

Improving Learners' Essential Competencies with Physical Fitness Learning Kits

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Abstract: *This study aimed to determine the impact of a self-learning kit as an intervention to improve the academic achievement of Grade 12 learners in physical fitness at National University Bulacan in the Philippines. The researcher used a mixed quantitative-qualitative pretest/posttest design to assess the fundamental impact of the stated intervention on its target population, Grade 12 learners at National University Bulacan in the Philippines. The participants and teachers who would administer the test were chosen using a purposive random sampling technique. The proposed learner's material was administered during the third grading period. The intervention was utilized from February to March 2023, with the approval of the School Principal. T-test results showed that there was a significant difference in the mean pretest scores ($M = 14.1$, $SD = 3.477$) and mean posttest scores ($M = 28.5$, $SD = 1.300$) and; $t(39) = -24.439$, $p = 0.00521$. These results suggest that using the self-learning kit in Physical Education 10 affects the academic achievement of the Grade 12 learners in the subject. The intervention material was useful and significantly impacted the academic performance of the Grade 12 learners. It recommends that the self-learning kits can be adopted by other schools or educators teaching Physical Education in Grade 12, especially in areas where learners have unique needs and abilities. Further research can be conducted to explore the effectiveness of the self-learning kit in other subjects and grade levels. Teachers can be trained on how to develop and utilize self-learning kits to meet the needs of their learners and enhance their academic performance. Education policymakers can consider incorporating self-learning kit development and utilization in the curriculum to promote a more inclusive and effective learning environment for learners with diverse needs and abilities. The development of self-learning kits can also be explored in other areas of study, which can provide a more efficient and effective mode of learning for learners, especially in times of limited access to face-to-face instruction.*

Keywords: *Physical Fitness, Most Essential Learning Competencies, Self-Learning Kit*

I. Introduction

MAPEH, or Music, Arts, Physical Education, and Health, is one of the most challenging yet exciting subjects in the secondary curriculum. Aside from having four components, it focuses on the student's overall development. Motor, cognitive, and value skills are all emphasized and developed in equal measure. Physical education is one of the components of MAPEH that is taught in schools. It is a learning process that focuses on the knowledge, attitudes, and behaviors required for learners to live a healthy and active lifestyle. Physical education helps learners maintain fitness and develop motor skills and muscular strength, and it frequently improves learning in other areas, such as academic performance.

One of the problems in private and public schools in the Philippines is a lack of instructional materials. A lack of classroom materials has a significant impact on the learners' teaching and learning processes. Because of this problem, the teaching-learning process will be ineffective and inconvenient. Many classrooms lack sufficient books, art supplies, or technology to provide the same instruction as schools with more resources. Learners are unable to bring books for homework due to a lack of books. A lack of instructional materials is a vicious circle. The work cannot be completed without instructional materials, and without the work, there are few incentives to spend money on school when all supplies are not purchased.

Furthermore, physical fitness is an important component of overall health and well-being, and it plays an important role in enhancing learners' competencies. However, many learners, particularly those from low-income communities, have difficulty accessing traditional physical fitness resources such as gyms and personal trainers. The scarcity, affordability, and accessibility of these resources can be impediments to acquiring essential physical fitness competencies.

In response to the aforementioned problem, the researcher intends to create instructional material or Self-Learning Kits. The Self-Learning Kit (SLK) is one of the most effective tools designed by teachers to help learners master concepts in a variety of subjects. The Self-Learning Kit is a tool that encourages learning and creativity through the use of manipulative processes and thinking skills. It also helps learners gain self-confidence in the subject by connecting the lesson to the real world (Hambre, 2019). According to the Department of Education (DepEd), the Self-Learning Kit is an innovative tool that meets the criteria of the K-12 Curriculum by providing relevant and localized information to teachers and learners. It is a supplemental learning resource (SLR) created, modified, or contextualized by a teacher.

The Self-Learning Kit is used to supplement the least mastered or learned competencies, as well as to redirect learners' attitudes toward becoming active participants in the educational process and to provide teaching aids to address the lack of available books, other resources, or references in schools. In terms of teaching, instructional materials have inherent benefits that distinguish teachers. It offers teachers exciting knowledge platforms. Learners will be motivated to study more as a result. Generally, the study's objective is to escalate the learning competencies of the learners in physical fitness using the Self-Learning Kits. In line with these objectives, researcher seek to answer the following questions:

1. How may the Physical Education performance of Grade 12 learners be described based on the pretest results?
2. How may the Self-Learning Kit be evaluated in terms of
 - 2.1 Content
 - 2.2 Instructional Quality
 - 2.3 Presentation and Organization
 - 2.4 Other Findings
3. How may the Physical Education performance of Grade 12 learners be described based on the posttest results?
4. Is there a significant difference in the performance of the Grade 12 learners in Physical Education before and after implementing Self-Learning Kit?

II. Literature Review

Related Literature

Teaching MAPEH

Many instructors find teaching Music, Art, Physical Education, and Health (MAPEH) to be both rewarding and challenging. It necessitates a methodical approach to increasing professional knowledge, putting Music, Arts, Physical Education, and Health teachers on par with those who excel in the classroom. The teacher employs a variety of teaching tactics, instructional materials, mastery of topic knowledge, and assessment in accordance with the many components of Music, Arts, Physical Education, and Health (Silvestre P. & Itaas C., 2020).

Furthermore, teachers in Music, Arts, Physical Education, and Health use a variety of instructional materials and evaluation methods, and learners are expected to perform. Because it includes learning components from Music, Art, Physical Education, and Health, the performance will have a significant impact on grades. Teachers have identified additional Classroom Assessment Techniques (Tabuena, 2017).

However, regardless of how well the teacher performs, uninspired learners lack the same enthusiasm. Participants are from lower socioeconomic classes because the study was conducted at a public school. According to Teddlie and Stringfield (2017), people who come from this level outperform those who do not. Innovative teaching techniques are required to keep learners engaged in MAPEH lessons and interested in the subject. Because of the 21st-century education setting's short attention span, it can be difficult to keep high school learners engaged and passionate about learning MAPEH.

Furthermore, MAPEH teachers are being labeled as jacks of all trades, with mastery of all MAPEH components. One subject alone necessitates four MAPEH teacher preparations. They are qualified, competent, and have the skill set required to handle the situation.

Self-Learning Kit

Teachers today face more complex challenges than ever before. Teachers must be prepared to facilitate transversal competencies and access to transversal knowledge and skill learning resources, as well as to create learning experiences that are easily transferable between home and school (Heick, 2017). 2016 (UNESCO). The effective use of learning materials ensures the delivery of high-quality education by expanding learners' competencies and breaking down barriers to traditional learning experiences.

Many academic developers responded by aligning the curriculum to meet learners' needs as well as practicality in social and cultural realms. Curriculum improvements were made to make it learner-centered, inclusive, developmentally appropriate,

relevant, and responsive, among other things, in conjunction with the paradigm shift in education brought about by the RA 10533 (Enhanced Basic Education Act of 2013). In addition, the law encouraged the creation and production of localized, indigenous, and enhanced teaching materials in order to develop diverse learners.

In addition, using a Self-Learning Kit ensures self-learning. Self-learning is a modern form of learning that has supplemented traditional learning with astounding results, which are bolstered by self-directed learning and the availability of resources (Karanja, 2017). Self-learning promotes self-awareness and independence in learning. In the Junior High School (JHS) program, this is the long-term educational goal. The junior high school program aimed to develop self-directed or independent learners who could effectively learn using available learning resources with little supervision, becoming actively involved in the educational process. According to Hattie (2009), if MAPEH is taught effectively and learners are given clear learning objectives, it will be one of the quickest paths to lifelong learning.

Hence, to facilitate learning for learners, teachers can use the Self-Learning Kit as a learning tool to help learners perform better. The utilization of learning kits will improve the pupils' academic performance. At the conclusion of the teaching and learning process, teachers can also achieve the anticipated learning objectives in each subject area. In accordance of Jasmi et al. (2011) states that the Self-Learning Kit serves as a facilitator for teachers to improve the effectiveness of student-centered learning.

Moreover, learning no longer depends on conventional teaching tools like chalk, chalkboards, and textbooks (Ahmad Zanzali & Daud, 2010).

Most Essential Learning Competencies (MELCs)

According to De Guzman L. Estrella E. and Estrella E. (2022), the Music, Arts, Physical Education, and Health curriculum experts recognize the subject's importance in fostering physical, health, cultural literacies, artistic expression, knowledge acquisition skills, and values to lead a more fulfilling life. They are influenced by the requirement that a learning competency (L.C.) be applicable to lifelong learning. The discovered Essential Learning Competencies (MELCs) closely resemble other subject-specific abilities, bolstering curriculum integration. MELCs are tools that teachers can use to prioritize the most important learning abilities learners should acquire or improve in an emergency. The Department of Education is working to create a country with happier, healthier, and more enlightened citizens.

Furthermore, it is beneficial for reducing emotional stress and maintaining good mental health, both of which are evident in the current situation. Recognizing the significance of physical education is critical because it promotes natural human development. Learners and teachers may face additional challenges as a result of the distance learning environment created by the epidemic during this new normal. It can be difficult to teach different student types who have different intellectual aptitudes, talents, skills, interests, and learning styles when the student body is heterogeneous. Lessons must be planned for each student based on readiness, interests, and prior knowledge.

According to Donnelly and Patrinos (2021), the most important topics will be fundamental bases for educational organizations. Hence, higher offices of DEPED implement the learning delivery approaches to meet the learners' needs and interests.

Related Studies

In the beginning, the world of self-learning may appear difficult to navigate. However, it is our desire to successfully bring about or attain our ambitions while remaining intimately connected to what is being done or contemplated in an ever-changing environment. In such cases, self-learning is essential for meeting the demands of the twenty-first century. As a result, the goal of education necessitates a dramatic shift in providing elementary education that meets the demands of the twenty-first century. It implies that, rather than attempting to provide young generations with the necessary knowledge, DepEd or other related institutions ideally concerned with education should provide individuals with the tools and abilities to acquire knowledge for themselves. As a result, learners must be self-sufficient and adapt to the changing environment.

Modules may involve learning about any subject, including computer animation, general electronics, engineering concepts, and global warming. Based on the study conducted by (Kristy Sweet, 2018; Estrella M., 2020), a publisher and specialist on health and wellness, because the module uses active learning experiences rather than passive ones, learners may be more engaged, comprehend real-world applications of the principles, and further develop higher-order cognitive capacities and wellness. Teaching is the structured presentation of knowledge, concepts, abilities, and teaching pupils techniques. Even while our ability to impart knowledge has helped us survive and advance as a species, teaching as a profession did not appear until recently. Teachers usually find a way to accommodate their personal requirements when delivering lessons (Fulgado J. St. 2020).

In other words, an instructional module is a tool for evaluating psychomotor and critical thinking abilities. The teacher can only guide the student to improve their capacity for applying what they have learned. According to Sullano G.M. (2020), an alternate

educational strategy for improving student learning and satisfaction is using modules. The teacher's job is to guide and keep track of each student's progress as they complete their respective tasks while the pupils work independently. Learners use modules to complete various tasks that are engaging and difficult enough to keep their attention and focus. Independent study is also encouraged by the usage of modules. It instructs learners to practice or memorize material. Exercises are provided to help learners understand the ideas by progressing from easy to challenging activities. How the exercises are organized formalizes the degree of difficulty the learners can complete.

According to Adalikwu S., and Iorkpilgh I. (2016), Instructional materials serve as a channel between teachers and learners. They can also use learners' attention and avoid boredom. Teaching materials are extremely crucial, especially for inexperienced teachers. In every element of teaching, teachers rely on instructional materials. They require background material information about the subject they are teaching.

One significant study in the Philippine context that investigated using SLK is that of (Hambre, 2019). It conducted a comparative analysis of the effectiveness of the teacher-designed SLK in Geometry for the Subanen, Meranaos, and Visayans, considering their culture, tradition, and ethnicity. The learners rated the SLK well, stating that it increased their motivation to learn ideas and that they loved the interactive learning format. According to the study, learners find it difficult to understand concepts cohesively in Physical Education. This topic provides cognitive content and instruction to build motor skills, knowledge, and behaviors for physical exercise and physical fitness. Furthermore, using Self-Learning Kit as instructional material targeted the learners' least mastered competencies and assured fulfillment of the curriculum's goals and standards.

Regarding Johnson et al. (2019), it examines the effectiveness of self-directed learning in Physical Education. The authors concluded that self-directed learning could be a successful strategy for teaching physical fitness competencies, especially when combined with teacher direction and feedback. The effect of self-regulated learning on college learners' physical health was examined. The findings indicated that self-regulated learners had higher levels of physical fitness and increased enthusiasm to work out (Lee et al., 2017).

Additionally, the authors concluded that Self-Learning Kits could effectively improve physical fitness outcomes; however, it depends on several factors, including the quality of the kits and learner involvement (Zhang et al., 2021).

III. Methods

Methods and Techniques of the Study

The researcher used a mixed qualitative and quantitative experimental pre-test/post-test design as his scheme to determine the impact of the self-learning kit as an intervention to be used individually among Grade 12 learners to improve the essential competencies in Physical Education 12.

The researcher examined the test results after the experiment. They compared the pre-test without treatment (intervention) and the post-test with treatment (intervention) to determine the effectiveness of the instructional material in the learning process of Grade 12 learners at National University Bulacan in the Philippines. The experiment was designed to see if the pre-test and post-test results were more successful. The pre-test and post-test results are used as a guideline for developing effective Grade 12 instructional materials.

Population and Sample of the Study

The study included 40 Grade 12 learners from National University Bulacan, Philippines, who had poor academic performance in physical fitness. The learners were enrolled in the 2022-2023 school year. The researcher asked for permission to use one section of Grade 12 learners as study respondents.

Furthermore, the researcher solicited the feedback of six (6) experts to evaluate the Self-Learning Kit (SLK). These six (6) experts included three (3) MAPEH teachers from National University Bulacan, Philippines, one (1) language teacher, and two (2) P.E instructors from National University Bulacan, Philippines.

Sampling Design

To select respondents, the researcher used a technique known as random sampling. Every member of the population had an equal chance of being a respondent using this method. The respondents were chosen by the researcher from a master list provided by the teacher. A 30-item multiple-choice exam was prepared for 40 Grade 12 learners from National University Bulacan, Philippines, who were chosen as research study respondents.

Research Instrument

The researcher used tests in this study to assess the learners' performance skills before and after the implementation of the self-learning kit. To ensure the accuracy of the questions included, two performance tests were used: the pre-test and the post-test, both of which were created by the teacher. The testing material was validated by the Music, Arts, Physical Education, and Health (MAPEH) teachers.

The pre-test and post-test included preliminary (optional) questions about the respondent's profile, such as name, gender, and age. The contents of the pre-test and post-test, as well as the questionnaire, are the same, but they are ramble. The pre-test was first administered to determine which learners require intervention or remediation and which competencies need to be further developed among them. After implementing the designed sets of Self-Learning Kit, a post-test was administered to see if their academic performance had improved.

Data Gathering Procedures

During data collection, the researcher seeks permission from the school principal and the Grade 12 class adviser at National University Bulacan, Philippines, by sending a letter of request for the study's conduct. The letter states the researcher's intentions. Following approval from the school principal and class adviser, the researcher interviewed one (1) Music, Arts, Physical Education, and Health teacher to inquire about the least mastered lesson in Grade 12 Physical Education that the learners struggled with and failed to catch up on in class. The teacher replied that the lesson was about physical fitness.

The researcher then developed and prepared a 30-item multiple-choice pre-test and post-test to identify the learners' knowledge, particularly in physical education lessons that are physical fitness. When administering the pre-test and post-test to Grade 12 learners, the subject teacher ensured that the participants understood the precise questions in the pre-test and post-test. Following approval of the test, the researcher obtained information from the subject teacher, confirming that a pre-test and a post-test can be conducted on March 2023, in the afternoon.

Following confirmation, the researcher distributed the pre-test and post-test to the respondents using a hard copy of the test. The respondents were divided into control and experimental groups at random. The researcher has analyzed and tallied the pre-test results, which will be collected on the distribution day. As a result, the researcher was inspired to develop an intervention that can identify the needs of the learners and master a proper understanding of the lesson. The researcher will use a self-learning kit as instructional material to assist learners who cannot learn using traditional instructional materials. To address the issue, the researcher will develop self-learning kits in Physical Education. The ADIDAS Model (Activity, Discussion, Input, Deepening, Application, and Synthesis) was used to develop the Self-Learning Kit.

Researcher gave letters to the ten (6) experts requesting permission to evaluate their self-learning kits as part of the research instrument for data collection. Three (3) secondary Music, Arts, Physical Education, and Health teachers and Three (3) Instructors from Bulacan State University - Bustos Campus.

For the last step, the post-test will be administered to the pupils. For the researcher, the data from the pre-test and post-test will be cross-examined and compared to whether the Self-Learning Kit effectively escalates the learners' essential competencies in physical fitness. Afterward, the results of the pre-test, post-test, and evaluated form by the experts will be checked, tallied, tabulated, and subjected to statistical treatment and study findings.

Ethical Considerations

The researcher's responsibility is to guarantee that all ethical issues will not harm the study participants. Before conducting this interview, the researcher sought permission by submitting a formal letter from those involved, particularly the principal, teachers, and learners. The researcher also explained the significance of the study to the participants.

Informed Consent

The consent must be procured through the following steps; permission had given first to the principal, teachers, and the Grade 12 learners. Along with this, the respondents must be aware of the research study and would be given an option of yes or no. The study would only be conducted once the participants agreed. The Grade 12 learners must understand why the study will be shown.

Confidentiality and Anonymity

The respondent's confidentiality and anonymity were protected by the researcher, who did not reveal their names or identities during data collection, analysis, and reporting of the study findings, as well as the privacy and confidentiality of their pre-test and post-test results.

Conducting of Pre-Test and Post-Test

The pre-test and post-test were personally administered by the researcher to ensure that the following procedures were strictly followed. After gathering the data, it was analyzed and used to assess the instrument's reliability and validity. The participants' confidentiality was maintained.

Intervention Evaluation

The researcher directed that experts be sought to evaluate the intervention, and that the experts be qualified for the study. A formal letter was sent to the experts. They had enough time to think about whether they wanted to be a part of our evaluator in the intervention material that would be created. It denoted the approval's formality. When the researcher received approval, he or she explained the method and handed over the intervention materials and evaluation forms.

Collection of Privacy Data

Data collection and analysis were done at the time. The data was made available to the two qualitative researchers, who independently transcribed and examined it. Data was kept on encrypted and password-protected devices. Two qualitative researchers received the transcripts via password-protected email for cross-checking in the data analysis.

Data Analysis

The researcher calculated the mean of the pre-test and post-test scores, while the standard deviation calculated the variability of the pre-test and post-test scores.

The t-test has been used to determine the population's mean when the population is normally distributed but the standard deviation is unknown. This will determine whether there was a significant difference in Grade 12 learners' pre-test and post-test scores. By acquiring the mean of the rated evaluation form for instructional materials, the Likert-Type Scale assesses the effectiveness of the Self-Learning Kit in escalating the essential competencies of Grade 12 learners in physical fitness. Each item is graded on a four-point scale.

Range	Scale	Interpretation
3.01-4.00	4	Very Satisfactory
2.01-3.00	3	Satisfactory
1.01-2.00	2	Poor
0.99-1.00	1	Not Satisfactory

IV. Results and Discussion

This section presents the study's findings as well as the analysis and interpretation of data from the pre-test and post-test results of the Self-Learning Kit to improve the learning process of Grade 12 learners at National University Bulacan, Philippines for the topic of Physical Fitness. The statistical data served as the foundation for analysis and interpretation.

Table 1

The Mean and Standard Deviation of the Student's Test Score in the Pre-Test

Variable	Mean	Standard Deviation	N
Pre-test	14.1	3.477	40

As shown in Table 1, the overall mean score of 14.1 indicates the low academic performance of Grade 12 learners in National University Bulacan, Philippines. The standard deviation of 3.477 points toward the heterogeneity of their scores. This implies that before the implementation of the study, it was noted that the academic performance in Physical Education of the Grade 12 learners needs improvement. The data gathered signifies the clarion call of using a Self-Learning Kit in Physical Education to improve the academic performance of Grade 12 learners involved in the study.

Evaluation of Experts to the Physical Fitness Learning Kit

Table 2.1

Summary of Evaluator's Perception of Self-Learning Kit in Physical Fitness in Terms of Content

Factor 1: Content		
Item	Weighted Mean	Interpretation
1. Content is suitable to the student's level of development.	3.66	Very Satisfactory
2. Material contributes to the achievement of specific objectives of the subject area and grade/year level for which it is intended.	4	Very Satisfactory
3. Material provides for the development of higher cognitive skills such as critical thinking, creativity, learning by doing, inquiry, problem solving, etc.	3.83	Very Satisfactory
4. Material is free of ideological, cultural, religious, racial, and gender biases and prejudices.	3.83	Very Satisfactory
5. Material enhances the development of desirable values and traits.	3.5	Very Satisfactory
6. Material has the potential to arouse interest of target reader.	3.83	Very Satisfactory
7. Adequate warning/cautionary notes are provided in topics and activities where safety and health are of concern.	3.83	Very Satisfactory
Overall Weighted Mean:		3.78
		Very Satisfactory

Note. 0.99-1.00= Not Satisfactory (NS); 1.01-2.00=Poor (P); 2.01-3.00= Satisfactory (S); 3.01-4.00= Very Satisfactory (VS)

Table 2.1 shows that the item statement "*Material contributes to the achievement of specific objectives of the subject area and grade/year level for which it is intended.*" acquired the highest mean of 4.00, which is "Very Satisfactory." While the statement "*Material enhances the development of desirable values and traits.*" received the lowest mean of 3.5, interpreted as "Very Satisfactory" Overall, the sub-mean of the "Content" is 3.78 - regarded as "Very Satisfactory."

The above statement is consistent with Derman-Sparks & Edwards' (2019) assertion that an anti-biased curriculum is crucial in a child's growth and development. Establishing a conducive learning environment for learners, where cultural differences and similarities are adequately defined and expounded, is vital to encourage children's racial awareness.

It is shown that the content of the Self-Learning Kit in Physical Fitness is vital in increasing their academic performance

Table 2.2

Summary of Evaluator's Perception of Self-Learning Kit in Physical Fitness in terms of Format

Factor 2: Format

Item	Weighted Mean	Interpretation
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1. Prints		
1.1 Size of letters is appropriate to the intended user.	3.66	Very Satisfactory
1.2 Spaces between letters and words facilitate reading.	3.83	Very Satisfactory
1.3 Font is easy to read.	4	Very Satisfactory
1.4 Printing is of good quality (i.e., no broken letters, even density, correct alignment, properly placed screen registration).	3.83	Very Satisfactory
2. Illustrations		
2.1 Simple and easily recognizable.	4	Very Satisfactory
2.2 Clarify and supplement the text.	3.83	Very Satisfactory
2.3 Properly labelled or captioned (if applicable)	3.5	Very Satisfactory
2.4 Realistic / appropriate colors.	3.66	Very Satisfactory
2.5 Attractive and appealing.	3.66	Very Satisfactory
2.6 Culturally relevant.	3	Satisfactory
3. Design and Layout		
3.1 Attractive and pleasing to look at.	3.66	Very Satisfactory
3.2 Simple (i.e., does not distract the attention of the reader).	3.83	Very Satisfactory
3.3 Adequate illustration in relation to text.	3.83	Very Satisfactory
3.4 Harmonious blending of elements (e.g., illustrations and text).	3.66	Very Satisfactory
4. Paper and Binding		
4.1 Paper used contributes to easy reading.	3.83	Very Satisfactory
4.2 Durable binding to withstand frequent use.	3.33	Very Satisfactory
5. Size and Weight of Resource		
5.1 Easy to handle	3.66	Very Satisfactory
5.2 Relatively light.	3.66	Very Satisfactory
Overall Weighted Mean:		3.68
		Very Satisfactory

Note. 0.99-1.00= Not Satisfactory (NS); 1.01-2.00=Poor (P); 2.01-3.00= Satisfactory (S); 3.01-4.00= Very Satisfactory (VS)

As shown in Table 2.2, the item statements “*Simple and easily recognizable*” and “*Font is easy to read*” got the highest mean of 4 and were interpreted as “very satisfactory.” The item statement “*Culturally relevant*” got the lowest mean of 3 and was interpreted as “satisfactory.” It is noticeable that they answered the statements ‘very satisfactory,’ and it has a total weighted mean score of 3.68.

According to Gould (2013), learner autonomy is characterized by learners assuming ownership and accountability for their learning, including the subjects they choose to learn and the methods they use to acquire knowledge. This concept is based on the belief that learners can self-direct and cultivate a self-sufficient, self-motivated attitude toward their educational pursuits.

Table 2.3

Summary of Evaluator’s Perception of Self-Learning Kit in Physical Fitness in terms of Presentation and Organization

Factor 3: Presentation and Organization

Item	Weighted Mean	Interpretation
1. Presentation is engaging, interesting, and understandable.	4	Very Satisfactory

2. There is a logical and smooth flow of ideas.	3.66	Very Satisfactory
3. Vocabulary level is adapted to target reader's likely experience and level of understanding.	3.83	Very Satisfactory
4. Length of sentences is suited to the comprehension level of the target reader.	4	Very Satisfactory
5. Sentences and paragraph structures are varied and interesting to the target reader.	3.5	Very Satisfactory
Overall Weighted Mean:	3.798	Very Satisfactory

Note. 0.99-1.00= Not Satisfactory (NS); 1.01-2.00=Poor (P); 2.01-3.00= Satisfactory (S); 3.01-4.00= Very Satisfactory (VS)

Table 2.3 shows that the item statements “*Presentation is engaging, interesting, and understandable*” and “*Length of sentences is suited to the comprehension level of the target reader*” have the same highest mean of 4, which is interpreted as “very satisfactory.” While the item statement “*Sentences and paragraph structures are varied and interesting to the target reader*” have the lowest mean of 3.5, which is interpreted as “very satisfactory.” Overall, the total sub-mean of “**Presentation and Organization**” is 3.798, which is regarded as “very satisfactory.”

Likewise, in the research conducted by Lake C. in 2007, it was found that the most notable benefits were seen in instructional methods such as cooperative learning and motivation programs. The study suggests that initiatives to alter daily teaching practices are more successful.

Table 2.4

Summary of Evaluator’s Perception of Self-Learning Kit in Physical Fitness in terms of Accuracy and Up-to-datedness of Information

Factor 4: Accuracy and Up-to-datedness of Information

Item	Weighted Mean	Interpretation
1. Conceptual errors	3.5	Very Satisfactory
2. Factual errors.	3.83	Very Satisfactory
3. Grammatical errors.	3.33	Very Satisfactory
4. Computational errors	4	Very Satisfactory
5. Obsolete information.	3.83	Very Satisfactory
6. Typographical and other minor errors (e.g., inappropriate or unclear illustrations, missing labels, wrong captions, etc.).	3.33	Very Satisfactory
Overall Weighted Mean:	3.72	Very Satisfactory

Note. 0.99-1.00= Not Satisfactory (NS); 1.01-2.00=Poor (P); 2.01-3.00= Satisfactory (S); 3.01-4.00= Very Satisfactory (VS)

The table 2.4 shows experts' evaluation regarding the accuracy and up-to-datedness of Information. The item statement “*Computational errors*” got the highest mean of 4 and was interpreted as “very satisfactory.” While the statement “*Conceptual errors*” got the lowest mean of 3.5 which is interpreted as “very satisfactory.” It is noticeable that they answered the statements' very satisfactory, and it has a total weighted mean score of 3.72.

According to Morrow et al. (1988), authors suggested that printed materials should have various content and design features, including using concise and straightforward words, an adequately large and legible font, and incorporating headings and paragraphs.

Table 2.5

Summary of Evaluation of Self-Learning Kit in Physical Fitness

Overall Evaluation		
Item	Weighted Mean	Interpretation
1. Content	3.78	Very Satisfactory
2. Format	3.68	Very Satisfactory
3. Presentation and Organization	3.798	Very Satisfactory
4. Accuracy and Up-to-datedness of Information	3.72	Very Satisfactory
Grand Mean:	3.74	Very Satisfactory

Note. 0.99-1.00= Not Satisfactory (NS); 1.01-2.00=Poor (P); 2.01-3.00= Satisfactory (S); 3.01-4.00= Very Satisfactory (VS)

Table 2.5 shows this is the overall summary of the evaluation. For “Content” it displayed a sub-mean of 3.78 and was interpreted as “very satisfactory” For “Format,” it got a weighted mean of 3.68 and was interpreted as “very satisfactory.” For the “Presentation and Organization,” it got 3.798 and was interpreted as “very satisfactory.” Moreover, the “Accuracy and Up-to-datedness of Information” got a weighted mean of 3.72 and was interpreted as “very satisfactory.” In the overall evaluation, the grand mean score of the experts in evaluating the self-learning kit is 3.74. It is interpreted as “very satisfactory. The highest level of agreement is a recession that the Self-Learning Kit may already be used in the classroom as instructional material in Music, Arts, Physical Education, and Health subjects, particularly in physical fitness.

The Academic Performance of Grade 12Learners in Physical Education After the Implementation of the Study

Table 3

The Mean and Standard Deviation of the Student’s Test Score in the Post-Test

Variable	Mean	Standard Deviation	N
Post-test	28.55	1.28	40

Based on the statistics above, the mean score of 28.55 indicates high academic performance in Physical Education regarding the post-test of Grade 12learners in National University Bulacan, Philippines. After the utilization of the Self-Learning Kit, there is an improvement in the scores of the learners.

The Significant Difference Between the Pre-Test and Post-Test Scores of the Grade 12Learners Before and After the Use of the Physical Fitness Learning Kit

Table 4.

The Paired Samples T-test Results on Pre-test and Post-test Scores of Self-Learning Kit

Variable Mean	t-value	a	p-value	Decision
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Pre-test	14.1				
Post-test	28.5	2.96	0.05	0.00521	Reject

Mean pre-test and post-test scores of Grade 12learners were compared to determine if there was a significant difference in the Grade 12learners' academic performance in Physical Fitness before and after utilizing the Self-Learning Kit. There was a significant difference in the mean pre-test scores of Grade 12learners ($M = 14.1$, $SD = 3.477$) and mean post-test scores of Grade 12learners ($M = 28.5$, $SD = 1.300$) and; $t(39) = -24.439$, $p = 0.00521$. These results suggest that using the Self-Learning Kit in Physical Education 10 affects the academic achievement of the Grade 12learners in the subject. Specifically, results suggest that after using the Self-Learning Kit, post-test scores of the Grade 12learners significantly increased.

V. Conclusion

Based on the findings of the study, the following conclusion was drawn:

1. The total mean of learners' pretest scores is 14.1 over 30, with a percentage of 47%. This means that the learners' percentage of scores did not meet the passing score percentage of at least 60%, resulting in a grade of 75% (DM 076, s. 2018).
2. The ratification level of the evaluator's perception to use the self-learning kit in Physical Fitness as instructional material.
3. The total mean of learners' scores in the posttest is 28.55 over 30, which has a percentage of 95.17%. This means that the percentage of the scores of the learners goes beyond the passing score percentage of at least 60%, which is transmuted grade of 75% (DM 076, s. 2018).
4. There is a significant difference between the pretest and posttest scores of the Grade 12learners before and after using the physical fitness kit. Therefore, it concludes that the implementation of this intervention conducted by the researcher is effective and significantly impacts the learning progress of Grade 12learners.

VI. Recommendations

Based on the conclusion of the study, the following recommendations are made:

1. Other schools or educators teaching Physical Education in Grade 12 can use the Self-Learning Kit, especially in areas where learners have unique needs and abilities.
2. More research can be done to determine the effectiveness of the Self-Learning Kit in other subjects and grade levels.
3. Teachers can be trained on how to create and use Self-Learning Kits to meet the needs of their students and help them perform better in school.
4. Education policymakers can consider incorporating Self-Learning Kit development and utilization in the curriculum to promote a more inclusive and effective learning environment for learners with diverse needs and abilities.
5. The development of Self-Learning Kits can also be explored in other areas of study, which can provide learners with a more efficient and effective mode of learning, especially in times of limited face-to-face instruction.

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