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*Photo provided by
Dr. Kathleen Poole,
Radford University*

Virginia AHPERD Members,

It is my pleasure to serve as the editor of The Virginia Journal (TVJ) and Communicator. Enclosed you will find the Spring/Summer 2025 issue. I hope to continue the successful publications of TVJ and Communicator.

However, the success of TVJ and the Communicator only go as far as the members and our submissions. I ask that you continue to submit the quality work you have in the past. Let the state, region and nation know the outstanding work we are doing in Virginia AHPERD. So, this is my continued call for manuscripts for the next issue of TVJ and news information for the Communicator. The TVJ and Communicator depend on the submissions from our exceptional professionals working in the field.

So please continue to e-mail me your manuscripts and news by January 15 and July 15 as a Word attachment for the two publications. Please follow the manuscript guidelines posted in each issue of TVJ. My contact information is below.

Sincerely,

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Virginia AHPERD is a professional association of educators that advocate quality programs in health, physical education, recreation, dance and sport. The association seeks to facilitate the professional growth and educational practices and legislation that will impact the profession.

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- An active and healthy lifestyle
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TABLE OF CONTENTS

Volume 46, Number 1

Spring/Summer 2025

Global Literacy in Physical Education	2
Potential Benefits of Recess Setting for Children with Ehlers-Danlos Syndrome.....	8
Ethical Decision Making in Youth Sports	10
How Physical Education Teachers Can Assist Kindergarten Teachers in Mathematics Instruction	12
How Physical Education Teachers Can Assist 5th Grade Teachers in Mathematics Instruction	16
Guidelines for Manuscript Submission.....	19

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Global Literacy in Physical Education

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Abstract

In an era of rapid global transformation, universities must reshape their curriculum to allow students to expand their understanding beyond their local and national experiences. Comprehending knowledge beyond borders serves as a foundation for global literacy. College students must be exposed to global issues, learn, and analyze the problems within their discipline.

The Republic of China (Taiwan) has invested in bilingual proficiency and international mobility as a part of global literacy. In response to the nationwide requirements, the Department of Physical Education at one university in Taiwan requested faculty members from a university in Virginia to present to graduate-level students the global literacy needed to seek physical education teaching jobs in the United States. The presentation aligned with Taiwan's Bilingual Policy 2030 to improve students' digital literacy and bolster their international competitiveness. Approximately 100 students were in attendance for the presentation.

Key Words: global literacy, physical education, Taiwan

Global Literacy in Physical Education

What is global literacy, and why is it important in higher education? As more universities in the U.S. begin to include global literacy in their curriculum, it becomes imperative to gauge the impact, specifically in the physical education discipline. According to Bulut and Oksuziglu (2021), global literacy involves critical thinking surrounding global issues. "In the global age, global literacy has become a crucial skill to navigate potential challenges and difficulties, making it one of the fundamental competencies of the modern world" (Bulut, & Oksuzoglu, p.711). There are four significant characteristics distinctive to global literacy (Hsu & Wang, 2010; Zhang et al., 2010). The first is awareness of diverse cultures. Awareness of diverse cultures or cultural awareness is recognizing one's own culture and understanding and appreciating other cultural backgrounds, traditions, etc. (Shliakhovchuk, 2021). Winkleman (2005) states cultural self-awareness includes recognition of one's cultural influences upon values, beliefs, and judgments, as well as the influences derived from the professional's work culture" (p. 9). The second is embracing global citizenship. Global citizenship is the concept of individuals as a collective group consisting of multiple, diverse members instead of individuals acting on their own (UN, 2025). Third is understanding the interconnectedness of one's nation.

Interconnectedness refers to a country connecting to other nations for alliances, trade, etc. (Wike et al., 2023). The last component of global literacy is confidence in using new literacies for the "global village." More specifically, how an individual can navigate using digital technology to communicate with others across national boundaries (Dwyer, 2016).

Global literacy can be interwoven through a variety of projects and activities in the higher education curriculum. It should not be viewed as a separate subject but rather as a means of instructing and modernizing every academic subject and area of cognitive and social development. Consider the following components of global literacy as it relates to physical education.

Cultural Awareness

Cultural awareness is a term that refers to how individuals interpret the impact of culture on themselves. Cultural awareness also involves sensitivity to how people from different cultures communicate, work, live, and interact (Kaihlainen et al., 2019; Beach et al., 2004; Alizadeh et al., 2016). Various factors, historical context, and community needs influence the cultural awareness of physical education. First, consider physical education's impact on the U.S. and how it has changed. During the 1950s and 1960s, physical education was regarded as a significant and respected component of childhood education to abatement and the threat of elimination in the 1980s, only to re-emerge as a valued and integral part of education today. Physical educators have fought to promote the benefits of physical education in schools and the overall purpose of physical fitness for life. Second, consider that the national standards developed in physical education can be applied to those in other countries, making it easier for physical education majors to utilize the knowledge when studying abroad or deciding to become physical education teachers in another country.

"When guided by the clarity of their cultural identities, individuals are more likely to understand their culture and establish a strong connection with both their culture and their cultural group" (Zhang & Ren, 2024, p. 34486). Physical education students gain insight into the qualifications needed to teach in the U.S. via their core courses. Global literacy suggests that those students should also research the qualifications needed to teach physical education in another country.

Global Citizenship

Global citizenship in schools ranges from studying

a foreign language to short-term study abroad experiences to engage students in preparing them to compete in a global market (Atkas et al., 2017). The past decade has seen an increase in a variety of multi-disciplinary and curricular approaches to campus-wide internationalization such as “global citizenship” programs. Such programs aim to enhance students’ academic, professional, and personal development to help them better navigate a more globalized world” (Atkas et al., 2017, p. 66). Atkas et al. (2017) conducted a study to examine how universities institutionalize global citizenship in their curricula by analyzing program mission statements, goals, and curriculum materials. The researchers identified 24 universities in five countries that offered global citizenship programs. The common themes among the institutions were international travel, language proficiency, participation in service learning, learning outcomes, and curriculum content.

Based on the study of Atkas et al. (2017), global citizenship in physical education could include service learning in k-12 schools abroad, learning the language of the children in specific countries in order to communicate effectively, and incorporating the learning outcomes from the courses in the U.S. to those in the study abroad country. There are several universities in the U.S. that offer study-abroad opportunities for physical education students, such as the University of Kansas, Appalachian State University, and North Central College. North Central College outlines that a physical education study abroad experience may help students understand the meaning of health and fitness in various world regions. North Central College also suggests that the study abroad experience allows students to discover new health and fitness philosophies while engaging in different sports and exercises than those in the U.S.

Interconnectedness

Interconnectedness operates as an awareness of global phenomena, their causes and conditions, and the reliance of others (Mak et al., 2022). It involves sharing a common language or culture. Interconnectedness also relies on country alliances and trade and can be facilitated via various channels, including trade in services and goods and the movement of capital (OBR, 2025).

Students majoring in physical education globally learn motor skill development and the nuances of teaching these skills to students within their programs. These physical activities provide a global commonality that physical education majors can apply to other cultures, such as walking, cycling, swimming, team sports, etc. Physical education majors instruct and observe motor skills and foster the development of a common global competence in the physical education standards students must master as part of interconnectedness in the field. Further, this interconnectedness can guide educational growth in a

variety of curriculum structures throughout the world. This process will insure that curriculum models are living documents that match the changes in today’s world and encourage life time sports and activities to support global health.

Digital Literacy

Digital literacy is a key concept that should be adapted by universities globally (Tejedor et al., 2020; Prensky, 2001; Cervei et al., 2020). It is the foundation for citizenship and necessary for the 21st-century professional (Tejedor et al., 2020). There is no formal standard regarding digital literacy. It has been commonly used in computer science, educational studies, information science, and library science (Perez-Tornero, 2004). Based upon this notion, digital literacy is diverse and is germane to the academic area. “Digital literacy may be understood as an inter-related set of skills or competencies necessary for success in the digital age, developed and evolved in different dimensions addressed in models acknowledged by countries and governments” (Tejedor et al., 2020, p.2). According to Santos & Gomez (2024), ‘Digital Literacy... emerged in the 1990s with the spread of the Internet and expanded the scope of digital skills needed to handle information and online communication’ (p.5). Digital literacy is more than using computers and mobile devices; it also includes comprehending digital technology’s political, social, and ethical ramifications (Santos & Gomez, 2024).

Consider digital literacy in physical education. According to Anthony (2024) “technology integration in physical education enhances both student engagement and fitness outcomes by leveraging digital tools and interactive platforms” (p.17). Picture a group of physical education majors in the U.S. collaborating with physical education students in Taiwan regarding a research project to examine how physical activity affects grades and standardized test scores among teens in Taiwan. The faculty members could team teach and use various educational digital platforms for student interactions.

Models for Global Literacy Development

Global literacy is a growing educational goal at universities. The purpose is to help students understand the world from multiple perspectives. Universities promote global literacy via the curriculum, programs such as study abroad, faculty members, and internationalization (strategic plans for a global campus). Several universities have researched and developed models for global literacy to develop globally literate professionals.

In 2003, Carnegie Mellon University (CMU) launched the Education for Global Awareness project, in which they defined global literacy objectives (UMB, 2018). During this project, CMU established a team to conduct an inventory of courses taught that already included global

content. They interviewed diverse campus leaders and developed a mission and vision for global education that aligns with their philosophy. CMU further invited faculty members to incorporate global learning into their courses. The administrative team provided funding to support the development for three cycles. CMU divided the objectives into intellectual skills and knowledge, social/cultural competencies, and ethical dispositions. CMU concluded that global literacy requires university support for faculty members, which, in turn, impacts students. CMU also concluded that global literacy is a trending topic among universities, including globalizing the core curriculum, global citizenship, internationalization, global learning, and cultural competency.

In their global literacy report, the University of Maryland (2018) concluded that faculty involvement was necessary for global literacy. There should be faculty compensation, frequent development opportunities, and options to include global efforts in the tenure and promotion process. Further, the University of Maryland (2018) determined that faculty members' interest in global literacy should add value to each school. Thus, schools should integrate global literacy practices into the curriculum and, as best practice, have it teaching and learning-centered.

Taiwan 2030 Bilingual Policy

Taiwan has developed a national global literacy policy with the Bilingual 2030 Policy. The policy was launched to improve the next generation of professionals' English language proficiency and international mobility (NDC, 2021). The policy seeks to increase the competitiveness among the youth for better job and salary opportunities (NDC, 2021). In order to strengthen its global competitiveness, the Bilingual 2030 Policy aims to guide Taiwan's workforce in connecting with the world and appealing to international enterprises in Taiwan (NDC, 2021). Therefore, the Ministry of Education in Taiwan postulates that all-English instruction is an effective tool that will equip students with the global perspective to comprehend, communicate, and engage and the ability to compete with others globally (NDC, 2021).

The Bilingual 2030 Policy includes six goals. The first is to advance the development of bilingualism in higher education. Second, the policy creates the optimal environment for bilingualism in K-12. Third, digital learning should be established in educational settings. Fourth, access to affordable English proficiency exams must be established. Fifth, the goal is to increase the English proficiency of civil servants. Lastly, a level of oversight will be created to monitor the policy, promote it, and establish effective implementation (NDC, 2021).

Based on Taiwan's Bilingual 2030 Policy, academic programs at many universities are connecting with universities in the U.S. to emphasize global literacy in specified disciplines. This article features one such university in

Taiwan that collaborated with a university in Virginia to share the benefits of global literacy in physical education.

Physical Education in Taiwan

In Taiwan, the concept of whole-person education has expanded and been implemented in many educational settings (Jian et al., 2020). The whole person concept focuses on the "complete and harmonious development of human beings" (p.96). "Under the influence of this, philosophy, school sports, competitive sports, and social sports in Taiwan are all coincidentally oriented towards the development of physical and mental health and harmonious personality development" (Jiang et al., 2020, p.6). Under the reign of Chiang Ching-kuo, who advocated for moral, physical, and intellectual education, education should be designed in a balanced manner and, thus, should not sacrifice physical education. Approximately 30 institutions have implemented the whole person into practice, changing traditional methods of physical education and sports.

Physical education is mandatory at all levels in Taiwan. Like many countries, the goal of physical education is to promote fitness and health. Taiwan also includes Tai Chi, along with other sports such as volleyball and basketball. Tai Chi is practiced as a graceful form of exercise. It is non-competitive and self-paced. Tai Chi requires constant motion and stretching, requiring each posture to flow into the next without pause. The inheritance of Tai Chi is not only confined to the technical level but also the inheritance of traditional virtues.

Taiwan also has its challenges in physical activity among youth. Chang & Wu (2022) conducted a study to determine the physical activity in Taiwan among children and adolescents. The study included data from government agencies in Taiwan from 2017 to 2022. The researchers used a grading scale to show results. Regarding overall physical activity, the grade was F. Regarding organized sports participation and active play, the grades were D- and F, respectively. Concerning active transportation, sedentary behavior, and family and peers, they were all below average, with grades of C-, D+, and D- (respectively). The researchers concluded that even with an immense effort by the Taiwanese government, physical activity levels are low among children and adolescents.

Background of University Collaborations in Taiwan and the U.S. (Virginia)

A faculty member from a university in Virginia served as a visiting professor at a university in Taiwan and assisted in establishing a Memorandum of Understanding (MOU) between the two institutions in 2019. The MOU led to team teaching and several virtual presentations, and in 2024, five students from the university in Virginia participated in a study abroad trip in Taiwan for the summer. The students conducted a summer camp for the elemen-

tary school affiliated with the university in Taiwan. The Virginia students taught dance and lacrosse. The elementary school's principal was very impressed and requested additional collaboration. Later that year, in December, the Taiwan-based university requested a physical education presentation that aligns with the Bilingual 2030 Policy.

Presenting Global Literacy in Physical Education

The Global Literacy in Physical Education presentation is part of a series of collaboration projects with the partnered universities that have transpired for the past three years. Based on the MOU, the collaboration was designed to connect both universities to gain a better understanding and build cultural competence. The university in Taiwan is invested in the Bilingual 2030 policy and is devoted to its students gaining global literacy competencies. By partnering with a U.S.-based institution, the university in Taiwan is committed to creating a global environment to increase its students' mobility and competitiveness in their academic discipline. The projects included:

1. Undergraduate (physical education and sport management) virtual research presentations (2021 and 2023)
2. Study Abroad in Taiwan (2024)
3. Faculty presentations (2024)

Undergraduate Presentations

The undergraduate research presentations began in 2021 and featured students enrolled in a directed research course at the partnered university in Virginia. The students conducted research in the areas of physical education and sports management for poster presentation. The global literacy component of the course served as a vehicle to encourage global mobility and gain a perspective of their field outside of the U.S. The global literacy areas emphasized in the course are cultural awareness, global citizenship, interconnectedness, and digital technology. Cultural awareness was cultivated by having students explore the culture of physical education and sports management in their research topic in the U.S. and how it compares to Taiwan. Students were also given a historical perspective of physical education and sports in Taiwan. The global citizenship focused on how open Virginia students were to engaging with different cultures and identities (Taiwan). Students were selected based on who was willing to present virtually to Taiwan. The following year, the opportunity opened for students to travel to Taiwan. The interconnectedness centered on the cultural ties that bind the students majoring in physical education and sport management in the U.S. and Taiwan. Students selected to present participated in meetings that explained the unique cultural nuances and the influence the U.S. has on their discipline in Taiwan. Finally, students had the opportunity to meet with the faculty members in Tai-

wan virtually before their presentation to get them acclimated to the culture.

Study Abroad

One undergraduate physical education student (enrolled in the directed research course) and four graduate sport management students participated in a study abroad opportunity in the summer of 2024. Even though the graduate students were sport management majors, they were all physical education majors at the undergraduate level. This was important since the students were required to host a summer camp for elementary students in Taiwan. The students taught dance and lacrosse. Students also hosted a seminar on developing an e-portfolio for fellow graduate-level students majoring in physical education. The students performed so well that the elementary school's principal and the university faculty in Taiwan asked the group to return the following year.

Faculty Presentation

The faculty presentations featured faculty members from Virginia presenting on global literacy in physical education. One faculty member traveled to Taiwan, while the other presented virtually. The presentation was conducted as a seminar for graduating students majoring in physical education. It is important to note that although the presentation included health and physical education, physical education and health are not combined as a major in Taiwan. A Center for Disease Control and Prevention (CDC) member was also a presenter to showcase the global literacy of health. The presentation started with the definitions of global literacy, followed by global careers. Second, the Taiwan 2030 Bilingual policy was discussed, as it impacted students wanting careers in the U.S. and building English proficiency in the physical education discipline. Third, intercultural competence was defined along with Deardorff's Intercultural Competence Model and how that relates to global literacy. Fourth, the first speaker was introduced as a member of the CDC. The CDC speaker shared the career opportunities in health and the international connection in health careers.

Fifth, a faculty member from the Virginia partner university presented on health and physical education in the U.S. Before the presentation, the faculty member sent a "Know, Want to Know, and Learn" (KWL) survey to the student majors in Taiwan to find out their current knowledge base and areas of interest for the presentation. The presentation was derived from the survey results. Most students felt they knew more about skill and lifetime themed activities, age appropriate curriculum, and lesson development in the United States while consequently, they also considered these areas to be ones to gain further knowledge in. Of great importance was the need to expand Taiwanese physical education student's knowledge in "The Every Child Succeeds Act" (ESSA) as physical edu-

cation is considered a core subject area across the U.S.

The faculty member presented the U.S. based standards to teach physical education, including the requirement to have health education included as part of the undergraduate teaching degree. Thus, the Taiwanese students realized that in the U.S., health is a required component of an undergraduate physical education teacher's training program. In addition to acquiring a work visa, there was also discussion on licensure requirements across the nation and praxis, the required teacher licensure preparation test. The presentation supported the common pillars of global literacy as culture, citizenship, interconnectedness and the global learning village are benchmarks of education in the U.S. After the presentation, the students had several questions, especially regarding language proficiency as a health and physical education teacher. At the end of the presentation, students were given contact information for additional questions. There were more questions and interest in the global literacy topic.

It is also important to note that the faculty member who presented face-to-face also presented part of the presentation in Mandarin. The ability to speak Mandarin excited the students; as several stated, it showed a commitment to connecting in their language. Finally, several students requested to meet with the faculty members to get more information about teaching health and physical education in the U.S.

Conclusion

The collaborating universities in the U.S. and Taiwan have shown commitment to global literacy in physical education via student and faculty members' exchanges and interactions. Engaging in this type of learning creates an ecosystem of career preparedness and mobility. Both groups are obtaining the ability to understand and engage with issues and perspectives globally while comprehending a critical awareness of diverse cultures, systems, and global challenges in the field. This commitment ensures that students become informed and responsible global citizens through their education and careers.

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HEALTH *Smart*

Potential Benefits of Recess Setting for Children with Ehlers-Danlos Syndrome

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Introduction

The social and physical skills learned in recess can be immensely beneficial to students with Ehlers-Danlos Syndrome (EDS). This article will address methods to enhance recess for students with EDS. Beginning with the definition, the authors will then proceed to learning about the prevalence, characteristics, benefits, and potential modifications of students with EDS in the recess setting.

Definition and Prevalence of Ehlers-Danlos Syndrome

Ehlers-Danlos Syndrome is defined as “a group of inherited illnesses which affects the tissue that supports and protects other tissues and organs in the body, also known as connective tissue. Ehlers-Danlos syndrome mainly affects the skin, joints and blood vessel walls.” (Ehlers-Danlos Society - a, 2017). According to the National Institutes of Health, students with EDS are often eligible for special education services under the Orthopedic Impairment category of the Individuals with Disabilities Education Act (2004) if it affects the learning process, which is often the case (Center for Ehlers-Danlos Syndrome Alliance, n.d.). The disability is very rare. Only one in approximately 5,000 individuals are diagnosed with EDS (MedlinePlus Genetics, 2021). Hypermobility EDS is the most common type (National Health Service, 2019).

Characteristics of Ehlers-Danlos Syndrome

Ehlers-Danlos Syndrome is now being diagnosed as early as 3 years-old. Infants and children with EDS often have hypotonia (weak muscle tone). This condition can delay the development of a variety of motor skills including sitting, standing, and walking. The child may also have loose joints that are unstable and prone to dislocation and chronic pain (MedlinePlus Genetics, 2021). The following is a list of common characteristics of EDS noted by the National Health Service (National Health Service, 2019)

- joint hypermobility
- loose, unstable joints that dislocate easily
- joint pain and clicking joints
- extreme tiredness
- skin that bruises easily
- digestive problems, such as heartburn and constipation

- dizziness and an increased heart rate after standing up
- problems with internal organs, such as mitral valve prolapse
- problems with bladder control urinary incontinence (p. 1)

According to the Mayo Clinic, the following characteristics of the syndrome are most popular:

- **Overly flexible joints** - Because the connective tissue that holds joints together is looser, joints can move far past the normal range of motion. Joint pain and dislocations are common.
- **Stretchy skin** - Weakened connective tissue allows skin to stretch much more than usual. One may be able to pull a pinch of skin up away from their flesh, but it will snap right back into place when it is released. Skin might also feel exceptionally soft and velvety.
- **Fragile skin** - Damaged skin often doesn't heal well. For example, the stitches used to close a wound often will tear out and leave a gaping scar. These scars may look thin and crinkly. (Mayo Clinic, 2022, p.1)

Potential Benefits of Recess Setting for Children with Ehlers-Danlos Syndrome

Students with moderate EDS can gain a variety of benefits from being active. Benefits of exercise for the individuals include the following:

- feeling more confident about moving
- improving the flexibility of stiff parts of the body
- improving stamina
- improving the body's muscle endurance
- stress and tension release
- losing weight and increasing muscle tone
- improving fitness levels
- improving self-esteem (Ehlers-Danlos Support - b, 2017).

Recess Modifications for Children with Ehlers-Danlos Syndrome

The authors believe with modifications for children with EDS, recess can be very valuable, especially from a physical standpoint, but also for self-esteem. The following list describes some of the potential modifications to some of the benefits noted above:

Benefits of Recess for Children with Ehlers-Danlos Syndrome	Modifications to Potentially Gain Benefits of Recess for Children with Ehlers-Danlos Syndrome
improving self-esteem	• establish safe activities which do not have “winners or losers” • give positive feedback to all children • as a teacher, participate in some activities to lessen competitiveness
improving the flexibility of stiff parts of the body	• establish safe activities to avoid bruising or dislocation of joints • have students participate in less-strenuous activities • participate in a bowling-type activity which could include smaller balls and plastic pins at a shorter distance than in standard bowling
improving stamina and endurance	• ensure that students participate in very low-impact locomotor activities such as walking • ensure that students remain active • have students play a “miniature” golf course – set up cones that need to be struck with a small ball that students will strike with a club where they will need to walk from hole to hole
stress and tension release	• participate in low-income badminton on a small court to limit the range to be covered • ensure that students remain active

Conclusion

The social and physical skills learned in recess are very important for a child EDS. This manuscript addressed the definition, prevalence, and characteristics of students with EDS in the social and recess setting. Potential benefits and modifications for children with EDS in recess were then noted.

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Ethical Decision Making in Youth Sports

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Many children participate in recreational youth sports around the world. Parents allow their children to participate in recreational sports at a young age to teach them sports skills, keep them physically active, and help them determine what sport they will play as they get older. Recreational youth sports also teach children many important life skills including ethical decision making (Coatsworth & Conroy, 2007).

Recreational youth sports programs have a focus on skill development, teamwork, fun, and inclusion. These youth programs put an emphasis on participation as opposed to performance. Many guarantee that all children will have the opportunity to play and grow (Vierimaa et al., 2018). This is very different from elite sports programs that prioritize competition and are largely focused on winning. Confidence building, enforcing a physically active lifestyle, and personal growth are the overall main focuses of recreation program youth (Smith & Smolianov, 2016). It is to be remembered that many researchers consider sport a microcosm of society (Cunningham and Singer, 2012).

Coaches make a very critical contribution to these young recreational sports teams. Oftentimes, the coaches are parents with schedules that will allow them to coach. These parents often step in without coaching training. In addition to their primary responsibility to teach basic sports skills and strategies, it is necessary that they serve as models of behavior for the children (Haudenhuyse et al., 2012). An example of this proper behavior is behaving and encouraging sound ethical decision making.

A quality youth coach should have several characteristics:

- Fairness
- Patience
- Kindness
- Honesty
- Morality
- Positive attitude

(Johnson, 2004, p.1)

Sports ethics can be defined as a branch of philosophy dealing with principles of conduct in sports (Health and Physical Education, 2024). Some examples of this may include fairness, responsibility, and honesty. Ethical decision-making in youth sports should involve making choices that align with values no matter the external dilemmas present. The authors would like to focus on the ethical terms and philosophies of realism, relativism, and utilitarianism. The author has provided very simplified definitions.

Definitions of Realism, Relativism, and Utilitarianism:

Realism: Definition

Realism in ethics is the belief that moral facts exist independently of human perception (Realism in Ethics: The Search for Objective Moral Values, 2023). The author notes that things are ethical, or not. There is no wiggle room. **No rationalizing such as in a basketball game:** an opponent is holding a player on another team during the game so it is a foul; even though they are holding the other player because they are catching the opponent who is having a seizure so they don't fall to the ground. It is still a foul.

Relativism: Definition

Relativism is the view that moral judgments are true or false only relative to some particular standpoint (Westacott, n.d.). So, there is wiggle room. The action can be considered ethical, depending on the situation. There is rationalizing such as in a basketball game. The player holds the opponent above because they are falling to the ground because of being struck in the head. Because of the situation, committing the "foul" of holding is justified so it should not count as a foul.

Utilitarianism: Definition

Utilitarianism is an ethical theory that asserts that right and wrong are best determined by focusing on outcomes of actions and choices (Utilitarianism - ethics unwrapped., 2025, p.1). The authors would like to add that if the majority of individuals experience positive outcomes based on the decision, it is ethical. A coach can kick a player in practice to gain attention from the rest of the team. This action did gain the attention of the other players because they all listened after the abuse of the player who was kicked. It is ethical because the majority of the players benefit. If they all quit the next day it would not be considered ethical in terms of sports.

Scenarios

The authors would now like to present scenarios of the three ethical terms that were previously defined. The authors will begin by presenting scenarios, followed by a description of ethical behavior, and then address the strategies that could be followed based on realism, relativism, and utilitarianism. The authors will also present better ways of implementing strong ethical behavior, including ethical decision-making.

Scenario #1: A high school coach has rules where there

is no gray area. They are followed and if not, no matter what, players adhere to the consequences. Two nights before a very important regional championship basketball game, one player's grandmother is rushed to the hospital with heart trouble. The player goes to stay with her grandmother for the night and the next day. She does go to school but emails the coach and tells them she will be missing practice. She does so, and she visits with her grandmother, who is unresponsive. She goes to the game but the coach does not play her citing the team rule that "Players must be at practice the day before a game to play". The crowd, administrators, and parents are all upset and are chanting to put her in. The coach does not budge, the team loses a close game. The next day at practice some students question the coach and the response they receive from the coach is "A rule is a rule".

This scenario presents an ethical question. A realist would agree with the coach, but should there be any bending in the rules? If so, how far? For just the good players? It does not matter for a realist. As stated, "A rule is a rule".

Scenario #2: A high school coach has a rule that to try out for the football team a prospective player must run two miles in under 14 minutes. Not the most difficult, but difficult for some. As try-outs come closer the coach sees potential players making the mark but many failing. The assistant coach approaches the head coach and notes they may have a problem. Some of the bigger football players who would play on the offensive line are really good but they are simply not going to accomplish running two miles in under 14 minutes. So, the announcement is made that "the players on the offensive line that plan to play do not have to accomplish the task because "they are in shape and this is evident since they are going to be playing the offensive line".

This scenario presents another ethical question. A relativist would agree with the coach. The coach has modified the rules "relative" to the situation. There was never any mention from the coaches of the football players not being able to try out for the team until the coach made an ethical decision and displayed "relativism" that these four players would not be held to this standard.

Scenario #3: A recreational basketball youth coach is preparing their team for a major game against their rival team. In the league, there are rules that every player on the team is to have equal playing time. The coach is worried that a specific player who does not have skills as developed as the rest of the team will cost them the game if they go in. The coach decides to help the team win; they will report that this player is injured, or feeling ill so he does not have to play her. Upon conclusion of the game the team wins and everyone is excited and happy, except for the player who was benched. This would be an example of utilitarianism. If it is good for the majority of players, it is ethical.

This scenario presents an ethical question. Should the importance of winning (and most team members being OK with the decision) triumph over a player's opportunity to play? This is a common topic that one may encounter when investigating ethical decision-making in youth sports. On the one hand, the coach in the scenario wants the majority of his team to be satisfied and win the game, and on the other, the coach wants to be fair to this player and allow her to compete.

Many children participate in recreational youth sports around the world. Ethical decision making is an important factor in sports. The authors have presented a brief description of realism, relativism, and utilitarianism. In addition, the authors presented scenarios of coaches who are following these three ethical guidelines and their opinions on what specific ethical principles are being followed.

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How Physical Education Teachers Can Assist Kindergarten Teachers in Mathematics Instruction

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A kindergarten teacher is finishing up a math lesson and realizes that the students are not understanding the concept. Unfortunately, instead of taking the extra time needed to help them to understand, it is time to go to P.E. The teacher will have to push the lesson plans back a whole day or more in order to teach the topic in a different way, hoping the students will better comprehend it. Now, imagine what would have happened if the teacher had collaborated with the physical education teacher. They could have found a way to incorporate what the students struggled to understand into the P.E. class to demonstrate a different method of teaching to guide the students to a better understanding without having to push back other concepts.

Each individual learns in a different manner (Flemming and Mills, 1992). Teaching should include many different learning styles to accommodate the different ways that each student learns (Emel et al., 2024). Over the years, many individuals have recognized the different methods of learning. Psychologist Howard Gardner identified the following intelligences from these different learning styles. Flemming and Mills (1992) have developed learning styles similar to those developed by Gardner which both include kinesthetic learning.

- A summary of Gardner's intelligences is listed below:
- Logical-mathematical: focus on abstract thinking and distinguishing patterns involving numerical and logical patterns
 - Spatial-visual: focus on thinking in pictures and accurate visualizations

- Bodily-kinesthetic: focus on bodily movement control
- Musical: focus on noticing musical aspects
- Verbal-linguistic: focus on verbal skills, vocabulary, and phonics
- Naturalist: focus on knowledge and recognition of nature
- Existential: focus on deep meaning and pose questions on human nature/existence
- Interpersonal: focus on awareness of other people's feelings, morals, etc.
- Intrapersonal: focus on self-awareness and one's own feelings, morals, etc.

(Howard Gardner's Theory of Multiple Intelligences | Center for Innovative Teaching and Learning | Northern Illinois University, n.d., p. 1)

Flemming and Mills (1992) have noted the following four different learning styles: visual (V), aural (A) [related to hearing], read/write (R), and kinesthetic (K). Physical education teachers focus on bodily-kinesthetic intelligence and can do so to further the learning of students in other subjects. The following table includes categories of the Mathematics for Kindergarten in Virginia SOLs and examples of items that are part of these categories. The chart then provides physical education activities (Kinesthetic Movement) that can assist in teaching these examples. It is also to be remembered that virtually all individuals are more engaged when learning is fun and dynamic as opposed to when students are bored, static, and not engaged in learning.

Virginia Standard of Learning for Kindergarten Mathematics	Kinesthetic Intelligence (Physical Activity)
Number and Number Sense Recognize and explain that the number of objects remains the same regardless of the arrangement or the order in which the objects are counted. Use objects, drawings, words, or numbers to compose and decompose numbers 11-19 into a ten and some ones.	• This activity involves BINGO. Each student will receive a card with random numbers 0-20 on it. Around the room, there will be posters with dots arranged in different ways representing different numbers. The students will each start at different posters and will have to run to the open posters to see if their number is on their card. The game ends when one student gets a BINGO. After this

	happens, the teacher will take the students around the room to every poster and ask them what the number is. The posters can be changed into different arrangements or use pictures instead of dots to make it more challenging. • Have students arrange ten pins close to together and roll a ball. After they knock down some pins, have the students count how many are left. • Have students follow a model on paper to set up ten pins in the correct order and count them. Also, count them after bowling. • Have one student toss a number of balls between 11-19 into 20 pins. Have the students catch the balls and place them on the floor “out of the way.” After the tossing is done, have the students put ten pins in a pile, count the ones that are left, and then tell you the number.
Computation and Estimation Use objects, drawings, words, or numbers to compose and decompose numbers less than or equal to 10 in multiple ways. Model and identify the number that makes 5 when added to a given number less than or equal to 5.	• The teacher will use five very large sticky notes to write a number less than or equal to 10 on each one and place them on each side of the gym. The students will be split into two teams but be positioned on each side of the half court line of the gym. Under the sticky notes, there will be cones. The students will use the cones to represent each of the numbers in a relay race. Once the teacher yells, “Go,” two students will race to their sticky notes and their cones. When they are done, they will look to their teacher to see if they are correct, and if they are, they race back to their team so the next two students can work on the next number. If they are not correct, have them try again. Whichever team gets all the numbers correct first will win. • Have the student count and place three balls into a bucket. Then have the students using an underhand throw count until they toss enough balls to get them in a bucket. Ask them how many it took. Then, start with a different number of balls to begin with. Show them the

	mathematical equation. Starting Number + ____ = 10 Do the same, but use the number to get accomplished 5.
Measurement and Geometry The student will reason mathematically by making direct comparisons between two objects or events using the attributes of length, height, weight, volume, and time.	- Ask students to roll a ball to a close cone and then a farther cone. Ask them which ball went farther, more length, and why - Toss basketballs to a piece of tape on the wall. Then toss the ball to higher tape. Ask them which went higher and why. - Toss basketballs. Then toss a lighter ball. Ask the students which were heavier.
Amount of time spent on two events using the terms longer or shorter.	- Ask students in a group to roll a ball at an empty bottle and roll a ball at a full bottle trying not to knock down the bottle. Then have the students change to a heavier ball. After it is knocked down ask them which one was easier to knock down and why. - Have students look at a clock and do as many jumping jacks as they can in ten seconds. Then have the students count the number that can be done using twenty seconds after telling them to count the clock to twenty seconds. Ask which one is higher. Ask them why.
Probability and Statistics Sort and classify concrete objects into appropriate subsets (categories) based on one attribute (e.g., size, shape, color, thickness). Pose questions, given a predetermined context, that require the collection of data (limited to 25 or fewer data points for no more than four categories).	- The teacher could lay hula hoops of different colors across the middle of the hula hoop. The students will be lined up around the perimeter of the hula hoops. The teacher will give each student a different object. They could all be balls but a different color or size. The teacher will call out a category and the students with an object fitting that category will run to the correct hula hoop to place it in. - The teacher could do the same as above but with different objects like balls, cones, and jump ropes. Each hula hoop will represent a different category. The teacher will call out a category, and the students holding an object that fits into the category will run to the hula hoop and put it in before running back to their spot. The game continues until everyone has put their object in a hula hoop. Now, the teacher will ask students about the objects.

	For example, “How many of the balls were blue?” Place as many colors of carpet balls. Have students run, hop, or slide, one at a time, collect one ball of any color, and bring it back and put as many of 25 (teacher chooses the number) behind their group in different colors. Colored paper that is balled up can also be used as this activity will be required.
Patterns, Functions, and Algebra Create and describe a repeating pattern using objects, colors, sounds, movements, or pictures.	- The teacher needs to use blue tape and create four squares in a straight line on each end of the gym. Divide the students into two teams and put them next to their row of squares. Have different objects in the middle of the gym (different colored/sized balls, cones, jump ropes, etc.). Each round, give the students a pattern to create. When the students hear “Go!” four students from their team run to the middle of the room to grab their objects and bring them back to the squares. The other members of the team create the pattern by placing the objects the correct way in the squares. Each round, the student roles will switch. - Have students in groups use jump ropes to make squares, circles, rectangles. Multiple jump ropes can be used. - Have students in groups make squares, circles, rectangles using their bodies (e.g. stand in a circle)

In conclusion, the authors presented a variety of learning styles, one of which is kinesthetic which includes using the body to learn. Physical education teachers focus on bodily-kinesthetic intelligence and can also do so to further the learning of students in other subjects. Each student learns differently, and this should always be remembered. The more methods that can be used, the more success teachers can see in their students. It is also to be remembered that all individuals are more engaged when learning is fun and dynamic as opposed to when students are bored, static, and not engaged in learning.

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How Physical Education Teachers Can Assist 5th Grade Teachers in Mathematics Instruction

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Physical education during elementary school is a time in which students leave the general classroom and move to a separate location within the building typically known as the “gym” in order to work primarily on movement skills. However, such a setting can have other educational benefits. It is important to recognize Gardner’s Multiple Intelligence educational theory in order to provide proper instructions for students as they all learn differently. Specifically, this manuscript will discuss how mathematics can easily be included in physical education.

Gardner’s Multiple Intelligence

Gardner’s Multiple Intelligence educational theory (1983) should be considered by all educators as it offers the different ways that individuals may learn. It is important to note that using many intelligences is desired as everyone learns differently. Below is a list of the multiple intelligences and their summaries (Minshew, 2019):

- Bodily-Kinesthetic Intelligence: Proficiency in the ability to control and skillfully move one’s body.
- Interpersonal Intelligence: Proficiency in the ability to interact with individuals in a meaningful and healthy way.
- Intrapersonal Intelligence: Proficiency in the ability to analyze and understand oneself emotions, actions, and beliefs.
- Logical-Mathematical Intelligence: Proficiency in the ability to use analysis and reason in order to solve problems.
- Linguistic Intelligence: Proficiency in the ability to comprehend writing, reading, or speaking.
- Naturalistic Intelligence: Proficiency in the ability to appreciate and act with sensitivity to the natural world.
- Spatial Intelligence: Proficiency in the ability to manipulate and visualize environments.
- Musical Intelligence: Proficiency in the ability to create, perform, and appreciate music.

Within the physical education setting, it is important to take the multiple intelligence educational theory into mind as students often align with an intelligence or “intelligences” (Minshew, 2019): and should offer activities and instruction that benefit all students. Specifically, the idea of including 5th grade mathematics, or Kinesthetic Movement in the instruction of physical education with

Logical-Mathematical Intelligences is “natural” as basic math is used in all sports for items such as keeping scores, following averages, etc.

Standards of Learning

Physical education teachers can easily focus on the Bodily Kinesthetic Intelligence (movement) and Logical-Mathematical Intelligence (math). The following is a summary of the Virginia Standards of Learning for math in the fifth grade (What should students be able “to do?”):

- Number and Number Sense:
 - represent equivalency between decimals and fractions.
 - compare and order sets of fractions including proper, improper, and mixed numbers having denominators of 12 or less as well as decimals through the thousandths.
 - demonstrate an understanding of prime and composite numbers as well as determine the prime factorization of a whole number up to 100.
- Computation and Estimation:
 - estimate, solve, represent, and justify solutions to single-step and multistep contextual problems using addition, subtraction, division, and multiplication with whole numbers.
 - estimate, justify, represent, and solve solutions to single-step and multistep contextual problems through using addition and subtraction of fractions with like and unlike denominators with and without models as well as solve single-step contextual problems involving multiplication of a whole number and a proper fraction with models.
 - represent, estimate, solve, and justify solutions to single-step and multistep problems including those in context using subtraction, addition, multiplication, and division with decimal numbers.
 - simplify numerical expressions with whole numbers using the order of operations.
- Measurement and Geometry:
 - reason mathematically to solve problems including those in context that involve mass, length, liquid volume using metric units.
 - multiple representatives to solve problems including those in context that involve perimeter, area, and volume.

- classify and measure angles and triangles, and solve problems including those in context.
- Probability and Statistics:
 - apply the data cycle or formulate questions, collect or acquire data, organize and represent data, and analyze data and communicate results focusing on line plots or dot plots and stem-and-leaf plots.
 - solve contextual problems using measures of center and the range.
 - determine the probability of an outcome by constructing a model of a sample space and using the Fundamental Counting Principle.

- Patterns, Functions, and Algebra:
 - identify, describe, extend, and create increasing and decreasing patterns using whole numbers, fractions, and decimals including those in context while using various demonstrations.
 - investigate and use variables in contextual problems. (Virginia Standards of Learning, 2023)

Physical Activities

Basic mathematical skills are practiced as a part of a regular lesson with keeping in mind the standards above. It's important to create activities that help the students to

Virginia Standard of Learning for 5th Grade Mathematics	Kinesthetic Intelligence (Physical Activity)
Number and Number Sense	Have students shoot a basketball into a hoop and make a fraction of how many they made over how many shots they took then have them convert that into a decimal and percent.
Computation and Estimation	Have students kick soccer goals with a partner and turn how many they made over how many they kicked into a fraction doing so the same with their partner and have them add them together and even compare with the class.
Measurement and Geometry	Have students jump forward as far as they can and let them measure the length of their jump using different measurements like inches, centimeters, meters, and feet then ask them which they thought was the most effective in measuring.
Probability and Statistics	Have students break into 3 groups (group 1 multicolored ball, group 2 multicolored scarf, and group 3 multicolored hula hoop). Play music as they find variations of 1 ball, 1 scarf, and 1 hula hoop, when the music stops they continue forming new groups. After the movement activity have the students sit down and explain the fundamental counting principle (how many different groups could be formed). Have the students use this principle as it applies to the activity.
Patterns, Functions, and Algebra	Have students throw a ball in a circle keeping the same pattern as to who they threw it to, then start adding balls to the pattern and ask them to write down the pattern that they performed with their group.

learn the topics but in an interactive way to get students moving (Kinesthetic Intelligences). Below are specific recommendations for the summaries of the Virginia Mathematics Standards of Learning for 5th grade.

The previous table describes and explains various activities that can be used within the gymnasium to promote physical activity during the instruction of mathematics at the fifth-grade level. Each activity works to address the standard that is paired with it in order to get students moving while also reinforcing the instruction that was described beforehand. By participating in these activities within the physical education class, teachers will be able to follow the Virginia Standards of Learning for mathematics in the 5th grade and promote physical activity in the gymnasium. Through the use of movement activities students will be able to gain a deeper and more concrete understanding of the material that is learned through each standard.

Conclusion

It is important to understand that all individuals learn differently as noted by Gardner’s Multiple Intelligence educational theory. It is important to keep in mind the different ways that students may learn to develop effective instructions to allow for learning to be long lasting. Physical education teachers can easily use Kinesthetic movement to incorporate 5th grade mathematics.

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Guidelines for Manuscript Submission - (Revised Fall 2025)

The Virginia Journal is published twice yearly (Fall and Spring) by the Virginia Association for Health, Physical Education, Recreation and Dance. Deadlines for submitting materials for inclusion in the spring and fall issues are January 15th and July 15th respectively. Manuscripts should be sent to Dr. Michael Moore, TVJ editor, by email in an attached WORD document (mbmoore@radford.edu). Each e-mail attachment should be no greater than 4 MB. In submitting a manuscript, the author affirms that it has not been published or accepted for publication elsewhere, unless otherwise stated in writing.

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Manuscripts follow the form of the Publication Manual of the American Psychological Association and must be typed on 8 ½ by 11 format. The attached manuscript must be double spaced except that direct quotations of three or more lines in length are to be single spaced and indented. Manuscripts should not exceed 8-10 double-spaced pages of narrative. The name and institution of each author are inserted on a title page but not on the narrative. There should be provided on the title page biographical information on each author. This biographic information should include name and position at time of manuscript submission.

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Examples of Citations

American Dietetic Association. (1999). Dietary guidance for healthy children aged 2 to 11 years. *Journal of the American Dietetic Association*, 99(3), 93-101.

Kulwicki, A., & Rice, V.H. (2003). Arab American adolescent perceptions and experiences with smoking. *Public Health Nursing*, 20(5), 177-183.

Illustrations

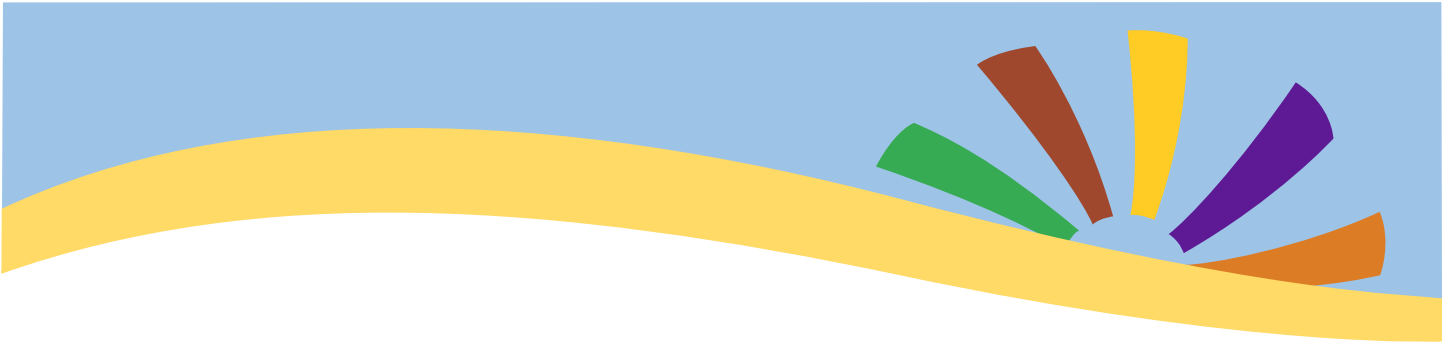
Illustrations such as pictures, graphs, and drawings are valuable additions to manuscripts. Please send these embedded within your manuscript.

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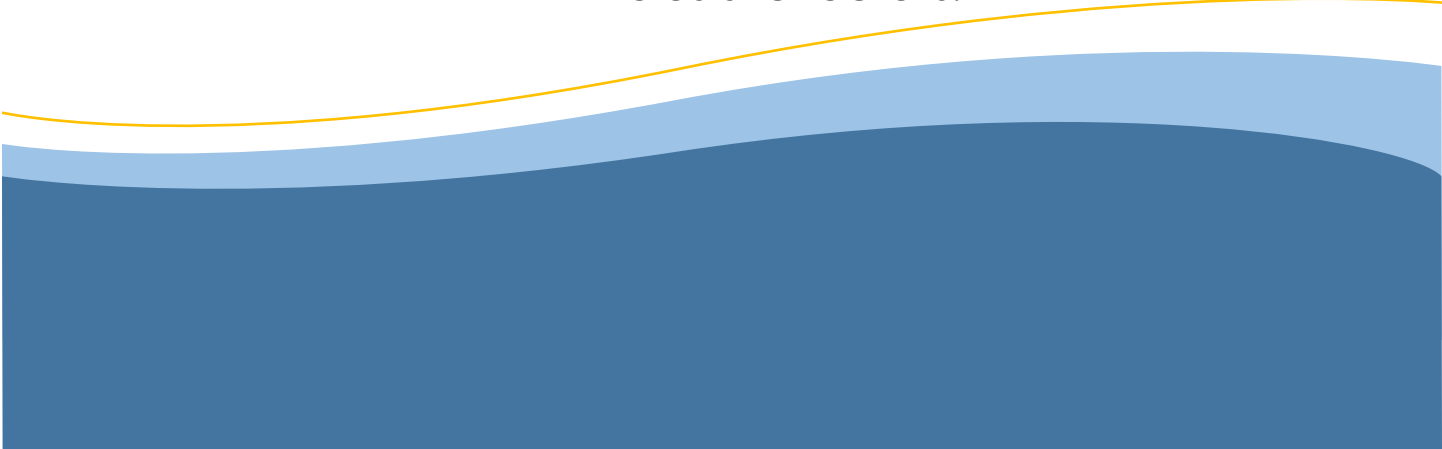
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