

Interdisciplinary Learning: An Introduction

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This special issue of the Ghana Physical Education and Sport Journal (GPESJ) presents articles on interdisciplinary learning. Cone, Werner, and Cone (2009) defined interdisciplinary learning as “a process in which two or more subject areas are integrated with the goal of fostering enhanced learning in each subject area” (p. 4). From an African perspective, we define interdisciplinary learning as the process of integrating two or more content areas and African traditional games or dances, intended to provide students the opportunity to effectively learn each content area and to increase their physical activity levels.

Interdisciplinary teaching models provide the framework or guidance for teachers to organize their ideas to facilitate learning. Three commonly used interdisciplinary models in physical education include the connected, shared, and thematic models (Cone et al., 2009; Graham, Holt/Hale, & Parker, 2007).

The connected model is a simple technique in which a concept or skill in one content area is used to enhance learning in another content area. Graham et al. (2007) referred to it as the content linkage approach. For example, the concepts of base of support and the center of gravity from science can be used to teach the skill of balancing in physical education. The connected model involves one teacher only. In the example provided here, balancing in physical education is the primary focus of the lesson. The teacher would use the concepts of base of support and center of gravity to enhance the learning of the skill of balancing. For example, children would learn that a wide base of support and low

center gravity result in a balanced (stable) position, while a narrow base of support and high center of gravity result in an unstable body position.

The shared model focuses on the teaching of concepts or skills from two or more content areas with another teacher. Unlike the connected model, the shared model involves at least two teachers from different content areas. In the balancing example using the shared model, balancing and the concepts of base of support/center of gravity would be taught simultaneously in physical education and science classes. Learning the concepts and skills in the two subject areas concurrently would help reinforce the concepts, and make the learning experiences more meaningful.

The thematic model— what Cone et al. (2009) referred to as the partnership model— involves teachers in different content areas simultaneously covering content over a set period of time while focusing on the same theme (Graham et al., 2007). For example, teachers in different content areas can develop units focusing on the theme of fair play. In physical education, a games unit could focus on fair play; lessons would be planned to afford students the opportunities to experience and critique game structures relating to the extent to which they are fair to all students. Similarly, units in other content areas to be taught concurrently would focus on the theme of fair play.

Interdisciplinary or integrated learning can be done within a content area or among two or more content areas— what Nilges (2003) referred to as internal and external interdisciplinary learning. An example of internal integration in physical education is integrating physical fitness in a games lesson. External interdisciplinary learning involves integrating physical education into other subjects and vice versa.

Benefits of interdisciplinary learning include the provision of practical and meaningful learning experiences, where students see the connections among content across the curriculum. Integrating content from other subjects in physical education makes abstract concepts concrete for students. Conversely, integrating physical education concepts and skills in regular classrooms would provide additional movement opportunities for students outside the physical education class. In spite of the benefits, it requires a lot of time and extra effort on the part of teachers to plan and implement an interdisciplinary unit.

In the first article of Dr. Eugene Asola presents physical education concepts and skills, and how these can be integrated with academic concepts in other subject areas. Dr. John Nandzo discusses sample literacy concepts and movement activities to enhance the learning of literacy in basic education classrooms and to increase movement opportunities for children in the second article.

The third article by Dr. Michael Nabie and co-author Peter Akayuure describes African traditional games that can be used to teach mathematics.

This special issue of *Interdisciplinary Learning* is intended to serve as a resource to physical education specialists and classroom teachers in Ghana. It will also be an invaluable resource to teacher trainees and preservice teachers in Ghanaian Colleges of Education and Universities. It is worth noting that for interdisciplinary learning to be beneficial, teachers need to utilize developmentally and instructionally appropriate practices.

References

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