The Use of Simplified Learning Materials (SLM) in Physical Education as a Tool in Enhancing Students Learning Experiences

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Received: 06/01/2023 Revised: 14/06/2023 Accepted: 20/06/2023

Abstract

The pandemic has allowed teachers to apply their innate abilities, such as creativity and innovation, and to impart comprehensive knowledge about physical education with simplified learning materials (SLM) that are centered on the contextual needs of students. The objective of the study is to determine the effect of Simplified Learning Materials (SLM) on students’ learning performance in Physical Education. The study specifically aimed to determine the following: (1) evaluate the learning performance of the students in Physical Education before and after using simplified learning materials, and (2) identify the said significant differences between the students’ mean scores before and after the intervention. The researchers used a pre-experimental design, specifically the One-Group Pretest-Posttest Design. The study was participated by 52 Grade 8 students in one of the secondary schools in the Philippines. Purposive sampling was used in the study. Data analysis was performed using the JASP software (weighted mean and paired t-test). Data revealed that the Shapiro-Wilk test of normality can be used to determine that the data does not deviate from the assumption of normality with a p-value of 0.305, which is greater than 0.05. According to the descriptive table, the post-test result is higher than the pretest result. The mean difference of -2.538 in the Paired Samples T-Test results is significant, with a p-value of 0.002 for the test. The use of Simplified Learning Materials (SLM) helps grade 8 students perform better on tasks and grasp understanding to the lesson related to physical education. This shows that the intervention has a significant effect on the student’s learning performance in Physical Education. Future researchers can utilize the findings as a foundation to use simplified learning materials (SLM) for further contextualize and address what students need to accomplish.

Keywords: JASP Software, Learning performance, Modality, Physical education, Simplified Learning Materials
1. INTRODUCTION

Learning is a great way for students to widen their perspectives in accordance with their educational objectives. Learning strategies are a way of analysis that has been well thought out now and organized. Learning habits has a big impact on how persistently students understand their subject, perform well on performance task and acquire new knowledge (Acheaw, 2016). The objective of using wide variety and assessment methods is to help students achieve their greatest potential (Sulistiantoro, et al., 2021). As such, simplified learning materials will make it possible to easily adjust lessons using the learning materials, examine the content of better learning materials for learning students, and increase student performance. As the content of the learning materials is more focused on the learning abilities needed, one of the teacher's strategies is to develop simplified learning materials (SLM) in Physical Education that are more concise yet comprehend the inputs, easily grasp the reading materials, and assist them to complete the tasks. This study aims to enlighten every teacher about the use of Simplified Learning Materials (SLM) in delivering physical education lessons in a structured and beneficial learning environment.

In the middle of the COVID-19 pandemic, every student deserves a good education (Burhaein, 2022). Supplementary learning materials complement the objectives and delivery of instructions (Culajara, 2022). It was a well-designed learning material that caught the interest and motivate students in all cases. With the teachers’ tasks in imparting knowledge, the simplified learning materials could be of used as a collaborating part in the teaching and learning process (N. Acosta, 2021). The pandemic has supplied the knowledge to further expand the tactics and approaches that can be delivered to children. It is important to realize that this is the new normal (Bozkurt & Sharma, 2020) it is essential that the materials, notably the SLM, have high-quality content and can be used effectively for the modular learning delivery (Natividad, 2021). Simplified Learning Materials (SLM) are an effective tool in bridging the gap in addressing the diverse approaches.

In the study of (Ulfa, 2017) borderless instruction emphasizes the student and provides support to help them succeed. Particularly in these trying times, everyone should have access to excellent training that is effective, readily available, and flexible (Toquero, 2020). The use and development of simplified learning materials will aid learners' capacity to complete other tasks while also completing the various learning tasks. As a result, (Prahani & Cheng, 2020) must have a great attention to the planning, carrying out, and keeping an eye on the New Normal in the disciplines of teaching and learning. To achieve academic attainment, it is critical for educators to establish a good approach and with the help of innovative technology, an effective instructional technique technology that is suited to the learner's interests (Munir et al., 2021). In lieu of the study, teachers have become innovative in designing and delivering instruction applicable to students. According to research by (Carag, 2020), students can use academic concepts to visuals and experiential learning to better understand the subject matter and develop their knowledge and skills because of actively expressing their opinions and responding to
others, as well as their interaction and analytical skills, which are crucial throughout life. As to the study by (Klímová & Poulová, 2022) there are many ways to learn and educate. Thus (Fonte et al., 2021)

In relation to the study, simplified learning materials (SLM) are reading materials that are easier for students to comprehend since the directions and contents are enhanced and specific and based on the competencies they need to acquire. The coronavirus (COVID-19) virus has served as a global wake-up call to rethink our ideas and viewpoints. It was a predictably and altered our views of normalcy as well as how we live. Salient features in learning and teaching is that educators remain inspired to continue teaching because of their students' achievements (Reem D. Montesur, 2021). Studies have stressed the importance of providing students with assistance and supervision (Hwang et al., 2018). Teachers thought of various approaches to give effective instruction, teachers need to be knowledgeable about how different types of connection, student engagement, and assessment are developed (Sacramento et al., 2021) in response to their trend of rising learning tasks, and this is through enhanced learning materials made by the teachers that assist them in functioning as students to maintain the attainment of learning competencies using digital modality and enhanced learning materials. This was strengthened by the study of (Klímová & Poulová, 2022), there are many ways to learn and educate. In a classroom, instructional material is an important factor in the teaching-learning process where a classroom setting textbooks, reference literature, chalk and blackboard, and computers are all examples of this.

Liberty gives students their time and flexibility through streamlined learning resources because the substance of their courses and references is straight to the point. In the research of (Carag, 2020) students can use academic concepts to visuals and experiential learning to better understand the content and grow their skills and knowledge of the students as a result of actively expressing their views and responding to others, as well as their interaction and analytical abilities, which are important throughout life. Additionally, (Filiz & Konukman, 2020) simplified learning materials should have content that are given to students in order to motivate them to pursue, engage on, and solve challenges. Due to the numerous methods of imparting instructions, the school provides a variety of options for reaching students, including digital and printed modules. It also helps to increase student's ability to perform learning tasks. By simplified learning materials (SLM), each student will get clarity on the learning tasks and be able to complete the physical education activities with the help of the teacher's assistance.

2. METHOD

2.1 Participants

The study was participated by 52 students in one of the secondary schools in the Philippines which of the 52 samples were divided into 32 women and 20 men. Furthermore, in the sample selection process, researchers use the total sampling method where this total sampling is the total number of the population to be sampled (Munir, Nasrulloh, et al., 2022).

2.2 Research Design

The researchers used a pre-experimental design specifically the One-Group Pretest-Posttest Design, to determine the efficiency of the intervention in enhancing the participants' learning performance in this study. According to (Rausch et al., 2010) using pretest and post-
test design is a frequent experimental design for investigating intervention effects on the students which students will get treatment from researchers which will later be implemented in the teaching and learning process.

**Figure 1.**

*One-group Pre-test and Post-test Design*

![One-group Pre-test and Post-test Design](image)

(Source: (Gaamouri et al., 2019))

In the picture above, it is indicated that in the initial treatment, the sample will be divided into groups, after which the sample will be given a pre-test test, and from the findings of the pre-test, the researcher will obtain reliable data that will later be treated. Following therapy, researchers will administer a post-test to determine whether there are any significant positive results.

### 2.3 Research Instruments

The research instrument used a 30-item pre-test and posttest exam. Students will take a 30-item pre-test and post-test before and after the intervention is put into place as part of the research instrument. Where in the procedural exam questions have been tested for validity and reliability by experts with a validity value of 0.72 and reliability of 0.80. So that based on the results of validity and reliability, the test questions can be given to students.

Validation is done by seeking advice and assistance from specialists after seeking approval from superiors. It was approved by the Head Teacher and Master Teacher and checked the created a Table of Specifications (TOS) to serve as a reference for creating the exam based on the learning capabilities that must be maintained in that quarter. To assess the efficacy of the researchers' intervention, it lasted for 8 weeks. The pre-test and post-test were the instruments used to gather the data needed in the study which was validated by the Master Teacher and Head Teacher. Specifically, the study specifically aimed to determine the following: (1) evaluate the learning performance of the students in Physical Education before and after using simplified learning materials, and (2) identify the said significant differences between the students' mean scores before and after the intervention.

### 2.4 Procedure

The first step that researchers conduct is to assemble students and obtain directions that will be passed by pupils. Furthermore, after receiving direction, students will administer a pretest. After the pre-test, receive the treatment that the researcher will provide. Finally, the study includes a post-test with the researcher's premise that there is a significant rise from before to after treatment.
2.5 Data Analysis

JASP software was utilized to analyze the data. To determine the results of the data, the study used the following:

1. The pretest and post-test scores were conducted before and after the usage of enhanced learning materials, and the mean and standard deviation were used to assess the results; and

2. Paired T-Test was used to see if there was a significant difference between the learners' mean pretest and post-test scores.

The researchers requested permission from the School Head and Department Head to conduct the study to achieve the study's purpose. Following approval, the study was immediately carried out. The pre-test took place in the first week of the fourth quarter, the intervention lasted four weeks, and the post-test took place in the fourth week. The COVID-19 outbreak has resulted in entire school closures, the pretest and post-test were conducted using Google forms. The pretest and posttest were both conducted using a 30-item teacher-created test. The Master Teacher proofread and approved the test and materials. Pretest administration, intervention implementation, and post-testing all took place over eight weeks.

3. RESULTS

3.1 Normality Test

Table 1.

<table>
<thead>
<tr>
<th>Level of Normality</th>
<th>W</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Post test</td>
<td>0.974</td>
<td>0.305</td>
</tr>
</tbody>
</table>

According to the data above, the normality test during the pre-test and post-test found a W value of 0.974 and a p value of 0.305. Because this value is more than 0.05, we can conclude that it is regularly distributed.

Table 2.

<table>
<thead>
<tr>
<th>Pre-Test and Post test scores of the respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>Pretest</td>
</tr>
<tr>
<td>Post test</td>
</tr>
</tbody>
</table>

In table 2, the pre-test SD value from a sample of 52 respondents was 5.384, with a mean of 10.808 and a SE of 0.608. Furthermore, the post-test value had an SD of 3.241 with a mean of 13.346 and a SE of 0.449.
Table 3.

**Significant difference between Pre-Test and Post test scores**

<table>
<thead>
<tr>
<th>Paired Samples T-Test</th>
<th>95% CI for Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Pretest - Posttest</td>
<td>3.208</td>
</tr>
</tbody>
</table>

Table 3 indicates the substantial difference in the respondents' pre-test and post-test scores. Paired Samples T-Test findings show that the mean difference of -2.538 is significant, with a p-value of 0.002. According to statistics, the intervention improves the performance of grade 8 students.

4. DISCUSSION

According to Table 1, the respondents' pretest and posttest scores indicate that their pretest and post-test scores were only accurate based on their prior understanding of the lecture. The Shapiro-Wilk test of normality can be used to establish that the data does not violate the assumption of normality because the p-value is greater than 0.05.

Moreover, Table 2 displays the respondents' pre-test and post-test scores, with the posttest result being greater than the pretest result, as stated in the descriptive table. The pre-test had a mean of 10.808 and SD of 4.384, whereas the post-test had a mean of 13.346 and SD of 3.241, indicating that there is a difference in the results of students' scores while employing simplified learning materials. It explains how to use simplified learning materials effectively. It also demonstrates the effectiveness of the simplified learning materials used in the before and after outcomes of their scores. The fact that the students' ratings differ indicates that the intervention had an effect on how they viewed and understood the instruction using the simplified learning materials (SLM) in physical education.

Throughout the teaching and learning process, effective teaching necessitates the use of well-designed and differentiated instructional materials such as interactive media (Antonietti & Giorgetti, 2006). Because basically the task of an educator is as a facilitator (Munir, Zahed, et al., 2022). Whether or not students are happy in absorbing the knowledge provided depends on how the teacher provides stimulus to students (Nia et al., 2022). If in the learning process the teacher is only guided by lecture-based learning resources, then the effect felt by students will feel boring (Zahed et al., 2022). Unlike if the treatment given by the teacher by providing creative and innovative material, will increase the passion of students in the teaching and learning process. As (Dimitrov & Rumrill, 2003) various pretest-posttest designs are provided in
a way that will assist treatment professionals in better analyzing, implementing, and determine the effects of treatments. It has a significant impact on students' learning experiences when they use the teachers’ provided simplified learning materials. Moreover, (Baccin et al., 2020) a significant statistical difference between the results of the pretest and posttest adjustments revealed a substantial expansion of knowledge following the adoption and execution of a particular method.

The research can be used as a source of information and to help other teachers increase their knowledge on how to apply it since it can help students focus and become more committed to their learning activities. Similarly, (Barnett, 2011) reiterates that educational interventions can have significant short- and long-term effects on cognition, social-emotional functioning, and academic achievement, development, and academic progress. Likewise, data from such a design that examined, for instance, whether instruction influenced understanding, skills, or attitudes could help advance practice (Zientek et al., 2016). With these, the next generation will be taught that using simplified learning materials is an effective way to provide instructions while also allowing students to have an equal opportunity at answering the modules on time and efficiently which also suggests that simplified learning materials for physical education lessons are a smart method for instructors to concentrate more on their own learning and think more carefully about high-quality material.

Furthermore, Table 3 shows the significant difference in the pre-test and post-test scores of the respondents. Paired Samples T-Test findings show that the mean difference of -2.538 is significant, with a p-value of 0.002. According to the results of the study, the intervention improves the performance of grade 8 students. Teachers observe that offering tangible, explicit, and direct content of reading materials and providing 2 to 4 exercises in Physical education classes helps because this study goes through a complete investigation and concludes in this type of intervention. This ensures that the addressed competencies and goals are met. As with the study of (Tejania et al., 2013) educators have always been looking for better ways to educate and to keep their students interested with what they're experiencing and to affect their academic performance. Borderless instruction, in accordance with (Ulfa, 2017) places an emphasis on the student and offers assistance to enable their success. The usage of and development of simplified learning materials will improve students’ ability to finish other tasks in addition to the numerous lessons in physical education. The intervention was a powerful tool for assisting students in completing their tasks and completing the learning activities for each subject.

5. CONCLUSION

Based on the results, the following conclusions were drawn: (1) The Grade 8 respondents’ mean scores in the pre-test indicate that they do not yet have a lot of knowledge about the lesson to be discussed in Physical Education. (2) The mean scores of the students in their post-test show that the students’ scores in Physical education had an increase result by using simplified learning materials (SLM). (3) The findings of the pre-and post-tests indicate that the used of simplified learning materials (SLM) has a substantial effect on Grade 8 students learning performance in Physical Education. This intervention has been proved to have a good impact on students. Teachers should be given focus in enhancing their competencies specifically in designing or making contents in their simplified learning materials (SLM). Teachers and students must focus on enhancing the digital literacy as well as physical literacy that provides a rich data of content to the simplified learning materials (SLM). Further studies should
incorporate to produce a better outcome in Physical Education. Future researchers who adopt the study should additionally take a benchmarking tool for further research implications.

ACKNOWLEDGMENTS

The researchers acknowledged everyone who contributed to the success of the research and intervention.

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