional strategies effectively has two implications for pupils. It influences the learning processes used by our students and may help or hinder their ability to gain knowledge and skills. The way instructors present the material depends on their unique characteristics Basheer et al.,2015). Teaching styles are viewed as a unique pattern of needs, beliefs, and classroom behaviors displayed by teaching personnel. Teachers must recognize the diversity and complexity in the classroom, be it the ethnicity, gender, culture, language abilities and interests. Getting students to work and learn in class is largely influenced in all these areas.

The effect of the teacher's teaching style on students' motivation. (2019, October 7). NYU Steinhardt. https://steinhardt.nyu.edu/departments/teaching-and-learning/research/practitioner-action-research/effect-teachers-teaching

Tabular Presentation

Educator's Teaching Strategies

Educator's Questions	**5**	**4**	**3**	**2**	**1**	**Total**
Inquiry-based Learning						
1. I conduct group activity, projects and reporting more than once in a month.	5	2	3	0	0	10
2. I asked my students to come up with a problem statement.	1	5	4	0	0	10
3. I encourage my students to ask questions and explore their answers.	4	4	2	0	0	10
Differentiated Instruction						
4. I use instructional strategies and activities that respect students' prior knowledge and the preconceptions inherent therein.	5	3	2	0	0	10
5. The focus and direction of the lesson are often determined by ideas originating with students.	3	4	3	0	0	10
6. I teach my students our lessons by combining different strategies to match their preferences learning style	4	4	2	0	0	10
Direct Instruction						
7. I give questions that will be answered by students as part of our lesson.	6	3	1	0	0	10
8. I like it when I present them with a video about our topic.	8	1	1	0	0	10
9. I often assign topics that will demonstrate by student	4	4	2	0	0	10
Cooperative Learning						
10. I always task my students to work on an activity together to develop their social and communication skills.	3	6	1	0	0	10
11.I ask my students to study one section of lesson and let them teach it to the other member of the group.	3	4	1	1	1	10
12. I let my students decide on a group on their own as I assign them on project together.	4	4	1	1	0	10
MEAN:	4.2	3.7	1.9	0.2	0.1	

TABLE NO. 1

Paragraph 1: Analysis

Table 1 breaks down the teaching methods used by an educator, sorting them into four groups: Inquiry-based Learning, Differentiated Instruction, Direct Instruction, and Cooperative Learning. It provides details on how many times the educator applied each strategy in a month, along with the total usage for each category. The mean number of times each strategy was used, regardless of the category, is calculated at 4.2. This suggests a mix of teaching strategies, with a slight preference for Inquiry-based Learning and Differentiated Instruction compared to Direct Instruction and Cooperative Learning.

In terms of votes, Inquiry-based Learning activities like group projects and encouraging student questions each got 10 votes. Differentiated Instruction strategies, such as considering prior knowledge and adapting to learning styles, also got 10 votes each. Direct Instruction activities, like giving questions and showing videos, got 6 and 8 votes, respectively. Cooperative Learning tasks, such as having students work together, received 10 votes. Letting students decide on groups got 4 votes.

Paragraph 2: Summary/Conclusion

The average vote across all strategies is 4.2, indicating a balanced use of different teaching methods. Overall, the table highlights the educator's commitment to employing various strategies to meet the diverse needs of their students. The teacher must recognize individual differences among his/her students and adjust instructions that best suit the learners. It is always a fact that as educators, we play varied and vital roles in the classroom.

Paragraph 3: RRLS

Matching is defined in terms of compatibility, the interactive effects of person and environment (Hunt, 1979). Anderson and Bruce (1979) suggested that "matching students with selected learning environments is an efficacious means of increasing student achievement, particularly when the matching is conducted on the basis of a student's learning style". Matching teaching style with learning style produces an environment wherein students learn best (Gregorc & Butler, 1984).

Auld, S. (2023, August 16). Different teaching styles suit different students. ACC Blog. https://www.acc.edu.au/blog/students-suit-different-styles/

Student's Learning Styles

Student's Question	**5**	**4**	**3**	**2**	**1**	**Total**
Visual Learning						
1. I like it when the lesson is presented with diagrams being drown out.	6	10	4	0	0	20
2. I understand the topic better when it has visual presentation.	9	9	1	1	0	20
3. I prefer to see information written on the board and supplemented by visual aids.	7	6	3	3	1	20
Auditory Learning						
4. I prefer listening to the lecture in class than writing.	6	9	5	0	0	20
5. I remember things I heard well than things I read in class.	7	8	5	0	0	20
6. I can focus well in exams when the teacher dictates the questions.	5	3	5	4	3	20
Reading/Writing Learning						
7. I can learn best by writing the lesson and taking down notes.	9	6	2	2	1	20
8. I enjoy the lesson by reading and studying texts.	9	5	4	1	1	20
9. I prefer to learn information by reading handouts and textbooks.	7	4	5	2	2	20
Kinesthetic Learning						
10. I prefer hands-on activities to learn better.	13	4	2	0	1	20
11.I understand things better in class when I participate in role-playing.	11	4	4	1	0	20
12.When I speak, I move my hands a lot to express myself better.	11	5	3	1	0	20
MEAN:	8.3	6.1	3.6	1.25	0.75	

TABLE NO. 2

Paragraph 1: Analysis

Upon analyzing the data presented in Table 2, it is apparent that a significant portion of students within this group predominantly exhibit characteristics aligned with auditory learning. The mean scores for questions related to auditory learning consistently exceed 2, indicating a prevailing consensus among students, with the majority expressing agreement or strong agreement with statements associated with this learning style. Furthermore, there is a notable inclination towards visual learning, as evidenced by mean scores surpassing 1.8 for questions pertaining to this modality.

Conversely, the data suggests a lower inclination towards both reading/writing and kinesthetic learning styles. Mean scores for questions related to reading/writing learning fall below 1.8, and for kinesthetic learning, they register below 1.6.

Paragraph 2: Summary &Conclusion

It is imperative to acknowledge the potential for a combination of learning styles among students. The identification of an individual as primarily an auditory learner does not preclude their ability to benefit from alternative learning modalities.

Educators can leverage these findings to tailor their instructional methods, incorporating strategies that align with the predominant learning styles within the group. This may involve utilizing auditory-centric methods such as discussions and lectures for auditory learners, integrating visual aids like diagrams for those inclined towards visual learning, and incorporating a balanced mix of reading/writing tasks and hands-on activities to accommodate diverse learning preferences.

Paragraph 3: RRLS

As a result, the experimenter must first make the difficult decision of which aspects of learning style to clarify and which interactions may be significant in terms of their practical contribution to achievement. Learning style is a complex construct involving the interaction of numerous elements. A person's preferred method of assimilating new knowledge for effective learning is referred to as their learning style. The definition of learning style, according to Rita Dunn, is "a unique way developed by students when he/she was learning new and difficult information." Instead of focusing on what children learn, learning styles address how they learn. Every person learns differently, and this is true even in the same learning environment where pupils are not all learning at the same time.

İlçin, N., Tomruk, M., Yeşilyaprak, S. S., Karadibak, D., & Savcı, S. (2018b). The relationship between learning styles and academic performance in TURKISH physiotherapy students. BMC Medical Education, 18(1). https://doi.org/10.1186/s12909-018-1400-2

Textual Presentation

The researchers have gathered a total of 30 respondents from Calawitan National High School (Akle High School), 20 from Senior High School Students which shared their sentiments regarding the different Learning Styles and 10 Educators that shared their Teaching Strategies.

According to the tabular, among the Senior High School students of Calawitan National High School (Akle High School), the total of Educators who voted Absolutely Agree in Inquiry-based Learning which includes the questions 1-3 are composed of 10 votes, while 11 answered Agree, 9 are Neutral, and 0 vote for Disagree and Absolutely Disagree. For Differentiated Instruction, the total votes of Absolutely Agree by Educators for questions 4-6 are 12, while 11 answered Agree, 7 chose to stay Neutral, and 0 vote for Disagree and Absolutely Disagree. In Direct Instruction, the total of votes by Educators for questions 7-8 in Absolutely Agree are 18, while the sum of Agree is 8, 4 chose to vote for Neutral, and 0 votes for Disagree and Absolutely Disagree. Lastly, in questions 10-12 about Cooperative Learning, the total of votes gathered for Absolutely Agree are 10, while 14 chose to Agree, 3 stayed Neutral and 0 votes for Disagree and Absolutely Disagree.

Among the 20 Students who willingly joined the survey conducted by the researchers, the total of students who voted Absolutely Agree in Visual Learning which includes the questions 1-3 are composed of 22 votes, while 25 answered Agree, 8 are Neutral, 4 Disagree, and one answered Absolutely Disagree. For the Auditory Learning, the total of students who voted Absolutely Agree in questions 3-6 are 18, while 22 Agreed, 15 are Neutral, 4 answered Disagree, and 3 voted Absolutely Disagree. Meanwhile, the sum of Students who voted for Absolutely Agrees in questions 7-9 regarding Reading/Writing Learning are 25, while 15 answered Agree, 11 are Neutral, 5 chose Disagree, and 4 voted Absolutely Disagree. The overall votes by Students of Absolutely Agrees for questions 10-12 regarding Kinesthetic Learning are 35, while 13 naturally chose Agrees, 9 are Neutral, 2 Disagrees, and 1 voted for Absolutely Disagree

TABULAR FOR TEXTUAL

Educator's Teaching Style

Teaching Style	Absolutely Agree	Agree	Neutral	Disagree	Absolutely Disagree
Inquiry-based Learning	10	11	9	0	0
Differentiated Instruction	12	11	7	0	0
Direct Instruction	18	8	4	0	0

Cooperative Learning	10	14	3	0	0

Student's Learning Style

Learning Style	Absolutely Agree	Agree	Neutral	Disagree	Absolutely Disagree
Visual Learning	22	25	8	4	1
Auditory Learning	18	22	15	4	3
Reading/Writing Learning	25	15	11	5	4
Kinesthetic Learning	35	13	9	2	1

SUMMARY, CONCLUSIONS, AND RECOMMENDATION

This chapter will show the summary of findings, conclusions, and recommendations. At the end of this chapter, ideas for further study and research are suggested.

Summary of Findings

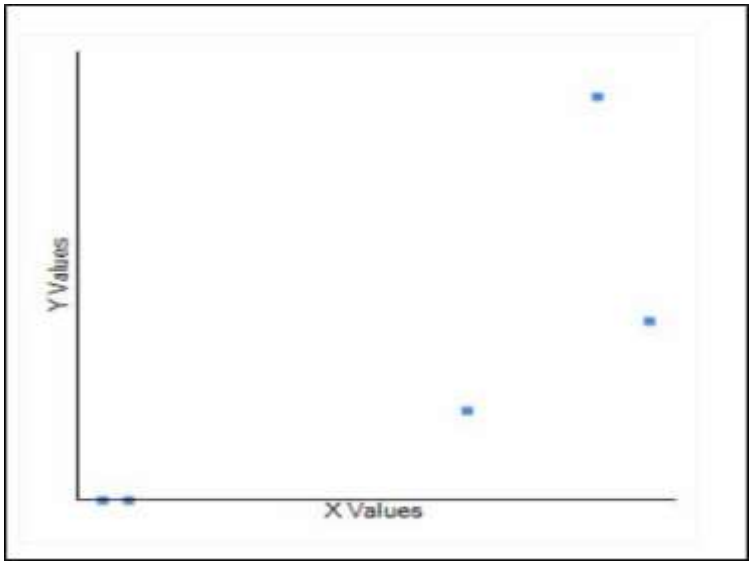
- The results showed that Kinesthetic Learning was the style that students preferred while Direct instructions lead on educator's teaching strategies.
- Researchers found that the connection between these two lies in their complementary nature. Kinesthetic learning styles focus on physical movement and hands-on activities that help students understand and retain information, while direct instruction involves a more structured approach where teachers provide explicit explanations and demonstrations of concepts.
- The two can be powerful tools in promoting engagement and understanding among students while allowing educators to guide them towards mastery of content knowledge and skills.
- The findings indicate that an integrated approach that combines elements of both strategies may be the most effective for comprehensive learning outcomes. Incorporating kinesthetic activities into direct instructional teaching can enhance engagement and retention among learners.
- Pearson R shows that there was a strong positive correlation between the two values. Researchers used Kinesthetic Learning as X values and Direct Instruction as Y values.

Conclusions

In this study, the researchers aimed to investigate the Learning Style and Teaching Strategies among Senior High School Students and Educators at Akle High School. After interpreting and analyzing all of the data, the researchers found out that aligning students' learning styles with educators' teaching strategies lies in creating an environment that fosters engagement, motivation, and effective learning. Recognizing and accommodating diverse learning styles contributes to the overall success and satisfaction of both students and educators in the learning process. The research also highlights the importance of communication between educators and students regarding learning preferences. Establishing an open dialogue encourages students to express their needs and allows educators to tailor their teaching strategies accordingly. This mutual understanding fosters a positive and supportive learning atmosphere.

According to the findings, Kinesthetic Learning and Direct-Instruction Teaching Strategies have the highest vote in the result of our survey with 35% for Kinesthetic and 36% for Direct-Instruction. The significance of Kinesthetic Learning lies in its ability to engage learners physically, enhance memory retention, and cater to diverse learning styles. On the other hand, direct instruction is valuable for its clarity, efficiency, and effectiveness in teaching foundational knowledge and skills. However, the findings indicate that an integrated approach that combines elements of both strategies may be the most effective for comprehensive learning outcomes. Incorporating kinesthetic activities into direct instructional teaching can enhance engagement and retention among learners. Students often benefit from a multisensory approach that caters to various learning styles, and kinesthetic learning provides an avenue for physical interaction with the material. This can lead to improved understanding and memory retention, as the sensory experiences associated with movement can reinforce cognitive processes.

Result



X and Y Combined

N = 5

∑(X - Mx)(Y - My) = 236

R Calculation

r = ∑((X - My)(Y - Mx)) / √((SSx)(SSy))

r = 236 / √((394)(224)) = 0.7944

Meta Numerics (cross-check)

r = 0.7944Key

The correlation analysis shows a **strong positive correlation**, which means that high X variable scores go with high Y variable scores (and vice versa). According to the data gathered by the researchers, Kinesthetic Learning and Direct-Instruction Teaching Strategies have the highest vote in the result of our survey with 35% for Kinesthetic and 36% for Direct-Instruction. The significance of Kinesthetic Learning lies in its ability to engage learners physically, enhance memory retention, and cater to diverse learning styles. The findings indicate that an integrated approach that combines elements of both strategies may be the most effective for comprehensive learning outcomes. Incorporating kinesthetic activities into direct instructional teaching can enhance engagement and retention among learners. This mutual understanding fosters a positive and supportive learning atmosphere.

Recommendations

The study reveals that aligning the Student's Learning Style with the Educator's Teaching Strategies have a great impact for the Learner's academic needs. It will help the students excel in academics once given the appropriate teaching method, which creates a space for Student's effective learning. However, it is important to remember that there are many other factors that can impact student learning, such as motivation, prior knowledge, and classroom atmosphere. This study can provide a starting point for educators to think about how they can use their understanding of student learning styles and teaching strategies to improve student learning outcomes.

On this basis, future researchers may explore the role of technology in facilitating personalized learning experiences that cater to individual learning styles and promote inclusive learning environments aimed to shed light on the complex interplay between learning styles, teaching strategies, and student outcomes. By understanding these connections, we can gain a deeper understanding of how to effectively cater to individual learning styles, enhance student engagement, and promote academic success for all learners.

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