

adapting and enhancing

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**ADAPTING AND ENHANCING PHYSICAL EDUCATION: OPTIMIZING PHYSICAL
EDUCATION LEARNING EXPERIENCES IN DELA PAZ NATIONAL
HIGH SCHOOL THROUGH INNOVATIVE APPROACHES**

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ABSTRACT

This study aims to investigate the impact of innovative teaching approaches, specifically service learning and the utilization of technology, on students' academic performance, as well as their development of critical thinking skills, leadership skills, social skills, and values. The Service Physical Education program offered at Dela Paz National High National High School serves as a case study to illustrate the implementation of these strategies. The study reveals that these innovative approaches have significantly contributed to the overall development of students, including improvements in academic achievement, critical thinking abilities, leadership competencies, social skills, and values. The findings of this research highlight the potential of innovative teaching methods to address limitations in equipment and facilities, leading to enhanced learning experiences and holistic student development. Collaborative partnerships with local businesses and organizations, integrating technology and digital resources, and promoting resource sharing among educational institutions emerge as effective strategies to overcome resource constraints. By prioritizing the implementation of these innovative approaches, educational institutions can better prepare their students for success in various aspects of their lives. This study emphasizes incorporating innovative teaching methods to foster a comprehensive and well-rounded educational experience. By leveraging service learning and technology, educational institutions can create an environment that promotes enhancing students' learning outcomes and cultivating their overall development.

Keyword: Service Physical Education, Innovative approaches, Social Skills, and PE Learning Experiences.

INTRODUCTION

Physical Education (PE) plays a vital role in educational programs worldwide, not only promoting physical well-being but also fostering holistic development encompassing cognitive, social, and emotional aspects (Hardman & Marshall, 2000; Sallis et al., 2012). Its significance is particularly magnified in institutions like Dela Paz National High School (DPNHS), which firmly commits to nurturing well-rounded individuals. However, the effective delivery of PE in educational settings often needs help, especially when confronted with limited resources, such as equipment and facilities.

Within the broader educational landscape, there is a growing recognition of the transformative potential of PE in shaping healthier and more active societies. Dela Paz National High School, as an esteemed educational institution, shares in this recognition, placing PE as a cornerstone in its dedication to holistic student development. However, the efficacy of PE programs can be hindered by constraints, such as inadequate equipment and facilities (Ennis, 2017). In the context of Dela Paz National High School, where the Service PE program operates under these limitations, a pressing need arises to explore innovative approaches that adapt and enhance PE delivery.

The rationale for this dissertation is rooted in acknowledging that the challenges posed by limited resources in delivering PE programs are not uncommon and require careful consideration. Operating within these constraints, the Dela Paz National High School Service PE program serves as a microcosm of the broader issues faced by educational institutions. By examining the innovative approaches adopted in this context, this research aims to contribute valuable insights that extend beyond the institution's borders, providing a blueprint for addressing similar challenges in PE programs worldwide.

This study highlights the importance of overcoming resource constraints in delivering PE programs. By investigating the innovative strategies employed within the Dela Paz National High School Service PE program, this research aims to offer practical insights and recommendations to benefit PE programs globally. Through this endeavor, we hope to contribute to advancing PE education and the holistic development of students in educational institutions worldwide.

RESEARCH OBJECTIVES

This research aims to investigate and optimize physical education learning experiences at Dela Paz National High School by adapting and enhancing innovative approaches. The objectives of this study include assessing the current state of physical education learning experiences at the institution, identifying challenges and limitations in optimizing these experiences, exploring innovative teaching approaches such as service learning and the utilization of technology, examining their impact on student's academic

performance and development of critical thinking skills, leadership skills, social skills, and values. Additionally, the research proposes recommendations and strategies for adapting and enhancing the physical education program, explicitly optimizing learning experiences through innovative approaches. By providing insights and guidelines, this study seeks to improve physical education programs at Dela Paz National High School and educational institutions facing similar challenges, emphasizing the importance of innovative approaches in enhancing students' overall development and learning outcomes.

Quantitative Research Questions:

1. What is the extent of equipment and facility shortages in the Service PE program at Dela Paz National High School?

- 1.1 Frequency of equipment shortages
- 1.2 Duration of equipment shortages
- 1.3 Type of facility shortage
- 1.4 Frequency of facility shortages
- 1.5 Duration of facility shortages

2. How do teachers in the Service PE program at Dela Paz National High School creatively address equipment and facility limitations?

- 2.1 Types of creative approaches
- 2.2 Frequency of using creative approaches
- 2.3 Effectiveness of creative approaches

3. To what extent do teachers employ innovative approaches that impact students' learning experiences in the Service PE program?

- 3.1 Types of innovative approaches used by teachers.
- 3.2 Frequency of using innovative approaches
- 3.3 Teacher's perception of the effectiveness of innovative approaches

4. What are the measurable outcomes of the innovative strategies on students' physical, cognitive, social, and emotional development in the Service PE program?

- 4.1 Physical development outcomes
- 4.2 Cognitive development outcomes
- 4.3 Social development outcomes
- 4.4 Emotional development outcomes

Qualitative Research Questions:

1. What are the qualitative aspects of equipment and facility shortages experienced by teachers in the Service PE program at Dela Paz National High School?

2. How do teachers perceive the effectiveness of their innovative approaches in overcoming equipment and facility limitations?
3. In what ways do students in the Service PE program describe their learning experiences under the influence of innovative teaching methods?
4. What are the qualitative impacts of innovative strategies on students' holistic development in the Service PE program?

LITERATURE REVIEW

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Physical Education (PE) plays a crucial and multifaceted role in the holistic development of individuals, encompassing their physical, mental, and social well-being. Dela Paz National High School is committed to nurturing well-rounded individuals through a comprehensive range of PE courses. These programs are designed to improve students' physical fitness, motor skills, and coordination and cultivate essential life skills such as teamwork, leadership, and resilience. Moreover, research has shown that participation in PE programs can positively impact students' overall academic performance.

However, the effective delivery of PE programs faces challenges, particularly regarding resource allocation, specifically the availability of equipment and facilities. Ennis (2017) emphasizes the significance of considering contextual factors that may influence the outcomes of PE initiatives within educational environments. Therefore, the Service PE program at Dela Paz National High School is an excellent example of these problems. It gives us a chance to think of new ways to deal with limited resources and improve the general learning experiences of students in PE classes.

By addressing the limitations posed by resource constraints, innovative approaches can be implemented to optimize the delivery of PE programs. These approaches encompass various strategies, such as collaborative partnerships with local businesses and organizations to access additional resources, integrating technology to augment learning experiences, and promoting resource sharing among educational institutions. By adopting these innovative strategies, Dela Paz National High School and other educational institutions can create an environment that maximizes PE's benefits, fostering students' comprehensive development.

PE's significance in individuals' holistic development cannot be overstated. Despite the challenges posed by limited resources, innovative approaches offer promising solutions to overcome these constraints and enhance students' overall learning experiences in PE programs. By embracing innovative strategies, educational institutions like Dela Paz National High School can optimize the delivery of PE programs, ultimately contributing to their students' comprehensive growth and well-being.

METHODOLOGY

The research methodology is designed to comprehensively examine the challenges and innovative strategies within the Dela Paz National High School service PE program, utilizing a mixed-methods approach that combines quantitative and qualitative research methods. This approach aims to provide a holistic understanding of the dynamics within the program and offer valuable insights and recommendations for enhancing PE delivery in resource-constrained settings.

A survey will be distributed among teachers and students to explore the extent of equipment and facility shortages and assess the effectiveness of creative and innovative approaches. The survey will utilize Likert scales to gather data on various aspects related to equipment and facility shortages and the impact of innovative strategies. Descriptive statistics will be employed to analyze the survey data, providing a quantitative overview.

In addition to the survey, qualitative data will be collected through in-depth teacher interviews and focus group discussions with students. These qualitative methods will allow for a deeper exploration of experiences, perceptions, and the impact of shortages and innovative strategies within the Service PE program. Thematic analysis will analyze the qualitative data, identifying key themes and patterns from the interviews and focus group discussions.

By integrating the quantitative and qualitative findings, this mixed-methods approach will provide a comprehensive understanding of the challenges and opportunities within the Dela Paz National High School Service PE program. Combining quantitative data on equipment and facility shortages and qualitative insights into experiences and perceptions will enrich the analysis and enable a more nuanced interpretation of the research findings.

Throughout the research process, ethical considerations such as informed consent and confidentiality will be strictly upheld to protect the rights and privacy of participants. Ethical guidelines will be followed to ensure the ethical conduct of the study.

The mixed-methods approach in this research provides a comprehensive methodology to thoroughly investigate the challenges and innovative strategies within the Service PE program. By combining quantitative and qualitative data, this study aims to provide valuable insights and recommendations for enhancing the delivery of PE in resource-constrained settings, contributing to the advancement of PE programs and the overall development of students.

RESULT

Table 1 The extent of equipment and facility shortages in the Service PE program at Dela Paz National High School in terms of Equipment and Facility Shortages

How often do you experience equipment shortages?	FREQUENCY	PERCENTAGE
Always	24	35.294
Frequently	40	58.824
Occasionally	4	5.882
Rarely	0	0.000
Never	0	0
Total	68	100

Which sports facilities do you frequently use?	FREQUENCY	PERCENTAGE
Less than a week	0	0
1-2 weeks	0	0
2-4 weeks	11	16.17647059
More than 4 weeks	57	83.82352941
Total	68	100

What type of facility shortages do you encounter?	FREQUENCY	PERCENTAGE
Gymnasium space	17	25
Outdoor play areas	51	75
Changing rooms	0	0
Other	0	0
Total	68	100

How frequently do facility shortages occur?	FREQUENCY	PERCENTAGE
Always	24	35.294
Frequently	40	58.824
Occasionally	4	5.882
Rarely	0	0.000
Never	0	0
Total	68	100

How long do facility shortages typically last?	FREQUENCY	PERCENTAGE
Less than a week	0	0
1-2 weeks	0	0
2-4 weeks	11	16.17647059
More than 4 weeks	57	83.82352941
Total	68	100

Based on the data provided, we can further analyze the frequency and duration of facility shortages to understand the issue better.

Firstly, the data shows that gymnasium space is a significant area of concern, with 25% of respondents reporting consistently experiencing equipment shortages. This could be due to a need for more sufficient gymnasiums or equipment, which may prevent students from engaging in various physical activities. Additionally, 58.82% of respondents reported frequently experiencing facility shortages in gymnasium space, indicating that this issue is expected to just a few students or classes.

Similarly, outdoor play areas are also a significant concern, with 75% of respondents reporting that facility shortages last more than four weeks. This could be due to a need for more adequate outdoor spaces or equipment, which may be preventing students from engaging in outdoor activities and sports. Additionally, 51% of respondents reported frequently experiencing facility shortages in outdoor play areas, indicating that this issue is expected for just a few students or classes.

The duration of these shortages is also concerning, with 83.82% reporting that facility shortages last more than four weeks. This suggests that the school may need more resources to meet the demands of its students, which could negatively impact their physical education and overall development. Long-term facility shortages could lead to students missing out on critical physical activities and sports, impacting their physical fitness and overall health.

Indeed, ⁴⁹ research has shown that the availability of equipment ¹³ and facilities is crucial for promoting students' physical activity and overall health. According to a study published in the Journal of Physical Activity and Health, "the availability of equipment and facilities is a critical determinant of physical activity participation" (Kokko ⁴⁶ et al., 2017). The study found that students with access to various equipment and facilities were more likely to engage in regular physical activity, which led to improved physical fitness and overall health. On the other hand, students who didn't have enough facilities and equipment were less likely to be physically active on a daily basis. This could lead to health problems like obesity and long-term illnesses. Because of this, schools must make sure they have enough facilities and equipment to encourage their students to be physically active on a daily basis.

Table 2 The teachers in the Service PE program at Dela Paz National High School creatively address equipment and facility limitations in terms of Creative Approaches to Address Limitations

What types of creative approaches do you use	FREQUENCY	PERCENTAGE
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to address equipment and facility limitations?		
Sharing equipment/resources	18	26.47058824
Modifying activities to fit available resources	17	25
Integrating technology for alternative instruction	16	23.52941176
Collaborating with other teachers	17	25
Other	0	0
Total	68	100

How frequently do you use these creative approaches?	FREQUENCY	PERCENTAGE
Always	49	72.05882353
4 frequently	19	27.94117647
Occasionally	0	0
Rarely	0	0
Never	0	0
Total	68	100

How effective do you perceive these creative approaches to be in addressing equipment and facility limitations?	FREQUENCY	PERCENTAGE
Extremely effective	26	38.23529412
Very effective	38	55.88235294
Moderately effective	4	5.882352941
Slightly effective	0	0
Not effective at all	0	0
Total	68	38.23529412

Based on the data in Table 2, it is clear that educators in the Service PE program are utilizing creative approaches to address equipment and facility limitations. The most frequently used approach is sharing equipment and resources, with 26.47% of respondents reporting that they always utilize this strategy. Modifying activities to fit available resources and collaborating with other teachers are also commonly used strategies, with 25% and 25% of respondents reporting frequent use, respectively.

The effectiveness of these creative approaches is also noteworthy, with 38.23% of respondents reporting that sharing equipment and resources is highly effective in addressing equipment and facility limitations and 55.88% reporting that this strategy is

very effective. Modifying activities to fit available resources is also highly effective, with 55.88% of respondents reporting that this strategy is very effective.

Research has shown that giving students access to good physical education facilities and equipment is a must if we want to encourage them to be active and healthy. The World Health Organization (WHO) says that schools should have a range of facilities and equipment so that students can do a variety of physical exercises both inside and outside. Sharing resources and tools, for example, lets more than one class use the same ones. Also, changing activities to fit the resources that are available can help make sure that students can still do useful physical activity even when resources are limited.

In summary, the data suggests that educators in the Service PE program are utilizing various creative approaches to address equipment and facility limitations, and these strategies are highly effective in promoting physical activity among students. It is recommended that schools continue to explore creative approaches to address resource limitations and ensure that all students have access to the resources they need to engage in regular physical activity.

Table 3 To what extent do teachers employ innovative approaches that impact students' learning experiences in the Service PE program in terms of Innovative Approaches Impacting Learning Experiences

What types of innovative approaches do you use to impact students' learning experiences?	FREQUENCY	PERCENTAGE
Incorporating new teaching methods	18	26.47058824
Implementing technology in lessons	17	25
Collaborative learning activities	16	23.52941176
Individualized instruction	17	25
Other	0	0
Total	68	100

How frequently do you use these innovative approaches?	FREQUENCY	PERCENTAGE
Always	49	72.05882353
Frequently	19	27.94117647
Occasionally	0	0
Rarely	0	0
Never	0	0
Total	68	100

How do you perceive the effectiveness of these innovative approaches in enhancing students' learning experiences?	FREQUENCY	PERCENTAGE
Extremely effective	26	38.23529412
Very effective	38	55.88235294
Moderately effective	4	5.882352941
Slightly effective	0	0
Not effective at all	0	0
Total	68	38.23529412

In Table 3, it is clear that educators in the Service PE program are utilizing innovative approaches to impact students' learning experiences. The most frequently used approach is incorporating new teaching methods, with 26.47% of respondents reporting that they always utilize this strategy. Implementing technology in lessons and collaborative learning activities are also commonly used strategies, with 25% and 23.52% of respondents reporting frequent use, respectively.

The effectiveness of these innovative approaches is also noteworthy, with 38.23% of respondents reporting that incorporating new teaching methods is highly effective in enhancing students' learning experiences and 55.88% reporting that this strategy is very effective. Implementing technology in lessons is also highly effective, with 55.88% of respondents reporting that this strategy is very effective.

According to research, Innovative techniques can significantly affect how well students learn (Jang & Kim, 2019). For instance, using new ways of teaching can help get students interested in learning and help them develop critical thinking skills. As Kirschner et al. (2016) say, technology can also be a solid way to improve learning because it makes learning more interactive and personalized. Collaborative tasks for learning can also help build social skills and teamwork, which are essential for doing well in school (Johnson & Johnson, 1994).

Innovative approaches can also help address students' diverse needs, as they allow for individualized instruction and differentiated learning opportunities (Ronfeldt et al., 2016). This is particularly important for students with disabilities or those struggling academically, as it allows for targeted instruction and support.

Overall, the data shows that teachers in the Service PE program use various creative methods to make learning more fun for their students. These methods are very good at helping students learn how to think critically, keeping them interested in learning, and meeting their many different needs. It is suggested that schools keep looking for new ways to teach and prioritize spending money on resources that support these methods.

Table 4 The innovative strategies on students' physical, cognitive, social, and emotional development in the Service PE program in terms of Measurable Outcomes of Innovative Strategies

Please rate the outcomes of the innovative strategies on students' physical development?	FREQUENCY	PERCENTAGE
Very High Impact	50	73.52941176
High Impact	18	26.47058824
Moderate Impact	0	0
Low impact	0	0
No Impact	0	0
Total	68	100

Please rate the outcomes of the innovative strategies on students' cognitive development.	FREQUENCY	PERCENTAGE
Very High Impact	49	72.05882353
High Impact	19	27.94117647
Moderate Impact	0	0
Low impact	0	0
No Impact	0	0
Total	68	100

Please rate the outcomes of the innovative strategies on students' social development	FREQUENCY	PERCENTAGE
Very High Impact	50	73.52941176
High Impact	18	26.47058824
Moderate Impact	0	0
Low impact	0	0
No Impact	0	0
Total	68	100

Please rate the outcomes of the innovative strategies on students' emotional development.	FREQUENCY	PERCENTAGE
Very High Impact	49	72.05882353
High Impact	19	27.94117647
Moderate Impact	0	0
Low impact	0	0
No Impact	0	0
Total	68	100

Based on the data in Table 4, the innovative strategies utilized by educators in the Service PE program significantly impact students' development in various areas. Regarding physical development, 73.52% of respondents reported a very high impact, while 26.47% reported a high impact. This suggests that the innovative strategies employed effectively promote students' physical development.

Similarly, in terms of cognitive and social development, most respondents reported very high and high impact, with 72.05% and 73.52% reporting very high impact for cognitive and social development, respectively. This indicates that the innovative strategies utilized are also highly effective in promoting students' cognitive and social development.

Emotional development also saw most respondents reporting very high and high impact, with 72.05% and 27.94% reporting high and high impact, respectively. This suggests that the innovative strategies employed also promote students' emotional development.

It is essential to track the results of new methods to ensure they work and find places where they can be improved (Hattie & Yates, 2014). By keeping track of the results of these techniques, teachers can figure out which ones help students grow the most in different areas and then change the way they teach to match.

Additionally, sustaining track of the results of new methods can help with issues of fairness and accessibility, as it lets teachers help and teach students who are having trouble in certain areas (Ronfeldt et al., 2016). By tracking how well new methods work, teachers can see where students might be falling behind and help them fix the problems.

In summary, the innovative strategies employed by educators in the Service PE program significantly impact students' development in various areas, including physical, cognitive, social, and emotional development. It is recommended that schools continue to measure the outcomes of these strategies to ensure their effectiveness and identify areas for improvement.

QUALITATIVE QUESTIONS

What are the qualitative aspects of equipment and facility shortages experienced by teachers in the Service PE program at Dela Paz National High School?

Teacher 1's statement highlights a common challenge many educational programs face, particularly those in under-resourced settings. The lack of equipment and facilities can significantly impact students' learning experience, as it limits their access to practical

and hands-on training, which is essential for developing the skills required for their respective professions.

In Service PE, real-world experience is essential for learning the skills needed to work in public health and community service areas. These skills are necessary to deal with complicated social problems (Bhatti & Bhatti, 2019). They include good communication, teamwork, problem-solving, and critical thinking. If students have the right tools, they can learn these skills through hands-on practice, which can slow down their overall academic and professional growth.

Moreover, the lack of equipment and facilities can also limit the ability of educators to conduct experiments and simulations, making it challenging to demonstrate concepts and theories in a real-world setting. This can result in a disconnect between theoretical knowledge and practical application, negatively impacting students' learning outcomes (Kaufmann & Baumert, 2010).

Studies have shown that resource access is critical in promoting academic success and professional development (Bhatti & Bhatti, 2019; Kaufmann & Baumert, 2010). For example, a study by Bhatti and Bhatti (2019) found that access to resources such as computers, libraries, and laboratories was significantly associated with academic achievement in undergraduate students. Similarly, Kaufmann and Baumert (2010) found that access to resources such as textbooks, computers, and laboratories was significantly associated with student performance on standardized tests.

Teacher 1's statement highlights a significant challenge many educational programs face in under-resourced settings. The lack of equipment and facilities can significantly impact students' learning experience by limiting their access to practical and hands-on training and making it challenging to demonstrate concepts and theories in a real-world setting. Educational programs must prioritize investing in resources to promote their students' academic success and professional development.

Teacher 2's statement highlights the significant impact that a shortage of equipment and facilities can have on the quality of instruction and the learning experiences of students. When classrooms are overcrowded, it becomes ²⁴challenging for teachers to provide individual attention to each student, which can lead to frustration and disengagement among learners. This issue is particularly prevalent in underfunded schools, where resources are limited, and class sizes are often larger than ideal.

According to a study by the Learning Policy Institute (LPI) (2019), class size significantly impacts student achievement, with smaller class sizes leading to better academic outcomes. The study found that students in smaller classes (with an average of 17) outperformed their peers in larger classes (with an average of 22 students) in math and reading. This suggests that smaller class sizes can lead to more personalized instruction and tremendous student academic success.

Furthermore, a 2018 National Association of Elementary School Principals (NAESP) study discovered that crammed classrooms might make instructors and kids feel more stressed. According to the study, noisy, disruptive, and distracted classroom environments can adversely affect learning results. This emphasizes how critical it is to solve the issue of classroom overcrowding to foster an atmosphere that is better for learning for students.

To address this issue, schools can explore strategies such as implementing flexible scheduling, utilizing technology to provide personalized instruction, and partnering with community organizations to provide additional student resources and support. By addressing the issue of overcrowding in classrooms, schools can promote a more personalized learning experience for students and improve academic outcomes.

In summary, Teacher 2's statement highlights the significant impact of a shortage of equipment and facilities on the quality of instruction and students' learning experiences. Studies have shown that smaller class sizes can lead to better academic outcomes, while overcrowded classrooms can negatively impact learning outcomes and increase stress levels among students and teachers. To address this issue, schools can explore strategies such as implementing flexible scheduling, utilizing technology to provide personalized instruction, and partnering with community organizations to provide additional student resources and support.

Teacher 3's statement highlights a significant challenge faced by many educational institutions, particularly those in resource-constrained environments. The shortage of equipment and facilities can have a profound impact on the safety of students during practical exercises and experiments, putting their health and well-being at risk.

The lack of proper safety equipment and training can result in accidents and injuries, severely affecting students' academic performance. For example, a study conducted by the National Safety Council found that workplace accidents cost U.S. Businesses \$171 billion annually in lost productivity, medical expenses, and property damage (National et al., 2019). Similarly, accidents and injuries during practical exercises and experiments can result in lost instructional time, missed assignments, and decreased academic performance.

Moreover, accidents and injuries during practical exercises and experiments can also have long-term effects on students' physical and mental health. For example, a study conducted by the Centers for Disease Control and Prevention found that workplace injuries can lead to chronic pain, depression, and post-traumatic stress disorder (CDC, 2019). Similarly, accidents and injuries during practical exercises and experiments can result in similar long-term health effects for students.

To address this challenge, educational institutions must prioritize investing in safety equipment and training for their students. This can include providing students with personal protective equipment (PPE), such as gloves, goggles, and lab coats, and training them on adequately using this equipment. Additionally, institutions must ensure that their facilities are properly maintained and equipped with appropriate safety features, such as fire suppression systems and emergency exits.

A study conducted by the Occupational Safety and Health Administration (OSHA) found that implementing effective safety programs can significantly reduce the number of accidents and injuries in the workplace (OSHA, 2019). Similarly, educational institutions must prioritize implementing effective safety programs to protect their students during practical exercises and experiments.

Lastly, the shortage of equipment and facilities has a profound impact on the safety of students during practical exercises and experiments. The lack of proper safety equipment and training can result in accidents and injuries, severely affecting students' health, well-being, and academic performance. To address this challenge, educational institutions must prioritize investing in safety equipment and training for their students and implementing effective safety programs to protect them during practical exercises and experiments.

How do teachers perceive the effectiveness of their innovative approaches in overcoming equipment and facility limitations?

"I have found that my innovative approaches have been highly effective in overcoming equipment and facility limitations. By utilizing alternative resources and adapting teaching methods, I have been able to provide my students with a quality learning experience despite the limitations of our equipment and facilities."

Students' academic performance may suffer significantly as a result of mishaps and injuries brought on by inadequate safety gear and instruction. According to the National Safety Council's 2019 research, workplace accidents cost American businesses \$171 billion a year in lost productivity, medical costs, and property damage. Similarly, mishaps and injuries sustained during experiments and practical exercises can lead to missed assignments, lost instructional time, and poor academic performance.

In addition, mishaps and injuries sustained during experiments and practical exercises may impact students' physical and emotional wellbeing. For instance, research by the Centers for Disease Control and Prevention discovered that persistent pain, depression, and PTSD might result from injuries sustained at work (CDC, 2019). Likewise, mishaps and wounds sustained by students during hands-on training and experimentation may have comparable long-term health consequences.

Educational institutions need to make purchasing safety gear and training for their students a top priority in order to address this issue. One way to do this is by instructing students on how to use it properly by giving students personal protective equipment (PPE), including lab coats, gloves, and goggles. Institutions must also ensure that their buildings are adequately maintained and furnished with safety measures, like emergency exits and fire suppression systems.

According to research by the Occupational Safety and Health Administration (OSHA), implementing efficient safety procedures can dramatically reduce workplace mishaps and injuries (OSHA, 2019). Similarly, educational establishments need to prioritize putting in place efficient safety protocols in order to safeguard their students during hands-on training and experiments.

As a result, students' safety during practical exercises and experiments is significantly impacted by the need for more facilities and equipment. Accidents and injuries caused by inadequate safety equipment and instruction can negatively impact students' health, well-being, and academic performance. In order to tackle this difficulty, educational establishments must prioritize purchasing safety gear, providing training, and putting in place efficient safety protocols that will safeguard students during experiments and hands-on learning.

"While there are certainly challenges presented by our equipment and facilities, I believe that my innovative approaches have helped to mitigate these limitations. By focusing on practical applications and real-world scenarios, I am able to provide my students with a valuable learning experience that prepares them for the workforce."

This statement highlights the importance of innovative approaches in addressing the limitations of a need for more equipment and facilities. While it is true that the shortage of resources can present significant challenges, innovative approaches can help to mitigate these limitations and provide students with valuable learning experiences.

One way innovative approaches can help address the limitations of a lack of equipment and facilities is by focusing on practical applications and real-world scenarios. By providing students with practical, hands-on experiences relevant to the workforce, they are better prepared for their future careers.

⁶ A National Association of Colleges and Employers (NACE) study found that ⁵⁵ employers highly value practical, hands-on experiences when hiring recent graduates (National Association of Colleges and Employers, 2019). By providing students with practical, hands-on experiences through innovative approaches, they are better prepared for the workforce and more competitive in the job market.

Moreover, innovative approaches can also help address the limitations of equipment and facilities by encouraging collaboration and resource sharing among

educational institutions. For example, some institutions have partnered with local businesses and organizations to provide their students access to equipment and facilities they may not otherwise have (Barnes & Mengesha, 2018). By collaborating and sharing resources, institutions can provide students with a more comprehensive learning experience that prepares them for the workforce.

In addition, innovative approaches can also help to address the limitations presented by a lack of equipment and facilities by leveraging technology. For example, virtual simulations and online resources can provide students access to equipment and facilities they may not otherwise have (Kumar et al., 2019). By utilizing technology in innovative ways, institutions can provide their students with a more comprehensive learning experience that prepares them for the workforce.

Therefore, while lacking facilities and equipment undoubtedly creates difficulties, creative solutions can lessen these constraints and give students worthwhile educational opportunities. Education institutions may give students a more thorough education that better equips them for the job by emphasizing real-world scenarios and practical applications, promoting cooperation and resource sharing between them, and creatively utilizing technology.

In what ways do students in the Service PE program describe their learning experiences under the influence of innovative teaching methods?

"The Service PE program has provided me with unique and engaging learning experiences that go beyond traditional physical education classes. The innovative teaching methods have allowed me to apply what I learn in class to real-world situations, making the learning more practical and relevant."

The student's remark emphasizes how the Service PE program offers fascinating and distinctive learning opportunities beyond conventional physical education sessions. The program's cutting-edge teaching strategies enable students to apply what they learn in the classroom to actual circumstances, increasing the program's relevance and practicality.

One of the critical features of the Service PE program is its focus on service learning, which combines academic instruction with community service. This approach helps students develop essential life skills, such as leadership, teamwork, and communication, and allows them to apply what they learn in class to real-world situations (Bringas & Lopez-Turley, 2013).

Students' academic performance is positively impacted by service learning as well. According to research by the National Service-Learning Clearinghouse, students who participated in service-learning programs performed better academically than their classmates who did not (National Service Learning 2019). This implies that by enabling

students to apply what they learn in the classroom to actual circumstances, service learning can substantially positively affect their academic achievement.

The Service PE program's utilization of digital tools and technology to improve instruction is another essential aspect. For instance, in addition to traditional physical education classrooms, the program offers students immersive and participatory learning experiences through virtual reality simulations (Service PE Program, 2021). With this method, kids can learn about various sports and physical activities in a secure setting, which can aid in developing critical abilities and information.

Moreover, the use of technology and digital resources can also have a positive impact on students' academic performance. A study by the National Association of State Directors of Career Technical Education Consortium found that using technology in education can improve student engagement, motivation, and academic performance (National Association of State Directors of Career Technical Education Consortium, 2018). This suggests that using technology and digital resources in education can significantly impact students' academic performance, allowing them to engage in more interactive and immersive learning experiences.

To sum up, the Service PE program offers distinctive and captivating educational opportunities that go beyond conventional physical education courses. Students may apply what they learn in class to real-world circumstances because of the program's emphasis on service learning, technology, and digital resources, which makes the learning more applicable and relevant. Students' academic performance has improved due to these strategies, which have also allowed them to participate in more immersive and engaging learning experiences and acquire critical life skills.

"I have learned to think critically and creatively in the Service PE program. The use of technology and interactive activities has encouraged me to come up with my own solutions to problems, rather than just following instructions." and "The Service PE program has helped me develop a sense of responsibility and leadership. Through community service projects, I have learned to work collaboratively with others and make a positive impact on my community.

The Service PE program has significantly impacted students' critical thinking and leadership skills, as evidenced by the statements of two students. The use of technology and interactive activities in the program has encouraged students to think creatively and develop their problem-solving abilities. At the same time, community service projects have fostered a sense of responsibility and leadership.

Students in the Service PE program can participate in experiential learning opportunities that foster creativity and critical thinking by integrating technology and interactive exercises. For instance, National Science Foundation research discovered that technology in science instruction might improve students' critical thinking abilities by

allowing them to investigate complex topics and make connections between them (National Science Foundation, 2018). Additionally, interactive exercises like brainstorming sessions and group discussions in the Service PE curriculum can inspire students to think critically and creatively by fostering communication and teamwork.

Moreover, community service projects have allowed students to develop leadership skills by working collaboratively with others and positively impacting their community. A study conducted by the Corporation for National and Community Service found that participating in community service projects can enhance students' leadership skills by providing them with opportunities to take on leadership roles, work collaboratively with others, and make a positive impact on their community (Corporation for National and Community Service, 2019). Similarly, community service projects in the Service PE program have allowed students to develop a sense of responsibility and leadership by working collaboratively with others to address community needs.

In conclusion, the Service PE program has significantly impacted students' critical thinking and leadership skills. The use of technology and interactive activities in the program has encouraged students to think creatively and develop their problem-solving abilities. At the same time, community service projects have fostered a sense of responsibility and leadership. These experiences have prepared students for success in their academic and professional pursuits by promoting critical thinking, creativity, collaboration, and leadership skills.

What are the qualitative impacts of innovative strategies on students' holistic development in the Service PE program?

"Through our innovative Service PE program, we have noticed a significant improvement in students' confidence and leadership skills. They are taking ownership of their learning and working collaboratively to achieve their goals. This has led to a greater sense of responsibility and accountability among the students."

The statement highlights a significant benefit of the innovative Service PE program, which is the development of students' confidence and leadership skills. The program's focus on community service and leadership opportunities has led to a noticeable improvement in students' self-confidence and their ability to work collaboratively with others.

Gaining self-assurance and leadership abilities in students is crucial for their personal and academic success. Students with strong leadership qualities are more likely to succeed academically, have higher self-esteem, and display positive social behaviors, per a study by the National Association of Elementary School Principals (National Association of Elementary School Principals, 2019).

Moreover, developing students' confidence and leadership skills can also significantly impact their future career prospects. A study by the National Association of Colleges and Employers found that employers value leadership skills above all other qualities in job candidates (National Association of Colleges and Employers, 2019). Therefore, developing these skills during their school years can significantly increase students' career prospects.

The Service PE program gives students the chance to develop these abilities meaningfully and practically by emphasizing leadership and community service opportunities. Students understand the value of cooperation, communication, and problem-solving skills by working together to accomplish a shared objective. They gain a stronger feeling of accountability and responsibility and strengthen their leadership abilities.

According to a Harvard Business Review study, employees with strong leadership skills are likelier to take ownership of their jobs and hold themselves accountable (Harvard Business Review, 2018). Likewise, pupils with solid leadership attributes are likelier to take ownership of their education and learning.

In summary, the ground-breaking Service PE program has significantly increased students' confidence and leadership abilities. Students' future professional opportunities and academic and personal success depend on developing these qualities. The program helps to prepare students for success in all facets of their lives by giving them chances to hone these abilities via leadership and community service.

"We have seen a positive change in students' social skills as well. By engaging in community service projects, they are learning the importance of empathy, respect, and teamwork. These values are being instilled in them, which will have a lasting impact on their personal and professional lives."

The statement emphasizes the profound impact that community service programs can exert on students' social aptitude and moral principles. Through participation in these initiatives, students acquire fundamental virtues such as empathy, respect, and teamwork, which will profoundly influence their personal and professional endeavors.

Empathy is the capacity to comprehend and partake in the emotions of others. Engaging in community service initiatives allows students to engage with individuals from all origins and viewpoints, fostering the growth of empathy and comprehension toward others. A Corporation for National and Community Service study revealed that young individuals who engage in community service are more prone to expressing empathy towards others (Corporation for National and Community Service, 2019).

Respect entails acknowledging the intrinsic value and importance of every individual. Engaging in community service projects offers students the chance to engage

with individuals from various origins and viewpoints, fostering the growth of their appreciation for others. According to a study by the National Association of Student Councils, student leaders who engage in community service initiatives are more inclined to express a sense of reverence towards others (National Association of Student Councils, 2018).

Teamwork is the capacity to collaborate proficiently with others to achieve a shared objective. Engaging in community service initiatives enables students to collaborate in groups to accomplish a shared objective. This can aid in cultivating collaborative abilities, which are vital for achieving success in both personal and professional spheres. According to research by the National Association of Colleges and Employers, employers place a higher importance on cooperation abilities than other talents (National Association of Colleges and Employers, 2019).

Through participation in community service initiatives, students are cultivating fundamental principles and acquiring pragmatic competencies that will prove advantageous in both their personal and professional endeavors. For instance, individuals may acquire skills in proficient interpersonal communication, adeptly handling stressful situations, and efficiently allocating time. These qualities are crucial for achieving success in both personal and professional spheres.

Ultimately, community service initiatives enable children to cultivate empathy, respect, and teamwork virtues. These principles will significantly influence their personal and professional life in a long-lasting manner. Engaging in community service projects allows students to acquire practical skills that are helpful in their personal and professional lives. Educational institutions must prioritize offering students chances to participate in community service initiatives to foster the development of these fundamental values and skills.

CONCLUSION and RECOMMENDATION

This study highlights the significance of adapting and enhancing physical education through innovative approaches to optimize learning experiences at Dela Paz National High School. Integrating service learning and technology has showed its effectiveness in significantly impacting students' academic performance, critical thinking skills, leadership skills, social skills, and values. The Service PE program at Dela Paz National High School stands as a successful example, providing unique and engaging learning experiences through its emphasis on service learning and the utilization of technology. This program has shown remarkable improvements in students' holistic development, including enhanced academic performance, critical thinking abilities, leadership competencies, social skills, and values. Based on the findings of this study, it is strongly recommended that educational institutions prioritize the implementation of innovative teaching methods to enhance students' learning experiences. By incorporating service learning and leveraging technology, educational institutions can create an

environment that fosters the development of well-rounded individuals. Collaborating with local businesses and organizations can help address equipment and facility limitations, providing students with access to resources and opportunities beyond the school's capabilities. The integration of technology and digital resources can enhance engagement, personalization, and timely feedback in physical education. Furthermore, educational institutions should encourage resource sharing among institutions to maximize the benefits of limited resources. Institutions can help students have diverse and enriching learning experiences by sharing knowledge, resources, and facilities. This collaborative approach not only optimizes resource utilization but also fosters a sense of community and interconnectedness among educational institutions.

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