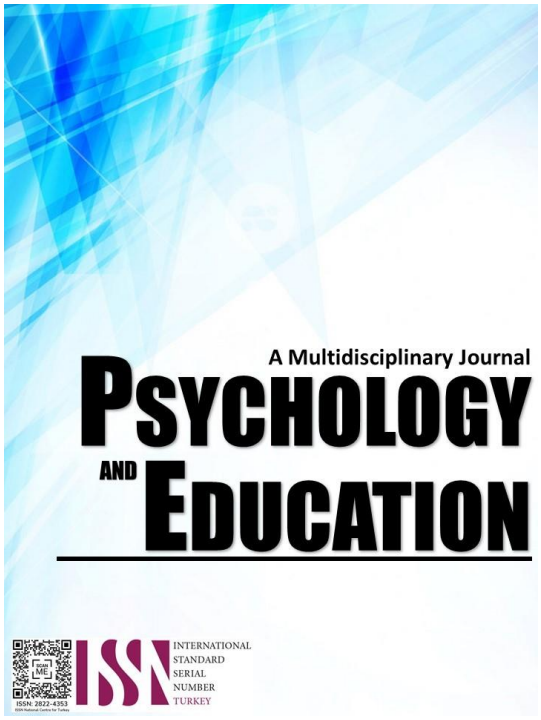
MODULAR INSTRUCTION IN PHYSICAL EDUCATION IN THE DIVISION OF PANGASINAN II



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Research Article

Modular Instruction in Physical Education in the Division of Pangasinan II

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Abstract

This study determined the effectiveness of modular instruction among the Grade 7 Physical Education teachers in the 5th district municipalities in the division of Pangasinan II. The study used the descriptive method of research and included 70 teachers teaching MAPEH as respondents. It used percentage, frequency counts, weighted mean, analysis of variance and Pearson r product moment coefficient of correlation through SPSS 21 in its statistical treatment.The study found out that majority of the respondent-teachers belonged to the 41-50 years age bracket, males, MAPEH graduates, and Master's unit earners. Most of them have been in the service for 16 years and above, Teacher III with 3 trainings and below at all training levels. There is a high level of effectiveness of modular instruction in physical education along preparation, distribution and implementation. A moderately high level of effectiveness of modular instruction is found along retrieval. There is a moderately high encounter of challenges in the modular instruction in physical education along technical, financial and instructional.Further, the study found out that there is a significant relationship between the effectiveness of modular instruction in physical education and the respondents' profile variables. There are significant differences on the level of effectiveness of the modular instruction in physical education if educational attainment, length of service and trainings are to be considered.

Keywords: *modular instruction, physical education, preparation, implementation*

Introduction

Physical Education is a subject generally taught in the physical way. Teachers discuss concepts and theories through demonstration and modelling as well as learners adapt well in the teachers' classroom teaching by demonstrating the lessons learned. However, this usual practice is difficult for these days due to the widespread of the Covid-19 pandemic. The face-to-face classes are being discouraged and eventually totally banned in schools. The modular and online teaching became the best choices for the health safety of learners. In the case of Pangasinan II division, the modular instruction will be strictly implemented. If ever there will be an online class, this will be of very limited time due to lack of resources. For this year and maybe for the next years to come, the limited interaction with learners is the biggest challenge of teachers in the delivery of basic learning. Classrooms became a venue only for the teachers to create and distribute the modules to learners' parents or guardians. The new normal caused by this pandemic disconnected the usual activities necessary for learners to learn better. But for now, let us look on the effectiveness of the implementation of the modular method in teaching physical education.

The new normal created by the covid-19 pandemic brought so many changes in the environment. The schools are one of those mostly affected areas that need to adjust to cope up with the changes in the environment. The usual practice of classroom-based teaching-learning cannot be implemented for health and safety reasons. The Inter-Agency Task Force had given enough instructions and guidelines in which every agency or individuals ought to follow. The Department of Education then adjusted its regular face-to-face classes into different modalities that would limit if not totally remove face-to-face contacts with learners. As per the Division of Pangasinan II, the modular approach of teaching is chosen to replace the face-to-face classes. The teachers have prepared learning modules and/or activity sheets that would be distributed and retrieved to and from parents or guardians at a given time. Learners could no longer come to school and will not have a close contact with their teachers. Probable online follow-up is allowed depending on the availability of resources of the families of the learners. Hence, the modules alone are the real source of teaching and learning.

The success of the implementation of any strategy or method of teaching lies not only on the teachers but also the cooperation from his learners. Modular distance learning involves individualized instruction that allows learners to use self-learning modules (SLMs) in print or digital format or electronic copy, whichever is applicable in the context of the learner, and other learning resources like learners' materials, textbooks, activity sheets, study guides and other study materials (DepEd 2020). The approach makes use of modules. UNESCO (1988) defines module as a set of learning opportunities organized around a well-defined topic which contains the elements of ordinate

dictation, categorical objectives, edifying cognition activities, and evaluation utilizing criterion-referenced measures. Gil (2015) cited based on the principles of modular approach to teaching, noted that modular approach as by authors permanent education, whether through studying under someone's supervision, inspired self-education or self-study on one's own initiative, is becoming not only a necessity, but also a need.

Modular instruction is one of those teaching approaches where the students have to learn everything in the module using his own effort at his own pace. This method differs from the traditional one wherein a teacher presents the lesson and the students just listen to learn the concepts presented. To surpass the difficulties faced by the students in the traditional classroom situation, modular approach may be a good alternative since it is student-centered, self-paced, and requires no note-taking (Gonzales, 2015).Sejpal (2013) states that modular teaching is one of the most widespread and recognized teaching learning techniques in many countries including other Western countries and Asian region. Modular approach is used almost in all subjects like natural science, specifically in biology and medical education and even in social sciences as well as in computer education. Likewise, he also states that modular teaching is considering the individual differences among learners which necessitate the planning for adoption of the most appropriate teaching techniques in order to help the individual grow and develop at her/his own pace.

Barnet et al. (2004) pointed out that modular teaching is a new approach in classroom settings, for experience taking in encounters in instruction, also it has been getting much consideration. The system of taking in modules has turned into a piece of all level of instructions. Teaching through module is a self-taking in bundle managing one particular topic/unit. Accordingly, Knight (2002) points out that materials on design work for edifiers orchestrating programmes in higher inculcation are insubstantial. He suggests desideratum for advice on programme design and argues for texts to be developed to target concrete learning skills and the focus of which is the design of modules.According to Sadiq (2014) on his study on the effectiveness of modular approach in teaching at the university level shows that scores were in favor of the usage and is recommended for wide use at various levels of education. The study found out an overall improvement in four factors which included students' participation, communication skills, concepts understandings and usage of new vocabulary and examples. Further, he concluded that modular teaching is more effective in the teaching learning process as compared to ordinary teaching methods because students learn at their own pace. In the study of Ibyatova et al. (2018), found out that modular approach to teaching and learning English at a technical university shows that modular syllabus is useful and motivating and students say that it encourages them to do better on the next modules. At the same time, teachers in the modular system appreciate the better planning opportunity around the exams and the clarity and the focus of their teaching requirements. The results of the study show that the modular approach in teaching is effective in improving students' knowledge and enhances students' understanding and critical thinking. But, it also found out that the modular learning and assessment does not remove the stress and workload of traditional approaches.

In the study of Tobias and Duffy (2009) also found out that the use of module can improve students' performance through learning based on problem solving. Further, the use of module attracted students to participate actively in the process of teaching and learning.Matanluk et al. (2013) found out in their research that the use of Geography learning module can improve students' thinking skills, specifically, enhance higher order thinking skills among students. But, findings also show that the constructivist teaching approach (Module CSAA) and the traditional approach had the same effect on student knowledge at a low cognitive level (cognitive level of knowledge and understanding).The study of Ambayon (2019) which aimed at validating a mythology and folklore module and evaluating its effectiveness in teaching the subject, revealed that based on the results, the performance of the college students in literature in experimental group had improved from poor to excellent achievement whereas the control group had relatively improved from poor to fair achievement. It is therefore recommended that the module be used in similar contexts.In view of the above-mentioned situation and the studies cited, the researcher conducted this study that focused on the effectiveness of the implementation of modular instruction. This method is widely chosen as a main approach to deliver basic learning amidst this covid-19 pandemic. It is then a challenge if this approach would work out well and could replace if not equal the same momentum that the conventional classroom teaching can provide. In the division of Pangasinan II, the modular instruction is the main approach to be used. This study specifically identifed the extent of effectiveness of the modular approach in teaching physical education since it is basically a physical class subject. It also took into

considerations the challenges met by teachers in the preparation, delivery and retrieval of the learning modules as well as the results of the activities answered by students. Further, it also included interview of selected Physical Education teachers to give actual insights on the flow of the approach used in the study. The result of this study served as a basis for the improvement of the learning modules prepared as well as the flow on the preparation, distribution, retrieval and assessment of learning.

Research Questions

This study determined the effectiveness of modular instruction in physical education among the Grade 7 teachers in the 5th district municipalities in the division of Pangasinan II.Specifically, it sought answers to the following questions:

1. What is the profile of the respondents in terms of:
   1.1 age
   1.2 sex
   1.3 field of specialization
   1.4 highest educational attainment
   1.5 length of service
   1.6 position
   1.7 number of relevant trainings
2. What is the level of effectiveness of modular instruction along the following phases:
   2.1 Preparation
   2.2 Distribution
   2.3 Implementation
   2.4 Retrieval
3. What are the challenges encountered in the modular instruction along:
   3.1 Technical
   3.2 Financial
   3.3 Instructional
4. Is there any significant relationship between the level of effectiveness of modular instruction and the respondents' profile variables?
5. Is there any significant difference on the level of effectiveness of modular instruction across the respondents' profile variables?

Methodology

Research Design

This study employed a descriptive method of research. This method of research involves comparison or contrast and attempts to discover significant differences and relationships between existing variables. This study secured evidence concerning current or existing situations. The study used the standard survey method through the questionnaire. The researcher prepared the questionnaire so that respondents and readers can understand the information contained in the data.

Data Gathering Tool

This study used the survey questionnaire as a data gathering tool. Checklists on the personal and professional attributes of the respondent- Physical Education teachers, as well as other details related to modular instruction was prepared based on the researcher's experiences, observations, and readings. The items of the questionnaire adopted the five-point Likert-scale type of responses.The questionnaire was evaluated and refined by members of the researcher's panel and other research experts. Finalization of the questionnaire was based on the suggestions, and after the approval of the committee on oral examination.A questionnaire is a principal tool in gathering the data. Trial and validation of the questionnaire was conducted to one (1) research expert, one (1) expert teacher or supervisor in-charge of physical education, and one (1) physical education teacher who is not part of the actual set of respondents. Validation was undertaken to ascertain that every question is clearly understood and within the experiences of the actual respondents of the study. It ensured that the respondents did not find difficulty in answering the questionnaire, and the data gathered were valid and reliable. The incorporation of all suggestions of the research experts were included in the final draft. Further comments and approval of the Oral Examination Committee were included in the study.

Data Gathering Procedure

The researcher secured permission from the Schools Division Superintendent of Pangasinan II division before administering the research. The researcher distributed the questionnaire to the needed respondents after the approval of the proper authorities' concern. The conduct was possible through the help of the physical education teachers and other personnel who are directly involved in the study.The researcher personally distributed the questionnaire to the respondents or sent them through google document forms. Likewise, the researcher personally retrieved or asked friends to retrieve the same questionnaire or gathered them online. The purpose and objectives of the study were clearly explained. Utmost

confidentially was assured to avoid inhibitions from the respondents in accomplishing the questionnaire. The research subjects were asked to choose their preferred response by checking or supplying the needed information in the blank spaces provided for. The respondents consequently answered the questions.

Results and Discussion

Profile of the Respondents

Profile of respondents according to Age, Sex, Field of Specialization, Highest Educational Attainment, Length of Service, and Position

Table 1a shows the data on the profile variables, age, sex, field of specialization, highest educational attainment, length of service, and position.

Age. Majority of the respondents belonged to the 41-50 years age bracket, 26 or 37.1 percent. There are 18 or 25.7 percent belonging to 30 years old and below, 16 or 22.9 percent under the 51 and above ages, and only 10 or 14.3 percent are in 31-40 years old. This result implies that respondents are mature and have enough experience in teaching modular instruction in physical education. Very few are neophytes considering that there is a small number distributed in the given age bracket. This implies better modular instruction since teachers are mature in age and exposed already to different learning modalities or methods of instructions.

Sex. The respondent-coaches are predominantly males. There are 38 males or 54.3 percent and 32 females or 45.7 percent. This is a typical situation in the physical education classes which is mostly dominated by males but it is slowly changing because more female teachers are now considering teaching in this subject. This can be easily seen in the small difference in the number of male against female teachers of physical education among the national high schools situated at the main part of the municipalities.

Field of Specialization. Majority of the respondents are MAPEH graduates, 41 or 58.6 percent. There are 22 or 31.4 percent belonging to different majors, and only 3 or 10 percent are math and sciences majors. This implies that there are still non-MAPEH majors who are teaching the subject. While majority of them have a suited field of specialization to teach the subject but those who have different field of specialization could still affect the delivery of instruction most especially of those schools where these teachers are assigned.

Highest Educational Attainment. The majority of the respondents, 40 of them or 57.1 percent, are Master's unit earners. There are 20 or 28.6 percent who are Master's degree holder, 9 or 12.9 percent are Bachelor's degree holder, and only 1 or 1.4 percent is a doctorate unit earner. The result only implies that the respondents aimed for their professional development only at Master's level as it can be seen that majority of them have pursued post-graduate studies. The respondents look forward of improving themselves in their chosen field or career path but they must continue and finish their post graduate studies. They are contented with Master's degree and do not pursue doctoral degree.

Length of Service. Twenty-three (23) or 32.9 percent, a majority of the respondents have been in the service for 16 years and above. There are 22 or 31.4 percent teaching within 5 years and below, 13 or 18.6 percent with 6-10 years in service, and 12 or 17.1 percent with 11-15 years in service. The result implies that most of the teachers are experienced in teaching because of the majority who had enough service as. Hence, adjustments in the delivery of basic services most especially in instruction is already a usual task for them to perform.

Position. Majority of the respondents, 40 or 57.1 percent are Teacher III. There are 16 or 22.9 percent who are Teacher I, 13 or 18.6 percent who are Teacher II. There is only 1 or 1.4 percent Master Teacher I. The result shows that most of the respondent are still very active in teaching considering that majority belonged to Teacher III position. These teachers are most likely prepared for ranking and waiting their time for promotion to master teacher positions once there are opening of items.

Table 1a. *Frequency and Percentage Distribution of Respondents across the Variables Age, Sex, Civil Status, Highest Educational Attainment, Position, Length of Service*

Variable	*Variable Category*	*Frequency*	*Percent*
Sex	Male	38	54.3
	Female	32	45.7
	Total	70	100.0
Age	30 and below	18	25.7
	31-40	10	14.3
	41-50	26	37.1
	51 and above	16	22.9
	Total	70	100
Field of Specialization	MAPEH	41	58.6
	Science and Math	7	10.0
	Others	22	31.4
	Total	70	100.0
Highest Educational Attainment	Bachelor's Degree	9	12.9
	Master's Unit Earner	40	57.1
	Master's Degree Holder	20	28.6
	Doctoral Unite Earner	1	1.4
	Total	70	100.0
Length of Service	1-5 years	22	31.4
	6-10 years	13	18.6
	11-15 years	12	17.1
	16 years and above	23	32.9
	Total	70	100.0
Position	Teacher I	16	22.9
	Teacher II	13	5.718.6
	Teacher III	40	57.1
	Master Teacher I	1	1.4
		70	100.0

Profile of respondents according to number of trainings attended relevant to modular instruction.

Table 1b shows the data on the profile variable, number of trainings attended relevant to modular instruction.

Relevant Trainings Attended. At the school level, majority of the respondents, 48 or 68.6 percent have 3 trainings and below. Likewise in the division level, 56 or 80 percent have 3 trainings and below. Further, at the regional level, 69 or 98.6 percent have 3 trainings and below, national level with 62 or 88.6 percent have 3 trainings and below, and international level with 69 or 98.6 percent have 3 trainings and below. The result shows that majority of the respondents have at least 3 trainings and below to all training levels. It can be noted that most of them are willing to attend trainings regardless to whatever level. Hence, these respondents are most likely equipped with the necessary concepts and ideas needed in teaching using modular instruction. While majority of them do not have 4 trainings and above, these could not affect much their delivery of instruction or modular instruction since majority have relevant trainings needed in using modular instruction. Within this pandemic, these experiences in training are necessary to adjust with the different learning environment

Table 1b. *Frequency and Percentage Distribution of Respondents across the Variable, Number of Trainings Attended Relevant to Modular Instruction*

Variable	*Variable Category*	*Frequency*	*Percent*
School Level Training	3 trainings & below	48	68.6
	4-6 trainings	14	20.0
	7 trainings & above	8	11.4
	Total	70	100.0
Division Level Training	3 trainings & below	56	80.0
	4-6 trainings	13	18.6
	7 trainings & above	1	1.4
	Total	70	100.0
Regional Level Training	3 trainings & below	69	98.6
	4-6 trainings	1	1.4
	7 trainings & above	0	0
	Total	70	100.0
National Level Training	3 trainings & below	62	88.6
	4-6 trainings	7	10.0
	7 trainings & above	1	1.4
	Total	70	100.0
International Level Training	3 trainings & below	69	98.6
	4-6 trainings	1	1.4
	7 trainings & above	0	0
	Total	70	100.0

Level of Effectiveness of Modular Instruction in Physical Education

Level of Effectiveness of Modular Instruction Along Preparation

Table 2 shows the level of effectiveness of modular instruction along preparation.

Table 2 presents that there is a high level of effectiveness with regards to the modules containing the most essential topics needed by the learners, and the most essential topics needed by the learners with the 4.32 mean. It also shows that the goals and objectives of the lesson are well-defined and implied in the modules, 4.21 mean. The results show that the level of effectiveness of modular instruction are high in terms of preparation of modules, topics needed by learners and in setting the goals and objectives of the lessons.

Table 2. *Level of Effectiveness of Modular Instruction in Physical Education Along Preparation*

Indicators	*Mean*	*Descriptive Equivalent*
The modules contain the most essential topics needed by the learners	4.32	High
The priority competencies are well distributed and budgeted every week	4.32	High
The goals and objectives of the lesson are well-defined and implied in the modules	4.21	High
The content of the modules entice the interest and attention of the learners	4.14	High
The content of the module is not congested and within the capability of learners	4.07	High
Enough discussion and examples are included in the modules	4.05	High
The content of the modules is adequate and can be easily understood by the learners	4.00	High
The modules is appealing and complete for study of the learners	4.00	High
The module can be easily understood by the learners and the parents or guardians who will assist the learners	3.90	High
Errors in the module are corrected before distribution	3.88	High
Overall Weighted Mean	4.09	High

This implies that the teachers are prepared with the modular instruction. This result concurs with the study of Barnet et al. (2004) pointing out that modular teaching is a new approach in classroom settings, for experience taking in encounters in instruction, also it has been getting much consideration. The system of taking in modules has turned into a piece of all level of instructions.

The overall weighted mean shows that there is a high level of effectiveness of modular instruction in Physical education along preparation, 4.09 mean. This only means that in totality with respect to preparation along topics needed, competencies required, goals and objectives implied, content, and all errors met in the modular instruction have been corrected and given enough checking before it will be released to learners. The modular instruction in physical education can help the learners study at their own convenience. This result goes with the study Sadiq (2014) that modular teaching is more effective in the teaching learning process as compared to ordinary teaching methods because students learn at their own pace.

Level of Effectiveness of Modular Instruction Along Distribution

Table 3 shows the level of effectiveness of modular instruction along distribution. Along distribution, there is a very high level of effectiveness of modular instruction in physical education in the strict observance of IATF protocols, 4.58 mean; and in the creation of group chats by teachers for parents and guardians, 4.55 mean; as well as in designating drop points in the school and/or in the barangay, 4.52 mean. Likewise, there is a very high level of effectiveness in giving enough time allotment of distribution for parents to pick-up their children's modules, 4.51 mean. This result only shows that there is a good distribution process being created in the modular instruction for physical education. This implies good planning and implementation on the part of teachers, and in adapting to the change in the mode of instruction. Considering this result, teachers in the modular system appreciate the better planning opportunity around the exams and the clarity and the focus of their teaching requirements (Ibyatova et al., 2018).

Table 3. *Level of Effectiveness of Modular Instruction in Physical Education Along Distribution*

Indicators	*Mean*	*Descriptive Equivalent*
There is a strict observance of IATF protocols	4.58	High
Teachers created group chats for parents and guardians	4.55	Very High
There are designated drop points in the school and/or in the barangay	4.52	Very High
The time allotment of distribution is enough for parents to pick-up their children's modules	4.51	Very High
Teachers find a way to deliver to learners the unclaimed modules	4.35	High
There is an orderly manner in the distribution of learning modules	4.28	High
The distribution of modules is well communicated to parents and guardians	4.28	High
Online follow-up on the parents is done regarding the distribution	4.25	High
There is a 100% distribution of modules in the designated time allotment	4.01	High
There are designated barangay officials to help in the information dissemination and to aid in the distribution	3.87	High
Overall Weighted Mean	4.32	High

Although, the overall weighted mean shows a high level of effectiveness of modular instruction in Physical education along distribution, 4.32 mean, still it can be determined in the results that teachers find a way to deliver to learners their modules and communicate them to their parents or guardians. This implies the well paid-off efforts of teachers in the distribution of learning modules and in ensuring that learners will get hold of their modules in order for them to learn better despite the absence of their teachers.

Level of Effectiveness of Modular Instruction Along Implementation

Table 4 shows the level of effectiveness of modular instruction along implementation.

Table 4. *Level of Effectiveness of Modular Instruction in Physical Education Along Implementation*

Indicators	*Mean*	*Descriptive Equivalent*
The modules are handy and accessible to all learners	4.48	High
Online communication is being used to aid students' learning	4.32	High
Learners can answer the modules on their own	4.01	High
Learners inquire from teachers on the confusing matters of the modules	4.01	High
The module is not congested and gives time allowances for review and research activities of the learners	3.97	High
The goals of the subject are well-defined and within the level of learners	3.94	High
The learners can answer all the activities and assignments indicated in the modules	3.84	High
The modules are easily understood by the learners and the assisting guardians	3.78	High
Activities in the modules can be performed by the learners without teacher's aid	3.77	High
The learners completely answered all the activities and finished them on time	3.61	High
Overall Weighted Mean	3.97	High

Table 4 shows that all indicators have a high level of effectiveness of modular instruction in physical education along implementation, 3.97 mean. With this, the modules are handy and accessible to all learners, 4.48 mean, and online communication is being used to aid students' learning, 4.32 mean, and learners can answer the modules on their own, 4.01 mean. This results only shows that there is a smooth and orderly implementation of modular instruction in physical education. This implies that the teachers completed their tasks in the preparation and distribution of learning materials and that they can have better implementation of the modular instruction. Thus, the aim of every teacher to improve the performance of learners through the modules will most likely be accomplished if all works are done. Confirming this, Tobias and Duffy (2009) found out that the use of module can improve students' performance through learning based on problem solving. Further, the use of module attracted students to participate actively in the process of teaching and learning.

Level of Effectiveness of Modular Instruction Along Retrieval

Table 5 shows the level of effectiveness of modular instruction along retrieval.

Table 5. *Level of Effectiveness of Modular Instruction in Physical Education Along Retrieval*

Indicators	*Mean*	*Descriptive Equivalent*
Group chats are being created for information dissemination	3.72	High
The retrieval of learning modules is 100 percent in the allotted time	3.71	High
Call, text messaging, and online media are means to follow-up retrieval of modules	3.60	High
Projects indicated in the modules are submitted	3.58	High
The school tapped barangay officials to help in the retrieval of modules	3.57	High
Parents can come to school anytime to return the modules of their children	3.52	High
The modules and/or answer sheets are in good condition and completely returned	3.34	Moderately High
The activities in the modules are answered completely	3.04	Moderately High
Majority of the learners got at least 75% correct answers	3.01	Moderately High
Unreturned modules are being fetched by the teacher	2.94	Moderately High
Overall Weighted Mean	3.40	Moderately High

Group chats are being created for information dissemination, 3.72 mean, the retrieval of learning modules is 100 percent in the allotted time, 3.71 mean, and the use of call, text messaging, and online media

are means to follow-up retrieval of modules, 3.60 mean. Further, projects indicated in the modules are submitted, 3.58 mean, and the school tapped barangay officials to help in the retrieval of modules, 3.57 mean. Likewise, parents can come to school anytime to return the modules of their children, 3.52 mean.

The results show that there is a high level of effectiveness along retrieval with respect to information dissemination and communication with parents and barangay officials. This implies that the modular instruction in physical education have gone far in its implementation and learning acquired by the learners. It can be further implied that the parents and barangay officials had a good rapport with the teachers. Thus, through channels there is the creation of better learning among learners. The results of the study show connection with the study of Ibyatova (2018), considering that the modular approach in teaching is effective in improving students' knowledge and enhances students' understanding and critical

Summary on the Level of Effectiveness of Modular Instruction in Physical Education

Table 6 shows the summary of the level of effectiveness of modular instruction in Physical Education along the four aspects: preparation, distribution, implementation, and retrieval.

The table shows that there is a high level of effectiveness of modular instruction in physical education along preparation, distribution, and implementation with 4.09, 4.32, and 3.97 means respectively. Along retrieval, 3.40 mean, there is only moderate level of effectiveness. The overall weighted mean, 3.95 mean, shows a high level of effectiveness, thus this makes the modular instruction in physical education proficient. This result implies positive outcome on the part of the teachers as per processes are involved. This only means that the modular instruction is not that far with the other modes of learning with regards to activities or procedures being followed.

Table 6. *Summary Table on the Level of Effectiveness of Modular Instruction in Physical Education*

Aspects	*Mean*	*Descriptive Equivalent*	*Interpretation*
Preparation	4.09	High	Proficient
Distribution	4.32	High	Proficient
Implementation	3.97	High	Proficient
Retrieval	3.40	Moderately High	Slightly Proficient
OWM	3.95	High	Proficient

Challenges Encountered in the Use of Modular Instruction in Physical Education

Challenges Encountered in the Use of Modular Instruction in Physical Education Along Technical

Table 7 shows the challenges encountered in the use of Modular Instruction in Physical Education along technical aspects.

Table 7. *Challenges Encountered in the Use of Modular Instruction in Physical Education Along Technical*

Indicators	*Mean*	*Descriptive Equivalent*
Time constraint in the writing and preparation of modules	3.36	Moderately High
Late submission or return of modules causing delay on the checking of activities given	3.31	Moderately High
Activities in the modules are not completely answered	3.29	Moderately High
There are lost modules and others are returned not in good condition	3.22	Moderately High
Many of the students got low scores in their activities checked	3.20	Moderately High
Inadequate supply to reproduce the materials for the modules	3.12	Moderately High
Lack of fund to support the printing of modules	3.10	Moderately High
Lack of support from potential stakeholders to reproduce the modules	2.91	Moderately High
Only few teachers cooperate in the printing and binding of modules due to the skeleton force	2.67	Moderately High
Parents or guardians do not come on scheduled time to pick-up their children's modules	2.82	Moderately High
Overall Weighted Mean	3.10	Moderately High

Table 7 shows that there is a moderately high encounter on the challenges when considering time constraint in the writing and preparation of modules, 3.36 mean, and in the submission or return of modules causing delay on the checking of activities given, 3.31

mean. Likewise, there is a moderately high encounter on the challenges in terms of the activities in the modules that are not completely answered, 3.29 mean, and in lost modules and those returned not in good condition, 3.22 mean. The result shows that the challenges encountered in the use of modular instruction in physical education along technical aspects are moderately high. This implies that there are technical aspects that can be totally resolved but there are also those that cannot be completely fixed. Further, this implies that teachers had to overcome and remedy issues and concerns of the modular instruction most especially the learning materials.

Challenges Encountered in the Use of Modular Instruction in Physical Education Along Financial

Table 8 shows the challenges encountered in the use of Modular Instruction in Physical Education along financial aspects.

Table 8. *Challenges Encountered in the Use of Modular Instruction in Physical Education Along Financial*

Indicators	*Mean*	*Descriptive Equivalent*
Learners cannot sustain all the activities and requirements indicated in the modules most especially those that need to buy materials	3.45	Moderately High
Teachers have to personally spend much on printing, communication and travel for the total implementation of the modular instruction	3.37	Moderately High
Personal printers of the teachers are used to print all modules	3.32	Moderately High
Parents do not come to fetch the modules due to their work priorities	3.25	Moderately High
Teachers have to tap stakeholders for the completion of the printing of modules	3.14	Moderately High
There is no enough budget from the school in printing all the modules	3.08	Moderately High
The printer in the school cannot sustain the printing of all modules in the given allotted time	3.07	Moderately High
Teachers have to asked from families and friends to help sustain the printing of modules	3.04	Moderately High
There is no enough supply of ink, coupon bonds, and binding materials	2.95	Moderately High
Parents do not come on scheduled distribution and retrieval due to financial constraints	3.08	Moderately High
Overall Weighted Mean	3.18	Moderately High

Table 8 shows that there is a moderately high encounter of challenges in the use of modular instruction in physical education along financial given the overall weighted mean, 3.18. This result shows that along financial, teachers have to accomplish the needed materials, go with processes but any amount to sustain the modular instruction will still be coming from their own pockets. This implies inconvenience on the side of teachers but have to endure in order to smoothly implement modular instruction.

Further, learners cannot sustain all the activities and requirements indicated in the modules most especially those that need to buy materials, 3.45 mean, and Teachers have to personally spend much on printing, communication and travel for the total implementation of the modular instruction, 3.37 mean. Likewise, personal printers of the teachers are used to print all modules, 3.32 mean, and parents do not come to fetch the modules due to their work priorities, 3.25 mean. The result shows that there is a moderately high encounter of challenges with regards to financial matters. The results implies that the modules must be reproduced at all costs, whether through the use of personal equipment, gadget and supplies or monetary.

Challenges Encountered in the Use of Modular Instruction in Physical Education Along Instructional

Table 9 shows the challenges encountered in the use of Modular Instruction in Physical Education along instructional aspects.

Table 9 shows that there is a moderately high encounter of challenges in the use of modular instruction in physical education along instructional with overall weighted mean, 3.40.

There is a high encounter of challenges to most of the activities that need browsing for books or internet, 3.72 mean. Likewise, there is a high encounter on learners having difficulty in performing the activities of the modules, 3.71 mean. Also, a high encounter when the learners asked the teacher's help most of the time through call or text messaging, 3.60 mean. These and more of the challenges show high encounter along instructional aspects in the use of modular instruction in physical education.

Table 9. *Challenges Encountered in the Use of Modular Instruction in Physical Education Along Instructional*

Indicators	*Mean*	*Descriptive Equivalent*
Most of the activities need browsing for books or internet	3.72	High
Learners have difficulty in performing the activities of the modules	3.71	High
The learners asked the teacher's help most of the time through call or text messaging	3.60	High
The learners cannot perform the activity on their own	3.58	High
There are modules with very few discussion but contains many activities	3.57	High
There are so many topics and activities to answer in the allotted time	3.52	High
The content of the modules is congested	3.34	Moderately High
The modules are too short and contains very few activities	3.04	Moderately High
The modules cannot sustain enough learning based on the needed competencies	3.01	Moderately High
The learner cannot find answers in the discussion written in the modules	2.94	Moderately High
Overall Weighted Mean	3.40	Moderately High

Relationships between the Level of Effectiveness of Modular Instruction and the Respondents' Profile Variables

Table 10 below presents the Pearson r Coefficients of Correlations between the level of effectiveness of modular instruction and the respondents' profile variables.

Table 10 presents the computed r-values, .189, .167, .178, .183 and .180 yielded a .045, .028, .037, .041, and .040 level of significance, respectively. The significant level of the Pearson r coefficient of correlations is below the significance level of 0.05 set at the start of this study. Therefore, the null hypothesis which states, "There is no significant relationship between the level of effectiveness of modular instruction in physical education and the respondents' profile variables," is rejected. This means that there is a significant relationship between the effectiveness of modular instruction in physical education and the respondents' profile variables. Thus, there is an indicated association between these variables.

Specifically with respect to age, the computed r-value .189 yielded a .045 level of significance which indicates that there is a relationship that exists between the level of effectiveness of modular instruction in physical education along preparation, and the age of the respondents. Likewise, the computed r-value .167 and .178 yielded a .028 and .037 level of significance respectively which indicates that there is a relationship that exists between the level of effectiveness of modular instruction in physical education along preparation and implementation, and the profile variable, highest educational attainment of the respondents. Further, the computed r-value .183 yielded a .041 level of significance which indicates that there is a relationship that exists between the level of effectiveness of modular instruction in physical education along implementation, and the profile variable, position. Furthermore, the computed r-value .180 yielded a .040 level of significance which indicates that there is a relationship that exists between the level of effectiveness of modular instruction in physical education along distribution, and the profile variable, trainings attended by the respondents at the division level.

Table 10. *Relationships between the level of effectiveness of modular instruction and the respondents' profile variables*

Independent Variables	*Pearson Correlation*	*Preparation*	*Distribution*	*Implementation*	*Retrieval*
Age	r-Value	.189	-.169	.039	-.027
	Sig	.045*	.163	.748	.828
Sex	r-Value	-.083	-.019	-.110	-.168
	Sig	.533	.874	.364	.165
Field of Specialization	r-Value	.030	.009	.068	.047
	Sig	.821	.941	.576	.697
Highest Educational Attainment	r-Value	.167	-.079	.178	-.036
	Sig	.028*	.515	.037*	.956
Position	r-Value	.090	.204	.183	-.008
	Sig	.495	.060	.041*	.945
Length of Service	r-Value	-.087	-.029	.058	-.036
	Sig	.051	.811	.632	.766
Trainings attended					
School Level	r-Value	-.047	.213	.109	.119
	Sig	.721	.076	.371	.325
Division Level	r-Value	.100	.180	.022	.061
	Sig	.450	.040*	.853	.613
Regional Level	r-Value	-.005	-.008	.019	-.030
	Sig	.973	.945	.87333	.806
National Level	r-Value	.121	.006	-.076	-.097
	Sig	.361	.961	.531	.422
International Level	r-Value	-.005	-.008	.019	-.030
	Sig	.973	.945	.873	.806

The result shows that in terms of age, highest educational attainment, position and trainings attended

relevant to modular instruction have significant relationships to the level of effectiveness of modular instruction in physical education. Hence, these areas must be given utmost consideration if modular instruction will be considered in the implementation of the curriculum. It implies that these profile variables of the respondents have an indicated association to modular instruction or to learning per se that must be strengthened and given focus if modular instruction is being used in the delivery of instruction.

T-Test Results on the Mean Differences of the Coaches' level of competence across the Variable, Sex

Table 11 shows the t-Test Results on the overall weighted mean differences of the level of effectiveness of modular instruction in physical education across the variable, sex.

Table 11. *T-Test Results on the OWM Differences of the level of effectiveness of Modular Instruction across the Variable, Sex*

Dependent Variable	*Variable Category*	*N*	*Mean*	*Mean Difference*	*Std. Error Difference*	*t*	*df*	*Sig. (2-tailed)*
Preparation	male	38	4.0636	.09825	.15670	.627	68	.533
	female	32	3.9654					
Distribution	male	38	4.3447	.01974	.12397	.127	68	.874
	female	32	4.3250					
Implementation	male	38	3.6684	.11530	.12616	.456	68	.364
	female	32	3.5531					
Retrieval	male	38	4.0500	.20938	.20938	.980	68	.165
	female	32	3.8406					

The data shows that the t-value, t=-.627 yielded a .533 level of significance for preparation by the respondents with respect to the variable sex, is not significant at 0.05 level. Likewise, the other t-values; t=.127 for distribution; t=.456 for implementation; and t=.980 for retrieval; are also not all significant at 0.05 level.

The result shows that there is no significant difference on the level of effectiveness of modular instruction in physical education with respect to the profile variable, sex. This only means that whether male or female, the level of effectiveness of modular instruction in physical education as they perform is the same. This result implies that there are no differences with the level of effectiveness of the teachers regardless if they are male or female. Their performance along preparation, distribution, implementation, and retrieval have no differences and would all be the same.

Differences on the Level of Effectiveness of Modular Instruction in Physical Education along the Variable, Age

Table 12 presents the ANOVA results on the mean differences on the level of effectiveness in Physical education along the variable, age. The F=.514 for preparation, F=.751 for distribution, and F=.353 for implementation and F=.427 for retrieval yielded .674, .526, and .787, and .734 level of significance respectively, with respect to age. The significance level set at .05 is lower than the computed values hence, there is no significant difference. The hypotheses, "There is no significant difference on the level of effectiveness of modular instruction in Physical Education across the respondents' profile variables" is accepted. This means that there are no differences on the level of effectiveness of the modular instruction in physical education if age is to be considered. Thus, the age has no indicated association on the level of effectiveness of the modular instruction in physical education along preparation, distribution, implementation and retrieval. This implies that whatever age, it will not show significant effect on the effectiveness or performance in modular instruction.

Table 12. ANOVA Results on the Level of Effectiveness of Modular Instruction in Physical Education along the Variable, Age

Dependent Variable	*Source of Variation*	*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
Preparation	Between Groups	.559	3	.186	.514	.674
	Within Groups	19.936	66	.362		
	Total	20.496	69			
Distribution	Between Groups	.599	3	.200	.751	.526
	Within Groups	17.562	66	.266		
	Total	18.161	69			
Implementation	Between Groups	.301	3	.100	.353	.787
	Within Groups	18.732	66	.284		
	Total	19.033	69			
Retrieval	Between Groups	.514	3	.171	.427	.734
	Within Groups	26.499	66	.402		
	Total	27.014	69			

Differences on the Level of Effectiveness of Modular Instruction in Physical Education along the Variable, Field of Specialization

Table 13 presents the ANOVA results on the mean differences on the level of effectiveness in Physical education along the variable, field of specialization. The F=.170 for preparation, F=.269 for distribution, F=.316 for implementation and F=.129 for retrieval yielded .844, .765, and .730, and .880 level of significance respectively, with respect to field of specialization. The significance level set at .05 is lower than the computed values hence, there is no significant difference. The hypotheses, "There is no significant difference on the level of effectiveness of modular instruction in Physical Education across the

respondents' profile variables" is accepted. This means that there are no differences on the level of effectiveness of the modular instruction in physical education if field of specialization is to be considered. Thus, the field of specialization has no indicated association on the level of effectiveness of the modular instruction in physical education along preparation, distribution, implementation and retrieval. This implies that whatever field of specialization, it will not show significant effect on the effectiveness or performance in modular instruction.

Table 13. *ANOVA Results on the Level of Effectiveness of Modular Instruction in Physical Education along the variable, field of specialization*

Dependent Variable	*Source of Variation*	*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
	Between Groups	.123	2	.062	.170	.674
	Within Groups	20.372	67	.364		
	Total	20.496	69			
	Between Groups	.145	2	.072	.269	.526
Distribution	Within Groups	18.016	67	.269		
	Total	18.161	69			
	Between Groups	.178	2	.089	.316	.787
Implementation	Within Groups	18.855	67	.281		
	Total	19.033	69			
	Between Groups	.103	2	.052	.129	.880
Retrieval	Within Groups	26.910	67	.402		
	Total	27.014	69			

Differences on the Level of Effectiveness of Modular Instruction in Physical Education along the Variable, Highest Educational Attainment

Table 14 presents the ANOVA results on the mean differences on the level of effectiveness in Physical education along the variable, highest educational attainment. The F=3.945 for implementation yielded a .012 level of significance with respect to the variable highest educational attainment. The significance level set at .05 is higher than the computed value hence, there is a significant difference. The research hypotheses, "There is no significant difference on the level of effectiveness of modular instruction in Physical Education across the respondents' profile variables" is rejected. This means that there are differences on the level of effectiveness of modular instruction when considering the differences in their highest educational attainment. This means that there are differences on the level of effectiveness of modular instruction in Physical Education with regards to implementation when considering the differences in their highest educational attainment.

This implies that the highest educational attainment is a basis of the differences in performance and effectiveness of teachers in the implementation of modular instruction. Further, the highest educational attainment can influence the effectiveness of the delivery of instruction.

Table 14. *ANOVA Results on the Level of Effectiveness of Modular Instruction in Physical Education along the Variable, Highest Educational Attainment*

Dependent Variable	*Source of Variation*	*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
	Between Groups	.367	3	.122	.335	.800
Preparation	Within Groups	20.128	66	.366		
	Total	20.496	69			
	Between Groups	.403	3	.134	.500	.684
Distribution	Within Groups	17.757	66	.269		
	Total	18.161	69			
	Between Groups	4.282	3	1.427	3.945	.012*
Implementation	Within Groups	23.880	66	.362		
	Total	28.162	69			
	Between Groups	.396	3	.132	.327	.806
Retrieval	Within Groups	26.618	66	.403		
	Total	27.014	69			

Differences on the Level of Effectiveness of Modular Instruction in Physical Education along the Variable, Length of Service

Table 15 presents the ANOVA results on the mean differences on the level of effectiveness in Physical education along the variable, length of service. The F=3.037 for preparation and F=2.747 for implementation yielded a .035 and .040 level of significance respectively, with respect to the variable length of service. The significance level set at .05 is higher than the computed value hence, there is a significant difference. The research hypotheses, "There is no significant difference on the level of effectiveness of modular instruction in Physical Education across the respondents' profile variables" is rejected. This means that there are differences on the level of effectiveness of modular instruction when considering the differences in their length of service. This means that there are differences on the level of effectiveness of modular instruction in Physical Education as per preparation and implementation when considering the differences in their years in service. Further, the years in service of teachers have an indicated association on the level of effectiveness of modular instruction in Physical Education along the preparation, distribution, implementation and retrieval aspects. This implies that the years in service can show differences in the performance of the teachers in modular instruction. The longer in service, the more experienced they have gained, and the more effective they can be in the conduct of modular instruction.

Table 15. *ANOVA Results on the Level of Effectiveness of Modular Instruction in Physical Education along the Variable, Length of Service*

Dependent Variable	*Source of Variation*	*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
Preparation	Between Groups	4.587	3	1.529	3.037	.035*
	Within Groups	33.223	66	.803		
	Total	37.810	69			
Distribution	Between Groups	.188	3	.063	.230	.875
	Within Groups	17.973	66	.272		
	Total	18.161	69			
Implementation	Between Groups	2.112	3	.704	2.747	.040*
	Within Groups	16.920	66	.256		
	Total	19.033	69			
Retrieval	Between Groups	.948	3	.316	.800	.498
	Within Groups	26.066	66	.395		
	Total	27.014	69			

Differences on the Level of Effectiveness of Modular Instruction in Physical Education along the Variable, Position

Table 16 presents the ANOVA results on the mean differences on the level of effectiveness in Physical education along the variable, position. The F=.287 for preparation, and F=2.092 for distribution, F=1.731 for implementation, and F=.594 yielded a .835, .110, .169 and .621level of significance respectively, with respect to the variable, position. The significance level set at .05 is lower than the computed values hence, there is no significant difference. The research hypotheses, "There is no significant difference on the level of effectiveness of modular instruction in Physical Education across the respondents' profile variables" is accepted. or disadvantage to the effectiveness of teachers as per modular instruction is concern.

Table 16. ANOVA Results on the Level of Effectiveness of Modular Instruction in Physical Education along the Variable, Position

Dependent Variable	*Source of Variation*	*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
Preparation	Between Groups	.316	3	.105	.287	.835
	Within Groups	20.180	66	.367		
	Total	20.496	69			
Distribution	Between Groups	1.577	3	.526	2.092	.110
	Within Groups	16.583	66	.251		
	Total	18.161	69			
Implementation	Between Groups	1.388	3	.463	1.731	.169
	Within Groups	17.645	66	.267		
	Total	19.033	69			
Retrieval	Between Groups	.711	3	.237	.925	.621
	Within Groups	26.303	66	.399		
	Total	27.014	69			

This means that there are no differences on the level of effectiveness of modular instruction when considering the differences in their position. Also, the position of the teachers has no indicated association on the level of effectiveness of modular instruction along preparation, distribution, implementation, and retrieval. This implies that position places no differences in performance and competence among teachers. And that, position can either be an advantage

Differences on the Level of Effectiveness of Modular Instruction in Physical Education along the Variable, Trainings Attended

Differences on the Level of Effectiveness of Modular Instruction in Physical Education along the Variable, Trainings Attended at the School Level

Table 17 presents the ANOVA results on the mean differences on the level of effectiveness of modular instruction in Physical Education along the variable, trainings attended at the school level.

Table 17. *ANOVA Results on the Level of Effectiveness of Modular Instruction in Physical Education along the Variable, Trainings Attended at the School Level*

Dependent Variable	*Source of Variation*	*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
Preparation	Between Groups	.978	3	.489	1.404	.254
	Within Groups	19.517	66	.349		
	Total	20.496	69			
Distribution	Between Groups	.701	3	.351	1.346	.267
	Within Groups	17.459	66	.261		
	Total	18.161	69			
Implementation	Between Groups	4.208	3	1.403	3.301	.026*
	Within Groups	28.045	66	.425		
	Total	32.253	69			
Retrieval	Between Groups	.117	3	.059	.146	.864
	Within Groups	26.896	66	.401		
	Total	27.014	69			

Table 17 shows that with respect to trainings attended at the school level, the level of effectiveness of modular instruction in physical education have significant differences in implementation with F= 3.301 and yielded a .026 level of significance. The research hypotheses, "There is no significant difference on the level of effectiveness of modular instruction in Physical Education across the respondents' profile variables" is rejected. This means that there are differences on the level of effectiveness of modular instruction when considering the differences in their training. This implies that at the school level, there are indicated differences in their implementation of modular instruction based on their trainings acquired.

Conclusion

From the salient findings, conclusions drawn are the following: (1)The profile variables are relative and need to be given utmost attention most especially their educational attainment and trainings. (2)The modular

instruction in physical education is highly effective. (3)The challenges encountered in the modular instruction in physical education are moderately high. (4) Significant relationship between the modular instruction in physical education and the respondents' profile variables exists. (5) Significant differences on the modular instruction in physical education are identified across the profile variables.

The following are the recommendations forwarded based on the salient findings and conclusions of this study: (1)The respondent-coaches have to earn a post graduate degree, attend more relevant trainings to further improve their modular instruction. (2)The teachers should attend in-service trainings, learning action cell sessions and trainings related to modular instruction.(3)Teachers should consider the changes in the new normal and must adapt to these changes.

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