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STUDENTS' LEARNING STYLE PREFERENCES AND TEACHERS' INSTRUCTIONAL STRATEGIES: INPUT TO LEARNING ACTION CELL (LAC) SESSIONS

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ABSTRACT

Learning style preference can increase educational experience given these are identified by teachers who match classroom instructions in congruent with the given students' learning style preferences. To help augment research in this area of matching classroom activities with the learning style preference of students, this descriptive study, which used both qualitative and quantitative methods of research, surveyed students' learning style preferences and analyzed 164 daily lesson logs prepared by the English teachers. This study yielded the following findings: 1) Most high school students are visual learners; 2) Most instructional strategies of the teachers cater to the needs of auditory learners; 3) There was a mismatch instruction between the students' learning style preferences and the teachers' instructional strategies; and 4) In order to increase awareness and understanding on matching the students' learning style preferences and the teachers' instructional strategies, a matrix on Learning Action Cell (LAC) sessions on the preparation and construction of daily lesson logs is proposed.

Keywords: auditory, daily lesson logs, kinesthetic, learning style preferences, visual

INTRODUCTION

Students, like any other people, learn through various senses and like fingerprints, the students' way of learning things differs from others. The ability to discover and to understand

GSJ© 2022 www.globalscientificjournal.com these learning style preferences of the students would help teachers to match classroom activities which should be congruent to the given students' learning style preferences.

Taking into consideration this notion, this research centered on discovering the learning style preferences of the students, evaluating the corpora of instructional strategies of the teachers particularly focusing on the activities employed and on finding matched instruction between learning style preferences and instructional strategies is conceptualized. As teachers, it is fundamental that identifying individual's learning style preferences should be realized (Romanelli, Bird, & Ryan, 2009).

Notwithstanding, learning style preferences of the students have become inevitable consideration in crafting instructional objectives. Given the importance of crafting a carefully planned blueprint of an executable lesson, it is imperative that teachers are expected to match their instructional strategies to that of the students' learning style preferences. The likeliness of having significant relationship between learning style preferences of the students and instructional strategies of the teachers was highlighted in the studies of Pashler, McDaniel, Rohrer, and Bjork (2009), Klitmoller (2015), and Rogowsky (2015). As Williamson and Watson (2007) argued that in order to achieve the goal of developing lifelong learners, the needs of the students must be essentially met and thus, make substantial progress.

Unfortunately, when a typical classroom is visualized, it is rare to find different learning approaches incorporated into just one lesson. While this situation may seem impossible to carry out, it can be done through thorough planning and well preparedness of teachers. As Rosenfeld & Rosenfeld (2008) articulated, the teachers' understanding on the learning style preferences of the students warrants increased attention to professional development. Such professional advancement includes preparation and construction of planners and budget of work. Moreover, teachers being provided with training and significant tools feel more confident in choosing relevant instructional strategies based on students' learning style preferences (Noble, 2004).

With document analysis on the authentic corpora of instructional strategies employed by teachers, this present research study positions teachers to see the preparation and construction of daily lesson logs at work and get them used to the practices in blending the learning style preferences of the students and teacher-implemented activities.

With this visualization in view, the current study, then, analyzes the daily lesson logs of teachers to capture the gap and bridge that gap of meeting the needs of learners by matching teacher-implemented activities to their learning style preferences. Yet, because the preparation and construction of daily lesson logs have become inevitable task for teachers contributing to their additional clerical jobs, such preparation of planner, then, is taken for granted which results to not well-prepared and not carefully planned blueprint of a classroom instruction.

Therefore, understanding the benefits of discovering students' learning style preferences and matching them to teachers' instructional strategies provides both the students and the teachers an opportunity to experience a comfortable learning environment.

FRAMEWORK OF THE STUDY

This research presents theories, approaches, and concepts which assisted the researcher in designing the framework of this study. But while there are many theories that may serve as the foundation of this paper, this research anchors heavily on Learning Model Approaches, Constructivism, Brain-Based Teaching, Differentiated Instruction, and Varied Instruction.

Factors Affecting Students' Learning Styles and Teachers' Instructional Strategies

In exploring the learning style preferences of students and unraveling the common strategies employed by teachers in the preparation and construction of daily lesson logs which picture the expected outcome in a classroom instruction, the following concepts and approaches displayed in a diagram (see Figure 1 below) were covered to support the framework of this study.



Fig. 1. Factors Affecting Learning Style Preferences and Instructional Strategies

Learning Model Approaches. Learning model approaches (Reiff as cited in Wilson, 2011) are defined as teachers' means of applying an understanding of students learning style preferences leading to the development of wide-ranging instructional practices. This concept maintains a design which is intended to address differences in student learning needs.

Constructivism. This approach digresses the importance of teachers' styles in teaching as paramount to the success of student learning. Instead, this approach concentrates on the learners' experiences and responses as means of constructing knowledge. Alesandrini and Larson (2002) contended that this approach is a learner-centered in a way that learning is derived through students' own exploration, inquiry, and discovery. Therefore, instructional activities given to the students should provide an opportunity for them to discover knowledge based on their learning style preferences.

Brain-Based Teaching. As students' learning style preferences differ from other students, this approach supports the idea that brain works differently as well. Caine & Caine (as cited in Wilson, 2011) stressed that there is a need for educators to be enlightened with the complexity of the brain including its functionality. The implication of this approach to education points to the increase of effectiveness in developing instructional practices.

Differentiated Instruction. Differentiated instruction (Anderson, 2007) highlighted the teachers' perceptions of student differences which require teachers to respond to these learning differences in order for students to maximize academic achievement. Thus, differentiated instruction becomes a necessary tool in catering to the needs of students with different learning style differences. Wormelli (2005) supports this idea that differentiation can maximize student learning.

Varied Instruction. Varied instructions do not contrast the concepts of differentiated instruction. Instead, varied instruction purports that students may obtain noteworthy benefits through differentiated activities but greater performance can be demonstrated through cumulative effects of wide variety of instructional practices (Sternberg, Grigorenko, & Zhang, 2008).

Overall, the framework of these theories and concepts pictures how learning style preferences of the students shape the teaching-learning process specifically on the teacher's preparation of activities which would suit the needs of diverse learners and with an end-view of empowering teachers to come up with a well-prepared outline of a classroom instruction.

In an attempt to describe the learning style preferences of students and its significance in coming out with instructional strategies which are matched with the identified learning style preferences, this research study sets the daily lesson logs of teachers in an analytical level of recognizing the common activities employed and the type of learning styles the activities are directed. Moreover, the schemes on employing appropriate instructional strategies are explored to comprehend the factors affecting the choice of classroom activities vis-à-vis the students learning style preferences. All these constructs and variables are pictured in a paradigm (see Fig. 2 below).

INPUT

PROCESS

OUTPUT



Fig. 2. Factors Influencing Classroom Instruction

The paradigm of the study recognizes the dynamics of classroom instructions. One factor sides the learners, while the other one concerns the teachers. The students and the teachers, as important contributors to teaching-learning process, become the input of this research. Specifically, the learning style preferences of the students and the daily lesson logs constructed by teachers will be described and analyzed to realize relationship between the two variables. This is done through conducting a survey on the students' learning style preferences and an analysis on the daily lesson logs of the teachers.

Consequently, the results on the identified students' learning style preferences and teachers' instructional strategies will be used as an index which can be used for identifying classroom activities and/or instructional practices that match students' preferred way of learning.

OBJECTIVES

This study surveyed the learning style preferences of the students of San Jose National High School. Also, this research evaluated the daily lesson logs of the English teachers in the same institution. Specifically, this research aimed at the following objectives:

- 1. To discover the learning style preferences of the students of San Jose National High School.
- 2. To discover the instructional strategies of the English teachers as evidenced by their classroom activities listed in the daily lesson logs.
- 3. To identify matched instruction between the learning style preferences of the students and the teacher-implemented activities in the learning procedures.

METHODOLOGY

Research Design

GSJ© 2022 www.globalscientificjournal.com The descriptive method was used in documenting the learning style preferences of the students and the instructional strategies employed by the teachers. It is descriptive because it sought to discover the relationship between the students' learning style preferences and the teachers' instructional strategies employed. Moreover, this study is part qualitative and part quantitative. The quantitative part included the survey of students' learning style preferences. Meanwhile, the qualitative part involved document analysis of teachers' daily lesson logs. Also, interview and observation were conducted to elicit factors that affect the choosing of activities employed and in verifying the results of the survey.

Sources of Data

The respondents of this study were 246 students of San Jose National High School from the municipality of Caba, La Union. These students were taken from Grade seven to Grade ten. Grade 11 students were purposely excluded by the researcher since the researcher is handling the said students. Also, respondents of this research include the two English teachers of the same institution. Total enumeration technique was used in determining the respondents. Meanwhile, this study gathered corpora of daily lesson logs from the two English teachers covering the second quarter of the school calendar (August – October, 2016). There were a total of one hundred and sixty-four (164) daily lesson logs collected and analyzed. These daily lesson logs display the teachers' instructional strategies. This current research particularly concentrated more on the learning procedure part of the daily lesson logs.

Instrumentation and Data Collection

The instrument used in this study is a questionnaire on students' learning style preferences. The VAK Learning Styles Self-Assessment Questionnaire (see Appendix C: VAK Learning Styles Self-Assessment Questionnaire) taken from Chislett and Chapman (2005) was adapted. In the questionnaire, the students were asked to encircle the letter of the statement which characterizes their learning style preferences.

For the daily lesson logs of the teachers, after permission was sought from the principal and from the two English teachers, the researcher collected the compiled daily lesson logs for the second quarter of the school calendar. This study focused on the instructional strategies of the teachers. These instructional strategies evidenced as classroom activities employed in the learning procedures were tallied according to what learning style is being catered. To categorize instructional strategies listed in the daily lesson logs, the teaching and learning strategies inventories of Chislett and Chapman (2005) (see Appendix D: *VAK Learning Styles Explanation*) and Enid (2015) (see Appendix E: *Learning Inventory*) were adopted.

In an effort to strengthen the results and interpretations made on the study, structured interview (see Appendix F: *Interview Guide Question*) and scheduled observations (see Appendix 6: *Teacher Observation Guide*) were conducted after permission is granted.

Statistical Tools and Analysis of Data

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To protect the identity of the subjects, all names and information which identified the respondents were given alphanumeric codes when presented throughout the rest of the paper.

The results of the survey were tabulated, tallied, and analyzed to provide the researcher answers to the research problems.

The researcher used frequency count and percentage distribution for both the students' learning style preferences and teachers' instructional strategies.

To answer the question on whether or not the students' learning style preferences and teachers' instructional strategies are matched, the researcher sought advised from three statisticians. All three statisticians agreed that correlation cannot be employed since the variables are categorized. It is then recommended that an analysis on the two variables is done through looking at the numbers to be followed by interpretations.

RESULTS AND DISCUSSION

Learning Style Preferences of the Students by Grade Level

The results of the survey on the learning style preferences of the students were tallied for analysis. The results of the questionnaire are displayed in Table 1 shown below.

It can be gleaned from the table that the learning style preferences of students from Grade 7 to Grade 10 are mostly visual. Auditory learners came in second and kinesthetic learners having the smallest number of students.

Based on the analysis done, there are three main learning style preferences in which students were categorized. As shown in the table, all grade levels are dominated by visual learners. Except Grade 7 students, all other grade levels are represented by fewer numbers of students who are kinesthetic. The result espouses the findings of Dunn and Dunn (as cited in Gilakjani & Ahmadi, 2011) which identified that visual learners among school aged children comprise 40% and auditory learners 20 - 30%. However, the results on the percentage of kinesthetic learners are a bit lower to that of the findings of Dunn and Dunn (as cited in Gilakjani & Ahmadi, 2011) which is 30 - 40%.

Learning Style Preferences Grade Level	Visual (%)	Auditory (%)	Kinesthetic (%)	Ν
Grade 7	41.22	28.04	30.74	63

Table 1. Learning Styles of the Students by Grade Level

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Grade 8	37.40	34.84	27.76	73
Grade 9	38.64	34.86	26.50	59
Grade 10	41.18	30.26	28.56	51

Teachers' Instructional Strategies

Table 2 on the next page presents the instructional strategies of the teachers by grade level. These instructional strategies employed by the English teachers as listed in their daily lesson logs were analyzed in a way that they should be categorized according to what learning style preference is described.

Based on the analysis done, the instructional strategies of the teachers do not follow certain patterns in a sense that a specific learning style preference is favored in all grade levels. Instead, these instructional strategies of the teachers favors all learning style preferences of the students. In Grade seven, most classroom activities were directed to kinesthetic learners; Grade 8, visual learners; Grade 9 and Grade 10, auditory learners.

It can be gleaned from the table that most classroom activities catering to the kinesthetic learners, except those in Grade 7, were less engaged. This result intensifies the findings of Evans and Waring (2006) which discovered that teachers were typically using approaches centered on transmitting information rather than employing approaches geared toward the development of students' understanding. Also, the high percentages of instructional strategies for auditory learners are attributed to the teachers' perceptions on content delivery. Based on the interview of the two English teachers, content delivery is best achieved through discussions.

Instructional Strategies				
	Visual (%)	Auditory (%)	Kinesthetic (%)	Ν
Grade Level				
Grade 7	19.05	28.57	52.38	42
Grade 8	52.38	42.86	4.76	42
Grade 9	33.33	52.38	14.29	42

Table 2. Teachers' Instructional Strategies

Grade 10	28.95	65.79	5.26	38

Teachers' Instructional Strategies Vis-a-Vis Students' Learning Style Preferences

To realize the objectives set by teachers, it is valuable that the success of achieving such objectives is due to a matched instruction between the instructional strategies of the teachers and the learning style preferences of the students.

The following discussions would show specifically the instructional strategies of the teachers and the learning style preferences of the students by grade level.

Teachers' Instructional Strategies Vis-a-Vis Grade 7 Students' Learning Style Preferences

Table 3 below displays the teachers' instructional strategies vis-a-vis Grade 7 students' learning style preferences. Grade 7 students are dominated by visual learners (41.22%) followed by kinesthetic learners (30.74%) which is closely followed auditory learners (28.04%).

Meanwhile, more than half (52.38%) of the instructional strategies of the teacher are for kinesthetic learners leaving 19.05 percent for visual learners and 28.57 percent for auditory learners.

Looking closely at the percentage distribution, there is a wide gap between the students' learning style preference and the teacher's instructional strategies. There seems to be consistency of distribution under visual learning. On the other hand, there are more numbers of visual learners in the classroom and yet visual learning has given fewer number of classroom activities. This implies that there is unmatched instruction in Grade 7. The large percentage of instructional strategies for kinesthetic learners can be directed to the performance tasks as one component of class standing. These performance tasks comprise 50 percent of their final grade. This is what Fine (as cited in Gilakjani & Ahmadi, 2011) states that students whole learning style preferences are not being matched may become confused, fall behind academically, lack confidence and interest, and eventually discontinue putting forth effort on the learning process.

	Visual (%)	Auditory (%)	Kinesthetic (%)
Learning Style Preference	41.22	28.04	30.74
Instructional Strategies	19.05	28.57	52.38

Table 3. Teachers' Instructional Strategies Vis-a-Vis Grade 7 Students' Learning Style Preferences

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Teachers' Instructional Strategies Vis-a-Vis Grade 8 Students' Learning Style Preferences

Table 4 on the next page presents the learning style preferences of Grade 8 students and instructional strategies of the teacher. Grade 8 students are closely dominated by visual learners and auditory learners with 37.40 percent and 34.84 percent respectively. Kinesthetic learner came in third with 27.76%. In the teacher's instructional strategies, visual learning activities got the highest percentage (52.38%) followed by auditory learning activities (42.86%). Kinesthetic learning activities garnered only 4.76 percent of all the instructional strategies of the teacher.

Comparing the percentage distributions of the two variables, though there are just a few kinesthetic learners, 4.76 percent of 164 instructional strategies seem too little for them. Conversely, more than half (52.38%) of the instructional strategies are for visual learning, but there are just more than one-thirds of the Grade 8 students who are visual learners. The result points to an unmatched instruction. As Felder (as cited in Wilson, 2011) put it, if students are not exposed to their preferred learning styles and are consistently required to use a less desired style, their learning is likely to be compromised due to a significantly raised level of discomfort.

(C)	Visual (%)	Auditory (%)	Kinesthetic (%)
Learning Style Preference	37.40	34.84	27.76
Instructional Strategies	52.38	42.86	4.76

Table 4. Teachers' Instructional Strategies Vis-a-Vis Grade 8 Students' Learning Style Preferences

Teachers' Instructional Strategies Vis-a-Vis Grade 9 Students' Learning Style Preferences

The learning styles preferences of the Grade 9 students and the teacher's instructional strategies are presented in Table 5 below. Grade 9 students have almost the same number or visual and auditory learners with 38.64 percent and 34.86 percent respectively. Kinesthetic learners garnered 26.50 percent.

In the instructional strategies of the teacher, auditory learning activities got more than half of the activities listed in the daily lesson logs. Kinesthetic learning activities constitute only 14.29 percent.

Looking at the percentage distribution, there are more numbers of visual learners but the teachers employed more auditory learning activities than visual and kinesthetic learning activities. This means that there is an unmatched instruction. Dunn and Burke (as cited in Zuck, 2015) reiterated that students are generally passive and not actively engaged or involved in the

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learning process because of lecture which lacks effectiveness in the development of higher-level skills.

	Visual (%)	Auditory (%)	Kinesthetic (%)
Learning Style Preference	38.64	34.86	26.50
Instructional Strategies	33.33	52.38	14.29

Table 5. Teachers' Instructional Strategies Vis-a-Vis Grade 9 Students' Learning Style Preferences

Teachers' Instructional Strategies Vis-a-Vis Grade 10 Students' Learning Style Preferences

Table 6 presents the instructional strategies of the teacher and the learning style preferences of Grade 10 students. It can be gleaned from the table that visual learners (41.18%) dominate the group. Auditory (30.26%) and kinesthetic (28.56%) learners came in second and third respectively.

Looking at the instructional strategies of the teacher, most of the classroom activities (65.79%) are for auditory learners. Visual learning activities garnered 28.95 percent. Meanwhile, kinesthetic (5.26%) learning activities got the minimal number of classroom activities.

As observed in the percentage distribution, there are more visual learners and yet more than half of the instructional strategies of teacher were categorized for auditory learners. Also, there are a few kinesthetic learners but having only 5.26 percent of all the classroom activities that support their preferred learning style is too minimal. The result is attributed to what the teacher believed that the best strategy to transmit information to the students is by using discussion and lecture method. Wormelli (2005) clarified that a teacher who is focused on teaching rather encouraging students to discover meaningful information makes the classroom environment meaningful, thus, turning the students into passive learners.

Table 6. Teachers' Instructional Strategies Vis-a-Vis Grade 10 Students' Learning Style Preferences

	Visual (%)	Auditory (%)	Kinesthetic (%)
Learning Style Preference	41.18	30.26	28.56
Instructional Strategies	28.95	65.79	5.26

CONCLUSIONS

Based on the findings of the study, the following conclusions are drawn:

- 1. The students of San Jose National High School are pictured as diverse learners in terms of learning styles visual, auditory, and kinesthetic.
- 2. The instructional strategies employed by the English teachers are varied.
- 3. The teachers' instructional strategies should match the students' learning style preferences. Thus, training on matching the two factors in the teaching learning process is needed.

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Appendix A: Letter to the School Principal



Region 1 Division of La Union Caba District SAN JOSE NATIONAL HIGH SCHOOL Caba 2502

November 3, 2016

MRS. PRECILA M. CARREON

Principal, San Jose National High School Caba, La Union

Madam:

My name is Regie F. Navor. I am presently studying Doctor of Philosophy major in Language Education, minor in Educational Administration under the supervision of Don Mariano Marcos Memorial State University, South La Union Campus, Agoo, La Union.

I am currently undertaking research study as a requirement of the degree. In this connection, I would like to ask your permission from your good office to conduct a study in your school. This is to use San Jose National High School as the locale of my study.

Attached in this letter are the instruments which the researcher will be using in gathering data. Rest assured that the findings of my study will be kept secret and confidential. Thank you very much.

Sincerely,

REGIE F. NAVOR Grade 11 Teacher

Approved by:

MRS. PRECILA M. CARREON SS Principal I **Appendix B** Letter to the Respondents



Region 1 Division of La Union Caba District SAN JOSE NATIONAL HIGH SCHOOL Caba 2502

November 3, 2016

Dear Respondents,

My name is Regie F. Navor. I am presently studying Doctor of Philosophy major in Language Education, minor in Educational Administration under the supervision of Don Mariano Marcos Memorial State University, South La Union Campus, Agoo, La Union.

I am currently undertaking research study as a requirement of the degree. In this connection, I would like to ask your cooperation as the respondents of the research study.

Rest assured that the findings of my study will be kept secret and confidential. Also, the information gathered will be treated carefully. To keep your identity, your names and information will be coded.

Attached in this letter is a questionnaire which aims to discover your learning style preferences.

Thank you very much.

Sincerely,

REGIE F. NAVOR Grade 11 Teacher

Appendix C:

VAK Learning Style Self-Assessment Questionnaire

Everyone is an individual and has his/her own style of learning. Remember that there are no wrong answers to this inventory.

Encircle the letter that represents how you behave.

- 1. When I operate new equipment I generally:
 - a) read the instructions first
 - b) listen to an explanation from someone who has used it before
 - c) go ahead and have a go, I can figure it out as I use it
- 2. When I need directions for travelling Iusually:
 - a) look at a map
 - b) ask for spoken directions
 - c) follow my nose and maybe use a compass
- 3. When I cook a new dish, I like to:
 - a) follow a written recipe
 - b) call a friend for an explanation
 - c) follow my instincts, testing as I cook
- 4. If I am teaching someone something new, I tend to:
 - a) write instructions down for them
 - b) give them a verbal explanation
 - c) demonstrate first and then let them have a go
- 5. I tend to say:
 - a) watch how I do it
 - b) listen to me explain
 - c) you have a go
- 6. During my free time I most enjoy:
 - a) going to museums and galleries
 - b) listening to music and talking to my friends
 - c) playing sport or doing DIY
- 7. When I go shopping for clothes, I tend to:
 - a) imagine what they would look like on
 - b) discuss them with the shop staff
 - c) try them on and test them out
- 8. When I am choosing a holiday I usually:
 - a) read lots of brochures
 - b) listen to recommendations from friends

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- c) imagine what it would be like to be there
- 9. If I was buying a new car, I would:
 - a) read reviews in newspapers and magazines
 - b) discuss what I need with my friends
 - c) test-drive lots of different types
- 10. When I am learning a new skill, I am most comfortable:
 - a) watching what the teacher is doing
 - b) talking through with the teacher exactly what I'm supposed to do
 - c) giving it a try myself and work it out as I go
- 11. If I am choosing food off a menu, I tend to:
 - a) imagine what the food will look like
 - b) talk through the options in my head or with my partner
 - c) imagine what the food will taste like
- 12. When I listen to a band, I can't help:
 - a) watching the band members and other people in the audience
 - b) listening to the lyrics and the beats
 - c) moving in time with the music
- 13. When I concentrate, I most often:
 - a) focus on the words or the pictures in front of me
 - b) discuss the problem and the possible solutions in my head
 - c) move around a lot, fiddle with pens and pencils and touch things
- 14. I choose household furnishings because Ilike:
 - a) their colors and how they look
 - b) the descriptions the sales-people give me
 - c) their textures and what it feels like to touch them
- 15. My first memory is of:
 - a) looking at something
 - b) being spoken to
 - c) doing something
- 16. When I am anxious, I:
 - a) visualize the worst-case scenarios
 - b) talk over in my head what worries me most
 - c) can't sit still, fiddle and move around constantly
- 17. I feel especially connected to other people because of:
 - a) how they look
 - b) what they say to me
 - c) how they make me feel

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- 18. When I have to revise for an exam, I generally:
 - a) write lots of revision notes and diagrams
 - b) talk over my notes, alone or with other people
 - c) imagine making the movement or creating the formula
- 19. If I am explaining to someone I tend to:
 - a) show them what I mean
 - b) explain to them in different ways until they understand
 - c) encourage them to try and talk them through my idea as they do it

20. I really love:

- a) watching films, photography, looking at art or people watching
- b) listening to music, the radio or talking to friends
- c) taking part in sporting activities, eating fine foods and wines or dancing
- 21. Most of my free time is spent:
 - a) watching television
 - b) talking to friends
 - c) doing physical activity or making things
- 22. When I first contact a new person, I usually:
 - a) arrange a face to face meeting
 - b) talk to them on the telephone
 - c) try to get together whilst doing something else, such as an activity or a meal
- 23. I first notice how people:
 - a) look and dress
 - b) sound and speak
 - c) stand and move
- 24. If I am angry, I tend to:
 - a) keep replaying in my mind what it is that has upset me
 - b) raise my voice and tell people how I feel
 - c) stamp about, slam doors and physically demonstrate my anger
- 25. I find it easiest to remember:
 - a) faces
 - b) names
 - c) things I have done
- 26. I think that you can tell if someone is lying if:
 - a) they avoid looking at you
 - b) their voices changes
 - c) they give me funny vibes
- 27. When I meet an old friend:

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- a) I say "it's great to see you!"
- b) I say "it's great to hear from you!"
- c) I give them a hug or a handshake

28. I remember things best by:

- a) writing notes or keeping printed details
- b) saying them aloud or repeating words and key points in my head
- c) doing and practicing the activity or imagining it being done

29. If I have to complain about faulty goods, I am most comfortable:

- a) writing a letter
- b) complaining over the phone
- c) taking the item back to the store or posting it to head office
- 30. I tend to say:
 - a) I see what you mean
 - b) I hear what you are saying
 - c) I know how you feel



Appendix D: VAK Learning Styles Explanation

VAK Learning Styles Explanation

The VAK learning styles model suggests that most people can be divided into one of three preferred styles of learning. These three styles are as follows:

- Someone with a Visual learning style has a preference for seen or observed things, including pictures, diagrams, demonstrations, displays, handouts, films, flip-chart, etc. These people will use phrases such as 'show me', 'let's have a look at that' and will be best able to perform a new task after reading the instructions or watching someone else do it first. These are the people who will work from lists and written directions and instructions.
- Someone with an Auditory learning style has a preference for the transfer of information through listening: to the spoken word, of self or others, of sounds and noises. These people will use phrases such as 'tell me', 'let's talk it over' and will be best able to perform a new task after listening to instructions from an expert. These are the people who are happy being given spoken instructions over the telephone, and can remember all the words to songs that they hear!
- Someone with a Kinesthetic learning style has a preference for physical experience touching, feeling, holding, doing, and practical hands-on experiences. These people will use phrases such as 'let me try', 'how do you feel?' and will be best able to perform a new task by going ahead and trying it out, learning as they go. These are the people who like to experiment, hands-on, and never look at the instructions first!

Appendix E:

Learning Inventory

Visual Learners

INTAKE

[To take in the information, use]

- underlining
- different colors highlighters symbols
- flow charts, charts, graphs pictures, videos, posters slides
- different spatial arrangements on the page white space
- textbooks with diagrams, pictures
- lecturers who use gestures and picturesque language

SWOT

[Study without tears]

- To make a learnable package
- Convert your lecture 'notes' into a learnable package by reducing them (3: 1) into page pictures.
- Use all techniques above to do this
- Reconstruct the images in different ways try different spatial arrangements
- Redraw your pages from memory Replace words with symbols or initials. Look at your pages

OUTPUT

[To perform well in the examination]

- Recall the 'pictures' of pages.
- Draw use diagrams where appropriate.
- Write exam answers
- Practice turning your visuals back into words.
- You are holistic rather than reductionist in your approach.
- You want the whole picture.
- Visual learners do not like handouts, words, lectures, textbooks or assessment that hinge on word usage, syntax and grammar.

Auditory Learners

INTAKE

[To take in the information]

- attend lectures attend tutorials
- discuss topics with other students discuss topics with your lecturers
- explain new ideas to other people
- use a tape recorder remember the interesting examples, stories, jokes...
- describe the overheads, pictures and other visuals to somebody who was not there

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• leave spaces in your lecture notes for later recall and 'filling'

SWOT

[Study without tears]

- To make a learnable package
- Convert your lecture notes into a 'learnable package by reducing them (3:1).
- Expand your notes by talking with others and collecting notes from the textbook.
- Put your summarized notes onto tapes and listen to them.
- Ask others to 'hear' your understanding of a topic.
- Read your summarized notes aloud.
- Explain your notes to another auditory person.

OUTPUT

[To perform well in the examination]

- Talk with the examiner.
- Listen to your voices and write them down.
- Spend time in quiet places recalling the ideas.
- Practice writing answers to old exam questions.
- Speak your answers
- You prefer to have this entire page explained to you.
- The written words are not as valuable as those you hear.
- You will probably go and tell somebody about this.

Kinesthetic Learners

INTAKE

[To take in the information, use]

- all your senses sight, touch, taste, smell, hearing . .
- laboratories, field trips , field tours
- examples of principles,
- lecturers who give real-life examples
- applications, hands-on approaches (computing)
- trial and error
- collections of rock types, plants, shells, grasses..
- exhibits, samples, photographs..
- recipes
- solutions to problems previous exam papers

SWOT

[Study without tears]

- Your lecture notes may be poor because the topics were not 'concrete' or 'relevant'.
- You will remember the 'real' things that happened.
- Put plenty of examples into your summary.
- Use case studies and applications to help with principles and abstract concepts

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- Talk about your notes with another 'K' person.
- Use pictures, photographs which illustrate an idea.
- Go back to the laboratory or your lab manual.
- Recall the experiments, field trip

OUTPUT

[To perform well in the examination]

- Write practice answers, paragraphs
- Role-play the exam situation in your own room
- You want to experience the exam so that you can understand it.
- The ideas on this page are only valuable if they sound practical, real and relevant to you.
- You need to do things to understand.



Appendix F:

Interview Guide Questions

Name: _____

- 1. How long have you been teaching?
- 2. What grade level are you teaching?
- 3. Describe your students.
- 4. What can you say about the daily lesson logs of the teachers?
- 5. What importance do you see in having daily lesson logs?
- 6. What disadvantages do you see in preparing and constructing daily lesson logs?
- 7. How much time do you spend in preparing lesson logs?
- 8. In preparing your daily lesson logs, what factors do you consider in choosing the activities?
- 9. What do you do in cases when the lesson log intended for the day is not executed?
- 10. How do you assess student learning in one session?
- 11. What adjustments do you do in the following situations:
 - a. Before preparing daily lesson logs
 - b. While preparing daily lesson logs
 - c. After preparing daily lesson logs

Appendix G:

Teacher Observation Guide

(Instructional Supervision Form3A / CB-PAST Form 3A)

Name:	Position:		Date:			
Legend	d:					
	0 – Not Observed (NO)					
	1 – Below Basic (BB)					
	2 - Basic (B)					
	3 – Proficient (P)					
	4 – Highly Proficient (HP)					
	Performance Behavior		Obse	rvation	Rating	
		NO	BB	В	Р	HP
A.	Diversity of Learners					
1.	Sets lesson objectives within the experiences and					
	capabilities of the learners	0	1	2	3	4
2.	Utilizes varied techniques and strategies suited to			- 10		
	different kinds of learners	0	1	2	3	4
3.	Shows fairness in dealing with learners	0	1	2	3	4
4.	Places lessons appropriate to the needs and					
	difficulties of learners	0	4	2	3	4
5.	Provides appropriate intervention activities for					
	learners at risk	0	1	2	3	4
Total S	Score: Average:	Desci	ription:			
Narrati	ive Description:					
	Performance Behavior		Obse	rvation	Rating	
		NO	BB	В	Р	HP
В.	Curriculum Content and Pedagogy					
	B.1 Teacher behavior in Actual teaching					
1.	Teaches accurate and updated content using					
	appropriate approaches and strategies.	0	1	2	3	4
2.	Aligns lesson objectives, teaching methods,					
	learning objectives and instructional materials	0	1	2	3	4

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3.	Encourages learners to use higher order thinking					
	skills in asking questions	0	1	2	3	4
4.	Encourages and sustains learners' interest in					
	the subject matter by making content meaningful					
	and relevant	0	1	2	3	4
5.	Establishes routines and procedures to maximize					
	use of time and instructional materials.	0	1	2	3	4
6.	Integrates language, literacy, skills and values					
	in teaching.	0	1	2	3	4
7.	Presents lesson logically in a developmental manner	:0	1	2	3	4
8.	Utilizes technology resources in planning,					
	designing and delivery of the lesson	0	1	2	3	4
9.	Creates situations that encourages learners					
	to use higher order thinking skills	0	1	2	3	4
Total 9	Score: Average:	Decor	rintion			
I Utal S	Average	Desci	ipuon.			

Narrative Description:

	Performance Behavior		Obse	rvation	Rating	5
		NO	BB	В	Р	HP
	B.2 Learners' Behavior in the Classroom					
1.	Answers in own words at a desired cognitive level	0	1	2	3	4
2.	Participates actively in the learning tasks					
	with some levels of independence	0	1	2	3	4
3.	Asks questions relevant to the lesson	0	1	2	3	4
4.	Sustains interest in the lesson/ activity	0	1	2	3	4
5.	Follows routines and procedure to maximize					
	instructional time	0	1	2	3	4
6.	Shows appropriate behavior of individualism,					
	cooperation, competition in classroom interactions	0	1	2	3	4
7.	Imbibes and values learning from the teacher					
	and from the classroom	0	1	2	3	4
8.	Demonstrates in varied ways learning achieved					
	in the activities	0	1	2	3	4

Narrative Description:

Performance Behavior			Observation Rating					
		NO	BB	В	Р	HP		
C.	Planning, Assessing , Reporting Learners' Ou	tcomes						
1.	Provides timely, appropriate reinforcement							
	/feedback to learners' behavior	0	1	2	3	4		
2.	Use appropriate formative, summative tests							
	congruent to the lesson	0	1	2	3	4		
3.	Uses non-traditional authentic assessment							
	techniques when needed	0	1	2	3	4		
4.	Keeps accurate records of learners'							
	performance level	0	1	2	3	4		
5.	Gives assignment as reinforcement or							
	enrichment of the lesson	0	1	2	3	4		
6.	Provide opportunity for learners to							
	demonstrate their learning	0	1	2	3	4		
Fotal S	Score: Average:	Desc	ription:	_				
Narrat	ive Description:			J				
Comm	ents to the Teacher:							

Agreements of the Teacher and Observer:

(Teacher's Name and Signature)

(Observer's Name and Signature) Head Teacher/Master Teacher/Principal/Supervisor

Appendix H: Matrix on Learning Action Cell (LAC) Session

Topics	Persons Involved	Expected Results
Learning Style Preference Awareness Lecture	All teachers of San Jose National High School	The lecture will increase awareness of the teachers in the existence of student learning style preferences.
Learning Style Preference Inventories	All teachers of San Jose National High School	The lecture will help the teachers in identifying the learning style preferences of their students in each section per grade level they are handling or teaching.
Learning Style Preference Explanations	All teachers of San Jose National High School	The lecture will increase the teachers' understanding on the different learning style preferences of the students.
Instructional Strategies Lecture	All teachers of San Jose National High School	The lecture will increase the teachers' awareness on instructional strategies.
Instructional Strategies Inventories	All teachers of San Jose National High School	The lecture will help the teachers to create a pool of classroom activities which can be used as instructional strategies.
Daily Lesson Log Preparation and Construction Lecture	All teachers of San Jose National High School	The lecture will review and increase the teachers' understanding on the preparation and construction of daily lesson logs.

Learning Procedures and its Main Parts	All teachers of San Jose National High School	The lecture will increase the teachers' abilities in incorporating instructional strategies congruent to the different learning style preferences of the students.
Preparing and Constructing of a Sample Daily Lesson Log	All teachers of San Jose National High School	This part of the session puts the teachers in an application mode integrating instructional strategies that match students' learning style preferences.
Peer/Pair Critique	All teachers of San Jose National High School	This activity will strengthen teamwork among teachers by giving relevant criticisms which would significantly help one another.
Demonstration Teaching	All teachers of San Jose National High School	This activity will set the minds of the teachers on the impact of the teacher's matched instructional strategies and students' learning style preferences