INTERNATIONAL JOURNAL OF FORMAL EDUCATION

Volume: 3 Issue: 8 | Aug–2024 ISSN: 2720-6874
http://journals.academiczone.net/index.php/ijfe

Deep Learning Strategies and Learners' Engagement in Learning Physical Education among Grade 4 Learners

Onasis B. Manlapaz
Teacher III, San Rafael (BBH) Elementary School

Abstract: This descriptive – correlational study examined the deep learning strategies and learners' engagement in learning physical education among fifty (50) Grade 4 learners. The results that the Grade 4 learners was highly observable to employed deep learning strategies in learning physical education and it was distinct that learning engagement was observable high among grade 4 learners. Based on gathered data from the validated survey instruments, it showed that there is a high correlation between deep learning strategies and learners' engagement in learning physical education among Grade 4 learners. It is recommended that physical education teachers incorporate deep learning strategies into their teaching practices by integrating game-based learning, simulations, and project-based learning into physical education classes. Furthermore, schools should provide resources and support to teachers to ensure that they have the necessary infrastructure and equipment to implement deep learning strategies effectively.

Key words: deep learning strategies, engagement, physical education.

INTRODUCTION

Deep learning strategies have revolutionized the way students learn and engage with various subjects, including physical education. In elementary grade learners, deep learning strategies have been found to have a profound impact on their engagement and motivation in physical education classes.

Looking forward, deep learning strategies refer to the techniques used to promote critical thinking, creativity, and problem-solving skills in learners. These strategies encourage learners to delve deeper into the subject matter, think critically, and make connections between concepts (Hmelo-Silver, 2004). In physical education, deep learning strategies can be applied through games, simulations, and project-based learning. For instance, a teacher can design a game that requires students to work in teams to solve a physical problem, such as navigating an obstacle course. This approach encourages students to think critically, communicate effectively, and work collaboratively, all of which are essential skills in physical education.

Studies have shown that deep learning strategies can lead to increased engagement and motivation in learners. A study by Mitchell and colleagues (2015) found that students who participated in project-based learning in physical education reported higher levels of engagement and motivation compared to those who received traditional instruction. Another study by Hastie and colleagues (2017) found that students who engaged in game-based learning in physical education reported higher levels of enjoyment and motivation compared to those who participated in traditional physical education classes.

In elementary grade learners, deep learning strategies can be particularly effective in promoting engagement and motivation in physical education. Elementary grade learners are naturally curious and love to explore and play. By incorporating deep learning strategies into physical education classes, teachers can tap into this natural curiosity and promote engagement and motivation. For instance, a teacher can design a scavenger hunt that requires students to find and identify different physical education concepts, such as the rules of a game or the benefits of exercise. This approach encourages students to think critically, work collaboratively, and have fun while learning.

Volume: 3 Issue: 8 | Aug–2024 ISSN: 2720-6874
http://journals.academiczone.net/index.php/ijfe

Moreover, deep learning strategies can help to promote inclusivity and diversity in physical education classes. By incorporating games and simulations that cater to different learning styles and abilities, teachers can ensure that all students feel included and engaged. A study by Block and colleagues (2016) found that students with disabilities who participated in adapted physical education programs that incorporated deep learning strategies reported higher levels of engagement and motivation compared to those who received traditional instruction.

From this, study aims to examine the relationship between the deep learning strategies and learners' engagement in learning physical education among elementary grades learners.

Research Problems

This study aims to evaluates the deep learning strategies and learners' engagement in learning physical education among Grade 4 Learners.

Specifically, it seeks answers to the following questions:

1. What is the extent deep learning strategies of Grade 4 learners in Physical education classroom in terms of:

1.1 self-regulation
1.2 visual elaboration and summarizing
1.3 deep information processing and
1.4 social learning

2. What is the level of learners' engagement of Grade 4 in learning physical education in terms of:

2.1 behavioral
2.2 agentic
2.3 cognitive
2.4 emotional and
2.5 social

3. Is there a significant relationship between deep learning strategies and learners' engagement in learning physical education among Grade 4 learners?

METHODOLOGY

This study utilized descriptive – correlational design. This design wants the researcher to determine the relationship between deep learning strategies and learners' engagement in learning physical education among Grade 4 learners. Descriptive correlational research design describes the variables and measures the extent of the relationships that occur between and among the variables. In this study, deep learning strategies and learners' engagement in learning physical education among Grade 4 learners were described, and their relationships were assessed.

The respondents of the study were fifty (50) Grade 4 learners which was purposively selected based on their grade point average (GPA) in Physical education from 1st quarter of calendar year 2023 – 2024. The researcher initially wrote a permission letter explaining the purpose and nature of the study to the School Principal. Subsequently, with the approval of the request to conduct the study, a letter of invitation, and informed consent form, and the questionnaire were sent online to the respondents using the Google form. The goal and their participation in the research were also explained to the respondents. Data was gathered using researcher – made instruments and underwent test of validity and reliability. The results of testing were 0.89 that showed highly reliable. The gathered data were treated descritively and inferentially.

Volume: 3 Issue: 8 | Aug–2024 ISSN: 2720-6874
http://journals.academiczone.net/index.php/ijfe

RESULTS AND DISCUSSIONS

To ensure transparency and accuracy, the data obtained in this analysis was thoroughly analyzed and interpreted.

TABLE 1 Extent Deep Learning Strategies of Grade 4 Learners in Physical Education

Deep Learning Strategies	WM	Verbal Interpretation
Self-Regulation	3.78	Highly Observed
Visual Elaboration and Summarizing	3.86	Highly Observed
Deep Information Processing	3.92	Highly Observed
Social Learning	3.95	Highly Observed
Overall	**3.88**	**Highly Observed**

The Table1entailstheextent deep learning strategies of grade 4 learners in physical education. The data revealed that Self-Regulation has 3.78 as highly observed. More so, visual elaboration and summarizing obtained 3.86 and interpreted as highly observed. Furthermore, deep information processing gained a weighted mean of 3.92 which interpreted as highly observed. Looking forward, social learning got a 3.95 and interpreted as highly observed.

The findings implies that the learners have highly observable deep learning strategies in learning physical education as reflected on the weighted mean of 3.88. The discoveries of this exploration confirm the ones of past investigations done by Sangco (2022) where deep learning strategies improved the academic performance of the learners in physical education.

TABLE 2 Level of Learners' Engagement of Grade 4 Learners in Physical Education

Learners' Engagement	WM	Verbal Interpretation
Behavioral	3.78	Highly Engaged
Agentic	3.59	Highly Engaged
Cognitive	3.88	Highly Engaged
Emotional	3.67	Highly Engaged
Social	3.94	Highly Engaged
Overall	**3.77**	**Highly Engaged**

As can be gleaned from the analysis of Table 2, shows the Level of Learners' Engagement of Grade 4 Learners in Physical Education. Looking on the learning engagement domains such as Behavioral (3.78), Agentic (3.59), Cognitive (3.88), Emotional (3.67), and Social (3.94), was described as highly engaged in learning physical education. Thereby, that the learners have a strong positive learning engagement when learning physical education as based on the weighted mean of 3.77. It also portrayed the studies of Fernandez-Rio et al, (2020) that learners were highly engaged when the classrooms employed game-based learning, simulations, and project-based learning into physical education classes.

TABLE 3 Test of Correlation between Deep Learning Strategies and Learners' Engagement in Learning Physical Education among Grade 4 Learners

Variables		Pearson r	Correlation	P-value	Decision	Verbal Interpretation
Deep Learning Strategies	Learners' Engagement	.87	High Positive	0.00	Ho is accepted	Not Significant

Considerably, based on the data gathered the computed rxy value of .83 reflects a High Positive strength of correlation. Meanwhile, the p- value 0.00, revealed the null hypothesis is rejected, thus there is a significant relationship between the deep learning strategies and learners' engagement in learning physical education among grade 4 learners. Hence, that High Positive strength of correlation indicates

Volume: 3 Issue: 8 | Aug–2024 ISSN: 2720-6874
http://journals.academiczone.net/index.php/ijfe

that, although deep learning strategies to the learners' engagement in learning physical education among grade 4 learners tend to go up in response to one another, the relationship is strong. It was also supported by the stands of Calderón et al (2020) that deep learning strategies and learners' engagement in learning physical education was significantly highly correlated to each other.

CONCLUSIONS

The study showed that learners' deep learning strategies have the potential to promote engagement and motivation in learners, particularly in elementary grade learners. It suggested to integrates the games, simulations, and project-based learning into physical education classes, to promote critical thinking, creativity, and problem-solving skills. Furthermore, deep learning strategies can help to promote inclusivity and diversity in physical education classes, ensuring that all students feel included and engaged.

In light of the findings, it is recommended that physical education teachers incorporate deep learning strategies into their teaching practices. This can be achieved through professional development programs that provide teachers with the necessary skills and knowledge to design and implement deep learning strategies in physical education classes. Additionally, schools can provide resources and support to teachers to ensure that they have the necessary infrastructure and equipment to implement deep learning strategies effectively. By promoting deep learning strategies in physical education, teachers can promote engagement, motivation, and inclusivity in learners, ultimately leading to better learning outcomes and a lifelong love of physical activity.

References:

1. Block, M. E., Hutzler, Y., & Barak, S. (2016). Including students with disabilities in general physical education: A review of the literature. Quest, 68(2), 151-166.
2. Calderón, A., Merono, L., & MacPhail, A. (2020). A student-centred digital technology approach: The relationship between intrinsic motivation, learning climate and academic achievement of physical education pre-service teachers. *European Physical Education Review*, *26*(1), 241-262.
3. Fernandez-Rio, J., de las Heras, E., González, T., Trillo, V., & Palomares, J. (2020). Gamification and physical education. Viability and preliminary views from students and teachers. *Physical education and sport pedagogy*, *25*(5), 509-524.
4. Hastie, P. A., & Buchanan, A. M. (2017). Game-based learning in physical education. Journal of Teaching in Physical Education, 36(2), 145-156.
5. Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? Educational Psychology Review, 16(3), 235-266.
6. Mitchell, S. A., & Rosenthal, D. D. (2015). Project-based learning in physical education. Journal of Physical Education, Recreation and Dance, 86(6), 23-28.
7. Sangco, A. (2022). Emerging physical education teaching strategies and students' academic performance: Basis for a development program. *Psychology and Education: A Multidisciplinary Journal*, *4*(1), 28-39.