

Teaching Strategies of Technical-Vocational Teachers and Student Satisfaction

Sergia B. Pangan*

Abstract

The researcher used a descriptive research design where the respondents were the 100 TVL teachers and 50 students in Cabuyao City, Laguna, following a purposive quota sampling. A Pearson r correlation was used to test the relationship between the frequency of application of different teaching strategies by the TVL teachers and students' satisfaction.

The following are the findings of the study with the mean assessment of the TVL teachers in their teaching strategies in terms of lecture with laboratory, computer-assisted lessons, peer tutoring, modeling and teaching demo, oral recitation and reporting, and group work obtaining a common application of extremely frequent. It just shows that they used a variety of teaching strategies in their classes, and the extreme frequency of application of the teaching strategies is a manifestation of good practice of teaching strategies. Also, the students' satisfaction in terms of teaching quality, teaching attitude, and teaching style comes up with the common agreement of highly satisfied. The results revealed that the learners were very pleased with the TVL teachers' teaching quality, attitude, and style; and the relationship between the frequency of teaching strategies of TVL teachers and learners' satisfaction is only significant at modeling and teaching demo and teaching quality. It was revealed that TVL teachers' modeling and teaching demo teaching strategies correlated with learners' satisfaction with the quality of the teacher's teaching.

Keywords: teaching strategies; technical-vocational teachers; student satisfaction

1. Introduction

The education sector is one of the most hit by crises' lockdowns. The greatest way to learn is now online. Students' attention was split between courses and phones. Blended learning is effective if it's well-implemented and tailored to the subject's needs. Online learning may differ from regular classrooms. Teachers must adapt smartly to online learning. The difficulty is creating student-interesting activities. Each teacher has a unique flair. With individualized instruction, conventional teachers with diverse teaching styles are adapting their approach to their students' learning requirements. Scaffolding has also been used to teach reading (Bakker et al., 2015), computational thinking (Angeli & Valanides, 2020), and physics (Abdurrahman, et al., 2019).

Metacognition falls under the constructive perspective teaching approach, which emphasizes that pupils must be actively involved in the learning process. While adapting teaching approaches to students' requirements can increase class performance, the metacognitive perspective argues students gain more from learning how to learn on their own (Haruehansawasin & Kiattikomol, 2017).

Thus, this study aimed to improve the teaching tactics of technical-vocational and livelihood education instructors as well as determine the level of student satisfaction with the teaching strategies employed by these instructors during the pandemic. Similarly, the proponent wished to establish the frequency of application of teaching strategies and the level of learner satisfaction with regard to the quality, attitude, and style employed by teachers in Cabuyao, Laguna.

The COVID-19 epidemic halted all human pursuits according to social distancing norms. The virus has closed businesses, churches, and entertainment places throughout the Philippines. 87 percent of students are prevented from returning to school, according to UNESCO (Olaes, 2021). In the Philippines, DepEd launched the Basic Education-Learning Continuity Plan in 2020 to prepare teachers with diverse learning delivery modalities that seek to exhibit resilience in resisting adversities and keeping their obligations and responsibilities. International Institute for Educational Planning (IIEP) (UNESCO, 2020). Free data limits instructors' inventiveness in teaching distant pupils, while Facebook depletes personal and contextual resources. Along with tactics that boost resilience, well-being, emotions, and willingness to work and exert maximum effort. (Mansfield et al., 2016). The COVID-19 pandemic has changed schooling at all levels. Face-to-face has replaced it. Remote, simultaneous, interactive master classes have replaced classroom lectures. Evaluation has gone beyond knowledge tests (Burgos & Tabacco, 2021).

Learning is growth in a world where processes are already unfolding. Teachers add their own impetus to forces and energies already at work (Ingold, 2020). Teachers prepare classroom activities and laboratories to satisfy their students' needs. Choosing classroom strategies and different answers to problems and issues. Online students' attention is split between classrooms and phones. During a pandemic, it's difficult to accommodate student requests. So, as a teacher, you must design fresh teaching approaches. Teachers of different ages employ different methods. Online teachers should utilize credible materials. Online tools and playlists or menus help students' study more. Students learn course material and create objectives through teaching strategies. Teaching techniques look at how individuals learn to create the best group strategy.

This study is anchored on three main teaching-learning theories: behaviorism, cognitivism, and constructivism. These theories are examined in relation to teachers' teaching practices and students' satisfaction at Cabuyao's City Schools Division. First, Western Governors University (2022, referenced in Rabinowitz, 2004) defined the Behaviourist Learning Theory of psychologists J.B. Watson and B.F. Skinner is an environment in determining behavior. An incident or activity in the environment triggers a mental event, which leads to a behavior. Also, behaviorism supplies certain assessment-related notions. (Juhmani, 2017). (1) identify cues that elicit desired responses; (2) pair prompts with target stimuli that initially have no eliciting power but are expected to elicit responses in the "natural" (performance) setting; and (3) create an environment where students can make the correct responses when confronted with those target stimuli (Etmer & Newby, 2019). Repetition and reinforcement improve imperfect reactions.

According to Hassan and Wai (2019), the behavioral reinforcement/incentives approach and behavioral learning techniques are used in interventions and treatment programs. It focuses on their conduct during a lecture with laboratory, computer-assisted learning, peer tutoring, demonstration teaching, oral recitation, report writing, and group activities. It also shows up in student satisfaction with their teachers' teaching quality, attitude, and style.

Cognitive Learning Theory, popularized by researchers Jerome Bruner and Jean Piaget, will assist people in learning how to think better at work. Because learning is dependent on how information is encoded, stored,

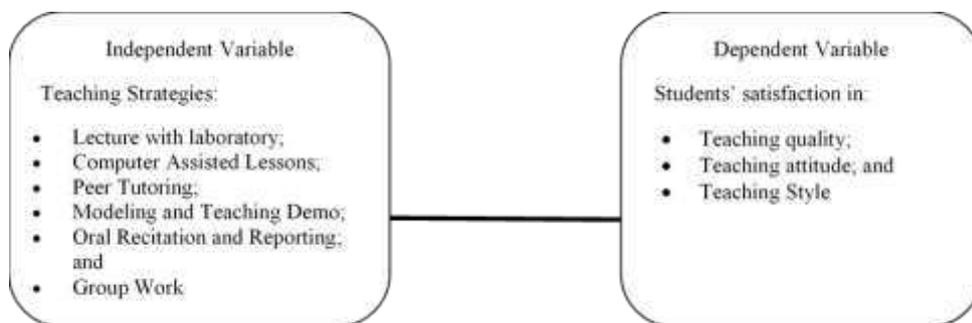
and retrieved in the human mind (Sink, 2014). For example, Hua (2016) found that the program's quality was good in terms of instruction, interaction, and technique. This shows that the ADDIE model is a useful technique to construct curricula. But if this study is utilized to develop lessons, it doesn't use cognitive load measurement tools. No explanation is given for how the terms themselves affect data validity and reliability. Teachers could clarify pedagogical and learning objectives.

Finally, according to the GSI Teaching and Resource Center (2015), constructivism is the belief that human learning is generated and that learners construct new knowledge based on existing information. The goal of cognitivist teaching is to help students integrate new information into their existing knowledge and adapt their existing conceptual framework to accept it (McLeod, 2019). Zainuddin and Sahrir (2015) made multimedia teaching and learning software with the help of a modified version of the ADDIE instructional design paradigm.

Online course design involves learning theories and instructional design, according to Bajbouj, Alwi, and Shah (2015). The study's presentation strategies are constrained by difficulty and usefulness. The mentioned theories (behaviourism, cognitivism, and constructivism) focus on the teachers' and students' needs and implications in terms of teaching and learning. Behaviourist Learning Theory suggests a mental event that leads to behavior, which involves repeated practice to improve imperfect reactions through reward and punishment. Whereas, Cognitive Learning Theory focuses on a program's instruction, interaction, and technique being achieved with excellence. Pedagogical and learning objectives must be clarified. While Constructivism holds that learners create new knowledge from existing information, it helps students accept new information and adapt to their new concept. In the context of education, both the instructor and the student need to be motivated by means of incentives and penalties in order to improve their conduct. Additionally, in order for students to be happy with the progress they are making toward their educational objectives, excellent instruction is required in teaching tactics. As a consequence of the correlation between the teaching tactics and the students' levels of satisfaction, new knowledge regarding teaching strategies will be created.

1.1. Conceptual Framework

To visualize the independent and dependent variables, below is an IV-DV model:



The above diagram shows the study's independent and dependent variables. The independent variables include lecturing with laboratory, computer-assisted lessons, peer tutoring, model-and-demonstration, oral

recitation and reporting, group work. While the dependent variables reflect student satisfaction in Cabuyao City, Laguna, which includes teaching quality, attitude, and style (Creswell, 2014).

1.2. Statement of the Problem

This study aims to enhance the teaching strategies of the Technical-Vocational and Livelihood education teachers and to know students' satisfaction. Specifically, the researcher seeks to answer the following questions:

1. What is the level of teaching strategies of the Technical-Vocational and Livelihood education teachers in terms of:

- 1.1 lecture with laboratory;
- 1.2 computer-assisted lessons;
- 1.3 peer tutoring;
- 1.4 modeling and teaching demo;
- 1.5 oral recitation and reporting; and
- 1.6 group work?

2. What is the level of students' satisfaction of the in Cabuyao, Laguna in terms of;

- 2.1 teaching quality;
- 2.2 teaching attitude; and
- 2.3 teaching style?

3. Is there a significant relationship between the level of teaching strategies and the level of students' satisfaction in Cabuyao City, Laguna?

2. Methodology

2.1 Research Design

This study used a quantitative design that aims to determine how many people think, act, or feel a certain way. Quantitative projects focus on the quantity of responses. (DJS Research, 2022). It will also utilize the descriptive research design, which allows researchers to describe the investigated phenomenon. (Kumar, 2022). Descriptive studies describe people, events, or conditions by observing them in nature. The researcher only describes the sample and/or variables. Descriptive studies can be pure or comparative. (Siedlecki, 2020).

This study uses a quantitative descriptive design to identify, analyze, and describe the strategies used by technical-vocational education teachers. Surveys will be used as a tool to collect data from both teacher and student participants.

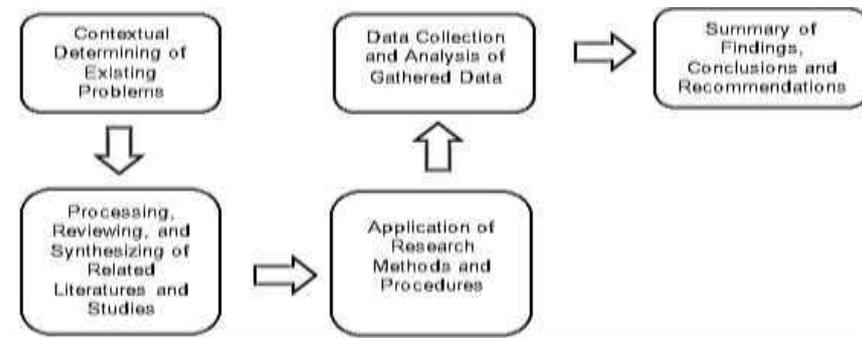
2.2 Respondents of the Study

The respondents of the study are the Technical-Vocational and Livelihood (TVL) education teachers and selected senior high school students of the A.Y. 2020-2021 in the City Schools Division of Cabuyao in Cabuyao City, Laguna. The researcher will get the total population of the senior high school learners and the total population of the Technical-Vocational and Livelihood education teachers. The number of respondents is

(100) Technical-Vocational and Livelihood education teachers and (50) students, for a total of (150) respondents.

2.3 Research Procedure and Instrumentation

The researcher outlined the topic, concerns, and focus. Following data collection, the researcher met with her thesis adviser to design the research framework and study direction. The researcher then collects relevant literature and studies. Then, they constructed the research questionnaire, and later, the proponent requested the Schools Division Superintendent to allow her to conduct the thesis in Cabuyao. During the distribution of survey questionnaires in chosen schools in the same division, respondents received a letter of request through Google form. After a few weeks, the researcher tallied, analyzed, and interpreted the data. Once finished, conclusions and recommendations are provided.



The research instrument was the researcher-made survey questionnaire, which served as the basic tool in determining the responses to the problems to be presented. It was structured according to the objectives of the study. Two (2) research questionnaires were used to collect the necessary data for the conduct of the study. The first questionnaire was answered by the teachers. It will be composed of two parts. The first part focuses on the teaching strategies of technical, vocational, and livelihood education teachers. The second questionnaire was answered by the students and was composed of one part, which will be the satisfaction of the respondents to the teaching strategies employed by the teachers. After undergoing through modifications and validations of the questionnaire on the frequency of application of teaching strategies by the Technical-Vocational and Livelihood education teachers, the researcher proceeded to the administration of the questionnaire utilizing the Five-Point Likert Scale below: The five (5) point scale ranges from five (5) being the highest with a descriptive remark of Extremely Frequent (EF) and one (1) being the lowest with a descriptive remark of Not Frequent (NF). And in terms of the students' satisfaction, a five-point Likert scale was also utilized, ranging from five (5) being the highest with a descriptive remark of Extremely Satisfied (ES), and one (1) being the lowest with a descriptive remark of Not Satisfied (NS).

.4 Statistical Treatment of Data

In identifying the measurement of the data and its statistics, the researcher used Weighted Mean to determine the values essential to the research problems. Also, this study utilized standard deviation, a method to determine data variability to show how distant the values presented in the surveys from the mean. Lastly, to identify the significant relationship between the dataset, Pearson R Correlation was used to measure the linear relationship between the variables.

3. Results and Discussion

3.1 Level of Teaching Strategies of the Technical-Vocational and Livelihood Education Teachers

There are many different categories that may be used to classify teachers of technical-vocational and livelihood education. Some of these categories are based on the qualities of the instructors, while others take into consideration elements such as the teachers' teaching styles, teaching tactics, and the amount of years they have spent instructing as well as other factors. Some of these categories consider factors such as the characteristics of the students, while others consider the characteristics of the teachers. Some of these categorizations are dependent on the characteristics that are held in common by the instructors.

In this study, the frequency of application of teaching strategies used by teachers of technical-vocational and livelihood education was described in terms of lecture with laboratory, computer assisted lessons, peer tutoring, modeling and teaching demo, oral recitation and reporting, and group work. This study was carried out in the United Kingdom. This study was carried out in the United Kingdom as the location of its primary operations. During the course of our research, we made use of the weighted mean in addition to the standard deviation in order to produce a representation that was as accurate as possible of the distribution of the various educational philosophies. This was accomplished in order to produce a representation that was as accurate as possible of the distribution of the educational philosophies.

Table 1. Level of Teaching Strategies of the Technical-Vocational Livelihood Education in terms of Lecture with Laboratory

The teacher...	Mean	SD	Remarks
...introduces equipment and develops observational skills.	4.37	0.71	Extremely Frequent
...installs/downloads/uses/understands laboratory software.	4.42	0.64	Extremely Frequent
...reinforces topics from lecture and text through laboratory experiments.	4.26	0.69	Extremely Frequent
...allows learners enough time to complete their laboratory assignments.	4.39	0.65	Extremely Frequent
...assesses and evaluates the output of learners.	4.44	0.60	Extremely Frequent
Grand Mean	4.38		Extremely Frequent

In Table 1, it was presented that in terms of lecture with laboratory, frequency of application of teaching strategies of TVL education teachers was extremely frequent supported by the grand (M=4.38). This means that the TVL teachers frequently apply lectures and laboratories as a strategy in teaching.

It was presented that TVL teachers extremely frequent assess and evaluate the output of learners as evidenced by the obtained highest (M=4.44, SD=0.60). Just the same, the TVL teachers are extremely frequent reinforce topics from lecture and text through laboratory experiments denoted by the least (M= 4.26, SD=0.69). This implies that lecture and laboratory is one of the strategies applied by TVL teachers constantly.

As recommended by the Chairman of the Board of Trustees (BOT) remarked that there's a need to modernize the interiors and exteriors of classrooms in response to several requests to study how the institution might improve classroom learning in laboratories. (Chibuzor, 2021)

Moreover, one of the resources that aids in the learning process is the laboratory. Students can use the laboratory to develop concepts, learn new approaches, and enhance their knowledge and talents. Using laboratory facilities in the learning process can help lecturers and students acquire concepts faster, expand on what they've learned, and improve their thinking abilities. (Noviani et al., 2015)

Teaching with laboratories provides an interactive learning environment. The hands-on experiences can help the students to acquire technical skills and apply concepts and theories presented in lecture.

Table 2. Level of Teaching Strategies of the Technical-Vocational Livelihood Education in terms of Computer Assisted Lessons

The teacher...	Mean	SD	Remarks
...utilizes a combination of text, graphics, sound and video in enhancing the learning process.	4.58	0.54	Extremely Frequent
...assists learners during hands-on and virtual activities.	4.39	0.58	Extremely Frequent
...incorporates recent apps and platforms in the lessons to aid the teaching and learning resources.	4.42	0.65	Extremely Frequent
...involves the learners in interacting with the programmed and quality-assured instructional materials.	4.32	0.67	Extremely Frequent
...utilizes tutorials, drill and practice, games, simulation, discovery and problem-solving tasks or activities in the lesson plan.	4.37	0.67	Extremely Frequent
Grand Mean	4.42		Extremely Frequent

Table 2 showed that in terms of computer assisted lessons, frequency of application of teaching strategies of TVL education teachers was extremely frequent supported by the grand mean ($M=4.42$). This means that the TVL teachers frequently used computer assisted lessons as one of the teaching strategies.

It was presented that TVL teachers extremely frequent utilize a combination of text, graphics, sound and video in enhancing the learning process as shown by the highest mean obtained ($M=4.58$, $SD=0.54$). Similarly, the TVL teachers are extremely frequent in involving the learners in interacting with the programmed and quality-assured instructional materials defined by the least ($M= 4.32$, $SD=0.67$). This indicated that one of the tactics used by TVL teachers on a regular basis is computer assisted teaching.

This was supported by Ataman (2020) stating that teachers used computer-aided materials to attract students' attention and increase efficiency and the teachers need to improve their technical skills. Moreover, Lai et al., (2015) claimed that the use of Computer-assisted learning (CAL) enhanced the pupils' interest in learning dramatically. The CAL intervention did not have any effect on the outcomes. Education systems in both rich and developing nations have had a long-standing issue in educating underprivileged populations.

Computer-assisted lessons that are delivered with the assistance of computers have the ability to capture the interest of even the least motivated of students. This device is a multimedia system that takes in data in both audio and video formats. It presents material in a variety of ways, some of which are interactive and exciting, such as animation, flashing, and graphical displays, which assists students in efficiently acquiring knowledge on a variety of subjects. This piece of equipment is a multimedia system that is capable of ingesting data in the form of audio in addition to visual.

Table 3. Level of Teaching Strategies of the Technical-Vocational Livelihood Education in terms of Peer Tutoring

The teacher...	Mean	SD	Remarks
...encourages sharing of effective study skills, habits and strategies between and among learners.	4.36	0.91	Extremely Frequent
...allows the learners how to take turns teaching and provide feedback.	4.36	0.66	Extremely Frequent
...explains to the learners the benefits and advantageous of peer teaching and learning at the same time.	4.33	0.80	Extremely Frequent
...selects learners who are high achievers who serve as a positive and inspirational influence between and among his peers.	4.30	0.75	Extremely Frequent
...knows the advantages and disadvantages of peer tutoring sessions.	4.43	0.59	Extremely Frequent

Grand Mean	4.36	Extremely Frequent
------------	------	--------------------

As shown in Table 3, the frequency of application of TVL teachers in terms of peer tutoring was extremely frequent supported by the grand (M=4.36). This signifies that the TVL teachers employed peer teaching as a teaching approach frequently.

It was shown that TVL teachers extremely frequent know the advantages and disadvantages of peer tutoring sessions as indicated by the highest mean (M=4.53, SD=0.59). In the same way, the TVL teachers extremely frequent select learners who are high achievers who serve as a positive and inspirational influence between and among his peers marked by the least (M= 4.30, SD=0.75). As a result, TVL teachers frequently employ peer tutoring as a strategy.

As stated by Thurston et al. (2021), peer tutoring benefits both tutors and tutees. Peer tutors and tutees have little experience in cooperative learning. Tutors and students who participated in cooperative learning performed better. The research conducted by Azubuike (2012), inactive students who were taught through peer tutoring did better than students who were taught by expository technique.

On the other hand, a study that was carried out by Ullah et al. (2018) found that peer tutoring only rarely improves the performance of tutors for a variety of reasons. Some of these reasons include tutors who have low academics, shorter tutor training time, random tutee and tutor assignment, and so on. Kimbrough (2022) stated that the efficiency of the student-to-student mentoring program is contingent on the academic prowess of the student's contemporaries.

Peer tutoring promotes collaboration and teamwork among students. Encourage students to speak up and participate in class. The interactive, collaborative learning experience focuses on the learner and promotes shared work. To create an interesting and collaborative learning environment, give students the chance to lead the activity. It's also one of the least expensive strategies.

Table 4. Level of Teaching Strategies of the Technical-Vocational Livelihood Education in terms of Modeling and Teaching Demonstration

The teacher...	Mean	SD	Remarks
...explains the content/topic without relying solely on the prescribed instructional materials.	4.32	0.66	Extremely Frequent
...demonstrates up-to-date knowledge and mastery of the learning area.	4.54	0.56	Extremely Frequent
...explains the relevance of present topics to the previous lessons.	4.53	0.58	Extremely Frequent
...relates the content/topic to relevant issues and trends.	4.48	0.63	Extremely Frequent

...cites application of topics learned to daily life activities of learners.	4.50	0.57	Extremely Frequent
Grand Mean	4.47		Extremely Frequent

The frequency of use of TVL teachers in terms of teaching demonstration was extremely frequent, as seen in Table 4, as evidenced by the grand (M=4.47). This indicates that the TVL teachers regularly used demonstration teaching as a teaching strategy.

The highest mean (M=4.54, SD=0.56), TVL teachers extremely frequent in demonstration of up-to-date knowledge and mastery of the learning area. Similarly, the TVL teachers extremely frequent explains the content/topic without relying solely on the prescribed instructional materials gained by the least mean (M=4.32, SD=0.66). As a result, teaching demonstration is a common strategy used by TVL teachers.

Kakumanu (2020), defined the term "modeling" refers to the process of providing an outstanding opportunity in the comprehension of concepts via the use of a variety of representations. While the term "demonstrations" refers to everything that helps students understand a concept, the phrase does not limit itself to just one type of instructional tool. The use of modeling as a teaching strategy is one that is extremely efficient and ought to be implemented in as many classroom settings as feasible. The act of directly demonstrating to pupils how to carry out a job or activity is referred to as "modeling," and it is one kind of instruction known as "modeling." (Coleman, 2020)

In accordance with this, a study was carried out by Robinson (2016), and the objective of the study was to assess the efficacy of the professional development opportunity provided by the Demonstration Classroom. Teachers are given the opportunity to witness other educators in action during the Demonstration Classroom experience. In addition, participants are given an opportunity to show their level of comprehension through the completion of an application task. To have a comprehensive understanding of the perspectives held by instructors who participated in the Demonstration Classroom process. According to the findings of the study, everyone who took part in the Demonstration Classroom program found the experience to be quite fulfilling, and the researchers concluded that the program was successful in achieving its objectives.

Similarly, Abdullahi et al. (2014) conducted a study that examines several different models of teaching and learning, the roles of modeling techniques in teaching and learning, and the benefit of modeling techniques. In addition, the study provides a demonstration and explanation of modeling techniques in the context of children's learning. There are two key advantages associated with making use of models as learning aids. The findings of the study can be summarized as follows: first, models offer accurate and helpful representations of knowledge that is required when working through problems in a specific domain; and second, a model makes the process of understanding a domain of knowledge easier because it is a visual expression of the subject matter. According to the findings of Gage and Berliner, students who review models prior to attending a lecture have a greater chance of remembering up to 57% more information pertaining to questions concerning conceptual information than students who are given instruction without the benefit of seeing and debating models.

The teacher will walk the students through a task that they will eventually be responsible for accomplishing on their own accord and then demonstrate the activity for them. Through the use of particular examples that are supplied by the teachers, this mode of instruction focuses on motivating the students to engage in certain behaviors that are beneficial to the learning process. These behaviors can be shown by the students. The use of models may be of assistance to teachers in determining the level of difficulty or load posed by their students. Additionally, the use of models may be of assistance to students in avoiding wasting time because they are unsure what they should be working on. Educators may find that the use of models is of assistance in determining the level of difficulty or load posed by their students. The application of models carries with it the potential to result in the realization of both of these advantages. It is possible that the application of modeling can bring about both of these benefits simultaneously, which is a really convenient combination to have.

Table 5. Level of Teaching Strategies of the Technical-Vocational Livelihood Education in terms of Oral Recitation and Reporting

The teacher...	Mean	SD	Remarks
...prepares oral reports either individually or by group.	4.39	0.65	Extremely Frequent
...gives due recognition to learners' performance/potentials.	4.49	0.58	Extremely Frequent
...encourages learners to learn beyond what is being required.	4.52	0.58	Extremely Frequent
...allows flexibility to meet for specific needs, interests and capabilities of individual learners.	4.47	0.61	Extremely Frequent
...keeps accurate records of learners' performance and prompt submission of the same.	4.53	0.60	Extremely Frequent
Grand Mean	4.48		Extremely Frequent

As shown in Table 5, the usage of TVL teachers for oral recitation and reporting was extremely frequent, as demonstrated by the grand ($M=4.48$). This suggests that the TVL teachers employed oral recitation and reporting as a teaching approach on a regular basis. TVL teachers are extremely frequent in *keeping accurate records of learners' performance and prompt submission of the same*, with a highest mean ($M=4.53$, $SD=0.60$).

Likewise, TVL teachers are extremely frequent in preparing oral reports either individually or by group, using the least mean ($M=4.39$, $SD=0.65$). As a result, teaching demonstration is a typical approach utilized by TVL teachers. In line with this, oral recitation is an additional technique that teachers can employ to aid pupils with memorization. This technique anchors information in the brain and assists pupils in absorbing and retaining the knowledge necessary for comprehension and critical reasoning. The more complex mental functions of analysis, synthesis, and assessment cannot be performed without the quick and accurate recall of large quantities of particular information. Oral recitation is the practice of having the entire class recite significant facts, identifiers, definitions, theorems, and processes during instruction and when they must be reviewed afterwards (Hanlon, 2014).

The objective of recitation is to teach students how to apply the lecture-learned material. You may be of assistance by explaining the rationale you used to arrive at a solution. It is essential, however, that pupils actively participate in the recitation (Psychology answers, 2019). Recitation is the most effective approach there is for ensuring that a student has mastered the content that they are studying. There is no place for a student to hide during a recitation, and there is no room for dishonesty that may cover up a lack of knowledge. There is no time for either of these things. There is no available space. You are either aware of it or you are not, and both your knowledge and your lack of knowledge will be clearly obvious to everyone. Whether or not you are conscious of it is irrelevant. (Tefertiller, 2016).

Oral presentation is one of the most difficult types of presentations since it is one of the greatest venues for combining excellent verbal abilities with nonverbal indicators to give a broader aspect to the presentation. As a result, oral presentation is one of the most complex types of presentations. Despite this, it is one of the most gratifying sorts of presentations to give. In addition to this, it gives the pupils a sense of self-assurance, which enables them to describe their thoughts and feelings in front of an audience with self-assurance.

Table 6. Level of Teaching Strategies of the Technical-Vocational Livelihood Education in terms of Group Work

The teacher...	Mean	SD	Remarks
...encourages learners to contribute knowledge/experience towards a better understanding of the learning competencies.	4.51	0.56	Extremely Frequent
...breaks the class into task groups to encourage learners' participation.	4.31	0.70	Extremely Frequent
...reinforces small-group differentiated activities or SGDA and the like to facilitate the teaching-learning process.	4.33	0.62	Extremely Frequent
...gives assessment and evaluation on time.	4.47	0.60	Extremely Frequent
...enables the learners to apply learned concepts to real-life situations.	4.42	0.52	Extremely Frequent
Grand Mean	4.41		Extremely Frequent

The use of TVL teachers for group work was extremely frequent, as indicated in Table 6, as evidenced by the grand mean ($M=4.41$). This shows that the TVL teachers regularly used group work as a teaching strategy.

With the highest mean ($M=4.51$, $SD=0.56$), TVL teachers are extremely common in encouraging learners to contribute knowledge/experience towards a better understanding of the learning competencies. In parallel, TVL teachers are extremely frequent in *breaking the class into task groups to encourage learners' participation*, with the least mean ($M=4.31$, $SD=0.70$) being used. As a result, TVL teachers frequently use group work as a method of instruction.

Group work may be an excellent strategy for motivating students, promoting active learning, and fostering the growth of essential critical-thinking, communication, and decision-making abilities. However, without appropriate preparation and facilitation, group work can annoy both students and instructors, as well as feel like a waste of time (Uwaterloo, 2021).

Additionally, group work lets teachers analyze and watch student teamwork. This lets teachers examine how students apply information and appraise conditions and decisions. Teachers can guide and correct students. By observing kids in groups, teachers can spot intellectual and social shortcomings. Because students may combine their efforts, teachers can give more challenging tasks with group work. Group collaboration delivers a more authentic learning experience than traditional classrooms can. Students with fewer tasks to grade when they work together (McDonald, 2020).

Students are considered to be engaged in group work when they collaborate with one another to accomplish a task or produce an output. In order to ensure that everyone is holding each other accountable, certain functions within the group are sometimes delegated to specific individuals. When students are able to openly discuss their ideas with one another and gain inspiration from the contributions of their peers, a fertile environment is created for the development of creative thinking.

3.2 Level of Students' Satisfaction

In order to sustain successful teaching and a high level of student satisfaction, TVL teachers are required to both foresee and respond to the future expectations and preferences of their students. There is much evidence to show that utilizing a variety of instructional approaches leads to increased student engagement and overall learning. The following factors, among others, will be used in this investigation to determine how satisfied the students are: teaching quality; teaching attitude; and teaching style.

Table 7. Level of Students' Satisfaction in terms of Teaching Quality

The teacher...	Mean	SD	Remarks
...has deep knowledge of the subject matter and can show it through challenging, interactive and engaging performance tasks or activities.	4.08	0.54	Highly Satisfied
...has deep understanding of general and specific concepts.	3.82	0.65	Highly Satisfied
...provides higher order thinking questions to the learners.	3.98	0.58	Highly Satisfied
...displays metalanguage.	3.64	0.46	Highly Satisfied
...delivers communication skills substantially	4.06	0.53	Highly Satisfied
Grand Mean	3.92		Highly Satisfied

The learners' satisfaction in terms of teaching quality was highly satisfied, as indicated in Table 7, as evidenced by the grand mean ($M=3.92$). This shows that the learners are satisfied with the teaching quality of the TVL teachers.

The learners were highly satisfied that the TVL teachers have deep knowledge of the subject matter and can show it through challenging, interactive and engaging performance tasks or activities, with a highest mean ($M=4.08$, $SD=0.54$). Likewise, the learners were highly satisfied that the TVL teacher displays metalanguage and garnered the least mean ($M=3.64$, $SD=0.46$). It indicates that the learners are very satisfied with the teaching quality of the TVL teachers.

The experiences that students have had with their own learning and the instruction in the areas that they are now studying are one of the most prevalent sources of information regarding the quality of teaching that can be obtained by institutions and individual academics.

Table 8. Level of Students' Satisfaction in terms of Teaching Attitude

The teacher...	Mean	SD	Remarks
...considers teaching a noble profession by showing enthusiasm and positive attitude towards work.	4.10	0.86	Highly Satisfied
...worries more about his/her household chores than the teaching profession in our society.	3.22	1.15	Moderately Satisfied
...is proud of his/her profession irrespective of other people's feelings towards it.	3.98	1.08	Highly Satisfied
...controls the class without inflicting corporal punishment to disobedient or noncompliant learners.	3.86	0.95	Highly Satisfied
...equips himself/herself with the latest in educational technology.	4.18	0.92	Highly Satisfied
Grand Mean	3.87		Highly Satisfied

Table 8 shows that the learners were highly satisfied with the teaching attitude, as evidenced by the grand mean ($M=3.87$). This demonstrates that the learners are pleased with the TVL teachers' teaching attitude. With the highest mean ($M=4.18$, $SD=0.92$), the students were highly satisfied with the TVL teachers' equipped themselves with the latest in educational technology. Similarly, learners were moderately satisfied that the TVL teacher worries more about his/her household chores than the teaching profession in our society, and the TVL teacher received the lowest mean ($M=3.22$, $SD=1.15$). It implies that the learners were satisfied with the TVL teachers' teaching attitude.

After a student's family environment, the quality of their teachers is the second most critical aspect in determining a student's success. The quality of a teacher is not limited to the classroom. The standard of education is a topic of discussion on a global scale. The provision of sound teaching is crucial. Why do some teachers seem to be more effective than others? How can they improve the overall performance of the students? Without clarity, it's difficult to measure, reward, or improve teacher quality for social justice. Many countries misunderstand teaching quality. Teaching quality encourages the most effective practices and provides the most supportive conditions. Diverse learning needs require advanced teaching skills. Therefore, researchers must consider international teaching experience (Maruli, 2014).

Furthermore, different countries define teaching quality differently. This article describes good teaching in five high-achieving countries that support teachers' professional learning and practice. The art of teaching is founded on a vast body of knowledge that integrates material, pedagogy, and students in order to satisfy the students' intellectual, social, and emotional requirements. The definition of teaching quality in these jurisdictions is based on the continuing study and investigation conducted by teachers. (Darling-Hammond, 2021).

As a result, the quality of teaching encompasses not just the qualifications of the teachers but also the perspectives that they bring into the classroom, the instructional strategies that they apply, and the general structure of both the school and the community as a whole. In the same way that academic goals are dependent on personal and environmental factors, teaching quality is as well. Since the abilities of teachers can evolve over time, it is appropriate to place emphasis on the quality of instruction.

Table 9. Level of Students' Satisfaction in terms of Teaching Style

The teacher...	Mean	SD	Remarks
...entails lengthy lecture sessions or one-way presentations where learners are expected to take notes or absorb information (the authority, or lecture style).	4.04	0.86	Highly Satisfied
...retains the formal authority role by showing students what they need to know through multimedia presentations, activities, and demonstrations (the demonstrator, or coach style).	4.14	0.78	Highly Satisfied
...promotes self-learning and helps learners develop critical thinking skills and retain knowledge that leads to self-actualization (the facilitator, or activity style).	3.96	0.90	Highly Satisfied
...is best suited for curricula that require lab activities that warrant peer feedback, like debate and creative writing (the delegator, or group style).	3.68	0.87	Highly Satisfied
...follows an integrated approach to teaching that blends the teacher's personality and interests with students'	4.30	0.81	Extremely Satisfied

needs and curriculum appropriate methods (the hybrid, or blended style).		
Grand Mean	4.02	Highly Satisfied

The grand mean ($M=4.02$) in Table 9 indicates that the learners were highly satisfied with the teaching style by the TVL teachers. This suggests that the TVL teachers' teaching style is appreciated by the students.

With the highest mean ($M=4.30$, $SD=0.81$), the students were extremely satisfied with the TVL teachers' following an *integrated approach to teaching that blends the teacher's personality and interests with students' needs and curriculum appropriate methods (the hybrid, or blended style)*. Similarly, learners were highly satisfied that the TVL teacher is best suited for curricula that require lab activities that warrant peer feedback, like debate and creative writing (the delegator, or group style), and the TVL teacher received the lowest mean of ($M=3.68$, $SD=0.87$) It implies that the learners were satisfied with the TVL teachers' teaching style.

The term "teaching style" should not be confused with "method" or "technique" since it refers to the way in which teachers interact with their students in the classroom. The approach that the teachers decide to use will impact how material is conveyed to the students, how the students engage with one another and with the teacher, and how the students keep track of the homework assignments they have been given. There is a widespread consensus among academics and professionals that the method of education that is employed has an impact on the students' overall level of knowledge as well as their performance. There is not a large body of literature that has been devoted to the study of the methodology behind the instruction of foreign and second languages. There hasn't been a lot of study done that looks at how the education and culture of teachers affects the methods that they use in the classroom. (Wong, 2015).

According to Buella et al. (2019), before we can make progress in education, we need to improve our environment. The manner in which the teacher instructs has a direct bearing on the reactions that are received from the class as a whole. Students that are obedient to their teachers are a sign of a good teacher. Recitation was encouraged using methods such as edible rewards, education based on technology, punishments for incorrect answers, and topic expansion.

3.3 Relationship between the Teaching Strategies of the Technical-Vocational and Livelihood Education Teachers and the Students' Satisfaction

For a teaching profession to be successful, knowledge is very necessary. It is possible that the educational methods will change depending on the requirements of the students.

Table 10. Significant Relationship between the Teaching Strategies of the Technical-Vocational and Livelihood Education Teachers and the Students' Satisfaction

Variables		r-value	Degree of Correlation	p-value	Analysis
Lecture with Laboratory	Teaching quality	0.151	Negligible	0.295	Not Significant
	Teaching attitude	0.061	Negligible	0.672	Not Significant
	Teaching style	0.099	Negligible	0.495	Not Significant
Computer Assisted Lessons	Teaching quality	0.064	Negligible	0.659	Not Significant
	Teaching attitude	0.024	Negligible	0.867	Not Significant
	Teaching style	0.014	Negligible	0.924	Not Significant
Peer Tutoring	Teaching quality	0.194	Negligible	0.176	Not Significant
	Teaching attitude	0.069	Negligible	0.633	Not Significant
	Teaching style	0.143	Negligible	0.323	Not Significant
Modeling & Teaching Demo	Teaching quality	0.279	Weak	0.050*	Significant
	Teaching attitude	0.120	Negligible	0.406	Not Significant
	Teaching style	0.190	Negligible	0.187	Not Significant
Oral Recitation & Reporting	Teaching quality	0.132	Negligible	0.360	Not Significant
	Teaching attitude	0.025	Negligible	0.864	Not Significant
	Teaching style	0.093	Negligible	0.521	Not Significant
Group Work	Teaching quality	0.200	Negligible	0.163	Not Significant
	Teaching attitude	0.100	Negligible	0.492	Not Significant
	Teaching style	0.144	Negligible	0.318	Not Significant

*significant at .05 level of significance

Table 10 revealed the relationship of frequency of application of teaching strategies of the Technical-Vocational and Livelihood education teachers and the level of satisfaction of the learners.

It can be seen from the table above that only modeling & teaching demo strategies of the Technical-Vocational and Livelihood education teachers has weak yet significant relationship to the satisfaction of the learners in terms of teaching quality as indicated by the obtained r-value (0.279) and p-values (0.050) which was equal to 0.05 level of significance. On the other hand, modeling & teaching demo strategies of the Technical-Vocational and Livelihood education teachers showed negligible and not significant relationship to the satisfaction of the learners in terms of teaching attitude and teaching style denoted by the gained r-values (0.120 and 0.190), p-values (0.406 and 0.187), respectively. This further meant that modeling and teaching demo strategies of TVL teachers corresponds to students' satisfaction with the teacher's quality of teaching. Nevertheless, it is not associated with students' satisfaction with the teacher's attitude and style towards teaching.

Furthermore, the frequency of application of teaching strategies of the Technical-Vocational and Livelihood education teachers in terms of lecture with laboratory, computer assisted lessons, peer tutoring, oral recitation & reporting and group work have no significant relationship to learners' satisfaction in terms of teaching quality, teaching attitude and teaching style as evidenced by the r-values (0.014 to 0.200) and p-values (0.924 to 0.163) correspondingly which were all higher than the 0.05 level of significance. This explains why respondents didn't link TVL teachers' instructional styles to student satisfaction.

Happy learning is joyful. Chang and Chang (2012) showed that to evaluate learner satisfaction, expectations must be compared to experience. Students learned through effective instruction.

4. Summary, Conclusions and Recommendations

The frequency of application of the TVL teachers in their teaching strategies in terms of lecture with laboratory, computer-assisted lessons, peer tutoring, modeling and teaching demo, oral recitation and reporting and group work obtained a common application of "extremely frequent". It only reveals that they made use of a variety of teaching strategies in their classes, and the extremely frequent application of teaching strategies is a sign that an individual is engaging in the practice of teaching strategies. The students' satisfaction in terms of teaching quality, teaching attitude and teaching style come up with the common agreement of "highly satisfied". The results revealed that the learners were very pleased with the TVL teachers' teaching quality, attitude, and style. Only when considering modeling and teaching demo in connection with teaching quality is there a significant relationship between the frequency of teaching strategies used by TVL teachers and the level of satisfaction experienced by their learners. TVL teachers use modeling and teaching demonstrations, which correlates with student satisfaction with the teacher's instruction. Technology and livelihood education discovered this.

The relationship between the frequency of teaching strategies of TVL teachers and learners' satisfaction in Cabuyao City, Laguna is only significant at modeling teaching demo and teaching quality. It was found that the teaching strategies used by TVL teachers, which involves modeling and teaching demo, is correlated with how satisfied students are with the quality of the teacher's instruction.

Based on the findings and conclusion, the following recommendations were drawn:

1. The City Schools Division of Cabuyao should conduct a seminar for the newly hired teachers regarding the different teaching strategies used by the TVL teachers.
2. Schools should conduct a sharing of best practices on the different teaching strategies in order to sustain or increase the students' level of satisfaction.
3. Further research to address the gap regarding the effectiveness of the different teaching strategies of TVL teachers to the performance skills of the TVL students.

References

- Abdurrahman, Ariyani, F., Achmad, A., & Nurulsari, N. (2019). Designing an inquiry-based stem learning strategy as a powerful alternative solution to enhance students' 21st-century skills: A preliminary research. *Journal of Physics: Conference Series*, 1155, 012087. <https://doi.org/10.1088/1742-6596/1155/1/012087>
- Agustiyasih, M. (2017). Teachers' attitude: individualized and differentiated instructions in Efl classes (thesis).
- Alegre Ansuátegui, F. J., Moliner Miravet, L., Lorenzo, G., & Maroto, A. (2018). Peer tutoring and academic achievement in mathematics: A meta-analysis.
- Al Salami, M. K., Makela, C. J., & De Miranda, M. A. (2017). Assessing changes in teachers' attitudes toward interdisciplinary STEM teaching. *International Journal of Technology and Design Education*, 27(1), 63-88
- Alshorman, B. A., & Bawaneh, A. K. (2018). Attitudes of Faculty Members and Students towards the Use of the Learning Management System in Teaching and Learning. *Turkish Online Journal of Educational Technology-TOJET*, 17(3), 1-15.
- Andersson, J. J. (2019). "Carbon Taxes and CO2 Emissions: Sweden as a Case Study." *American Economic Journal: Economic Policy*, 11(4): 1-30.
- Andersson, M., Wang, H., Nord, A., Salmón, P., & Isaksson, C. (2015). Andersson et al. 2015 ESM2.
- Angeli, C., & Valanides, N. (2020, March 20). Developing Young Children's computational thinking with educational robotics: An interaction effect between gender and scaffolding strategy. *Computers in Human Behavior*. Retrieved June 01, 2022, from <https://www.sciencedirect.com/science/article/abs/pii/S0747563219301104>
- Antwi, V., Sakyi-Hagan, N., & Anderson, I. K. (2014, January). (PDF) EFFECT OF COMPUTER ASSISTED INSTRUCTION ON STUDENTS' PERFORMANCE IN SOME SELECTED CONCEPTS IN ELECTRICITY AND MAGNETISM: A STUDY AT WINNEBA SENIOR HIGH SCHOOL IN GHANA. Retrieved June 8, 2022, from https://www.researchgate.net/publication/342664101_EFFECT_OF_COMPUTER_ASSISTED_INSTRUCTION_ON_STUDENTS'_PERFORMANCE_IN_SOME_SELECTED_CONCEPTS_IN_ELECTRICITY_AND_MAGNETISM_A_STUDY_AT_WINNEBA_SENIOR_HIGH_SCHOOL_IN_GHANA
- Arco-Tirado, J. L., Fernández-Martín, F. D., & Hervás-Torres, M. (2020). Evidence-based peer-tutoring program to improve students' performance at the university. *Studies in Higher Education*, 45(11), 2190-2202.
- Ataman AM (2020) Evaluating prevalence and mortality of external injuries on loggerhead (*Caretta caretta*) and green (*Chelonia mydas*) sea turtles in Florida, USA. MS thesis, University of South Florida, St. Petersburg, FL
- Ataman AM (2020) Evaluating prevalence and mortality of external injuries on loggerhead (*Caretta caretta*) and green (*Chelonia mydas*) sea turtles in Florida, USA. MS thesis, University of South Florida, St. Petersburg, FL
- Azubuikwe, E. N (2012). Effect of peer tutoring instructional strategy on achievement in biology of senior secondary school/ slow learners in Anambra State (master's thesis) Retrieved from http://nauliberary.org/dglibrary/admin/book_directory/EducationalManagement_policy?11394.pdf
- Backer, L.D., Keer, H.V., Moerkerke, B., & Valcke, M. (2016). Examining evolutions in the adoption of metacognitive regulation in reciprocal peer tutoring groups. *Metacognition Learning*, 11(2), 187-213.
- Bakker, A., Smit, J., & Wegerif, R. (2015, October 14). Scaffolding and dialogic teaching in mathematics education: Introduction and review - ZDM – mathematics education. SpringerLink. Retrieved June 1, 2022, from <https://link.springer.com/article/10.1007/s11858-015-0738-8>
- Barberos, M., et.al. (2017). The effect of the teacher's teaching style on students' motivation action research. Retrieved on August 21, 2017 from <https://www.researchgate.net/deref/http%3A%2F%2Fsteinhardt.nyu.edu%2Fteachlearn%2Ftfat%2Fresearch%2Fmotivation>
- Bardach, L., Oczlon, S., Pietschnig, J., & Lüftenegger, M. (2020). Has achievement goal theory been right? A meta-analysis of the relation between goal structures and personal achievement goals. *Journal of Educational Psychology*, 112(6), 1197.
- Bates, C. C., Klein, A., Schubert, B., McGee, L., Anderson, N., Dorn, L., ... Ross, R. H. (2016). E-books and e-book apps: Considerations for beginning readers. *The Reading Teacher*, 70, 401-411.
- Bawa, L.S. (2020). The Effect of Job Enabling English Proficiency Administration on Philippine Students' English Language Skills. *International Journal of Education and Literacy Studies*, 8, 127-134.

- Berso, L. B., & Lorente, R. M. (2020). Peer Tutoring: Exploring the Effects on Learning Grade 9 Mathematics. *PEOPLE: International Journal of Social Sciences*, 5(3), 881-894.
- Blazar, D., & Kraft, M. A. (2017). Teacher and teaching effects on students' attitudes and behaviors. *Educational evaluation and policy analysis*, 39(1), 146-170.
- Boud, D., Cohen, R., & Sampson, J. (2013). Peer learning in higher education: learning from and with each other.
- Brinkley-Etzkorn, K. E., & Lane, I. (2019). From the ground up: building a system-wide professional development and support program for academic department chairs. *Studies in Higher Education*, 44(3), 571-583.
- Buella, P. M., Olarte, J., Beringuel, J., Paguio, A., Bauzon, J., & Magalao, A. (2019). Teaching Styles: Its Effects on the Academic Performance of the Grade 12 Accountancy, Business and Management Students of Bestlink College of the Philippines. *SY: 2018–2019. Ascendens Asia Singapore–Bestlink College of the Philippines Journal of Multidisciplinary Research*, 1(1).
- Burgos, D., Tlili, A., & Tabacco, A. (2021). Radical Solutions for education in a crisis context: Covid-19 as an opportunity for global learning. – Evidence Library – The EdTech Hub. Retrieved June 1, 2022, from <https://docs.edtechhub.org/lib/Q67F2S69>
- Ernst, N., Blassnig, S., Engesser, S., Büchel, F., & Esser, F. (2019). Populists prefer social media over talk shows: An analysis of populist messages and stylistic elements across six countries. *Social media+ society*, 5(1), 2056305118823358.
- Estrada, A., & Batanero, C. (2019). Prospective primary school teachers' attitudes towards probability and its teaching. *International Electronic Journal of Mathematics Education*, 15(1), em0559.
- Carnevale, J. (2022). Take online courses. earn college credit. *Research Schools, Degrees & Careers. Study.com | Take Online Courses. Earn College Credit. Research Schools, Degrees & Careers*. Retrieved May 6, 2022, from <https://study.com/academy/lesson/group-work-in-the-classroom-definition-benefits-examples.html>
- Carter, I., Damianakis, T., Munro, S., Skinner, H., Matin, S., & Andrews, T. (2018). Exploring Online and Blended Course Delivery in Social Group Work. *Journal of Teaching in Social Work*. 38, 486-503. 10.1080/08841233.2018.1523824.
- Casinillo, L., & Guarte, J., Evaluating the Effectiveness of Teaching Strategies: The Case of a National Vocational School in Hilongos, Leyte (December 1, 2018). *Review of Socio-Economic Research and Development Studies*, 2(1), 65-80, 2018, Available at SSRN: <https://ssrn.com/abstract=3804151>
- Chang, I. Y., & Chang, W. Y. (2012). The effect of student learning motivation on learning satisfaction. *International Journal of Organizational Innovation*, 4(3).
- Chibuzor, O. (2021, December 10). Giving succor to alma-mater | THISDAYLIVE. this day live. Retrieved May 4, 2022, from <https://www.thisdaylive.com/index.php/2021/12/10/giving-succor-to-alma-mater/>
- Chiriac, E. H. (2014, June 5). Group work as an incentive for learning – students' experiences of group work. *Frontiers*. Retrieved April 9, 2022, from <https://www.frontiersin.org/articles/10.3389/fpsyg.2014.00558/full>
- Cioruța, B. V. & Luran, A. (2020). 2020 (99) - Computer Aided Training - A Variable of the Modern Romanian Educational Process in the Knowledge Society. *Asian Journal of Education and Social Studies*. 1-8. 10.9734/ajess/2020/v13i430336.
- Clue, R. (2018). *Researchclue.com. AVAILABILITY OF TEACHERS AND LABORATORY FACILITIES FOR EFFECTIVE TEACHING AND LEARNING OF HOME ECONOMICS IN JUNIOR SECONDARY SCHOOL IN ENUGU NORTH (A CASE STUDY OF ENUGU NORTH LGA)*. Retrieved April 4, 2022, from <https://nairaproject.com/projects/3334.html>
- Coleman, M. (2020, September 25). Modeling teaching strategy examples for English language learners. *TeachHUB*. Retrieved April 6, 2022, from [Greatbatch & Holland, 2016bathttps://www.teachhub.com/teaching-strategies/2020/08/modeling-teaching-strategy-examples-for-english-language-learners/](https://www.teachhub.com/teaching-strategies/2020/08/modeling-teaching-strategy-examples-for-english-language-learners/)
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Darling-Hammond, L. (2021). What Will It Take to Promote Whole-Child Development, Learning, and Thriving at Scale? [web log]. Retrieved from <https://www.aft.org/ae/fall2021/darling-hammond>.
- Dauvarte, L. (2015, May 16). Teacher's ICT competence in Home Economics and Technologies Lessons - Llu. Retrieved April 4, 2022, from <https://lufb.llu.lv/conference/REEP/2015/Latvia-Univ-Agricuilt-REEP-2015proceedings-89-100.pdf>
- De Guzman, M. F., & De Jesus, F. S. (2021). Non-intellective Challenges in Oral Communication Skills among Grade 11 Learners.
- DJS Research. (2022). Quantitativemarket research. Quantitative Market Research Company :: By DJS Research Ltd. Retrieved February 1, 2022, from <https://www.djsresearch.co.uk/services/service/Quantitative>
- Dziuban, C., Moskal, P., Kramer, L., & Thompson, J. (2013). Student satisfaction with online learning in the presence of ambivalence: Looking for the will-o'-the-wisp. *The Internet and Higher Education*, 17, 1-8.
- Dziuban, C., Moskal, P., Thompson, J., Kramer, L., DeCantis, G., & Hermsdorfer, A. (2015). Student Satisfaction with Online Learning: Is It a Psychological Contract?. *Online Learning*, 19(2), n2.
- Elizabeth, M. (2022, May 1). What is an oral report? *Language Humanities*. Retrieved June 6, 2022, from <https://www.languagehumanities.org/what-is-an-oral-report.htm>
- Ertmer, P. A., & Newby, T. J. (2013). Behaviorism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance Improvement Quarterly*, 26(2), 43-71.
- Escomes, E. L., & Morbo, E. A. (2021). Factors affecting distance learning of the physical education students of Sultan Kudarat State University, Mindanao, Philippines. *Indonesian Journal of Educational Research and Technology*, 2(2), 109-116.
- Fauth, B., Decristan, J., Decker, A. T., Büttner, G., Hardy, I., Klieme, E., & Kunter, M. (2019). The effects of teacher competence on student outcomes in elementary science education: The mediating role of teaching quality. *Teaching and Teacher Education*, 86, 102882.
- Gacosta, m. L. (2021). Gender pairing variations in peer tutoring: the case of senior high school students in eastern visayas, philippines. *Philippines* (October 23, 2021).

- Gafoor, K., & Haskar, B. (2012). Teaching Style: A Conceptual Overview.
- Gillett-Swan, J. (2017). The Challenges of Online Learning: Supporting and Engaging the Isolated Learner. *Journal of Learning Design*, 10, 20. 10.5204/jld.v9i3.293. 15. GSI Teaching and Resource Center . (2015). Cognitive constructivism. GSI Teaching Resource Center. Retrieved February 23, 2022, from <https://gsi.berkeley.edu/gsi-guide-contents/learning-theory-research/cognitive-constructivism/>
- Goe, L. (2012, June). Evaluating and promoting educator effectiveness [PowerPoint slides]. Keynote presentation at the Educator Effectiveness and Leadership Conference, Bloomington, IN. Retrieved from <http://www.lauragoe.com/LauraGoe/Publications.html>
- González, A., Conde, Á., Díaz, P., García, M., & Ricoy, C. (2018). Instructors' teaching styles: Relation with competences, self-efficacy, and commitment in pre-service teachers. *Higher Education*, 75(4), 625-642.
- González-Gómez, F., Guardiola, J., Rodríguez, Ó. M., & Alonso, M. Á. M. (2012). Gender differences in e-learning satisfaction. *Computers & Education*, 58(1), 283-290.
- Gonzales, S. M. (2019). Counteracting Subtractive Schools in American Education. *Critical Readings on Latinos and Education*, 185.
- Hammar Chiriac, E. (2014). Group work as an incentive for learning—students' experiences of group work. *Frontiers in psychology*, 5, 558.
- Hanlon, B. (2014, September 3). Hanlonmath – math help online, math tutorials : Algebra, geometry, Videos. Hanlon Math |. Retrieved June 6, 2022, from <https://www.hanlonmath.com/>
- Haruehansawasin, S., & Kiattikomol, P. (2017, March). Scaffolding in problem-based learning for low-achieving learners. Retrieved June 1, 2022, from https://www.researchgate.net/publication/318575635_Scaffolding_in_problem-based_learning_for_low-achieving_learners
- Hassan, A., & Wai, L. K. (2019, November 29). [PDF] exploring the learning theories underpinning in technical, vocational, Education and training (TVET) curriculum perceived by TVET students: Semantic scholar. undefined. Retrieved January 23, 2022, from <https://www.semanticscholar.org/paper/Exploring-the-Learning-Theories-Underpinning-in-and-Hassan-Wai/7f2bc938360a725687dc15e919269c0d99611319>
- Home Economics Instructional Materials Center, Texas Tech University, P.O. Box 4067, Lubbock, TX 79409 (\$5.50). (1979, January 31). Handbook for Home Economics Pre-Employment Laboratory Education Teachers. ERIC. Retrieved June 1, 2022, from <https://eric.ed.gov/?q=pele&pg=2&id=ED183783>
- Hott, B., & Walker, J. (2015, June 22). Peer tutoring is a flexible peer-mediated strategy: Council for Learning Disabilities. Council for Learning Disabilities | The Council for Learning Disabilities (CLD) is an international organization that promotes evidence-based teaching, collaboration, research, leadership, and advocacy. Retrieved April 6, 2022, from <https://council-for-learning-disabilities.org/peer-tutoring-flexible-peer-mediated-strategy-that-involves-students-serving-as-academic-tutors/>
- Hua, Z. (2016). How to design and Apply Interactive Digital Educational TV programs based on the addie model. *International Journal of Information and Education Technology*, 6(11), 884-889. <https://doi.org/10.7763/ijiet.2016.v6.810>
- Ingold, T. (2020). Meeting art with words: The philosopher as anthropologist. *Adaptive Behavior*, 105971232097067. <https://doi.org/10.1177/1059712320970672>
- Inuwa, Umar & A., Zarifah & Hassan, Haslinda. (2017). Assessing the Effect of Cooperative Learning on Financial Accounting Achievement among Secondary School Students. *International Journal of Instruction*. 10. 31-46. 10.12973/iji.2017.1033a.
- Joyce, J., Gitomer, D. H., & Iaconangelo, C. J. (2018). Classroom assignments as measures of teaching quality. *Learning and instruction*, 54, 48-61.
- Juhmani, O. (2017, February). Corporate governance and the level of Bahraini corporate compliance ... Retrieved December 23, 2021, from https://www.researchgate.net/publication/313200809_Corporate_governance_and_the_level_of_Bahraini_corporate_compliance_with_IFRS_disclosure
- Kabigting, R. (2020). Anxiety and Writing Ability of Filipino ESL Learners. *International Journal of Linguistics, Literature and Translation*. 3. 10.32996/ijllt.2020.3.7.14.
- Kabir, A. (2020, August 30). COVID-19: Inside Oyo community where schools reopening puts lives at risk [web log]. Retrieved February 26, 2022, from <https://www.premiumtimesng.com/news/headlines/411512-covid-19-inside-oyo-community-where-schools-reopening-puts-lives-at-risk.html#.YrffwDILUbQ.link>.
- Kakumanu, V. (2020). Modelling, the Demonstration-based learning. *educatorOne*. Retrieved April 6, 2022, from <https://www.educatorone.com/blog/Modelling-the-Demonstration-Based-Learning/>
- Karim, U. (2015, March). Implementation of group work in the classroom - researchgate. Researchgate. Retrieved May 9, 2022, from https://www.researchgate.net/publication/323896053_IMPLEMENTATION_OF_GROUP_WORK_IN_THE_CLASSROOM
- Keengwe, J., Schnellert, G., & Mills, C. (2012). Laptop initiative: Impact on instructional technology integration and student learning. *Education and Information Technologies*, 17(2), 137-146.
- Kimbrough, E. O., & and, A. D. M. G (2022, January 1). Erik O. Kimbrough. *Journal of Human Resources*. Retrieved May 26, 2022, from <http://jhr.uwpress.org/content/57/1/304.refs>
- Kim, N. J., Belland, B. R., & Walker, A. E. (2018). Effectiveness of computer-based scaffolding in the context of problem-based learning for STEM education: Bayesian meta-analysis. *Educational Psychology Review*, 30(2), 397-429.
- Ko D., Choi S., Park S., Smolander K., & Yli-Huumo J. (2016) Where Is Current Research on Blockchain Technology?—A Systematic Review. *PLoS ONE* 11(10): e0163477. <https://doi.org/10.1371/journal.pone.0163477>
- Kumar, Manoj. (2022). Classification of Research Design: Descriptive,

- Diagnostic, Exploratory and Experimental.
https://www.researchgate.net/publication/359643537_Classification_of_Research_Design_Descriptive_Diagnostic_Exploratory_and_Experimental
- Lai, F., Luo, R., Zhang, L., Huang, X., & Rozelle, S. (2015, August). Does computer-assisted learning improve learning outcomes? Evidence from a randomized experiment in migrant schools in Beijing. *Science Direct*. Retrieved March 26, 2022, from <https://doi.org/10.1016/j.econedurev.2015.03.005>
- Leung, K. C. (2019). An updated meta-analysis on the effect of peer tutoring on tutors' achievement. *School Psychology International*, 40(2), 200-214.
- Limon, M. R., & Vallente, J. P. (2016). Outcomes-Based Education Integration in Home Economics Program: An evaluative study. *Journal of Educational Issues*, 2(1), 289. <https://doi.org/10.5296/jei.v2i1.9262>
- M. Bajbouj, N. H. Mohd Alwi and N. F. M. N. Shah, "A systematic development of instructional design for programming languages: A constructivist based instructional design approach," 2015 International Conference on Computer, Communications, and Control Technology (I4CT), 2015, pp. 535-540, doi: 10.1109/I4CT.2015.7219636.
- Magtubo, K. M., Sunga, M., Gaspar, M. J. P., & Marcelo, P. G. F. (2018). The Role of Telehealth in Disaster Management: Lessons for the Philippines. *Journal of the International Society for Telemedicine and eHealth*, 6, e5-1.
- Maisyaroh, M., Juharyanto, J., Bafadal, I., Wiyono, B. B., Ariyanti, N. S., Adha, M. A., & Qureshi, M. I. (2021). THE PRINCIPALS' EFFORTS IN FACILITATING THE FREEDOM TO LEARN BY ENHANCING COMMUNITY PARTICIPATION IN INDONESIA. *Jurnal Cakrawala Pendidikan*, 40(1), 196-207.
- Mahaguay, K. P., & Mahaguay, J. M. (2020). Difficulties Encountered By TVL-ICT Computer Programming Students in Work Immersion. *The URSP Research Journal*, 6(1), 37-45. Retrieved from <http://www.urs.edu.ph/wpcontent/uploads/publications/the-ursp-researchjournal/current-issue/5-Mahaguay-K.pdf>
- Mahmood, A., Mahmood, A., & Malik, R. N. (2012). Indigenous knowledge of medicinal plants from Leepa valley, Azad Jammu and Kashmir, Pakistan. *Journal of ethnopharmacology*, 143(1), 338-346.
- Makumbe, S., & Nyevera, T. (2021, May). The teaching of home economics in primary schools in Zimbabwe.
- Manalo, J. A., Bautista, A. M. F., Hallares, R. T., Berto, J. C., Paulino, T. C., Saludez, F. M., ... & Maramara, R. M. (2018). Climate change-ready technologies teaching styles and preferences: the case of 12 TecVoc high schools in the Philippines. *Philippine Journal of Crop Science (Philippines)*.
- Mansfield, C. F., Beltman, S., Broadley, T., & Weatherby-Fell, N. (2016, February). Building resilience in teacher education: An evidenced informed framework. *Researchgate*.
- Marbán, J. M., & Mulenga, E. M. (2019). Pre-Service Primary Teachers' Teaching Styles and Attitudes towards the Use of Technology in Mathematics Classrooms. *International Electronic Journal of Mathematics Education*, 14(2), 253-263.
- Maruli, S. (2014). Quality in Teaching: A review of literature. *International Journal of Education and Research*, 2(12).
- McDonald, D. L. (2020, October 29). Benefits of group work. *TeachHUB*. Retrieved June 1, 2022, from <https://www.teachhub.com/classroom-management/2020/09/benefits-of-group-work/>
- McLain, M. (2021). Developing perspectives on 'the demonstration' as a signature pedagogy in design and technology education. *International Journal of Technology and Design Education*, 31(1), 3-26.
- Mcleod, S. (2019). [qualitative vs quantitative research]. *Qualitative vs Quantitative Research | Simply Psychology*. Retrieved June 23, 2022, from <https://www.simplypsychology.org/qualitative-quantitative.html>
- McMurrey, D. (2020). Oral presentations. *Online Technical Writing: Oral Presentations*. Retrieved May 2, 2022, from <https://www.prismnet.com/~hcxres/textbook/oral.html>
- Moliner, L., & Alegre, F. (2020). Effects of peer tutoring on middle school students' mathematics self-concepts. *PLoS one*, 15(4), e0231410.
- Montero Carretero, C., & Cervelló Gimeno, E. M. (2019). Estudio de un modelo predictivo del clima escolar sobre el desarrollo del carácter y las conductas de bullying. *ESE. Estudios sobre educación*.
- Neranon, W., & Thongsong, L. (2021). Development of a computer-assisted instructional package for life skills to prevent risky sexual behaviors in early adolescents, Bangkok, Thailand. *F1000Research*, 10, 385. <https://doi.org/10.12688/f1000research.27773.2>
- Nielsen, H. K. (2018). *Aesthetics and Political Culture in Modern Society*. Routledge.
- Noviani, L., Soetjipto, B. E., & Sabandi, M. (2015). Economic Education Laboratory: Initiating a Meaningful Economic Learning through Laboratory. *Journal of Education and Practice*, Vol.6(No.33).
- ODIKE, M., & NNAEKWE, U. K. (2018, November 10). Influence of teachers' attitude towards teaching profession on under graduate non-education students perception of teacher education. *International Journal of Academic Research in Progressive Education and Development*. Retrieved February 26, 2022, from <https://hrmars.com/index.php/IJARPED/article/view/4833/Influence-of-Teachers-Attitude-towards-Teaching-Profession-on-Under-Graduate-Non-Education-Students-Perception-of-Teacher-Education>
- Olaes, M. R. D. (2020). #NoStudentLeftBehind: Reflections from the Migration to Digital. *Philippine Humanities Review: Crisis and the Arts*, 22(2).
- Orlich, D. C., Harder, R. J., Callahan, R. C., Trevisan, M. S., and Brown, A. H. (2017). *Teaching Strategies: A Guide to Effective Instruction*. Boston, MA: Wadsworth.

- Posadas, K. F., Santos, P. A., & Subia, G. S. (2020). Faculty Empowerment: Its Influence on Teachers' Organizational Citizenship Behavior.
- Praetorius, A., Klieme, E., Herbert, B., & Pinger, P. (2018). Generic dimensions of teaching quality: the German framework of Three Basic Dimensions. *ZDM - International Journal on Mathematics Education*, 50. 10.1007/s11858-018-0918-4.
- psychology answers, a. (2019). What is the meaning of oral recitation? Retrieved April 6, 2022, from <https://psychologyanswers.com/library/lecture/read/215839-what-is-the-meaning-of-oral-recitation#2>
- Ransom, E. N., & Salisu, A. (2014, June 24). The role of modeling towards impacting quality education. *International Letters of Social and Humanistic Sciences*. Retrieved May 9, 2022, from <https://www.scipress.com/ILSHS.32.54>
- Reid, R., & Garson, K. (2017). Rethinking multicultural group work as intercultural learning. *Journal of Studies in International Education*, 21(3), 195-212.
- Research Clue. (2018). Researchclue.com. AVAILABILITY OF TEACHERS AND LABORATORY FACILITIES FOR EFFECTIVE TEACHING AND LEARNING OF HOME ECONOMICS IN JUNIOR SECONDARY SCHOOL IN ENUGU NORTH (A CASE STUDY OF ENUGU NORTH LGA). Retrieved January 26, 2022, from <https://nairaproject.com/projects/3334.html>
- Riches, A. (2019, April 9). Effective teacher modelling. Home. Retrieved May 6, 2022, from <https://www.sec-ed.co.uk/best-practice/effective-teacher-modelling/#:~:text=Effective%20modelling%20makes%20you%20a,as%20or%20before%20they%20arise>.
- Robinson, N. M. (2016, December). An evaluation of the effectiveness of the demonstration classroom ... National Louis University Digital Commons @NLU. Retrieved April 29, 2022, from <https://digitalcommons.nlu.edu/cgi/viewcontent.cgi?article=1214&context=diss>
- Rosali, L. J. (2020). Effect of Computer-Assisted Instruction (CAI) on the Academic Achievement in Secondary Physics. *Open Access Library Journal*, 07. 1-11. 10.4236/oalib.1106319.
- Fika Sirat, M. J., & Nadeak, B. (2019). APPLICATION DESIGN OF LEARNING STRUCTURE DATA USING METHODS COMPUTER ASSISTED INSTRUCTION. *Jurnal Scientia*, 8(1, Agustus), 19-26. <https://doi.org/10.35337/scientia.Vol8.pp19-26>
- Sampermans, D., Reichert, F., & Claes, E. (2021). Teachers' concepts of good citizenship and associations with their teaching styles. *Cambridge Journal of Education*, 51(4), 433-450.
- Scott, J. (2022, February 7). Understanding the pros and cons: What is Computer Assisted Learning? *General Educator Blog*. Retrieved April 26, 2022, from <https://www.fluentu.com/blog/educator/what-is-computer-assisted-learning-2/>
- Siedlecki, Sandra L. PhD, RN, APRN-CNS, FAAN Understanding Descriptive Research Designs and Methods, *Clinical Nurse Specialist: 1/2 2020 - Volume 34 - Issue 1 - p 8-12*
doi: 10.1097/NUR.0000000000000493
- Sink, D. L. (2014). Chapter 11: Design Models and Learning Theories for Adults, pp. 181- 199, *Instructional design models and learning theories, American Society for Training & Development (ASTD)*. Retrieved from <http://dsink.com/downloads/10SinkASTDhandbook.pdf>.
- Stosich, E. L. & Bristol, T. J. (2018). Advancing a new focus on teaching quality: A critical synthesis. Stanford, CA: Stanford Center for Opportunity Policy in Education.
- Suárez-Escudero, J. C., Posada-Jurado, M. C., Bedoya-Muñoz, L. J., Urbina-Sánchez, A. J., Ferreira-Morales, J. L., & Bohórquez-Gutiérrez, C. A. (2020). Teaching and learning anatomy. Pedagogical methods, history, the present and tendencies. *Acta Medica Colombiana*, 45(4), 48-55.
- Suesee, B., & Barker, D.. (2018). Self-reported and observed teaching styles of Swedish physical education teachers. *Curriculum Studies in Health and Physical Education*. 10. 1-17. 10.1080/25742981.2018.1552498.
- Susanti, S., & Harapan, E. (2022, February). The teaching quality of teachers in a learning process. Retrieved May 29, 2022, from https://www.researchgate.net/publication/358389658_The_Teaching_Quality_of_Teachers_in_a_Learning_Process
- Taar, J. (2021, July 19). The hidden pearl: Home economics education for preparing conscious and skilful citizens. *SchoolEducationGateway*. Retrieved April 14, 2022, from <https://www.schooleducationgateway.eu/en/pub/viewpoints/experts/home-economics-education.htm>
- Tefertiller, M. (2016, October 3). Recitation, recitation, recitation: Or, three reasons for recitation. *Classical Latin School Association* -. Retrieved April 16, 2022, from <https://classicallatin.org/exordium/recitation-recitation-recitation-or-three-reasons-for-recitation/>
- Thurston, A., Cockerill, M., & Chiang, T. H. (2021). Assessing the differential effects of peer tutoring for tutors and tutees. *Education Sciences*, 11(3), 97.
- Ukrainetz, T. A. (2019). Sketch and Speak: An expository intervention using note-taking and oral practice for children with language-related learning disabilities. *Language, speech, and hearing services in schools*, 50(1), 53-70.
- Ullah, I., Tabassum, R., & Kaleem, M. (2018). Effects of peer tutoring on the academic achievement of students in the subject of biology at secondary level. *Education Sciences*, 8, 112. doi:10.3390/educsci8030112
- UNESCO. (2020). Learning opportunities shall be available: The Basic Education Learning Continuity Plan in the time of covid-19: IIEP-UNESCO education 4 resilience. IIEP. Retrieved April 10, 2022, from <https://education4resilience.iiep.unesco.org/resources/2020/learning-opportunities-shall-be-available-basic-education-learning-continuity-plan>

- UURAF. (2022). Oral presentations. Oral Presentations - Undergraduate Research. Retrieved May 6, 2022, from <https://urca.msu.edu/orals>
- Uwameiye, B. E. (2015). Students' perception of Home Economics Classroom Learning Environment in Edo State, Nigeria. *Literacy Information and Computer Education Journal*, Special 4(1), 2155–2160. <https://doi.org/10.20533/licej.2040.2589.2015.0286>
- Uwaterloo. (2021, November 22). Implementing Group work in the classroom. Centre for Teaching Excellence. Retrieved May 6, 2022, from <https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/alternatives-lecturing/group-work/implementing-group-work-classroom>
- Van Elk, R., Palali, A., Bolhaar, J., & Rud, I. (2018). Are good researchers also good teachers? The relationship between research quality and teaching quality. *Economics of Education Review*, 64, 40-49.
- Western Governors University. (2020, May 29). What is the behavioral learning theory? Western Governors University. Retrieved May 12, 2022, from <https://www.wgu.edu/blog/what-behavioral-learning-theory2005.html>
- Wilson, K. J., Long, T., Momsen, J., & Speth, E. B. (2020, January 23). Modeling in the classroom: Making relationships and systems visible. *CBE-Life Sciences Education*. Retrieved May 16, 2022, from <https://www.lifescied.org/doi/10.1187/cbe.19-11-0255>
- Witteck, L., & Habib, L. (2013). Quality Teaching and Learning as Practice within Different Disciplinary Discourses. *The International Journal of Teaching and Learning in Higher Education*, 25, 275-287.
- Wong C. A. (2015). Connecting nursing leadership and patient outcomes: state of the science. *Journal of nursing management*, 23(3), 275–278. <https://doi.org/10.1111/jonm.12307>
- Wuryani, & Yufiarti. (2017). The effect of teaching methods and learning styles on capabilities of writing essays on elementary school's students in East Jakarta. *Educational Research and Reviews*, 12(12), 635-642.
- Yang D., Lv Q., Liao G, Zheng K., Luo J., & Wei B., (2018). "Learning from Demonstration: Dynamical Movement Primitives Based Reusable Suturing Skill Modelling Method," 2018 Chinese Automation Congress (CAC), 2018, pp. 4252-4257, doi: 10.1109/CAC.2018.8623781.
- Yusuk, S. (2020). Perceptions and Practices of EFL School Teachers on Implementing Active Learning in Thai English Language Classrooms. *THAITESOL JOURNAL*.
- Zainuddin, N., & Sahrir, M. S. bin. (2015, August). [PDF] theories and design principles of multimedia courseware for teaching Arabic vocabulary: an analytical and evaluative study: Semantic scholar. Semantic Scholar.