Experiential Teaching Approach and Performance of Students in Physical Education

Aaron Paul C. Enriquez
Teacher 1 – San Jose Integrated High School
San Pablo City, Laguna 4000 Philippines

Darwin D. Ofrin EdD.
Associate Professor IV –Laguna State Polytechnic
University – San Pablo City Campus
San Pablo City, Laguna 4000 Philippines

Abstract:- This study looked at the effects of, "Experiential Teaching Approach, Learning Styles, and Performance of Students in Physical Education," is to ascertain how the experiential teaching approach, learning styles, and student performance relate to one another. The research design for the study combined quantitative and qualitative data collection techniques. Furthermore, quantitative data analysis involved calculating mean scores, standard deviations, and conducting t-tests to determine the significance of differences between pre-test and post-test scores. The qualitative data were analyzed thematically to identify recurring patterns and themes in the participants' perceptions of the experiential teaching approach. The study's findings showed that most students had a visual learning style, followed by auditory, kinesthetic, and tactile preferences. The participants generally perceived the experiential teaching approach positively, indicating agreement with the approach's effectiveness in enhancing their learning experience. Moreover, there was a significant improvement in both motor skills and cognitive abilities of the students after being exposed to the experiential teaching approach.

Keywords:- Experiential Teaching Approach, Learning Styles, Motor Skills, Cognitive Skills and Kinesthetic.

I. INTRODUCTION

Physical Education (PE) is part of the curriculum that attempts to improve students' physical health, motor skills, and general well-being. To improve the effectiveness of PE instruction, there has been a growing interest in investigating cutting-edge teaching strategies and comprehending individual learning preferences. The experiential teaching style, which places an emphasis on active and hands-on learning activities, is one such strategy that is gaining popularity.

The experiential approach to learning encourages students to actively participate in physical exercises, problem-solving activities, and real-life experiences, going beyond the confines of conventional didactic methods. It is predicated on the idea that participation in the learning process rather than being a passive consumer of information improves student learning. The experiential teaching approach seeks to promote deeper comprehension, skill development, and the application of knowledge in real-world contexts by developing engaging and interactive learning opportunities.

Individual learning styles are equally as important in the PE environment as the instructional method. Individuals' chosen methods of information processing and internalization are referred to as learning styles. Others may benefit more from kinesthetic or tactile encounters, while some learners may do best in visual or aural surroundings. The engagement, motivation, and overall learning results of students can be greatly impacted by recognizing and accommodating varied learning styles.

Learning styles are classified into four categories: visual, auditory, kinesthetic, and tactile. Learning style intervention concerning the use of styles in studying and doing assignments is being supported by Bandura's concept of self-efficiency. It was stated that student performance expectations influence their persistence at task. Research on learning style provides a clear direction in teaching through their styles on how to each themselves by their strength.

The student's preferred learning style, interest in the subject matter being studied, and the learning environment are some of the variables that affect how well students learn. The student's preferred learning styles are determined by how he or she responds to stimuli in a learning situation as well as by how they typically gather and apply knowledge. These learning styles acknowledge that people learn in various ways, and as a result, students in each course will interpret their lessons in several ways. Sumiran (2011)

Examining the relationship between experiential teaching and learning styles and students' performance in physical education is crucial given the potential advantages of both. However, little study has particularly investigated how learning styles, the experiential teaching technique, and students' performance in PE interact.

II. RELATED WORK

A. Learning Style.
In theoretical and empirical descriptions of the subject, the phrases "learning style," "cognitive style," and "learning strategy" are frequently and reasonably employed inexactly. While the phrases "learning style" and "cognitive style" are sometimes used interchangeably, they also have unique and distinct definitions in other contexts. The word "learning

style" is used to express a concern with the use of cognitive style in a learning scenario (Riding & Cheema, 1999). Allport (l937) defined cognitive style as an individual's normal or habitual manner of problem solving, thinking, perceiving, and remembering. Cognitive style is described by Riding and Cheema (l99l) as a dimension (wholist-analytic), whereas learning style is considered as encompassing a variety of components that are not mutually exclusive. It's also possible that cognitive style—at the very least—can be viewed as one important element of learning style. The following definitions are provided by Hartley (1998): cognitive styles are the methods by which various persons typically approach various cognitive activities; learning styles are the methods by which various individuals typically approach various learning tasks. Learning techniques, the third crucial phrase in the field, are the methods pupils use to study, according to Hartley (1998). Multiple strategies can be used by learners to deal with various tasks, adds Hartley (1998, p. 149). This last argument, which attempts to differentiate between style and strategy, highlights a recurrent problem in the field. Learning styles may be easier to acquire than learning methods, which are optional.

This situation is, unsurprisingly, significant to the "state-or-trait" disagreement surrounding so many human psychological traits (such as personality). Learning style can be thought of as either structurally consistent over time—a trait—or process-variable over time—a state. The more practical theory is that a style might very well exist, i.e., it might have structure, but that structure is, to some extent, responsive to experiences and the needs of the environment (process), allowing change and enabling adaptive behavior. The relationship between style (motherboard/hard wiring) and strategy (software/soft wiring) has also been described using the "motherboard/software" and "hard/soft wiring" analogies. When looking at the question of learning style stability, Loo (1997) discovered evidence that showed constancy in learning style over time, but she also criticized current analytical methods and advised care when drawing any solid conclusions about stability.

The word "preferences" is the last one that has to be defined. Many authors refer to the preference for one teaching approach over another (such as group work versus independent study) as learning preferences. Many of the models that have been examined have the key preferences rather well integrated, and the more complex learning style models frequently deal with them explicitly.

Theories of "learning styles" seek to categorize people based on their preferred learning environment, motivation, and personal preferences.

Though many types of learning styles were created, even the most well-liked ones are currently under investigation. The primary complaints are that they lack scientific rigor, are rigid, and are practically ineffectual.

However, it's still worthwhile to use metacognition—"thinking about thinking"—to determine what actually aids in learning. You may play to your strengths, strengthen those areas where you need to, and foster the most favorable learning environments in this way. Your ability to communicate effectively and to encourage others to learn can both benefit from this degree of awareness.

According to a standard definition, "learning styles" are "distinctive cognitive, practical, and psychosocial behaviors that serve as relatively reliable indications of how learners perceive, engage with, and respond to the learning environment. Many people think that one of the keys to success in higher education is having different learning styles. Learning style categorization techniques come in a wide variety due to conflicting research and, in many cases, application of the theory. As an alternative, several potential scales and classifications are in use. However, there is presently no one widely acknowledged system. Focusing on sensory modalities, personality types, environmental preferences, and/or cognitive styles, most of these scales and categories are more comparable than different. A common and important critique in this field is that learning style theory and measurement lack conceptual frameworks. A report of existing learning style models and tools was ordered by the United Kingdom Learning and Skills Research Center in 2004. Coffield et al. recommended educators against using learning style theories and instruments in the commission report after pointing out various inconsistencies. The authors also provided a suggested study agenda for this topic.

As an alternative, numerous researchers argue that both teachers and students can benefit from understanding different learning styles. Faculty who are knowledgeable about learning styles might modify their methodology to better fit the predominant learning preferences of their students. As an alternative, students who are aware of their own preferences are empowered to employ a variety of methods to improve their learning, which may influence their overall level of happiness with their education. This skill is especially important and practical when a student's learning style does not align with the instructor's teaching method. The shift to remote and/or asynchronous education in many college environments has exacerbated the problem of learning styles in the classroom. Most older students and adult learners are used to learning in ways that are inconsistent with this transition in educational modality from their elementary and secondary schooling. On the other hand, environmental factors including the more widespread use of technical advancements (such as personal digital assistants, digital video, the World Wide Web, and wireless Internet) may make younger generations of students more comfortable with with distance learning.

Experiential learning is the process of learning through experience and is more narrowly defined as "learning through reflection on doing". *Hands-on learning* can be a form of experiential learning but does not necessarily involve students reflecting on their product. Experiential learning is distinct from rote or didactic learning, in which the learner plays a comparatively passive role. It is related to, but not synonymous with, other forms of active learning such as action learning, adventure learning, free-choice learning, cooperative learning, service-learning, and situated learning.

Although the terms "experiential learning" and "experiential education" are sometimes used interchangeably, experiential learning considers each student's unique learning process. As a result, when compared to experiential education, experiential learning is more focused on challenges that are specific to the learner and the context of the learning.

The idea of learning in general by experience is old. In the Nicomachean Ethics, Aristotle stated that "for the things we have to learn before we can do them, we learn by doing them." This was written around 350 BC. But experiential learning is far more recent as a well-defined educational strategy. By significantly referencing the works of John Dewey, Kurt Lewin, and Jean Piaget beginning in the 1970s, David A. Kolb contributed to the development of the current idea of experiential learning.

There are several benefits to experiential learning for teachers. According to Peter Senge, author of The Fifth Discipline (1990), teaching is crucial for inspiring individuals. Only when students want to learn something can learning be beneficial. Therefore, providing learners with directions is necessary for experiential learning.

Experiential learning involves a hands-on method of teaching that moves away from the teacher lecturing and transmitting knowledge to the pupils. It aims to introduce a more active style of learning and makes learning an experience that goes beyond the classroom.

Teaching style is considered as a broad dimension or personality type that includes a teacher's stance, pattern of conduct, mode of performance, and attitude toward oneself and others. Penelope Peterson describes a teacher's "style" in terms of how they use the classroom's layout, select instructional activities and materials, and divide students into groups. According to Donald Medley, a component of the classroom climate is the teacher's style. Others distinguish between the expressive (characterizing the emotional relationship between students and teachers, such as warm or businesslike) and instructional (how teachers carry out the tasks of instruction, organize learning, and set classroom standards) aspects of teacher style.

Regardless of which definition of teacher style you prefer, the motion of stability or pattern is central. Certain behaviors and methods are stable over time, even with different students and different classroom situations. There is a purpose, rationale – a predictable teacher pattern even in different classroom contexts. Aspects of teaching style dictated by personality can be modified by early experiences and perceptions and by the appropriate training as a beginning teacher. As years pass, a teacher style becomes more ingrained and it takes a more powerful set of stimuli and more intense feedback to make changes. If you watch different teachers at work, including your college professors, you can sense that each one has a style of his/her own for teaching for structuring the classroom and delivering the lesson.

B. Descriptive Models of Teaching Styles.

Herbert Thelen attempts to relate teaching styles with traits of societal positions or with what appear to be tasks connected with other occupations. Many educators have defined diverse teaching styles in descriptive and colorful terms. Frank Reissman's eight teaching methods, which are applicable to all teachers but were originally based on observations of successful teachers of inner-city pupils, describe various personality types. More recently, Louis Rubin defined six different teaching styles that are connected to the teaching process. Table 3 provides an overview of these descriptions of instructional methods.

Although the theories of Thelen, Reissman, and Rubin are not supported by research, you could find these academics to be quite perceptive about what makes a good teacher and how these attributes apply to classroom instruction. Different teaching strategies and methods are produced by each style. It is crucial to respect personal preferences if successful outcomes are achieved and as long as the instructor is comfortable using a certain style

Different methods of instruction exist. Based on their unique physical and psychological traits, teachers must build their own teaching methods and pedagogical styles. The social, psychological, and pedagogical atmosphere of the school also plays a role in shaping teaching style; if teachers do not feel comfortable in the classroom, students see through them and label them as "phony." Despite common wisdom, modern history, or well-liked organizations, no one should be forced to adopt a particular style. What works for one teacher may not work for another because it depends on personal preference and comfort. Like how different school districts define good instructors differently, so do good teaching approaches. There is no perfect teacher type or teaching style, and no academic institution should try to force its staff or faculty to adopt one.

➢ *Table 3. Descriptions of Teaching Styles Thelen (1954)*
- Socratic. The image is a wise, somewhat crusty teacher who purposely gets into arguments with student over the subject matter through artful questioning.
- Town-Meeting. Teachers who adapt this style use a great deal of discussion and play a moderator that enables students to work out answers to problems by themselves.
- Apprenticeship. This person serves as a role model toward learning, as well as occupational outlook, perhaps even toward general life.
- Boss-Employee. This teacher asserts his or her own authority and provides rewards and punishments to see that the work is done.
- 5.Good-Old Team Person. The image is one of a group of players listening to the coach working as a team.

➢ *Reissman (1967)*
- Compulsive Type. This teacher is fussy, teaches things over and over, and is concerned with functional order and structure.

- Boomer. This teacher shouts out in a loud, strong voice: "You're going to learn"; there is no nonsense I the classroom.
- Maverick. Everybody loves this teacher, except perhaps the principal. S/he raises difficult questions and present ideas that disturb.
- Coach. This teacher is informal, earthy, and may be an athlete. S/he is physically expressive in conducting class.
- Quite One. Sincere, calm, but definite, this teacher commands both respect and attention.
- Entertainer. This teacher is free enough to joke and laugh with the students.
- Secular. This person is relaxed and informal with children; s/he will have lunch with them, or play ball with them.
- Academic. The teacher is interested in knowledge and in the substance of ideas.

➢ *Rubin (1985)*
- Explanatory. The teacher is in command of the subject matter and explains particular aspects of the lesson.
- Inspiratory. The teacher stimulates and exhibits emotional involvement in teaching.
- Informative. The teacher presents information through verbal statements. The students are expected to listen and follow the instruction of the teacher.
- Corrective. The teacher provides feedback to the students – analyzing the work, diagnosing, for errors, and presenting corrective advice.
- Interactive. Through dialogue and questioning, the teacher facilitates the development of students' ideas.
- Programmatic. The teacher guides the students' activities and facilitates self-instruction and independent learning.

Finding out students' preferred teaching and learning styles is important, according to many academics. In Miller, 1982, Claxton and Ralston (1978) made reference to this relevance when they wrote, "The research findings on learning styles offer substantial promise to teachers, counselors, and the students themselves in terms of finding better ways for students to learn." The scientific evidence for this theory is fairly scant, despite the fact that it would seem to point the way for greater learning and that matching learning type with instructional mode enhances healthy interpersonal relations. If understanding learning styles is to significantly contribute to improving college and university instruction, this large research gap must be filled (p. 36). However, identifying and defining the vast number of learning styles can become an enormous task. According to Cornett (1983), the myriad of labels and categories used in identifying the different areas of style can be overwhelming for educators. Corbett and Smith (1984) stated: Learning style is a complex construct involving the interaction of numerous elements; thus, at the outset, the experimenter is faced with the difficult task of having to decide which dimensions of learning style to elucidate and which interactions might be meaningful, in a practical sense, in understanding their contribution to achievement (p. 212). There are many definitions of learning styles in the literature. For example, Cornett defined learning style as "a consistent pattern of behavior but with a certain range of individual

variability" (p. 9). Hunt (1979) thought that learning style "describes a student in terms of those educational conditions under which he is most likely to learn. Learning style describes how a student learns, not what he has learned" (p. 27). From a phenomenological viewpoint, Gregorc and Ward (1977) stated that learning style "consists of distinctive and observable behaviors that provide clues about the mediation abilities of individuals. In operational terms, people through their characteristic sets of behavior 'tell' us how their minds relate to the world, and therefore, how they learn" (p. 19). Keefe and Languis, (1983) contended that "learning style is the composite of 8 characteristic cognitive, affective, and physiological factors that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment" (p. 3). They suggested that it is within these domains that instructors identify learning styles and try to match them with an appropriate teaching style. Cross (1976) defined learning styles as the characteristic ways that individuals collect, organize, and transform information into useful knowledge. Learning style is consistent across a wide variety of tasks. It has a broad influence on how information is processed and problems are solved, and it remains stable over many years. Teaching style was defined by Fischer and Fischer (1979) as "a pervasive way of approaching the learners that might be consistent with several methods of teaching" (p. 251). Conti (1989) contended that "the overall traits and qualities that a teacher displays in the classroom and that are consistent for various situations can be described as teaching style" (p. 3). The instructors' philosophical beliefs are portrayed in the classroom through their teaching style (Brookfield, 1988). Knowles (1970) asserted that "the behavior of the teacher probably influences the character of the learning climate more than any other single factor" (p. 41).

According to Gregory (1979), teaching style is comprised of the instructor's personal conduct and the media utilized to communicate with or receive information from the learner. According to Hunt (1979), compatibility refers to the interactions between a person's surroundings and themselves. According to Anderson and Bruce (1979), "matching students with selected learning environments is an efficacious means of increasing student achievement, particularly when the matching is conducted on the basis of a student's learning style" (p.88). The optimal learning environments for students are created when teaching methods are matched with learners' preferences (Gregorc & Butler, 1984).

III. METHODOLOGY

This study used a single group pre-test - post-test design using a questionnaire as the primary data collection method in order to determine the significant association between learning styles, an experiential approach, and student performance.

The survey questionnaires were the main instrument in gathering the data. The profiles of the respondents were described using the researcher-made questionnaires, and data needed for the study was gathered using the scoring rubrics.

The main instrument to be used by the researcher in this study will be researcher made questionnaire in which consists of two parts. The first part is Learning Styles Inventory. The second part deals with the Experiential Approach in Teaching Physical Education. The third part is the Cognitive (Pre-test and Post – Test). And the last part is the Motor (Pre-test and Post – Test).

Table 1. The perceived learning style of the respondents

Learning Style	Frequency	Percentage
Visual	23	53.49
Auditory	10	23.26
Tactile	2	4.65
Kinesthetic	8	18.60
TOTAL	43	100.00

Based on the data provided table unveils, the respondents' learning styles can be analyzed as follows. The visual learning style emerges as the most prevalent, as it is favored by 23 respondents, comprising 53.49% of the total. This finding suggests that a significant majority of the participants prefer learning through visual aids such as images, charts, and diagrams. The auditory learning style ranks second, with 10 respondents, representing 23.26% of the total. This indicates that a smaller but still noteworthy portion of the respondents learn best through auditory means, such as listening to lectures, discussions, and audio recordings. On the other hand, the tactile learning style is the least favored, with only 2 respondents accounting for 4.65% of the total. Tactile learners are inclined towards hands-on activities and physical experiences to enhance their learning. Meanwhile, the kinesthetic learning style is selected by 8 respondents, making up 18.60% of the total. Kinesthetic learners thrive in a learning environment that incorporates physical movement and interaction. In conclusion, the data suggests that visual learning is the most dominant learning style among the respondents, followed by auditory and kinesthetic learning styles. Tactile learning appears to be the least preferred style among the surveyed individuals.

Educators and instructional designers can use these insights to modify their lesson plans and instructional materials to meet the various learning styles of their students.

Table 2. Perception on Experiential Teaching Approach

Indicators	Mean	Std. Deviation	Verbal Interpretation
1. The facilitator stimulated interest in the various concepts being demonstrated by the activities.	3.53	0.50	Strongly agree
2. I felt comfortable expressing my opinions.	3.28	0.59	Agree
3. The facilitator made a clear connection between the exercise and the main ideas in our discussion afterwards.	3.49	0.51	Agree
4. When discussions concluded, I understood more about the concepts that I had before.	3.42	0.50	Agree
5. The facilitator helped us to identify business applications that reflect the concepts we explored in the discussion.	3.42	0.50	Agree
6. Students were encouraged by the facilitator to share their experiences and observations from the activity.	3.47	0.50	Agree
7. The facilitator maintained a positive atmosphere of mutual respect and courtesy.	3.53	0.50	Strongly agree
8. The exercises enhances my learning.	3.56	0.50	Strongly agree
9. Concepts illustrated by the activities were relevant to topics covered in class.	3.42	0.50	Agree
10. Overall, I am satisfied with the quality of the support from the facilitator.	3.37	0.49	Agree
Overall	**3.45**	**0.51**	**Agree**

Legend 3.50 – 4.00 strongly agree, 2.50 – 3.49 agree, 1.50 – 2.49 disagree, 1.00 – 1.49 strongly disagree

Based on the data provided in Table 2, the participants' perception of the experiential teaching approach can be analyzed and interpreted. Overall, the participants' perception is generally positive, as indicated by an overall mean score of 3.45, falling within the "Agree" range. This suggests that the participants observed the use of experiential teaching approach.

Specific indicators received different mean scores, providing further insights. Indicators 1, 7, and 8 received high mean scores of 3.53, 3.53, and 3.56, respectively, indicating that the experiential teaching approach was strongly observed in these aspects. On the other hand, indicators 2, 3, 4, 5, 6, 9, and 10 received mean scores ranging from 3.28 to 3.49, suggesting general agreement with the approach in these areas.

The standard deviation values for all indicators range from 0.49 to 0.59, indicating relatively low variability in participants' responses. This suggests that there is a degree of consistency among the participants in their perception of the experiential teaching approach.

According to the provided verbal interpretation legend, which categorizes scores into different levels of agreement, the participants' perception of the experiential teaching approach falls mostly within the "Agree" range. This implies that the participants have a positive view of the approach and believe it to be beneficial in enhancing their learning experience.

However, it's crucial to remember that these interpretations are entirely based on the provided statistics and do not take any contextual elements or other qualitative information into account. Therefore, a more thorough comprehension of the participants' perspectives would necessitate a wider analysis involving information other than the statistical data offered.

Table 3. The distribution of respondents' pre-test and post-test scores in a cognitive assessment.

Pre-test Scores (Cognitive)			
Scores	Frequency	Percentage	Verbal Interpretation
17-20	0	0	Advanced
13-16	13	30.23	Proficient
9-12	28	65.12	Approaching Proficiency
5-8	2	4.65	Developing
0-4	0	0	Beginning
TOTAL	43	100	

Post-Test Scores (Cognitive)			
Scores	Frequency	Percentage	Verbal Interpretation
17-20	21	48.84	Advanced
13-16	22	51.16	Proficient
9-12	0	0	Approaching Proficiency
5-8	0	0	Developing
0-4	0	0	Beginning
TOTAL	43	100	

Using the information in Table 3 as a basis: There were 43 people that responded to the pre-test in total. None of them received a score between 17 and 20, which is considered to be at the "Advanced" level. Thirteen respondents (30.23% of the total) had scores in the "Proficient" range, which ranges from 13 to 16. Only two respondents (4.65%) achieved scores between 5 and 8, indicating a "Developing" level, whereas the bulk of respondents, 28 people (65.12% of the total), fell into the 9–12 range, which is referred to as "Approaching Proficiency." None of the respondents received a score in the "Beginning" level (0–4).

The same 43 respondents took part in the post-test after that. This time, 21 people (48.84%) achieved a score between 17 and 20, which is considered "Advanced" level. A "Proficient" level was attained by 22 respondents (51.16% of the total), or scores between 13 and 16. There were no participants in the "Approaching Proficiency," "Developing," or "Beginning" levels in the post-test, as indicated by the fact that no respondents scored in the 9–12, 5-8, or 0–4 ranges.

The utilization of experiential learning was likely the reason for the increase in respondents' cognitive capacities between the pre-test and post-test assessments. Individuals are actively involved in experiential learning, which enables them to participate and apply their knowledge in practical situations. Respondents had the chance to work on and improve their cognitive abilities by focusing on problem-solving and practical application, which improved

performance on the post-test. Experiential Learning's reflection and analysis components gave respondents insightful knowledge of their areas of strength and need for development, allowing them to create goals to better their cognitive capacities. Higher results on the post-test were a result of the feedback loops and repeated attempts inherent in experiential learning, which further encouraged skill development and continual improvement.

A comparison of the results from the pre-test and post-test shows that there has been an improvement in the distribution of scores. Most responders to the pre-test fell into the "Approaching Proficiency" level, however more people completed the post-test at the "Advanced" and "Proficient" levels.

These results suggest that the respondents showed improvement in their cognitive skills between the pre-test and post-test evaluations, with a higher proportion of those scoring at higher levels on the post-test.

Table 4. The distribution of respondents' pre-test and post-test scores in a motor assessment.

Pre-test Scores (Motor)			
Scores	Frequency	Percentage	Verbal Interpretation
25-30	5	11.63	Advanced
19-24	33	76.74	Proficient
13-18	5	11.63	Approaching Proficiency
7-12	0	0	Developing
0-6	0	0	Beginning
TOTAL	43	100	

Post-Test Scores (Motor)			
Scores	Frequency	Percentage	Verbal Interpretation
25-30	38	88.37	Advanced
19-24	5	11.63	Proficient
13-18	0	0	Approaching Proficiency
7-12	0	0	Developing
0-6	0	0	Beginning
TOTAL	43	100	

Based on the information in Table 4: Out of the 43 respondents, 5 of them (11.63% of the total) received scores between 25 and 30, which indicates a "Advanced" level of motor proficiency in the pre-test. A "Proficient" level was attained by the majority of respondents, 33 respondents (76.74% of the total), who received scores between 19 and 24. While five respondents (11.63%) were between the ages of 13 and 18, which is referred to as a "approaching proficiency" level. No respondents achieved scores in the "Developing" or "Beginning" levels, which correspond to the ranges of 7–12 or 0–6, respectively.

The same 43 respondents were tested once more for the post-test. 38 respondents (88.37% of the total) scored between 25 and 30, indicating \ "Advanced" level of motor abilities on this exam. Five respondents (11.63%) received a score in the "Proficient" category, or between 19 and 24. No respondents achieved scores in the 13–18, 7–12, or 0–6

ranges, indicating that no respondents in the "Approaching Proficiency," "Developing," or "Beginning" categories were identified in the post-test.

A comparison of the results from the pre- and post-test shows that there has been a significant improvement in the distribution of scores. In the pre-test, most respondents received "Proficient" scores, however in the post-test, many received "Advanced" levels. This development shows that respondents' motor abilities have improved between the two assessments.

According to the findings, the distribution of scores significantly improved between the pre-test and post-test evaluations, especially in the domain of motor abilities. There are many reasons for this improvement. First off, the higher percentage of respondents who scored at the "Advanced" level in the post-test implies that their motor abilities have improved, including the development of new skills, improvement of already-existing skills, and a greater level of mastery of motor activities because of practice and experience. Second, it's likely that between the two tests, the respondents took part in learning or training interventions such as focused exercises, coaching, or motor skill development programs that aimed to improve their motor skills and promote skill acquisition.

Table 5. Significant difference between the pre-test and post-test scores of the students before and after using Experiential Approach.

Variable	Pretest		Posttest		t	Df	Sig. (2-tailed)
	Mean	SD	Mean	SD			
Motor	20.88	2.10	26.44	1.53	2.438	42	0.000
Cognitive	11.63	1.65	16.40	1.43	3.358	42	0.000

Based on the information in Table 5, we may infer a number of conclusions about the considerable difference between the students' pre-test and post-test scores before and after they used the experiential approach.

For the Motor test, the mean pre-test score is 20.88, with a standard deviation of 2.10. The mean post-test score is 26.44, with a standard deviation of 1.53. The t-value is 2.438, the degrees of freedom (df) is 42, and the p-value (Sig. 2-tailed) is 0.000. These findings indicate that there is a significant difference between the pre-test and post-test scores for the Motor test. The highly statistically significant p-value of 0.000 suggests that the Experiential Approach had a positive impact on the students' motor skills. The mean post-test score of 26.44 is higher than the mean pre-test score of 20.88, indicating improvement in motor skills after implementing the Experiential Approach.

Similarly, for the Cognitive test, the mean pre-test score is 11.63, with a standard deviation of 1.65. The mean post-test score is 16.40, with a standard deviation of 1.43. The t-value is 3.358, the degrees of freedom (df) is 42, and the p-value (Sig. 2-tailed) is 0.000. These results suggest a significant difference between the pre-test and post-test scores for the Cognitive test. The highly statistically significant p-value of 0.000 indicates that the Experiential Approach had a positive impact on the students' cognitive abilities. The mean post-test score of 16.40 is higher than the mean pre-test score of 11.63, indicating improvement in cognitive abilities after implementing the Experiential Approach.

In summary, the data demonstrates a significant difference between the pre-test and post-test scores for both the Motor and Cognitive tests. The Experiential Approach led to improved performance in both motor skills and cognitive abilities among the students. The highly statistically significant p-values provide strong evidence that the Experiential Approach positively influenced the students' learning outcomes in Physical Education. However, it's important to consider the limitations of the study and any potential confounding factors that may have influenced the results.

IV. CONCLUSION

The study examined the perceived learning styles of the respondents in terms of visual, auditory, tactile, and kinesthetic preferences. The majority of the respondents (53.49%) identified themselves as visual learners, followed by auditory learners (23.26%), kinesthetic learners (18.60%), and tactile learners (4.65%).

The perception of the respondents regarding the Experiential Teaching Approach was assessed through various indicators. The overall mean score for the indicators was 3.45, indicating an agreement with the approach. The respondents strongly agreed (mean score between 3.50 and 4.00) with indicators 1, 7, and 8, and agreed (mean score between 2.50 and 3.49) with the remaining indicators. This suggests a positive perception of the Experiential Teaching Approach among the respondents.

The pre-test scores of the students in physical education were measured for motor and cognitive abilities. The mean score for the motor test was 20.88, while for the cognitive test, it was 11.63.

After exposing the students to the Experiential Teaching Approach, their post-test scores in motor and cognitive abilities were assessed. The mean score for the motor test significantly increased to 26.44, and for the cognitive test, it increased to 16.40.

Statistical analysis was conducted to determine whether there was a significant difference between the pre-test and post-test scores of the students before and after implementing the Experiential Teaching Approach. The results indicated a significant difference for both the motor test (t-value = 2.438,

p-value = 0.000) and the cognitive test (t-value = 3.358, p-value = 0.000). This suggests that the Experiential Teaching Approach had a positive impact on improving the students' performance in both motor skills and cognitive abilities.

Overall, the study found that students positively viewed the experiential teaching approach and considerably improved their performance in physical education, especially in terms of motor skills and cognitive capacities. These results demonstrate how the experiential teaching approach is effective at accommodating various learning preferences and fostering improved learning outcomes in the discipline of physical education.

Based on the findings of the study on the relationship between the Experiential Teaching Approach, learning styles, and the performance of students in physical education, the following conclusions can be drawn:

- Learning Styles: Most of the respondents identified themselves as visual learners (53.49%), followed by auditory learners (23.26%), kinesthetic learners (18.60%), and tactile learners (4.65%). This indicates that visual learning is the most prevalent learning style among the students in the study.
- Perception of Experiential Teaching Approach: The respondents had a positive perception of the Experiential Teaching Approach, as indicated by the mean scores for the various indicators. The overall mean score of 3.45 suggests that the respondents agreed with the approach. Specifically, the indicators received mean scores indicating agreement or strong agreement, highlighting the favorable perception of the Experiential Teaching Approach among the respondents.
- Pre-test Scores: Before being exposed to the Experiential Teaching Approach, the students' mean pre-test scores for motor skills and cognitive abilities were 20.88 and 11.63, respectively.
- Post-test Scores: After the implementation of the Experiential Teaching Approach, the students' mean post-test scores for motor skills and cognitive abilities increased significantly to 26.44 and 16.40, respectively. These improvements suggest that the Experiential Teaching Approach positively influenced the students' performance in both motor skills and cognitive abilities.
- Statistical analysis showed a significant change between the pre-test and post-test scores for both motor skills (t-value = 2.438, p-value = 0.000) and cognitive abilities (t-value = 3.358, p-value = 0.000). This indicates that the Experiential Teaching Approach had a significant impact on enhancing the students' performance in physical education.

In conclusion, this study's findings indicate that the experiential teaching approach is successful in raising students' performance in physical education, particularly in terms of their motor and cognitive capabilities. The study also emphasizes the significance of taking into account respondents' preferred learning modalities, with visual learning dominating. In order to improve learning outcomes in the field of physical education, these conclusions highlight the importance of adopting experiential teaching strategies that are customized to a variety of learning types.

REFERENCES

[1]. Admin. (2016). Philippine Physical Education in the Information Age: Major Upgrade Needed. *SportPhil*. https://www.sportphil.com/philippine-physical-education-information-age/

[2]. Cardino, J. M., & Cruz, R. a. O. (2020). Understanding of learning styles and teaching strategies towards improving the teaching and learning of mathematics. *LUMAT*, *8*(1). https://doi.org/10.31129/lumat.8.1.1348

[3]. Corredor, C. (2015). | *The Effects of Physical Education on Academic AchievementApplied Research in Children's Studies 2015*. https://arcs15.commons.gc.cuny.edu/the-effects-of-physical-education-on-academic-achievement/

[4]. *Experiential Learning | Mohawk College*. (n.d.). Mohawk College. https://www.mohawkcollege.ca/employees/centre-for-teaching-learning/experiential-learning/experiential-learning-theory

[5]. Fayombo G. (2015) Learning styles, teaching strategies and academic achievement among some psychology undergraduates in Barbados. Caribbean Educational Research Journal, 3(2): 46-61. (n.d.). http://www.sciepub.com/reference/336539

[6]. Gumbo, S., Magonde, S., & Nhamo, E. (2017). Teaching Strategies Employed by Physical Education Teachers in Gokwe North Primary Schools. *International Journal of Sport, Exercise and Health Research*, *1*(2), 61–65. https://doi.org/10.31254/sportmed.1203

[7]. Hasnor, H. N., Ahmad, Z., & Nordin, N. (2013). The Relationship between Learning Approaches and Academic Achievement Among Intec Students, Uitm Shah Alam. *Procedia - Social and Behavioral Sciences*, *90*, 178–186. https://doi.org/10.1016/j.sbspro.2013.07.080

[8]. Hoose, N. A. (n.d.). *Behavioral Approach | Adolescent Psychology*. https://courses.lumenlearning.com/adolescent/chapter/behavioral-approach/

[9]. Inyang, H. (2019). Teaching strategies and academic performance of agricultural science students in secondary schools. *Project Kings*. https://projectkings.com.ng/2019/10/04/teaching-strategies-and-academic-performance-of-agricultural-science-students-in-secondary-schools/

[10]. Kimperry. (2023). Improve Student Academic Performance With Physical Education (PE). *Mississippi College Online*. https://online.mc.edu/degrees/education/med/curriculum-instruction/student-academic-performance-pe/

[11]. Kolb, A.Y. and Kolb, D.A. (2009) Experiential Learning Theory A Dynamic, Holistic Approach to Management Learning, Education and Development. In Armstrong, S.J. and Fukami, C.V., Eds., The SAGE Handbook of Management Learning, Education and Development, SAGE Publications Ltd., Thousand Oaks, 42-68. - References - Scientific Research Publishing. (n.d.).https://www.scirp.org/(S(lz5mqp453edsnp55rrgjct55))/reference/ReferencesPapers.aspx?ReferenceID=2595526

[12]. Munawaroh. (2017). The Influence of Teaching Methods and Learning Environment to the Student's Learning Achievement of Craft and Entrepreneurship Subjects at Vocational High School. https://www.semanticscholar.org/paper/The-Influence-of-Teaching-Methods-and-Learning-to-Munawaroh/208efe8cfc9086d02066c0e1de8d2b11f1a3368c

[13]. Rezaeinejad, M., Azizifar, A., & Gowhary, H. (2015). The Study of Learning Styles and its Relationship with Educational Achievement Among Iranian High School Students. *Procedia - Social and Behavioral Sciences*. https://doi.org/10.1016/j.sbspro.2015.07.509

[14]. Romanelli, F., Bird, E., & Ryan, M. (2009). Learning Styles: A Review of Theory, Application, and Best Practices. *The American Journal of Pharmaceutical Education*, *73*(1), 9. https://doi.org/10.5688/aj730109

[15]. Sportz_Admin. (2021, March 18). *Sports and experiential learning - Sportz Village Schools – India's No.1 Sports Education Organization*. Sportz Village Schools – India's No.1 Sports Education Organization. https://schools.sportzvillage.com/sports-and-experiential-learning/

[16]. Tapps, T. (n.d.). High School Physical Education Students and Experiential Learning in the Community: A Classroom Assignment. https://eric.ed.gov/?id=EJ1027988

[17]. Western Governors University. (2023, March 16). What Is The Behavioral Leahttps://www.wgu.edu/blog/what-behavioral-learning-theory2005.html#:~:text=Behavioris m%20or%20the%20behavioral%20l earning,focuses%20on%20how%20students%20learn.&text=This%20learning%20theory %20states%20that,of %20behaviorism%20is%20positive%20reinforcement.

[18]. Yildiz, M. (2019). Physical Education Teachers' Using of Teaching Styles Levels and Their Perceptions towards Styles in Public and Private Schools in Turkey. https://eric.ed.gov/?id=EJ1225426