**Article 1- Developing Video Analysis to Boost Instruction and Assessment in Physical Education**

**Brief Summary**

This article is about using technology to enhance teaching and learning in physical education classes, specifically how technology can help a teacher with instruction and assessment. Video analysis applications are usually affordable, if not free, and easy to use. Video analysis provides educators with quick feedback on student performance, supports motor-skill development, and can be individualized for each student during assessment (Laughlin et al., 2019).

The article also discusses how each SHAPE America National Standard aligns with an assessment strategy involving technology in a physical education class. Laughlin et al. (2019) provide specific examples of how Mrs. Ogden incorporates technology into her lessons and how her outcomes align with each standard. Laughlin et al. also discuss how educators can overcome feasibility issues, specifically in five different areas; permission, purpose, learning curves, social responsibility, and maintenance. Lastly, Laughlin et al. emphasize how big of an asset mobile video analysis and technology can be in terms of supporting instruction and assessment, however, it should not be used as a means of replacement of instruction or teaching.

1. **Key Concepts**
2. Determine goals for using technology and how it will aid in the process of students achieving/meeting specific learning outcomes

According to the article, educators need to ask themselves a few essential questions before including technology devices or applications in the classroom, especially, what their overarching goal is for using technology (Laughlin et al., 2019). Physical education teachers should conduct research to select and narrow down applications that align with specific goals. It’s important to take into account their students’ interests and needs to ensure their engagement in the learning process.

1. Physical education students gain a deeper understanding of learning outcomes when video-based feedback is provided, increasing motivation and engagement

Video-based feedback offers many opportunities for students to improve performance, allowing them to see their movements and techniques. It’s visual proof of the movement and it enhances learning, retention, especially for students who are visual learners. Video-based feedback is a wonderful tool for students to self-assess, and to self-reflect. They can literally review their own performance on the video and pin point strengths and areas for improvement.

1. Educators should make sure to do their research, specifically looking into customer reviews, free trial applications, and finding appropriate applications that support their curricular needs, and the needs of their students

It’s important to complete thorough research, specifically before incorporating technology into the classroom. Research can help educators in establishing whether a technology tool is proven to be effective in enhancing learning outcomes. Research also allows educators to find applications that offer certain customization options that allow them to make adjustments or accommodations to meet the diverse learning needs and interests of their students (Laughlin et al., 2019).

**Overall Reaction**

Mrs. Ogden does a wonderful job engaging her students and aligning her teaching outcomes to match standards while incorporating video-analysis tools. While there are many benefits in including technology in the classroom, it’s important to have discussions with students about social responsibility, stated by Laughlin et al. (2019), as one of the five strategies, prior to using technology tools in the classroom. Students encounter increased challenges in today’s digital age, particularly concerning technology and social media, but Laughlin et al. provide helpful tips such as restricting or disabling devices’ Wi-Fi access and activating parental controls on each device.

Overall, this article was very informative and it was great to read about how Mrs. Ogden incorporated technology in her class, while keeping students engaged and motivated. During Mrs. Ogden’s volleyball unit when students were working on their underhand serve, I really liked how she included a “photo booth,” where students had the opportunity to independently work on, and record their underhand serve. Mrs. Ogden provides the opportunity for students to self-assess their progress individually, and to practice the skill by themselves. It’s a great technique to accommodate all students (Laughlin et al., 2019).

**Article 2- Welcome to the Matrix: Intersecting Physical Education and Technology Standards**

**Brief Summary**

This article is about combining physical education with technology standards and how technology can improve teaching and learning. SHAPE America recommends that physical education teachers use technology for planning and implementation, delivering instruction, and for professional responsibility. The article also discusses the seven components highlighting the skills and qualities that students need to be successful in the digital world (Cox et al., 2020).

A large part of the article displays a table that maps out different ideas for students to achieve physical education and technology standards. It lays out all five physical education SHAPE standards with all seven components highlighting the skills and qualities students need to be successful in the digital age (empowered learner, digital citizen, knowledge constructor, innovative design, computational thinker, creative communicator, and global collaborator). It shows how a PE standard and an International Society for Technology in Education (ISTE) standard can be achieved together (Cox et al., 2020).

1. **Key Concepts**
2. The International Society for Technology in Education (ISTE): organization that encourages the use of technology to transform teaching and learning

The article emphasizes how all educators should be encouraged to be a digitally literate learner, leader, citizen, collaborator, designer, facilitator, and analyst (Cox et al., 2020). With this in mind, the table provided in the article lays out a unique way of meeting both the PE standards and ISTE standards. It would be a fun challenge to create a table similar to the one in the article, but for health, because it’s a subject I am able to teach.

1. Meeting both the PE and technology standards for students

Being able to meet a PE standard and a technology standard at the same time is like killing two birds with one stone. The table provides specific objectives that students can do to accomplish a PE standard, as well as a ISTE standard. PE teachers can modify or add to this table and adjust it to students interests and needs. I think it would be fun to brainstorm and add more to each standard.

1. Physical and digital literacy complement one another, especially as advancements are made to technology, providing creative ways to support teaching and learning

PE teachers' objective is to create physically literate individuals who have the knowledge, skills, and confidence to lead a lifetime of healthful physical activity. With technology becoming increasingly popular, it’s essential for PE teachers and educators across disciplines to prioritize the development of students’ digital literacy skills, so why not address both aspects at the same time? (Cox et al., 2020).

**Overall Reaction**

The table gives a visual representation on PE and technology standards, specifically how a PE standard can (at the same time) meet each of the seven ISTE standards for students, which is a great resource to refer back to. The widespread popularity of technology among students allows teachers to easily integrate it into their instructional methods, offering interactive and engaging learning experiences. Different multimedia elements like videos, animations, and educational games capture students’ attention quickly and makes learning more relevant and enjoyable.

As I was going through and reading the PE and technology standards table, I highlighted and put a star by the ones I think would be fun to incorporate into a lesson. One of them was for under the ISTE standard #3a, c, d. (Knowledge Constructor), which aligns with standard 4 for PE, “use the internet to explore and curate (e.g., Google Doc) solutions to bullying in physical education and sport settings.” This ISTE standard would be perfect near the start of the semester when students learn about sportsmanship, collaboration, and teamwork in PE. Another one that I really liked was ISTE 7a (Global Collaborator) “communicate with a virtual pen-pal from another country and share popular physical activities with one another.” This would be a great opportunity for students to learn about another country; what sports or activities they compete in, and to ask questions about their culture. This activity would help students in developing a sense of global understanding and connection (Cox et al., 2020).

**Podcast- Episode 100: One Hundred Ways to Use Technology in PE**

**Brief Summary**

Jarrod Robinson is the host of this podcast episode and he discusses one-hundred ways to use technology in physical education. Robinson (2017) discusses activities and techniques for the following categories; fun and fitness, video, assessment and evaluation, google, active gaming, augmented and virtual reality, productivity, and useful tools.

Beneath the podcast on the website, there is a list of each category, breaking down each activity or technique educators can use. Each category, added up, compiles into 100 different ways an educator can include technology into their physical education class. The list also includes links to the technology tools, making it easily accessible for educators (Robinson, 2017).

**3 Key Concepts** Learned & how you perceive assisting you in designing and implementing instructional strategies

1. Fun and Fitness (category)

Under this category, there are numerous activities a PE teacher can incorporate into their classes. The Jump It application is free and looks like a great tool to use in PE during a warm-up jump roping activity or even if a school participates in Jump Rope for Heart. The ClassBreak application looks useful for general education teachers, where students can participate in icebreaker activities, team building and riddle activities. It might be worth $2.99 (Robinson, 2017).

1. Assessment and Evaluation (category)

Kahoot has always been a popular technology tool to use for review before a quiz or test. SoCrative is an application I want to look into further. It has immediate results where a teacher can see if students are learning the information. Students have activity choices in this application and also teachers can ask for feedback and receive it instantly. This application would be easy to use in a physical education class for quick exit ticket responses, or student feedback about certain units or lessons (Robinson, 2017).

1. Useful Tools (category)

Comic Life looks like such a fun and engaging application that would allow students to dive into their creative side. It would be especially fun to include in PE activities, as an end of unit assessment, where students had to create a comic about the sport or activity. I also like the idea of having an injured or student who is sick take stats from a game using SwipeStats (Robinson, 2017).

**Overall Reaction**

One thing I really like about this website is that any educator, no matter what discipline, could take an activity for the list and incorporate it into their teaching. They could use an activity as a brain break, movement activity, or form of assessment. I appreciate it when we have staff meetings, and other colleagues share what they have been doing in their classrooms to incorporate technology. This website would be a fun one to share, and to see if any other teacher actually used one of the activities.

Incorporating technology can sometimes seem time consuming or teachers might be hesitant to use technology because of how distracting it can be to students, however, if done effectively, teachers can see how engaging it can be for students and their ability to learn. Jumping in and just trying different technology applications out is the starting point. If it doesn’t work out like we’d hope, then adjustments can be made.

**References**

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