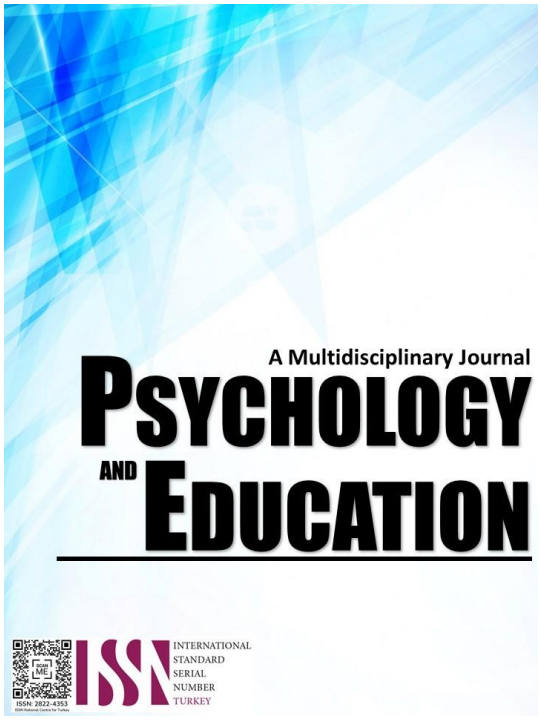
MULTIMEDIA-BASED INSTRUCTION IN PHYSICAL EDUCATION AND SPORTS



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Research Article

Multimedia-Based Instruction in Physical Education and Sports

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Abstract

This study focused on the teacher's extent of utilization of Multimedia Based Instruction (MBI) in Physical Education and Sports of SY 2020 – 2021 in the City Schools Division of Pangasinan along synchronous, asynchronous and hybrid instruction. The study determined the profile of the respondents, the extent of utilization of Multimedia Based Instruction (MBI) in Physical Education and Sports, the significant difference in the extent of utilization of multimedia based instruction in Physical Education and Sports of the teacher respondents across the profile variable and the significant relationships between the teacher's extent of utilization of multimedia based instruction in Physical Education and Sports of the teacher respondents and the profile variables. The descriptive method of research was used in this study. Findings showed that majority of the respondents are female, in the early adulthood stage, most of the respondents are married and earned their Master's Degree and have enough trainings for them to be capable in teaching Physical Education and Sports using the Multimedia Based Instruction. The extent of utilization of Multimedia Based Instruction (MBI) in Physical Education and Sports overall weighted mean was 4.52 described Highly Utilized. The extent of utilization of multimedia based instruction of the Physical Education and Sports teachers do not vary when grouped based on the profile variables. Therefore, the profile variables are not influential to the extent of their utilization of multimedia based instruction of the Physical Education and Sports teachers. There are significant relationships between the Physical Education and Sports teachers and their profile variables in terms of age, highest educational attainment and number of relevant trainings attended in the division levels. It was concluded in this study that the Physical Education and Sports teachers performed impressively more than enough in their utilization of multimedia based instruction and a stepping stone towards highest level of performance and they should always aspire and soar high for excellent performance in their utilization of multimedia based instruction by being innovative and resourceful teacher. In addition, a similar study should be conducted taking into consideration other factors and more appropriate and relevant variables to better determine the extent of utilization of multimedia based instruction of Physical Education and Sports teachers.

Keywords: *physical education, multimedia based instruction*

Introduction

Due to the widespread of COVID-19, school buildings worldwide were closed in 2020 to protect students and teachers from the spread of the disease, and learning was reorganized for distance learning. This; change in the education organization put teachers, students, and their parents in a new situation. Although; it is too early to assess the long-term impact of COVID-19 on education, various COVID-19 education-focused studies have been conducted in recent months. In; the Philippines confirmed that the availability of multimedia; facilities in students' homes is a significant concern in the transition to distance learning. Economic inequality in the home hindered students' participation in their studies. Moreover, schools' preparation for multimedia-based instruction has also influenced the success of distance learning. In; schools where multimedia learning platforms and digital tools were used before COVID-19, the transition to distance learning was also manageable.

The Department of Education approved the printed self-learning modality to all students from all walks of life. However, some city school divisions in the Philippines still use multimedia-based instruction.This research study focused on the utilization of multimedia-based instruction in Physical Education and Sports in the City Schools Division of Pangasinan.With the development of modern educational technology, the old education model is gradually broken. The; new educational model of education with the use of multimedia- based instruction in teaching is the information networks and multimedia-based instruction facilitate our educational activities for teaching to break time and space constraints, the specific image, vividly show the teaching content, teaching optimization to achieve the creation of the conditions. The; advent of computers and the application of multimedia teaching methods in education, significantly change the existing teaching model to promote the renewal of teaching contents and the system, and promote the reform of teaching methods, to achieve the diversification of learning, subject, of that physical education, has entered a new era (Vernadakis, 2016);

Multimedia-based instruction uses pictures and words, which includes watching a PowerPoint presentation, illustrations, diagrams, photos, and animation, watching a pre-recorded; lecture or videos from Youtube and other educational websites using the

internet. Multimedia-based instruction refers to learning environments that contain both words and pictures to promote learning, such as illustrated textbooks, narrated slideshow presentations, online narrated animations, and educational computer games. Applying; advanced multimedia-based to physical education instruction to fulfill an organic combination between multimedia-based and physical education instruction can not only be in line with the characteristics of physical education instruction but also adapt to objective requirements for students' development in an all-around way in the new age, which is of vital importance for cultivating students' good interests and motivation in sports (Tyrovolaa, 2011). Aiming at the current status of multimedia- based applications in physical education instruction, this research paper takes the influence of physical education multimedia-based instruction on students' sports motivation as an entry point. It collects the opinions of students in schools towards multimedia- based instruction utilizing the questionnaire survey and information searching to explore the influence of physical education multimedia-based instruction on students' sports motivation is based on multimedia- based instruction. At last, the relevant issues were summarized for applying multimedia-based instructionmethods.

Multimedia-based was an integral part of improving the efficiency of instruction, stimulating students' interest, cultivating student's innovation capability, to broaden the area of student learning Antoniou (2013); This research paper discussed the relationship between multimedia-based instruction in physical education and the importance of the application of multimedia-based instruction in physical education. The; research paper also investigated the extent of utilization of multimedia-based teaching in physical education and sports.According to Baek (2018), the introduction of multimedia-based instruction in teaching Physical education and Sports significantly improved the secondary education environment and also easy to stimulate students' enthusiasm and initiative, which can substantially enhance the effectiveness of instruction. However, due to a lack of support for the multimedia-based instruction inference mechanism student model, we cannot determine their level of knowledge and cognitive characteristics; not to provide the students learning materials based on students' willingness and ability to understand and make a targeted guide that cannot be done individualized.According to Wan (2016), in Physical education, at this stage of multimedia-based instruction, in general, there were several methods of using the following primary means of instruction, which is the application of image processing, computer animation, and sound to deal with physical education issues. The whole of the system includes computer, projector, screen, sound, and scanners five parts; in the instruction and content to adopt a progressive, gradual development of the principle and the utilization of multimedia-based instruction. Teachers; explain, guide, and, combined with the system, display the simulation. That; is reasonable to arrange a time to leave enough time for students to discuss. Thus, it achieves the students from three aspects, namely, listening, watching, and speaking, to gain knowledge, understanding, and consolidation.

To achieve good instruction, using support multitasking, multimedia Windows environment, and development tools used mainly PowerPoint, the software is well suited for presentation software. It has a wide range of templates that provide various drawing tools, rich and other pictures, and documents, and use to make courseware that can easily demonstrate (Xiong, 2015);The emergence of multimedia-based teaching brings physical education into a new era, becoming a revolution in physical education. Multimedia-based instruction has a vital significance. Chen; (2012) said teachers could be individualized according to their age characteristics and targeted for teaching activities. The use of computer multimedia helps to mobilize the enthusiasm of students, develop students 'thinking ability and creativity, and improve students' ability to analyze and solve practical problems. They are making full use of multimedia-based instruction during the pandemic and inheriting the essence of another way of teaching so that instruction complements each other for society to cultivate creative, exploratory talent. However, multimedia-based teaching in physical education also needs to solve some problems: How to achieve the relative effectiveness of multimedia-based instruction? Simultaneously, multimedia-based instruction methods should be considered using other ways and means of teaching. Due; to the use of multimedia-based instruction, courseware is well prepared in advance, so its playback sequence and schedule are established, forming a fixed teaching content, teaching process procedures drawbacks, teachers have a hard time improving, sometimes not even the student the reaction and targeted online class atmosphere temporarily adjust teaching content, resulting in rigid modes of teaching, teaching flexibility is not enough, the effect is also very popular lecture affected. Meanwhile, the students of focusing too much on the screen and sound, and over time, the impact of ignoring the teacher's vivid body language and facial expression changes has upset the blackboard, and the classroom teacher generated.

The application of modern multimedia-based instructional activities is an essential means to improve the quality of teaching. Therefore, the hardware construction of the multimedia; instruction system is actively involved in developing information technology. It; is an urgent task for the schools to speed up the reform and development. Modern; educational technology, including audio-visual; technology and information processing technology in two categories; the multimedia-based instructional system is the unity of the effective combination, should be the construction of a digital teaching environment through the campus network, electronic library, multimedia; classrooms, and improvement, provide the necessary material guarantee for the modernization of instruction by using the multimedia application to optimize instructional design according to Deng (2011). First is the use of multimedia; applications can expand the knowledge of classroom instruction, the language and picture information are complementary, and the writing time is saved. The author found that using multimedia; applications can increase the unit time. The; above information and multimedia; applications presented to students are dynamic information, sound effects, and different image transform can provide diversified and stereoscopic information, constantly stimulate the nerve center of learners, and be conducive to learning and memory of their activities. Second, multimedia; applications can enrich the form of classroom teaching and deepen the reform of classroom teaching methods. The; primary performance of traditional discussion teaching is the single question and answer between the speech and the information channel. In; a words, the multimedia-based instructional method can conveniently and quickly spread advanced information, but also can stimulate students' thinking and intellectual development and cultivate the student's ability to analyze and solve problems, the multimedia-based instruction can create a favorable learning environment for students.

According to Khan (2019), the primary purpose of multimedia-based instruction is to promote students' comprehensive development in learning. The; teacher, through the means of computers, networks, slides, multimedia applications, and communication, can be more practical information in the unit time, bringing new vigor and vitality to the field of education and teaching. But, the traditional view sees that when utilizing more multimedia-aided teaching is the face of the arrival of the information society, we should re-examine the value of multimedia-based instruction and the height of the ascension to the modern education idea. The; remarkable characteristic of the information society is that knowledge and information are growing exponentially, but any knowledge and information is a public resource, which is open and shared. The; advantages of multimedia-based instruction lie in the knowledge and information filtering, and integration is convenient and fast. Therefore, teachers should go through the process of multimedia-based education, how much information to the students, the objective perspective, a reasonable choice of means, such as the method, scientific use, correct attitude towards the network, through the network learning skills, to guide them to develop autonomous learning awareness and habits, improve their learning ability. Modern multimedia-based classrooms will create a broader world for the all-around development of students and will lay the foundation for their lifelong learning.

In multimedia-based instruction, "instruction" is always the main body, which is in line with the "multimedia; technology" instruction; excessive application of multimedia; technology will dilute the instructional goal, resulting in unnecessary burden for teachers and students, instructions efficiency is low (White, 2019); Compared; with traditionally based instruction, multimedia-based instruction essence is the change of information transfer, presents the means and methods, is no longer confined to the past chalk, blackboard, or the teacher himself, but makes full use of modern multimedia; applications, the most suitable organizational learning method of the students teaching content, teaching information, teaching situation, instructional design to achieve the purpose of effective instruction. The; so-called effective education refers to the teacher after a period of teaching so that students get specific progress or development. That is to say. The students have no gain or development is the only indicator of teaching effectiveness. Teachers; use multimedia; teaching, is to achieve effective instruction better.The researcher of this study wants to determine the extent of utilization of multimedia technology-based instruction in Physical Education and Sports in Pangasinan Division II for the school year 2020 – 2021, along with synchronous instruction, asynchronous instruction, and hybrid instruction.

Research Questions

Specifically, this study answered the following questions:

1. What are the profile variables of respondents in terms of:
   1.1 age;

1.2 sex;
1.3 civil status;
1.4 highest educational attainment;
1.5 rank/position;
1.6 length of years teaching PES;
1.7 a number of relevant training attended; and
1.8 a number of member the PES Organization?

2. What; is the extent of utilization of multimedia-based instruction in Physical Education and Sports along:
2.1 synchronous;
2.2 asynchronous; and
2.3 hybrid.

3. Are there a significant difference between the extent of utilization of multimedia-based the instruction of teachers teaching Physical Education and Sports across their profile variables?

4. Is; there a significant relationship between the assessment of the extent of utilization of multimedia-based the instruction of teachers teaching Physical Education and Sports and their profile variables?

5. What; enhancement program could be formulated, developed, and implemented to improve the utilization of multimedia-based instruction in Physical Education and Sports?

Methodology

Research Design and Strategy

The descriptive method of research was used in the acquisition of factual, accurate, and systematic data that can be used in statistical calculations to answer the problems in this study. This; study determined the extent of utilization of multimedia- based instruction in Physical Education and Sports. The; researcher employed this research method to gain more realistic and valid information regarding the importance of utilization of multimedia-based teaching in Physical Education and Sports.The descriptive survey method is a method of surveys, describes, and interprets. It reveals a condition of relationship that exists or does not exist, practices that prevail or do not prevail, and beliefs or points of view. The; word survey indicates the data gathering from place to place and from group to group. Information; is sought on current conditions, communities, agencies, and institutions. It; also refers to the characteristics, status, or practices of individuals or a particular group, Cameron (1995).The descriptive method of research will use in the study. Good and Scates (1991) defined the descriptive method of analysis as a method for gathering evidence relating the current or present conditions concerning the nature of a group of persons, several subjects, or a class of events and may involve the procedure of introduction analysis, clarification, enumeration of measurement. Gay, (1976) defined descriptive research as involving data collection to answer questions concerning the current status of the subject of the study.

Data Gathering Tool

The researcher used a questionnaire checklist instrument made explicitly for the study based on the constructed problems, the writer's experiences, and observations as a teacher and reinforced by readings, informal interviews, and conversations with people.The questionnaire checklist was evaluated by five (5) experts her Adviser. The suggestions were incorporated in the final draft. The; questionnaires were finalized after their approval by the examination committee.The main objective of the validation was to ascertain that every question was clearly understood and within the experience of the actual respondents of the study. Data Gathering ProcedureBefore administering the research instrument, permission was secured from the Dean of Graduate School and Advanced Studies of UCU, the Schools Division Superintendent, and School Heads. The; researcher personally distributed and administered the questionnaires to all respondents in the City Schools Division of Pangasinan.Likewise, the researcher personally retrieved the same questionnaires and used the Questionnaire Checklist in Google Forms for the convenience of other respondents in times of the COVID-19 pandemic. The; responses and data obtained are kept confidential by the researcher to ensure the highest degree of objectivity of reactions.

Results and Discussion

The Extent of Utilization of Multimedia-Based Instruction Ein Physical Education and Sports

This study aimed to determine the extent of the use of multimedia-based instruction in Physical Education and Sports among PES teachers in Pangasinan.

Table 3 presents the indicator of the extent of utilization of multimedia-based instruction in Physical Education and Sports as assessed by the teachers and school administrators.

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Table 3. *Extent of Utilization of Multimedia Instruction in Physical Education and Sports Along Synchronous*

Synchronous As a teacher I ...	*As assessed by Teachers*		*Rank*	*As assessed by School Administrators*		*Rank*	*Combined Rating*		*Rank*
	WM	*TR*		*WM*	*TR*		*WM*	*TR*	
provide appropriate online instruction in a flexible way by considering the characteristics of students and learning subjects.	4.54	HU	3.5	4.50	HU	4	4.52	HU	4
use streaming tools for online instruction.	4.45	U	9	4.41	U	8	4.43	U	8.5
guide online class interaction actively.	4.56	HU	1.5	4.52	HU	2	4.54	HU	2
interact with the learners, making group activities possible during online classes.	4.54	HU	3.5	4.49	U	5	4.52	HU	4
give immediate feedback on their work performance.	4.46	U	8	4.40	U	9	4.43	U	8.5
allow them to ask questions and get immediate answers.	4.53	HU	5	4.51	HU	3	4.52	HU	4
accommodate learners and offer more flexibility by providing a webinar recording of the lesson.	4.52	HU	6	4.48	U	6	4.50	HU	6
Check the learners' progress by setting aside time during one-on-one or group question-and-answer sessions.	4.50	HU	7	4.46	U	7	4.48	U	7
plan my lesson strategies ahead of time to ensure effective delivery for a great learning experience for the learners.	4.56	HU	1.5	4.54	HU	1	4.55	HU	1
give supplementary live webinars scheduled for varying days and times, ensuring that learners benefit from interacting with each other and teachers.	4.41	U	10	4.39	U	10	4.40	U	10
OWM	4.51	HU		4.47	U		4.49	U	

Table 3 below shows that the Physical Education and Sports teachers utilized very often multimedia-based in their synchronous instruction, as signified in the combined weighted mean in this area of 4.49.

The data in the table also shows that item number 9, " plan my lessons strategies ahead of time to ensure effective delivery for a great learning experience of the learners," got the highest combined mean of 4.55, is described as "Highly Utilized".

Table 4 pictures the Physical Education and Sports teacher's extent of utilization of multimedia-based instruction along with asynchronous instruction.

The table shows the assessment perceived by the teachers and school administrators regarding the extent of multimedia-based instruction and asynchronous instruction utilization. The weighted mean of teachers is 4.54 with a transmuted rating of "Highly Utilized," at the same time, the administrators assessed the teacher's extent of utilization of multimedia- based in teaching PES with a weighted mean of 4.52, described also as "Highly Utilized."

Table 4. *Extent of Utilization of Multimedia Instruction in Physical Education and Sports Along Asynchronous*

Asynchronous As a teacher I ...	*As assessed by Teachers*		*Rank*	*As assessed by School Administrators*		*Rank*	*Combined Rating*		*Rank*
	WM	*TR*		*WM*	*TR*		*WM*	*TR*	
Create videos and upload other instructional videos for students.	4.54	HU	7	4.50	HU	10	4.52	HU	10
allow learners to continue learning beyond the "live classroom" experience.	4.56	HU	1	4.52	HU	5.5	4.54	HU	5
use their virtual desk to share out content (e.g. access to the presentation, instructional videos, etc).	4.55	HU	3.5	4.53	HU	2.5	4.54	HU	5
give more time to reflect on the material they are learning, meaning they will likely understand it more thoroughly.	4.53	HU	10	4.51	HU	8.5	4.52	HU	10
encourage the learners to progress at their own pace and access their lessons at any time they choose and from any place.	4.55	HU	3.5	4.52	HU	5.5	4.54	HU	5
centralized space where assignments are turned in and where students receive specific feedback on their submitted work.	4.53	HU	10	4.52	HU	5.5	4.53	HU	7
make informal conversation, like discussion board for learners to discuss with each other or post open-ended questions for the group.	4.54	HU	7	4.54	HU	1	4.54	HU	5
see to it that materials are organized in an accessible, consistent method, based on the needs of learners, families, and educators.	4.55	HU	3.5	4.51	HU	8.5	4.53	HU	7
pre-recorded video lessons or webinars.	4.55	HU	3.5	4.53	HU	2.5	4.54	HU	5
organize online forums and discussion boards	4.54	HU	7	4.52	HU	5.5	4.53	HU	7
OWM	4.54	HU		4.52	HU		4.53	HU	

The combined weighted mean is 4.53, described as "Highly Utilized," There; were five indicators that got the highest combined weighted standard, indicator number 2, " allow learners continue learning beyond the "live classroom" experience," indicator number 3," use their virtual desk to share out content (e.g., access

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to the presentation, instructional videos, etc). indicator number 5, "encourage the learners so that they can progress at their own pace and access their lesson at any time they choose and from any place," indicator number 7, "make informal conversation, like discussion board for learners to discuss with each other or post open-ended questions for the group," and indicator number 9, " pre-recorded; video lessons or webinars" got a weighted mean of 4.54 with a transmuted rating of "Highly Utilized."

The indicator with the lowest combined mean was item number 1 and 4, item, number 1, " create videos and upload other instructional videos for students," and item number 4, "give more time to reflect on the material they are learning, which means they are likely to understand it more thoroughly" the combined weighted mean 4.52 described as "Highly Utilized" also.

Table 5 shows the extent of utilization of multimedia-based instruction in Physical Education and Sports along with hybrid instruction.

The teachers assessed themselves in their extent of utilization of multimedia-based instruction in Physical education and Sports along with hybrid instruction with a weighted mean of 4.53, described as "Highly Utilized," while the school administrators assessed the PES teachers with a weighted mean of 4.50, also described as "Highly Utilized."

Table 5. *Extent of Utilization of Multimedia Instruction in Physical Education and Sports Along Hybrid Instruction*

Hybrid As a teacher I ...	*As assessed by Teachers*		*Rank*	*As assessed by School Administrators*		*Rank*	*Combined Rating*		*Rank*
	WM	*TR*		*WM*	*TR*		*WM*	*TR*	
use online work to offer targeted learning plans, extensions, or one-on-one teaching for individual students.	4.52	HU	6	4.46	U	10	4.49	U	8.5
provide mobile learning options for the online portion of the lesson/topic.	4.54	HU	5	4.49	U	7	4.52	HU	5.5
encourage students to use a graphic organizer or something similar to collect and synthesize information.	4.56	HU	2.5	4.52	HU	3	4.54	HU	3
make students rotate through a series of stations within the classroom, including small group instruction and computer-based applications.	4.50	HU	8.5	4.50	HU	5.5	4.50	HU	7
provide personalization by allowing students to alternate between small group work at school and online learning at home.	4.58	HU	1	4.52	HU	3	4.55	HU	1.5
ask students to read and annotate an article about a current event and contribute to a group document where students share their thoughts.	4.50	HU	8.5	4.48	U	8	4.49	U	8.5
deliver lessons via video for students to watch at home while class time is reserved for students to collaborate and apply their learning.	4.56	HU	2.5	4.53	HU	1	4.55	HU	1.5
tell / inform students to watch the lesson posted in the group chat.	4.55	HU	4	4.50	HU	5.5	4.53	HU	4
use in-person class time for students to work through an assignment first modeled online.	4.48	U	10	4.46	U	10	4.47	U	10
allow students to work through digital lessons to move along a skills progression tailored to their needs.	4.51	HU	7	4.52	HU	3	4.52	HU	5.5
OWM	4.53	HU		4.50	HU		4.52	HU	

The combined weighted mean of this area of extent of utilization of multimedia-based instruction is 4.52, which is described as "Highly Utilized". Indicator number 5 and 7 got the highest combined mean of 4.55 which is described as "Highly Utilized," Two indicators got the lowest combined mean, indicator number 1 and 6. Both indicators got a combined mean of 4.49, with a transmuted rating of "Utilized."

Summary of the Extent of Utilization of Multimedia-Based Instruction in Physical Education and Sports

Multimedia-based instruction refers to learning environments that contain words and pictures using different technological gadgets to promote learning, such as power point presentations, video lessons, illustrated textbooks, narrated slideshow presentations, online narrated animations, and educational computer games.

Table 6 provides a general view of the PES teachers in their self-rating and the rating of school administrators in the extent of their utilization of multimedia-based instruction along synchronous, asynchronous, and hybrid instruction used in this study.

Table 6. *Summary Table of the Extent of Utilization of Multimedia Based Instruction in Physical Education and Sports*

Multimedia Based Instruction in Physical Education and Sports	*As assessed by Teachers*		*As assessed by School Administrators*		*Combined Rating*	
	WM	*TR*	*WM*	*TR*	*WM*	*TR*
1. Synchronous Instruction	4.51	HU	4.47	U	4.49	U
2. Asynchronous Instruction	4.54	HU	4.52	HU	4.53	HU
3. Hybrid Instruction	4.53	HU	4.50	HU	4.52	HU
GOWM	4.53	HU	4.50	HU	4.52	HU

In Table 6, it shows the teacher's assessment in the multimedia-based instruction had a grand overall weighted mean of 4.53, which is described as "Highly Utilized."

The school administrators rated the Physical Education and Sports teachers in their extent of utilization of multimedia-based instruction a grand overall weighted mean of 4.50 with a transmuted rating of "Highly Utilized." This shows that Physical Education and Sports teachers always utilize multimedia-based in teaching Physical Education and Sports.

The indicators of this study got the highest combined mean of 4.53, which is described as "Highly Utilized" in asynchronous instruction. The; synchronous instruction got the lowest combined weighted mean of 4.49, described as "Utilized."

The combined grand overall weighted mean of the extent of utilization of multimedia-based instruction in Physical Education and Sports is 4.52, which is described as "Highly Utilized."

Differences in the Extent of Utilization of Multimedia-Based Instruction in Physical Education and Sports Across their Profile Variables

This section presents the differences in the extent of utilization of multimedia-based instruction in Physical Education and Sports among physical education and sports teachers in the City Schools Division of Pangasinan.

The table summarizes the computed ANOVA as indicated by the F-value for each area covered with its corresponding significance level. This; was done to make a more in-depth analysis of data generated in this study.

The individual computation of the ANOVA for each Physical Education and Sports instruction covered in this study was the synchronous, asynchronous, and hybrid.

Table 7 presents the ANOVA showing the significant differences in the extent of utilization of multimedia-based instruction in Physical Education and Sports among Physical Education and Sports teachers across their profile variables.

Table 7. *Mean Differences in the Extent of Utilization of Multimedia Based Instruction in Physical Education and Sports Among Physical Education and Sports Teachers*

Web Based and Non-Web Based Instruction	*Synchronous*		*Asynchronous*		*Hybrid*	
	f	*Sig.*	*f*	*Sig.*	*f*	*Sig.*
Age	1.012	.323	.287	.725	.064	.632
Sex	.824	.373	.154	.587	.297	.427
Civil Status	.375	.283	.863	.217	.378	.312
Highest Educational Attainment	.508	.325	.548	.252	.864	.529
Rank/Position	.491	.298	.528	.473	.529	.542
Length of Service Teaching PES	.538	.346	.674	.398	.298	.217
Relevant Trainings/Seminars						
International	.287	.129	.739	.086	.276	.145
National	.792	.257	.201	.127	.239	.162
Regional	.328	.234	.645	.352	.418	.246
Division	.279	.082	.482	.279	.357	.309
Number of Membership in PES Organization	.562	.471	.736	.327	.573	.429

By looking very clearly, at the table, shows that the Physical Education and Sports teacher did not show any significant difference in the extent of their utilization of multimedia-based instruction across their profile variables as indicated by their computed F-value. In; other words, the null hypothesis which states that there were no significant differences in the extent of utilization of multimedia-based instruction across their profile variables was accepted.

Relationship Between the Extent of Utilization of Multimedia-Based Instruction in Physical Education and Sports Among Physical Education and Sports Teachers and their Profile Variables

For further analysis of data gathered in this study, the relationships between the Physical Education and Sports teachers, and their profile variables were likewise determined. This was done using Pearson coefficient of correlation or Pearson r, and the t-test for significant correlation.

Table 8 shows the performance of the Physical Education and Sports teachers is related to the profile variables in terms of age, highest educational attainment, and relevant training attended at the division level. However, it can be observed from the table that the Pearson r values for relationships between the variables do not reflect any significant relationship at the .05 level along with other profile variables.

Table 8. *Relationship Between the Extent of Utilization of Multimedia Based Instruction in Physical Education and Sports Among Physical Education and their Profile Variables*

Profile Variables	*Pearson Correlation*	*Sig. (2-tailed)*
Age	.487**	.853
Sex	-.075	.219
Civil Status	.392	.492
Highest Educational Attainment	.368**	.008
Rank / Position	.264	.276
Length of Service Teaching PES	.297	.085
Related Training/Seminars		
Division	.439**	.020
Regional	.295	.271
National	.563	.183
International	.127	.153
Number of Membership in PES Organization	.639	.386

Therefore, given such a point of reference, the null hypothesis is accepted that there are no significant relationships between the extent of utilization of multimedia-based instruction of the Physical Education and Sports teachers and their profile variables.

The data given in the above table can be said with confidence that the extent of utilization of multimedia-based teaching the Physical Education and Sports teachers. The different areas of web-based and non-web-based instruction depend upon the age, highest education, and relevant training in the division levels.

Proposed Development Program for Improving the Utilization of Multimedia-Based Instruction of Physical Education and Sports Teachers

Objective/s	*Strategies/Activities*	*Persons Involved*	*Time Frame*	*Resources*
Improve/strengthen/ enhance the knowledge and skills of Physical Education and Sports teachers through synchronous, asynchronous, and hybrid instruction. Give supplementary webinars scheduled for varying days and times, ensuring that learners benefit from interacting with each other and teachers. Give more time to reflect on the material they are learning, which means they are likely to understand it more thoroughly. Create videos and upload other instructional videos for students. Use in-person class time for students to work through an assignment first modeled online.	Trainings / seminars / workshop on asynchronous, synchronous, and hybrid instruction. Develop the skills that foster in the utilization of multimedia instruction in their synchronous classes. Help develop the knowledge in operation and use of gadgets in conducting synchronous instruction. Strengthening the Physical Education and Sports teacher's behavior towards the adaption and utilization of modern technologies used in teaching. Have seminar workshops on creating instructional videos.	Physical Education and Sports Teachers. School Administrators, DepEd Officials, Education Program Supervisors	Year Round	MOOE, Personal,

Conclusion

The following conclusions were formulated.(1) The respondent Physical Education and Sports teachers widely vary in their profile, and in certain instances, their variation is extreme cases and a distinctively female-dominated group of Physical Education and Sports teachers.
(2) The Physical Education and Sports teachers in this study are performing impressively more than enough in their utilization of multimedia-based instruction. Their present performance is a stepping stone towards the highest level of performance.(3) The Physical Education and Sports teachers are not significantly comparable in the performance of their utilization of multimedia-based instruction at certain times and specific functions. Still, there are times and cases when they are, on the other hand, comparable.(4) The Physical Education and Sports teacher's extent of utilization of multimedia-based instruction is dependent upon or affected or caused by age, highest educational attainment, and a number of relevant training in the division levels.

Based on the findings in this study and the conclusions are drawn, the following are hereby recommended. (1) Physical Education and Sports teachers should take the initiative to pursue the highest educational degree, which is the doctoral degree. They should undergo professional upgrading through more elevated levels of training and seminar workshops.(2) Physical Education and Sports teachers should always aspire and soar high for excellent performance in their utilization of multimedia-based instruction by being innovative and resourceful teachers.(3) More appropriate and relevant variables be explored to better (4)determine the extent of multimedia-based instruction utilization by Physical Education and Sports teachers.

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