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UNLOCK RESEARCH

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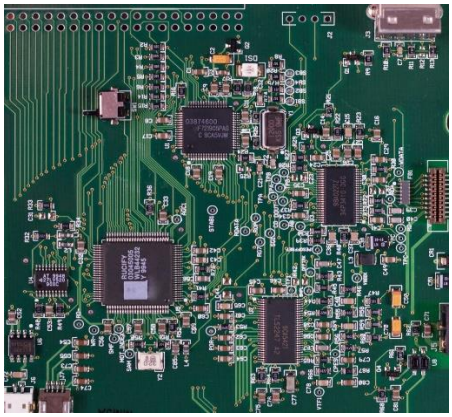
ARTICLE REVIEWED

Students' Perceptions of Technology Integration During the F.I.T. Unit

Marttinen, R., Daum, D., Fredrick III, R. N., Santiago, J., & Silverman, S. (2019). Students' perceptions of technology integration during the F.I.T. unit. *Research Quarterly for Exercise and Sport, 90*(2), 206-216.

THE PROBLEM:

We live in a rapidly advancing technological era. Research suggests that implementing technology in the classroom may produce a positive and engaging learning environment for students. Using wearable technology in physical education, for example, may promote increased physical activity levels. This type of technology is useful for both students and physical educators. For example, students are able to hold themselves more accountable for their physical activity participation, and physical education teachers are better able to provide their students with reliable performance data. All in all, physical education can get more physical when using technology, and therefore, may be more enjoyable for some students. After all, the more enjoyable the physical education experience, the more likely students are to develop positive attitudes toward physical activity.



Research Summary:

The purpose of this study was to examine how student attitudes toward physical education were conceptualized when experiencing a Fitness Integrated with Technology (F.I.T.) unit. Thirteen middle school students (seven female and six male) were asked to wear accelerometers (MOVbands) to measure their physical activity levels. Data from the accelerometers were used throughout the duration of a 12-lesson F.I.T. unit. This unit lasted anywhere from five to six weeks and taught fitness-related concepts while including the integration of academic subjects. Students were also encouraged to make their own fitness plan. MOVband data was used to set fitness goals for students and analyze their physical activity levels. Physical educators also taught students how to analyze their own fitness data (e.g., graphs, statistics). Interviews and observations took place with the 13 students. Students were also asked to complete written assignments and collages on what fitness meant to them.

Conclusion:

Three themes were discovered: a) technology and barriers to implementation; b) homework in physical education; and c) motivational effects of technology on students. When implementing technology, students encountered a number of barriers (e.g., size and comfortability of accelerometer, minimal technology support at home). Homework assignments integrated technology (accelerometers) use. However, several students suggested that although homework was valuable in physical education, it was not necessary. Rather, physical education should be more physically based. Lastly, some students were motivated to increase their physical activity levels when wearing the MOVband.

Key Takeaway:

The use of technology for some students in physical education can serve as a motivational tool to get them moving. However, some students had concerns about the bulkiness of the accelerometer and lack of technology access at home. This lack of access prevented some of the students from interacting with their accelerometer data. Moving forward, it is critical that physical educators consider their students' voices when it comes to technology integration. Student perceptions and utilization of technology can be both meaningful and useful in physical education.

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1900 Association Drive, Reston, VA 20191 ● 800.213.9527 ● info@shapeamerica.org