



Original Article

Integration of Health and Education in Teacher Education Programs


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How to Cite:

Sultan, S., Yousuf, M. I., & Parveen, N. (2023). Integration of health and education in teacher education programs. *Academy of Education and Social Sciences Review*, 3(3), 340–349.

<https://doi.org/10.48112/aessr.v3i3.597>

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Abstract

Integrating health and physical education in teacher education programs has garnered significant attention recently, driven by the potential to enhance students' overall well-being and instil enduring healthy habits. The study's foremost objectives were to identify health and physical education content within the teacher education curriculum and suggest some guidelines for integrating health and physical education content in the teacher education curriculum. The research was qualitative and a narrative design was used. The research was done using document analysis of teacher education programs. Based on this, findings and conclusions were drawn, and recommendations for further study in the field were suggested. Research findings indicate that the curriculum and content in the teacher education programs have sufficient portions that may help prospective teachers to enable them to handle health and education activities at schools if needed. Teacher education programs are intended to enhance the future teacher's ability to promote pupils' health and physical education.

Keywords: Health and physical education, Healthy habits, Student well-being, Teacher education programs

INTRODUCTION

Teacher education refers to the curriculum, instructional materials, and committed faculty that are collectively planned to guarantee that students receive the fundamental and superior education needed for academic success (Mohan, 2019). It also refers to the professional development of teachers. Teacher education is essential to improving the quality of education since the teacher is a significant player in the entire educational process, particularly at the secondary level teacher preparation takes on a special meaning between elementary education and higher education. Training and practice during teacher education affect their natural propensities, devotion, and other personal attributes like intelligence and attitude toward teaching, which influence their efficacy. Future teachers can gain professional experience through teacher education (Jenset, et al., 2018; Siddiqua, et al., 2014).

Instefjord and Munthe (2017) claim that teacher education programs may be improved differently. One of them is integration. We can use the concept of an integrated teacher education program where the curriculum enables the students and teachers to obtain a degree in education along with specialization in the fields like history, mathematics, physics, arts, health education, physical training, health, and physical education. In education, integration refers to the blending of multiple concepts and subjects to produce a more comprehensive learning environment. Students get a deeper knowledge of how many subjects relate to one another in practical situations by making connections between appropriate subjects and information (Karimov et al., 2020). A promising strategy for fostering students' all-round well-being and academic achievement is the integration of health and physical education in teacher education programs. Future educators are more equipped to address their students' physical, cognitive, and social-emotional needs by merging these two disciplines. This study intends to investigate how the integration of physical education and health into teacher preparation programs benefits students' health outcomes, academic performance, and social and emotional growth (Lander et al., 2017).

Given its potential to improve students' general well-being and promote long-lasting healthy behaviors, the integration of health and physical education in teacher education programs has gained popularity. To provide future teachers with the knowledge and ability to support students' holistic development, and in recognition of educators' crucial role, this study explores the integration of health and physical education content into the teacher education curriculum. Teacher training programs in which we expect from these educators that they are future teachers and are supposed to teach at the elementary level, but we have limited number of teachers at this level, especially in rural areas. One or two teachers have to teach all subjects like mathematics, science social studies, health and physical, physical training and physical education. Only a single teacher does all activities or teaches all topics. The present situation demands that teacher education programs give the concept of multi-grade teaching to prospective teachers, which means one teacher teaches different subjects at different levels.

This research aims to investigate the integration of physical education and health in teacher preparation in detail. At the national level, little research has been done in this area; therefore, the present study holds significance, since it explores the need for integrated educational methodologies. By evaluating how merging various disciplines influences learning, the analysis can impact how the curriculum is developed and how teaching and evaluation are done. This study can help support evidence-based teacher education, ensuring

that future educators are prepared to fulfil the needs of their students on a physical, mental, and emotional level. The study's results may also significantly affect educational policy, enhancing students' general well-being and elevating the importance of health and physical education in teacher training programs.

Teacher education programs are assumed to develop capable prospective teachers to handle schools' curricular, co-curricular and other allied activities. The programs may incorporate the demanding concept related to organization of health and physical education within the teacher education curriculum through the integration of content and skills related to physical health in teacher education programs. The study will discover that implementing health and physical education is necessary at the school level in teacher education programs. These future teachers should be aware of health and physical education and have a real spirit to implement health and physical education, which is the only possible way of integration.

Objectives of the Study

This research has the following objectives.

- To identify health and physical education content within teacher education curriculum.
- To suggest some guidelines for integrating health and physical education content within the teacher education curriculum.

Research Questions

- How do we identify health and physical education content within teacher education curriculum?
- What guidelines could be suggested for integrating health and physical education concepts within the teacher education curriculum?

LITERATURE REVIEW

Tan et al. (2017) discussed that our basic need in the education system is teachers. They are hired based on their skills and qualifications. After completing undergrad, there are unique educational programs lasting 1-2 years that prepare candidates to teach. These include assisting candidates in learning how to work with children and students and motivating them to learn so they can become experts in their fields. A bachelor's degree in teaching with a minimum score of 50% is the minimal requirement for becoming a teacher.

Teacher Education

According to Avalos (2011), teacher education refers to the courses, training, policies, and processes used to prepare prospective teachers with the knowledge and abilities to instruct in various educational institutions. Teacher education refers to policies and processes aimed at providing future teachers with the knowledge, attitudes, behaviors, and abilities they will need to perform their duties effectively in the classroom, school, and community. Teacher education is a program aimed at improving teacher proficiency and competency, so that they are better prepared to handle the demands of their profession and confront the obstacles that come with it.

Teacher Education Goals and Objectives

Various teacher education programs have varied goals and objectives. According to Darling-Hammond (2006), the primary purpose is to train teachers to provide all children with high-quality learning opportunities. With the help of these programs, instructors get equipped with subject-matter expertise, pedagogical content knowledge, and the capacity to design welcoming and stimulating learning environments.

Designing Curriculum in Teacher Education

According to Shaver (2017), the outline and content of the coursework and field experiences are determined during the curriculum design phase of teacher education programs. Courses frequently address classroom management, educational psychology, teaching techniques, student evaluation, and subject-specific teaching strategies. These courses emphasise the value of integrating theory and practical application in teacher preparation programs, attempting to connect knowledge learned in the classroom and actual teaching situations. The gap between academic learning and practical classroom experiences is effectively closed by this strategy.

Health Education

Cueto et al. (2019) define health as a state of whole physical, mental, and social well-being rather than

simply the absence of sickness or infirmity (infirmity = physical weakness). Health education is a set of well-designed educational activities with some sort of communication and the intention of enhancing health. A set of knowledge and life skills support both individual and collective health. Health education attempts to help people develop the motivation, expertise, and self-belief (self-efficacy) required to improve their health, going beyond merely disseminating information. Health education aims to educate people on the social, economic, and environmental elements that affect health, as well as about personal risk factors, risky behaviors, and how to access and use the healthcare system (McKenzie et al., 2022).

Physical Education

In accordance with Johnson and Turner (2016), physical education is a compound word made of Physical and Education. Education refers to methodical instructions or training, whereas physical relates to the physical body. As a result, physical education refers to a collection of structured teachings of the human body. A common term for physical education is physical training. Its main goal is to improve students' physical skills, increase their awareness of how they move and provide them the tools to employ these talents in various activities that promote a healthier and more active lifestyle. Additionally, it builds students' self-confidence and improves essential skills, including creativity, teamwork, communication, critical thinking, and artistic expression. Physical education helps pupils build a solid foundation for their lifelong and global learning aspirations and impart positive values and attitudes (Pangrazi & Beighle, 2019).

Role of Health Education in Teacher Education Program

Health education promotes a child's psychological and mental development and physical growth. According to Jourdan (2011), there is a growing awareness of the demands of teenagers' health. The national curriculum framework and the requirements outlined in the health and physical education curricula developed for various school education classes should be the focus of teacher preparation programs. Schonert-Reichl et al. (2017) address health education's critical role in training teachers to support and promote students' health and well-being. Since there is a clear connection between good health and academic success, teacher preparation programs include health education to provide future teachers the tools they need to foster a healthy learning environment and meet the various health requirements of their students. Future teachers will be better able to promote health literacy, foster healthy learning environments, address health inequities, support social and emotional well-being, and work with families and communities due to the integration of health education into teacher preparation. This guarantees that educators are experts in their fields and well-equipped to advance their students' general health and well-being.

Role of Physical Education in Teacher Education Programs

Gaudreault et al. (2018) explain that physical education plays a crucial role in equipping teachers to encourage and enable vigorous physical activity, the development of motor skills, and overall health and well-being among their pupils. Instilling lifetime habits of frequent physical activity is the primary goal of physical education, emphasising the need to develop motor skills, encourage teamwork, and foster physical fitness. The future teachers acquire the knowledge, abilities, and techniques necessary to establish a welcoming and inclusive learning environment that promotes physical health, the development of motor skills, and the all-around holistic development of children through the integration of physical education into teacher preparation programs. The importance of physical education in teacher preparation programs and how it affects students' growth in terms of their physical, cognitive, and social-emotional well-being.

Encouragement of Physical Fitness

Dobbins et al. (2013) stress that teachers who participate in physical education gain a thorough awareness of the value of physical fitness as well as information about different fitness factors such as muscular strength, flexibility, and cardiovascular endurance. The teachers learn how to create and carry out age-appropriate physical activities and exercises that raise students' general fitness levels. To assist students in maintaining and improving their physical fitness, they also learn how to assess and monitor students' levels of fitness, set fitness objectives, and give feedback.

METHODOLOGY

The research was qualitative in nature and a narrative research design was used. The purpose of this narrative inquiry was to obtain a better understanding of the integration of health and physical education in teacher education program. Document analysis was conducted for this purpose.

Choice Criteria of Content Analysis

Interpretative documentary analysis was employed for this. According to Bowen (2009), researchers interpret documents to give an influence and sense around an evaluation issue. There was flexibility in the selection of institutions throughout this phase and those departments were selected where first-hand documents were present for content analysis.

Selection of Themes Related Health and Physical Education

In consultation with the experts, key themes related to health and physical education were selected. Document analysis of teacher education programs was conducted to identify strengths, weaknesses, and best practices, leading to recommendations for improvement.

Data Collection

The data were collected from the curriculum of teacher education program B.Ed. (Hons) was reviewed and analyzed. The elements related to health and physical education were identified in the program.

Data Analysis

Content analysis was used to draw findings. Based on data research, findings and suggestions were made for further study in the field.

Ethical Consideration

The following ethical considerations were considered while conducting the research:

- Authorization or informed permission before document analysis
- Confidentiality and privacy of people listed in the materials
- Evaluating documents critically without passing judgment or assumptions
- Be ethical, professional, and honest at all times

Data Findings and Analysis

This particular research study aimed to assess the integration of health and physical education in teacher education programs. This section deals with analysis of qualitative data. The systematic assessment and evaluation of documents, including printed and electronic (computer-based and Internet-transmitted) content, are document analysis (Rapley & Silverman, 2011).

RESULTS & FINDINGS

The researcher studied and self-read each course content included in this study to identify content related to health and physical education. The identified relevant content is further organized in a table. The table included subject name, themes, topic name, and number of topics related to health and physical content. The content was analyzed into the following themes:

Table 1
Document Analysis Themes

No.	Themes	No.	Themes
1	Well-being	9	Attitude Development
2	Physical Fitness	10	Inclusive Learning
3	Healthy Habits	11	Engaging Students
4	Risk Management	12	Professional Development
5	Safety Guidelines	13	Obesity
6	Collaboration	14	Adaptability
7	Team Building Activities	16	Assessment & Evaluation
8	Basic Motor Skills	16	Risk management

The above mentioned table shows the themes relevant to health and physical education selected by experts from health education, teacher education and physical education. The following document analysis is based on these themes.

Table 2
Child Development

No.	Identification of topics	Theme	Relevancy
1	Psychosocial models	Inclusive learning	Moderate
2	Cognitive models	Well being	moderate
3	Factors that affect the child- Key issues and controversies	Physical fitness	Basic
4	Developmentally appropriate practices for toddlers	Basic motor skills	Basic
5	Social development- Changes and parental roles	Collaboration	Basic

Integrating health and physical education in the subject of child development in teacher education programs can be very helpful in preparing future educators to support the overall well-being of their students. Future teachers will learn more about the value of physical activity and how it affects children's overall development through integrating health and physical education into a subject of child development within teacher education programs. They will be more prepared to design inclusive, engaging learning environments that promote students' cognitive, social, emotional, and physical development.

Table 3
Comparative Education

No.	Identification	Themes	Relevancy
1	Comparative education trends and issues	Development attitude towards physical education	Moderate
2	The concept and scope of special education	Healthy habits	Moderate
3	Teacher education	Basic knowledge about physical activities	Basic
4	Sociological approach	Team building activities	High
5	Conflict theories	Emotional management	Moderate
6	Policies of Finland	Risk management and safety	High

Future educators will understand more about the various methods and practices related to health and physical education across different countries and educational systems by integrating comparative education into teacher education programs. Teacher preparation programs can give future teachers an in-depth understanding of the worldwide context of health and physical education through integrating it into their coursework of comparative education. This will encourage cultural awareness, informed decision-making, and the adoption of best practices from various contexts.

Table 4
Educational Psychology

No.	Identifications Of Topic	Theme	Relevancy
1	Education psychology	Basic motor skills	Moderate
2	Human growth and development	Team building	Basic
3	Mental health	Well-being	Moderate
4	Guidance in school	Healthy habits	Basic
5	Counseling	Collaboration	Basic

Future teachers are able to acquire an in-depth understanding of how physical health affects students' cognitive, social, and emotional development by integrating health and physical education within the subject of educational psychology in teacher education programs. By integrating health and physical education into the subject of educational psychology, teacher education programs can provide future educators with a deeper understanding of the holistic nature of student development and the essential role of physical well-

being in promoting optimal learning and psychological functioning.

Table 5
Guidance and Counseling

No.	Identifications of Topic	Theme	Relevancy
1	Personality development	Well-being, healthy habits	Moderate
2	Guidance responsibilities of pupils	Team building	Basic
3	The counselor's attitudes and skills	Collaboration	Moderate
4	Vocational guidance	Physical fitness	Basic
5	Aids to guidance in group situation	Team building activities	Basic
6	Social skills training	Collaboration	High
7	Importance of guidance at elementary school level	Healthy habits	Basic

The ability of future educators to treat students' physical and mental well-being completely can be improved by integrating health and physical education into the subject of guidance and counselling within teacher education programs. Teacher education programs may prepare future educators to better support students' physical and mental well-being through integrating health and physical education within the guidance and counselling course. Through integration, schools may develop a safe and inclusive environment where children can succeed both academically and emotionally.

Table 6
School Management

No.	Identifications Of Topic	Theme	Relevancy
1	Elements of organization	Engaging students	Basic
2	Scope and importance of school organization	Attitude towards physical activities	Moderate
3	The social demand approach	Well-being	Moderate
4	Pupil management	Team building activities	Basic
5	Objectives of school discipline	Safety guidelines	Basic
6	Approaches to management leadership	Engaging students	Basic
7	Leadership	Risk management	Moderate

School teachers should prioritize the well-being and development of students by integrating health and physical education in the subject of school management programs. By integrating health and physical education through the subject of school management, teacher education programs can prepare future school teachers to prioritize student well-being and create environments that support healthy habits and physical activity. This integration may contribute to the overall development and success of students within the school setting.

Discussion

For future teachers to be prepared to support student well-being and holistic development, health and physical education must be integrated into teacher preparation programs. The necessity and advantages of this integration are clarified through research and scholarly discussion. Nage et al., (2003) contend that pre-service teachers who receive education and training in health promotion are more likely to prioritize and incorporate health education into their future classrooms in their research on integrating health education into teacher preparation programs. The findings of our study also supported the same claim for such a type of integration. The program emphasizes the importance of providing pre-service teachers with comprehensive health education content and pedagogical methodologies for effective health education integration in schools.

Additionally, Marttinen et al., (2017) found that students benefit significantly from integrating health and physical education in teacher preparation programs. They contend that such integration improves academic achievement, fosters social skills, promotes overall well-being, and helps pupils develop a favorable attitude towards physical activity. The current study's findings also indicate that teacher education programs in Pakistan

specially B.Ed. (Hons) has the potential to teach the contents that are required by health and education teachers to run physical activities at the elementary level where deficient numbers of teachers are there. The prospective teachers can arrange the activities without a health and physical instructor. Integrating health and physical education in teacher education programs is essential to give future educators the information, abilities, and attitudes they need to support student well-being. According to research, this integration is critical for educating teachers to successfully provide health and physical education, prioritize health education in the classroom, and support students' overall development.

CONCLUSION

In conclusion, integrating health and physical education in teacher preparation programs is essential for preparing future teachers to support student well-being, develop healthy habits, collaborate, and be physically fit. Moreover, it manages their emotions and advances their careers. Research found that a comprehensive training in health and physical education should be provided to pre-service teachers to gain knowledge, skills, and attitudes needed to teach health education effectively, give attention to student well-being, and establish a supportive learning environment due to this integration. Studies highlight the many advantages for students resulting from integrating health and physical education into teacher preparation programs, including better attitudes towards physical exercise, outstanding academic achievement, increased social skills, and general well-being. Also, integrating health and physical education into teacher preparation programs can ensure prospective educators have the skills to handle the health and well-being needs of their pupils.

Future Directions

To effectively integrate health and physical education into teacher education programs, consider the following recommendations:

- Develop dedicated courses or modules focusing on health and physical education within the teacher education program.
- Ensure the curriculum covers various topics, including the importance of physical activity, nutrition, mental health, and inclusive practices.
- Provide opportunities for pre-service teachers to engage in practical experiences related to health and physical education.
- Foster collaborations with health and physical education experts, such as teachers, coaches, school nurses, and community health professionals.
- Provide training in educational apps, online resources, and digital platforms to enhance teaching and learning experiences in health and physical education.
- Teach pre-service teachers how to modify activities, adapt equipment, and create a supportive environment accommodating students with diverse abilities, backgrounds, and needs.
- Offer workshops, conferences, or online courses that provide updates on research, best practices, and emerging trends in the field.
- Encourage collaboration and interdisciplinary approaches among different subject areas, such as integrating health and physical education with science, mathematics, or social studies.

By implementing these recommendations, teacher education programs can effectively integrate health and physical education, equipping future educators with the knowledge, skills, and attitudes necessary to promote the overall well-being of their students.

Competing Interest

The authors had no competing interests.

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