

Teaching Methodologies on the Current Educational Landscape to Student Readiness and Vocational Learning

Abrie Ann Agne Salvador

abrieann.salvador@deped.gov.ph

Laguna State Polytechnic University Sta. Cruz Laguna 4009 PHILIPPINES

Abstract

This study aimed to refine instructional approaches that effectively prepare students for the demands of the modern workforce. It explored teaching methodologies' relationship with student readiness and its effect on vocational learning in the contemporary era. It covered various instructional strategies and considers factors affecting student readiness and students' vocational learning. The study also aimed to determine the status of teaching methodologies and student readiness and the level of students' vocational learning. The significant relationship between the teaching methodologies and students' readiness, as well as the significant effect between the status of teaching methodologies to students' vocational learning on the current educational landscape were also identified.

It employed a quantitative approach with correlation analysis to examine relationships between variables. The researcher designed a questionnaire and have it validated by three (3) experts in the field of Technology and Livelihood Education from the different schools in San Pedro, Laguna. This research involved one hundred twenty (120) Grade 10 students from Pacita Complex National High School in San Pedro City, Laguna.

The study revealed that the status of teaching methodologies and student readiness in the current educational landscape seen as very high by the respondents. Despite challenges, efforts in faculty development, improving learning environments, and advancing research are promising. Moreover, the level of students' vocational learning is also verbally interpreted as very high by the respondents. Mastering skills requires ongoing refinement, feedback integration, and effective application across diverse challenges.

Furthermore, since no significant relationship between teaching methodologies and students' readiness across various dimensions is found, this only explains that readiness levels are consistent across different teaching methods, highlighting the importance of holistic, student-centered approaches to education. Also, the research showed the absence of significant effect between teaching methodologies on the current educational landscape to students' vocational learning. However, lecture-based learning seemed to have a positive relationship to hands-on demonstration which can help them integrate theories and concepts to actual practice. Collaborative learning and technology-enhanced teaching also greatly affect student outcomes when it comes to industry relevance. While teaching methodologies vary, they do not significantly relate students' readiness and affect students' vocational learning. Hence, all hypotheses were accepted. Educators may need to address social dynamics and accountability for a more effective vocational learning environments.

It is recommended therefore to explore alternative teaching methods beyond those studied to match the level of students' readiness and potentially achieve more significant results. Another way to do this is to augment quantitative data with qualitative research techniques like interviews or focus groups to gain deeper insights into students' perceptions and experiences. Lastly, measurement tools for assessing vocational learning outcomes to detect meaningful changes in students' skills and competencies must be enhanced. Implementing these suggestions can advance understanding of teaching methodologies' relation on student readiness and effect to vocational learning, guiding educators in preparing students for successful careers.

Keywords: Teaching Methodologies; instructional approaches; instructional strategies

1. Introduction

In the present day, education is changing from within as it is affected by the merging of technological developments, changes in teaching methods, and international economics. The 21st century's first years find that traditional and new approaches to education interact within an ever-changing world. According to Main (2023), a well-known theory of organizational development, Lewin's Change Theory or the three-phase model contains stages of change that are: unfreeze, change, and refreeze. What makes Lewin's Change Theory popular is its practicality and ability to break down big changes into small manageable phases. Organizations can improve their overall performance and adaptability by employing this three-phase methodology to analyze, implement, and finalize changes efficiently and effectively.

A key feature of the current educational landscape is the pervasive impact of technology. Digital tools and online platforms have become an integral part of the learning experience, offering new forms of collaboration, personalized learning and access to information. The ubiquity of smartphones, tablets and computers transformed how students engage with instruction information and traditional teaching methods to suit the generation of the digital native.

Moreover as well as the accent on interdisciplinary empirical learning is reshaping programs and teaching methods. Educational institutions recognized the grandness of encouraging important thinking, creativeness and job solving to grow students for today's compound workforce. Project based learning, cooperative projects and real world applications are gaining popularity, challenging the formal effect of pedagogy as a flow of data. Furthermore, the globalization of the world economy has increased the importance of international perspectives in education. Emphasis on intercultural collaboration, study abroad programs, and global citizenship become core elements of the educational experience as students prepare for a more interconnected future and respect for diverse cultural contexts and perspectives adopting it as a valuable skill.

In this study, which focuses on teaching strategies in the current teaching context of student preparation and vocational learning, we will examine these priorities in more detail in the current teaching context and explore challenges and opportunity, especially in terms of teaching methods. By understanding the evolution of educational outcomes, we can better identify the strategies necessary to prepare students for the challenges of the 21st century and beyond. This allowed the researcher to study the teaching methodologies on the current educational landscape to student readiness and vocational learning.

1.1 Statement of the Problem

Specifically, the study aims to answer the following questions:

1. What is the status of teaching methodologies in the current educational Landscape in terms of:
 - 1.1 active learning;
 - 1.2 collaborative learning;
 - 1.3 experiential learning;
 - 1.4 lecture-based learning; and
 - 1.5 technology-enhanced teaching?
2. What is the status of students' readiness in terms of:
 - 2.1 set goals for development;
 - 2.2 students' ability to perform tasks;
 - 2.3 integration of theory into practice; and
 - 2.4 support system?

3. What is the level of students' vocational learning in terms of:
 - 3.1 hands-on demonstration;
 - 3.2 skill-based learning; and
 - 3.3 industry relevance?
4. Is there a significant relationship between the teaching methodologies on the current educational landscape and students' readiness?
5. Is there a significant effect between the status of teaching methodologies on the current educational landscape to students' vocational learning?

2. Methodology

According to Sheard (2018), data that can be translated into numbers or that are numerical are the focus of quantitative research. The research design for this study utilized a quantitative approach with a correlational statistical treatment. This design examined the relationships between variables of interest and identified these associations' strengths and directions. Through collecting numerical data and using correlational analysis, the study explored potential patterns, dependencies, or predictive relationships among variables.

3. Results and Discussion

This chapter shows the results on the status of the teaching methodologies and student readiness, the level of student's vocational learning, as well as the significant relationship between the student readiness and the teaching methodologies and its significant effect to students' vocational learning on the current educational landscape.

Status of Teaching Methodologies

The status of teaching methodologies in terms of active learning, collaborative learning, experiential learning, lecture-based learning, and technology-enhanced teaching was treated statistically using the mean and standard deviation.

Status of Teaching Methodologies on the Current Educational Landscape in terms of Active Learning

Table 1 shows the status of teaching methodologies in terms of active learning. It also shows the statements, mean, standard deviation and remarks.

The learners strongly agreed that the given situations influenced the active learning teaching methodology. They can overcome any performance gaps and achieve their desired learning goal through the teacher's instant ($M=4.43$, $SD=0.59$). Additionally, the students also strongly agreed that they could share their thoughts, opinions, and conclusions about certain topics and not simply be bombarded and spoon-fed with knowledge by the teacher ($M=4.21$, $SD=55$) and still indicate a high level of teaching methodologies in terms of active learning.

Table 1 Status of Teaching Methodologies on the Current Educational Landscape in terms of Active Learning

<i>Through my active learning experience, I...</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
--	-------------	-----------	----------------

...tend to understand the lesson better since I am given the chance to participate and actively do things	4.28	0.61	Strongly Agree
...am motivated to join class discussions through interactive activities	4.22	0.52	Strongly Agree
...can share my thoughts, opinions, and conclusions about certain topics and not simply be bombarded and spoon-fed with knowledge by my teacher	4.21	0.55	Strongly Agree
... can overcome any performance gaps and achieve my desired learning goal through my teacher's instant feedback	4.43	0.59	Strongly Agree
I am expected to get involved, play a part in activities and discussions, and apply my knowledge in practice since learning becomes more fun and exciting	4.41	0.56	Strongly Agree
Weighted Mean	4.31		
SD	0.56		
Verbal Interpretation	Very High		

The status of teaching methodologies in terms of active learning attained a weighted mean score of 4.31 and a standard deviation of 0.56, verbally interpreted as *very high* among the respondents.

This only explains that active learning reflects a growing recognition of the benefits of student-centered, participatory approaches to teaching and learning. It equips students with deeper understanding, boost engagement, cultivate important thinking and coalition skills, improved retention, increased motivation, and prepared students for real world challenges. and installation for real world challenges. While challenges still persist, ongoing efforts to promote faculty development, enhance learning environments, and meaningful educational experiences, empower learners and prepare them for success.

Status of Teaching Methodologies on the Current Educational Landscape in terms of Collaborative Learning

Table 2 shows the status of teaching methodologies in terms of collaborative learning. It also shows the statements, mean, standard deviation, and remarks.

Table 2 Status of Teaching Methodologies on the Current Educational Landscape in terms of Collaborative Learning

Collaborative Learning...	MEAN	SD	REMARKS
...enhances my social skills	4.33	0.62	Strongly Agree
...helps me obtain a deeper understanding of our lesson through peer interaction	4.33	0.57	Strongly Agree
...promotes responsibility among us students	4.33	0.67	Strongly Agree
...enhances my academic progress	4.43	0.69	Strongly Agree
...is appropriate in our subject	4.39	0.58	Strongly Agree
Weighted Mean	4.36		
SD	0.62		
Verbal Interpretation	Very High		

The learners strongly agreed that collaborative learning really helped them develop and enhance their understanding and abilities. Collaborative learning enhanced their academic progress (M=4.43, SD=0.69). In addition, three (3) indicators got the same mean (M=4.33), which only states that collaborative learning not only enhances their social skills (SD=0.62) but also helps them obtain deeper understanding (SD=0.57) and promotes student responsibility (SD=0.67).

The status of teaching methodologies in terms of collaborative learning attained a weighted mean score of 4.36 and a standard deviation of 0.62, verbally interpreted as *very high* among the respondents.

This implies that collaborative learning is highly effective in Technology and Livelihood Education as it cultivates essential technical skills, fosters critical thinking and creativity, promotes interpersonal skills, and prepares students for success in real-world vocational settings. It is also very important in promoting teamwork and social-emotional skills among students.

Status of Teaching Methodologies on the Current Educational Landscape in terms of Experiential Learning

Table 3 shows the status of teaching methodologies in terms of experiential learning. Also shows the statements, mean, standard deviation, and remarks.

Table 3 Status of Teaching Methodologies on the Current Educational Landscape in terms of Experiential Learning

Through experiential learning, I...	MEAN	SD	REMARKS
...learn more quickly by doing something guided by my teacher	4.35	0.63	Strongly Agree
...can be more creative on our performance tasks	4.27	0.63	Strongly Agree
... can analyze how my actions impact outcomes as it creates a more personal connection in the learning process	4.16	0.61	Agree
...learn and realize the effect if ever I commit mistakes or experience negative outcomes	4.46	0.59	Strongly Agree
...learn more quickly	4.53	0.50	Strongly Agree
Weighted Mean	4.35		
SD	0.59		
Verbal Interpretation	Very High		

The learners strongly agreed in four out of five situations that involved their experiential learning experience. Through experiential learning, they learn more quickly (M=4.53, SD=0.50) since they are personally experiencing tasks given by the teacher that are very relevant to the subject. Also, they can analyze how their actions impact outcomes, creating a more personal connection in the learning process (M=4.16, SD=0.61). Moreover, instant feedback can help the students to be better on what they do and avoid further negative outcomes.

The status of teaching methodologies in terms of experiential learning attained a weighted mean score of 4.35 and a standard deviation of 0.59, verbally interpreted as *very high* among the respondents.

The result explains that experiential learning is incredibly valuable since it engages learners actively in the learning process, allowing them to acquire knowledge, skills, and understanding through direct experience. Furthermore, experiential learning offers a stimulating and immersible admittance to

training and teaching that may have resulted in more meaningful and lasting learning outcomes.

Status of Teaching Methodologies on the Current Educational Landscape in terms of Lecture-based Learning

Table 4 shows the status of teaching methodologies in terms of lecture-based learning. Also shows the statements, mean, standard deviation, and remarks.

Table 4 Status of Teaching Methodologies on the Current Educational Landscape in terms of Lecture-Based Learning

Through lecture-based learning, I...	MEAN	SD	REMARKS
...can understand the lesson better when my teacher is discussing it	4.55	0.61	Strongly Agree
I usually rely on the teacher to learn what I need to know	4.45	0.63	Strongly Agree
...can prepare very well for tests	4.56	0.55	Strongly Agree
... tend to focus more because of possible recitations	4.36	0.52	Strongly Agree
...can understand the lesson better	4.67	0.47	Strongly Agree
Weighted Mean	4.52		
SD	0.55		
Verbal Interpretation	Very High		

The learners strongly agreed with the given situations involving their lecture-based learning experience. The students understand the lesson better through lecture-based learning (M=4.67, SD=0.47), since the teachers serve as the barrel of knowledge, making them the most reliable source of information. Moreover, the students also tend to strongly agree that they focus more on lectures because of possible recitations (M=4.36, SD=0.52).

Teaching methodologies' status in lecture-based learning attained a weighted mean score of 4.52 and a standard deviation of 0.55, verbally interpreted as *very high* among the respondents.

These results imply that lecture based learning as a type of teaching method leads to strong comprehension of theoretical concepts, efficient diffusion of information, skillful knowledge, and development of note-taking skills. By creating engaging content, educators can promote academic success and encourage curiosity and exploration in the classroom.

Status of Teaching Methodologies on the Current Educational Landscape in terms of Technology-Enhanced Teaching

Table 5 shows the status of teaching methodologies in terms of technology-enhanced teaching. It also shows the statements, mean, standard deviation, and remarks.

Table 5 Status of Teaching Methodologies on the Current Educational Landscape in terms of Technology-Enhanced Teaching

With technology-enhanced teaching, I...	MEAN	SD	REMARKS
I can communicate with my teacher easily to tutor/guide me during distance learning	4.44	0.59	Strongly Agree

...am more engaged during discussions, and learning becomes an enjoyable experience to learn	4.49	0.64	Strongly Agree
...can gain new skills and enrich my knowledge base	4.36	0.53	Strongly Agree
...have more learning opportunities provided through the digital tools used by my teacher	4.37	0.53	Strongly Agree
...can upload my projects or homework, which my teachers can access and give necessary recommendations during distance learning	4.33	0.47	Strongly Agree
Weighted Mean	4.40		
SD	0.55		
Verbal Interpretation	Very High		

The learners strongly agreed with the situations involving their technology-enhanced teaching and learning experience. With technology-enhanced teaching, they are more engaged during discussions, and learning becomes an enjoyable experience to learn (M=4.49, SD=0.64), especially when the teacher uses technology-enhanced learning materials to facilitate learning. Additionally, they can also upload their projects or homework, which the teachers can access and give necessary recommendations during distance learning (M=4.33, SD=0.47).

The status of teaching methodologies in terms of technology-enhanced teaching attained a weighted mean score of 4.40 and a standard deviation of 0.55, which was verbally interpreted as *very high* among the respondents.

Since students are receiving meaningful and applicable instruction that is tailored to their unique interests and skills, the results only explain that students find this teaching method to be more engaging and inspiring since they are able to explore more with technology. In order to maximize student learning, teachers must be adept at incorporating technology into their lessons.

Status of Students' Readiness

The status of students' readiness in terms of set goals for development, students' ability to perform tasks, integration of theory into practice and support system was treated statistically using the mean and standard deviation.

Status of Students' Readiness in terms of Set Goals for Development

Table 6 shows the status of students' readiness in terms of set goals for development. Also shows the statements, mean, standard deviation and remarks.

Table 6 Status of Students' Readiness in terms of Set Goals for Development

Through the learning process, I...	MEAN	SD	REMARKS
...think positive to stay focused	4.31	0.71	Strongly Agree
...acknowledge the challenge or difficulty in order to find a way to overcome it	4.43	0.64	Strongly Agree
...manage my time properly and prioritize tasks to complete work and assignments on time	4.13	0.85	Agree

...listen and obey the advice and guidance by my teacher	4.58	0.50	Strongly Agree
...strive to be better, with the end goal of providing consistent quality work	4.52	0.50	Strongly Agree
<i>Weighted Mean</i>	4.39		
<i>SD</i>	0.64		
<i>Verbal Interpretation</i>	Very High		

The learners strongly agreed with the given situations, which involves their readiness to set development goals. They rated themselves as listening and obeying the teacher's advice and guidance (M=4.58, SD=0.50). Also, the learners agreed that they manage their time properly and prioritize tasks to complete work and assignments on time (M=4.13, SD=0.85).

The status of students' readiness in terms of set goals for development attained a weighted mean score of 4.39 and a standard deviation of 0.64, verbally interpreted as *very high* among the respondents.

This only implies that setting goals for development is essential for the students in providing direction, motivation, self-awareness, accountability, and lifelong learning skills. Clear goals give students a sense of purpose, encourage perseverance, and enable them to focus their efforts on achieving specific outcomes, ultimately leading to improved academic and personal growth.

Status of Students' Readiness in terms of Students' Ability to Perform Tasks

Table 7 shows the status of students' readiness in terms of students' ability to perform tasks. It also shows the statements, mean, standard deviation and remarks.

Table 7 Status of Students' Readiness in terms of Students' Ability to Perform Tasks

<i>Students' ability to perform tasks.</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
<i>As a learner, I...</i>			
...manage my time effectively and submit my projects or assignments on time	4.33	0.67	Strongly Agree
...put in the time and effort necessary to achieve my goals with strong work ethics	4.38	0.64	Strongly Agree
...approach my tasks with positive attitude and willingness to learn	4.30	0.63	Strongly Agree
...am self-motivated and I take responsibility for my learning to be able to submit quality work	4.53	0.63	Strongly Agree
...am open to feedback and willing to learn from my mistakes	4.48	0.50	Strongly Agree
<i>Weighted Mean</i>	4.40		
<i>SD</i>	0.61		
<i>Verbal Interpretation</i>	Very High		

The learners strongly agreed with the given situations involving their ability to perform tasks. They are self-motivated and taking responsibility for their learning to be able to submit quality work (M=4.53, SD=0.63). This will help them submit fewer error- or error-free outputs. Additionally, they approach tasks with a positive attitude and willingness to learn (M=4.30, SD=0.63), which is very helpful in achieving a

common goal.

The status of students' readiness in terms of students' ability to perform tasks attained a weighted mean score of 4.40 and a standard deviation of 0.61, verbally interpreted as *very high* among the respondents.

While the ability of students to do tasks is based on their academic success and skill development, the results imply that students' motivation to learn can be influenced by single factors such as interest, perceived relevancy of the corporeal to their goals, convinced feedback and encouragement, a sense of competency and progress, and an auxiliary learning environment. Students' willingness to learn can be influenced by factors such as the teachers, engaging learning materials, a safe and welcoming learning environment, opportunities for success and recognition, inward concern, and motivation, peer encouragement, and feeling valued and respected.

Status of Students' Readiness in terms of Integration of Theory into Practice

Table 8 shows the status of students' readiness in terms of integration of theory into practice. Also shows the statements, mean, standard deviation, and remarks.

Table 8 Status of Students' Readiness in terms of Integration of Theory into Practice

<i>Integration of theory into practice</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
<i>As a learner, I...</i>			
<i>...accept the difficulty and let every setback be a learning opportunity</i>	4.34	0.70	Strongly Agree
<i>...focus on putting things that will enhance my work into practice</i>	4.33	0.61	Strongly Agree
<i>...practice using the resources that are available so that I am comfortable with them when I need them</i>	3.99	0.75	Agree
<i>...work with peers and do my roles and responsibilities</i>	4.42	0.60	Strongly Agree
<i>...work on my strengths as well as weaknesses to acquire new skills</i>	4.53	0.50	Strongly Agree
<i>Weighted Mean</i>	4.32		
<i>SD</i>	0.63		
<i>Verbal Interpretation</i>	<i>Very High</i>		

The learners mostly strongly agreed that they also work on their strengths as well as weaknesses to acquire new skills ($M=4.53$, $SD=0.50$). This will help them achieve their goals of excellence. Furthermore, they also agreed that practicing using the available resources still helps them achieve desired outcomes ($M=3.99$, $SD=0.75$).

The status of students' readiness in terms of integration of theory into practice attained a weighted mean score of 4.32 and a standard deviation of 0.63, verbally interpreted as *very high* among the respondents.

This implies that integrating theory into practice bridges the gap between abstract concepts and concrete application. The students benefit as they foster practical knowledge, enhance problem solving abilities, promote important thinking skills as well as they are prepared for real world scenarios. Teachers need to make sure that all students have equitable access to practical learning experiences, foster links between theory and practice, and offer meaningful opportunities for hands-on learning in order to close integration gaps.

Status of Students' Readiness in terms of Support System

Table 9 shows the status of students' readiness in terms of support system. Also shows the statements, mean, standard deviation, and remarks.

Table 9 Status of Students' Readiness in terms of Support System

Support System As a learner, I...	MEAN	SD	REMARKS
...can feel belongingness as well as opportunities to make new friends since joining clubs and organizations provides me a sense of community	4.28	0.62	Strongly Agree
...feel supported and guided by my teacher which serve as a sounding board for ideas and concerns	4.23	0.59	Strongly Agree
...am supported and guided by campus counselors and mental health advocates	4.15	0.64	Agree
...receive emotional and moral support from my friends and family, as well as a sense of home and belongingness	4.53	0.67	Strongly Agree
...am involved and included in the academic community that my school promotes	4.36	0.59	Strongly Agree
Weighted Mean	4.31		
SD	0.62		
Verbal Interpretation	Very High		

The learners strongly agreed that in the given situations, referring to support systems. As highly rated, they strongly agreed that they receive emotional and moral support from their friends and family and a sense of home and belongingness (M=4.53, SD=0.67), which helps them stay motivated in accomplishing tasks and achieving goals. Moreover, the learners also agreed that they are supported and guided by campus counselors and mental health advocates (M=4.15, SD=0.64) depending on each student's different mental and emotional state since we are facing diverse learners who need different approaches.

The status of students' readiness in terms of support system attained a weighted mean score of 4.31 and a standard deviation of 0.62, verbally interpreted as *very high* among the respondents.

Support systems play a vital role in academic success. Based on the results, it explains that support systems provide guidance, clarification, and additional instruction, helping students overcome academic obstacles and achieve their full potential. For enhanced support systems, allocated funds, improved coordination and communication will create a more friendly campus community that promotes each student's accessibility, diversity, and general well-being.

Level of Student's Vocational Learning

The level of vocational learning in terms of hands-on demonstration, skill-based learning and industry relevance was treated statistically using the mean and standard deviation.

Level of Student's Vocational Learning in terms of Hands-On Demonstration

Table 10 shows the level of student's vocational learning in terms of hands-on demonstration. Also shows the statements, mean, standard deviation and remarks.

Table 10 Level of Student's Vocational Learning in terms of Hands-On Demonstration

<i>Hands-on Demonstration</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
<i>My teacher...</i>			
<i>...gives clear, measurable, and achievable learning objectives</i>	4.53	0.53	Strongly Agree
<i>...usually demonstrates the tasks first, including the safety measures, before letting us do them on our own</i>	4.41	0.54	Strongly Agree
<i>...ensures that school facilities can help us achieve our goals during laboratory activities</i>	4.52	0.62	Strongly Agree
<i>...encourage self-assessment after the activities which is an effective method that encourages us to reflect on our learning and performance</i>	4.46	0.58	Strongly Agree
<i>...evaluate our work using criteria, standards, or scenarios, and provide timely and specific feedback</i>	4.52	0.50	Strongly Agree
<i>Weighted Mean</i>	4.49		
<i>SD</i>	0.56		
<i>Verbal Interpretation</i>	Very High		

Through hands-on activities, students develop a deeper understanding of content and acquire applicable skills in real-world situations. As rated, the students strongly agreed that the teacher gives clear, measurable, and achievable learning objectives (M=4.53, SD=0.53) that help them achieve common goals. Additionally, the students still strongly agreed that the teacher usually demonstrates the tasks first, including the safety measures, before letting the students do it on their own (M=4.41, SD=0.54).

The level of students' vocational learning in terms of hands-on demonstration attained a weighted mean score of 4.49 and a standard deviation of 0.56, verbally interpreted as *very high* among the respondents.

This explains that experiential learning facilitates a more profound comprehension and retention of the subject matter. As students work hands-on, they form enduring associations and memories that reinforce what they have learned. Continuous incorporation of hands-on demonstration into curriculum and education will develop practical exercises that fit the learning objectives suitable for a range of students which can be completed in a reasonable amount of time with available resources. This will ensure that every student has fair access to experiential learning opportunities that encourage curiosity, creativity, and critical thinking.

Level of Student's Vocational Learning in terms of Skill-Based Learning

Table 11 shows the level of student's vocational learning in terms of skill-based learning. Also shows the statements, mean, standard deviation, and remarks.

Table 11 Level of Student's Vocational Learning in terms of Skill-Based Learning

<i>Skill-based Learning</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
<i>As a learner, I...</i>			
<i>I actively seek opportunities to learn new skills that are relevant to my goals</i>	4.62	0.49	Strongly Agree

...find practical, hands-on activities helpful in acquiring new skills	4.57	0.50	Strongly Agree
...feel confident in my ability to apply the skills I have learned in real-world situations	4.55	0.62	Strongly Agree
...prefer learning environments that emphasize practical application rather than theoretical knowledge	4.39	0.63	Strongly Agree
...enjoy receiving feedback on my performance to improve my skills	4.58	0.50	Strongly Agree
Weighted Mean	4.54		
SD	0.55		
Verbal Interpretation	Very High		

The students strongly agreed that they actively seek opportunities to learn new skills relevant to their goals (M=4.62, SD=0.49). Furthermore, they also strongly agreed that they prefer learning environments that emphasize practical application rather than theoretical knowledge (M=4.39, SD=0.63).

The level of students' vocational learning in terms of skill-based learning attained a weighted mean score of 4.54 and a standard deviation of 0.55, verbally interpreted as *very high* among the respondents.

This only implies that skill based learning offers many observable benefits by providing significant relevance, enhancing employability, promoting engagement, and enabling personalized learning experiences. This approach allows students to apply theoretical knowledge in practical situations, making their learning more relevant and effective. It goes beyond mere acquisition of skills to encompass deep understanding, adaptability, and the ability to innovate within a given domain. Skill mastery entails consistent refinement, and feedback integration to effectively transfer skills across different situations or challenges.

Level of Student's Vocational Learning in terms of Industry Relevance

Table 12 shows the level of student's vocational learning in terms of industry relevance. Also shows the statements, mean, standard deviation and remarks.

Table 12 Level of Student's Vocational Learning in terms of Industry Relevance

<i>Industry Relevance</i> <i>As a learner, I...</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
...understand how the skills I learn in school can be useful in future careers	4.52	0.50	Strongly Agree
...feel that the projects and assignments I complete in my program prepare me for real-world industry scenarios	4.34	0.57	Strongly Agree
I feel motivated to learn when I understand how it can help me in my future career	4.37	0.52	Strongly Agree
...can understand how classroom learning relates to real-world jobs and industries	4.41	0.60	Strongly Agree
...feel encouraged to ask questions and explore topics related to industries and careers	4.53	0.50	Strongly Agree
Weighted Mean	4.43		

SD 0.54
 Verbal Interpretation. Very High

Industry relevance is paramount in vocational learning. The learners felt that they were encouraged to ask questions and explore topics related to industries and careers (M=4.53, SD=0.50). Though sometimes they are exposed to hard tasks, they still feel that the projects and assignments they complete in the program prepare them for real-world industry scenarios (M=4.34, SD=0.57).

The level of students' vocational learning in terms of industry relevance attained a weighted mean score of 4.43 and a standard deviation of 0.54, verbally interpreted as *very high* among the respondents.

This explains that students signifies vocational education to be closely aligned with the demands and practices of the workforce. Additionally, industrial relevance encourages cooperation between academics and industry among students to acquire insights into new trends, technologies, and market demands, which in turn promotes innovation and economic growth.

Test of Significant Relationship between the Teaching Methodologies and Students' Readiness

To test the significant Relationship between the Teaching Methodologies and Students' Readiness in terms of set goals for development, students' ability to perform tasks, integration of theory into practice, and support system was treated statistically using Real Statistics Data Analysis Tools using the Pearson correlation coefficient.

Table 13 Significant Relationship between the Teaching Methodologies in the Current Educational Landscape and Students' Readiness

Teaching Methodologies on the Current Educational Landscape (IV)	Students' Readiness (DV)			
	Set Goals for Development	Students' Ability to Perform Tasks	Integration of Theory into Practice	Support System
Active Learning: Pearson Correlation Significance(2-Tailed) N	0.09 .348 120	-0.09 .342 120	0.01 .883 120	0.07 .342 120
Collaborative Learning: Pearson Correlation Significance(2-Tailed) N	-0.05 .602 120	0.14 .126 120	-0.06 .519 120	-0.01 .945 120
Experiential Learning: Pearson Correlation Significance(2-Tailed) N	0.01 .986 120	0.05 .601 120	0.07 .471 120	-0.10 .297 120
Lecture-Based Learning: Pearson Correlation Significance(2-Tailed) N	0.09 .316 120	0.04 .664 120	0.04 .688 120	0.03 .743 120
Technology-Enhanced Teaching: Pearson Correlation Significance(2-Tailed) N	-0.02 .816 120	0.18 .047 120	0.06 .548 120	0.08 .379 120

The correlation coefficients measure the strength and direction of the relationship between teaching methodologies and students' readiness in terms of set goals for development, students' ability to perform tasks, integration of theory into practice, and support system. A positive correlation indicates that as teaching methodologies increase, students' readiness also tends to increase.

Correlations were computed among five teaching methodologies on data for 120 students. A correlation coefficient of 1 indicates a perfect positive correlation, while a coefficient of -1 indicates a perfect negative correlation. The correlation coefficients range from -0.10 to 0.18, indicating a low negative to low positive relationship, and all computed values were greater than the level of significance of 0.05 (2 tailed); therefore, there is no significant relationship between teaching methodologies and students' readiness in terms set goals for development, students' ability to perform tasks, integration of theory into practice and support system.

Specifically, this only explains that teaching methodologies on the current educational landscape show no significant relationship with students' readiness across all variables. It only highlights the complexity of educational dynamics and the need for comprehensive, student-centered approaches to foster holistic development and learning outcomes.

Test of Significant Effect of Teaching Methodologies on the Current Educational Landscape on Vocational Learning

To test the significant effect of teaching methodologies on students' vocational learning regarding hands-on demonstration, skill-based learning and industry relevance were treated statistically using Jamovi 2.3.28 using the regression analysis.

Significant Effect of Teaching Methodologies on the Current Educational Landscape on Student's Vocational Learning in Terms of Hands-On Demonstration

Table 14 showed each predictor variable's unstandardized coefficients, standardized coefficients, t-values, and p-values. The analysis included five predictor variables: active learning, collaborative learning, experiential learning, lecture-based learning and technology-enhanced teaching.

Table 14 Significant Effect of Teaching Methodologies on the Current Educational Landscape on Student's Vocational Learning in Terms of Hands-on Demonstration

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	2.956	0.578		5.113	<.001
Active Learning	-.046	0.075	-0.057	-0.610	.543
Collaborative Learning;	.025	0.081	0.035	0.304	.761
Experiential Learning;	-.071	0.083	-0.096	-0.856	.394
Lecture-Based Learning;	.270	0.092	0.290	2.941	.004

<i>Technology-Enhanced Teaching</i>	.162	0.092	0.158	1.753	.082
-------------------------------------	------	-------	-------	-------	------

$R = .337$; $R^2 = .114$; $Adj. R^2 = .0748$
 $F(5, 114) = 2.92$; $p < .001$

The results further showed that the five predictors explain 11.40% of the variance, $F(5, 144) = 2.92$, $p < .001$. Specially, lecture-based learning ($B = .29$, $t = 2.94$, $p = .004$) positively affects with students' vocational learning in terms of hands-on demonstration. On the other hand, active learning ($B = -.05$, $t = -0.61$, $p = .543$), collaborative learning ($B = .03$, $t = 0.30$, $p = .761$), experiential learning ($B = -.07$, $t = -0.86$, $p = .394$) and technology-enhanced teaching ($B = .16$, $t = 1.75$, $p = .082$) are not significantly affected by outcome variables.

The research showed the significant positive effects of hands-on demonstrations on vocational learning outcomes. This only implies that it is very important to integrate hands-on activities and balance them with lecture-based learning. Lecture based learning provides foundational knowledge, while active demonstrations offer practical application as well as bridging possibility with real world skills, enhancing understanding and retention. Students can enhance their skill acquisition with theories and concepts as well as promote real-world application, improve retention and understanding, foster engagement and motivation, develop critical thinking skills, preparing them for the workforce, and align education with industry standards.

Significant Effect of Teaching Methodologies on the Current Educational Landscape on Student's Vocational Learning in Terms of Skill-Based Learning

Table 15 showed the unstandardized coefficients, standardized coefficients, t-values, and p-values for each predictor variable. The analysis included five predictor variables: active learning, collaborative learning, experiential learning, lecture-based learning and technology-enhanced teaching.

Table 15 Significant Effect of Teaching Methodologies on the Current Educational Landscape on Student's Vocational Learning in terms of Skill-Based Learning

	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	3.331	0.596		5.585	<.001
Active Learning	.133	0.078	0.162	1.706	.091
Collaborative Learning;	.107	0.084	0.150	1.276	.205
Experiential Learning;	-.032	0.086	-0.043	-0.370	.712
Lecture-Based Learning;	-.041	0.095	-0.044	-0.437	.663

<i>Technology-Enhanced Teaching</i>	.113	0.095	0.110	1.189	.237
-------------------------------------	------	-------	-------	-------	------

$R = .265$; $R^2 = .070$; $Adj. R^2 = .029$
 $F(5, 114) = 1.72$; $p < .001$

The results further showed that the five predictors explain 7.00% of the variance, $F(5, 144) = 1.72$, $p < .001$. All the predictor variables—active learning ($B = -.13$, $t = 1.71$, $p = .091$), collaborative learning ($B = .15$, $t = 1.28$, $p = .205$), experiential learning ($B = -.04$, $t = -0.37$, $p = .712$), lecture-based learning ($B = -.04$, $t = -0.44$, $p = .663$) and technology-enhanced teaching ($B = .11$, $t = 1.19$, $p = .237$)—are not significantly affected by outcome variables.

The results only explains that while teaching methodologies play a crucial role in vocational learning and skill development, the presence of non-significant effects underscores the need for careful consideration of methodological, contextual, and learner-related factors. By addressing these challenges and adopting evidence-based practices, vocational educators can enhance skill-based learning outcomes and better prepare students for success in the workforce.

Significant Effect of Teaching Methodologies on the Current Educational Landscape on Student’s Vocational Learning in Terms of Industry Relevance

Table 16 showed each predictor variable's unstandardized coefficients, standardized coefficients, t-values, and p-values. The analysis included five predictor variables: active learning, collaborative learning, experiential learning, lecture-based learning and technology-enhanced teaching.

The results further showed that the five predictors explain 10.60% of the variance, $F(5, 144) = 2.70$, $p < .001$. Especially, technology-enhanced teaching ($B = .23$, $t = 2.55$, $p = .012$) is positively affected while collaborative learning ($B = -.26$, $t = -2.27$, $p = .025$) has negative affect with student’s vocational learning in terms of industry relevance.

On the other hand, active learning ($B = -.09$, $t = 0.94$, $p = .350$), experiential learning ($B = .19$, $t = 1.67$, $p = .098$) and lecture-based learning ($B = .08$, $t = 0.82$, $p = .415$) are not significantly affected by outcome variables.

Table 16 Significant Effect of Teaching Methodologies on the Current Educational Landscape on Student’s Vocational Learning in Terms of Industry Relevance

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.871	0.612		4.694	<.001
Active Learning	.075	0.080	0.087	0.938	.350
Collaborative Learning;	-.195	0.086	-0.261	-2.268	.025
Experiential Learning;	.147	0.088	0.188	1.670	.098
Lecture-Based Learning;	.080	0.097	0.081	0.819	.415
Technology-Enhanced Teaching	.248	0.098	0.230	2.549	.012

$$R = .326; R^2 = .106; Adj. R^2 = .0678$$
$$F(5, 114) = 2.70; p < .001$$

These results imply that, collaborative learning and technology-enhanced teaching has a favorable effect on vocational learning with respect to industry relevance. Students are prepared for the demands of the constantly changing profession and support their success in careers relevant to the industry by utilizing technology and collaboration in vocational education. By incorporating these approaches into job pedagogy programs, students with an all-encompassing and holistic learning prepares them for success in the workforce.

4. Conclusion and Recommendations

Based on the findings gathered from the study, it was found that:

1. There is no significant relationship between the teaching methodologies on the current educational landscape and students' readiness. This implies that increasing teaching methodologies does not lead to significant improvement or decline in students' readiness across all variables, thus leading to the acceptance of the null hypothesis.
2. It was also found that there is no significant effect between the status of the teaching methodologies on the current educational landscape to students' vocational learning. The lack of a significant relationship of teaching methods on students' vocational learning can be attributed to various factors. Hence, accepting the null hypothesis becomes a plausible outcome in light of these complexities.

Based on the results gathered from the study, the following are being recommended:

1. Though the status of student readiness in this research is very high, it is recommended that other teaching methods beyond those examined in the current study be investigated. There might be innovative or unconventional approaches that could better align with students' personal readiness and yield more significant results.
2. Supplement quantitative findings with qualitative research methods such as interviews or focus groups. Qualitative data can offer richer insights into students' experiences, perceptions, and personal readiness, providing a more comprehensive understanding of the relationship between teaching methods and student readiness.
3. While there is a positive and negative effect between some teaching methodologies and student vocational learning, refining the measurement tools used to assess students' vocational learning outcomes is recommended. In this way, it will be sensitive enough to detect meaningful changes in students' skills, knowledge, and competencies.

Reference:

- Main, P. (2023, July 14). Change Theories.
- Sheard, J. (2018). Quantitative Data Analysis. Research Methods (Second Edition), Chandos Publishing, 2018, Pages 429-452, ISBN 9780081022207, <https://doi.org/10.1016/B978-0-08-102220-7.00018-2>.