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Physical education, we must educate the physical or become obsolete: What are we doing?

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Abstract
SHAPE America's National Physical Education Content Standards Task Force has released the *Guiding Principles and Students Attributes* that are being used to shape the national standards "rewrite". The emphasis of the Task Force is predominantly on a new social domain while minimizing the "physical" education that has been the foundation of the discipline. This paper provides evidence-based rationale and a strong voice of dissent on the current direction of the Task Force and to validate the importance of our field to continue to educate in the physical as a) it is greatly needed for our societal well-being (physical activity, fitness, health) and b) it is crucial for our subject matter to be relevant and valued in the school system. The current National Standards have an established vision to promote physical literacy in students that coincides with the long history of focusing on physical and affective development. The debate should not be over adding a social domain and moving away from the physical, but rather what curricular content should be implemented to reach the current standards along with aligned assessments to evaluate if the standards are being met. This article emboldens the logic on why we should not change our current purpose and vision, which provides a unique contribution to K-12 education and society as a whole. We must get back to our foundation and seek out how to do it better rather than changing that focus, which will hinder students' ability to stay physically active and fit for a lifetime.

Keywords: Physical education, national standards, curriculum & instruction

Introduction
SHAPE America's National Physical Education Content Standards Task Force is in the process of revising ("rewriting" as stated by the task force) the organization's current National Content Standards and Grade-Level Outcomes for K-12 Physical Education [1]. The Task Force's decision to "rewrite" and fundamentally shift the primary focus of the National Standards from the historical psychomotor domain to a new social learning domain focus was made public (4/4/2022) in a preliminary draft that was opened for comment and discussion among SHAPE America's members. The dramatic shift in emphasis is being justified in the Task Force's guiding principles and student attributes document [2] on three counts. First, the Task Force posits that "the world is different than it was nine years ago", when the standards were last revised. Second, the Task Force recognized 'inequities' in the current national standards. Finally, the Task Force acknowledged the importance of motor competency, but stated that motor competence is not the sole attribute to equitably serve learners on the path to physical literacy and well-being.

The Task Force opened the floor to public comment (Round 1 April 4-May 16, https://www.shapeamerica.org/standards/pe/NPES_Task_Force.aspx) and welcomed the critical review of the ten Guiding Principles to student learning and assessable Student Attributes that should be gained through "learning in physical education". A similar process will be used during future windows of critical review (dates not yet announced) as nothing has been finalized and the current direction could possibly change as many in the field have been in opposition. This manuscript will refute the current direction of the Task Force and outline the effectiveness of the current National Physical Education Standards content that 1) Provide students with measurable psychomotor outcomes that have been proven to enhance lifelong fitness and activity; 2) Outline attributes that make Physical Education unique and relevant to the school system; 3) Provide a service to our society by equipping students with the tools to stay physically active to counter issues of inactivity (e.g., declined fitness levels, obesity,

disease, increased healthcare costs, decreased work productivity); and 4) Support continued research to better enhance how we teach (and assess) elements of the current National Physical Education Standards.

The authors of this position paper are in full support of regular and rigorous review of educational standards to better equip students with the needed skills for lifetime activity and fitness. The known benefits of physical activity (PA) not only for physical health (physical fitness and weight status maintenance), but also its corollary benefits on other aspects of development and overall well-being across the lifespan is well documented [3]. It is also understood that the world ***is*** different than it was nine years ago, as we continue to be less active [4], less fit, and more obese [5, 6] while children's overall health and well-being has continued to decline [5, 7]. So, one would think that the focus would be to seek to revise our national standards to better equip students with the tools to stay physically active and fit across the lifespan. Instead, the proposed new standards minimize the importance of the "physical" education focus of our field by almost exclusively promoting learning in a new social domain, a fact that we are not in support of, along with many others in the field [8].

We are not in disagreement that the affective domain in physical education is valuable, as it is already a staple in the national standards, but the intent of this article is to question why the standards drastically move away from educating in the physical and seem to focus primarily on a new social domain well beyond the scope of the affective domain. Especially, when evidence overwhelmingly demonstrates that our society (and our field) continues to struggle immensely within PA and fitness. With these in mind, we assert that abandoning or de-emphasizing physical education's unique subject matter reduces the discipline's potential effectiveness by distributing resources and attention on issues unique to no single subject matter. Doing so will potentially eliminate physical education as a necessary component to overall education.

Societal Need for Physical Education

The inability to engage in healthy levels of PA is a monumental issue across our nation. Currently, 75% of adults [9] and 76% of children 6 to 17 years [10] do not meet the national PA guidelines. The lack of PA results in health care costs of roughly $120 billion per year [9], while approximately 80% of adults [11] and 40% of children are either overweight, obese, or severely obese [12]. Heart disease accounts for nearly 20% of all-cause mortality in the United States [13] and could be mitigated with the improvement of PA and physical fitness [14] (Saint-Maurice *et al*., 2022).

We also acknowledge that physical education is not the end all cure to the declining health of our nation. However, the content represented by the current content standards – what individuals need to become physically literate – provides content to better equip all youth independent of resources and circumstances to manage their own health-related PA with physical education programs postured to educate every child in America. Given that there is a noted lack of dedicated time in physical education to achieve measurable movement outcomes, it does not seem prudent for the field to attempt to take on more responsibility by increasing an emphasis in a new social domain when we should be reprioritizing highly impactful movement opportunities while implementing best teaching practices, [15]. If physical education, which is the largest grass-roots approach for educating students in the physical domain (i.e., movement competency, PA, and fitness), is not equipping children and adolescents with the tools to stay physically active and fit for the rest of their lives, what subject matter experts or organization will be responsible for that focus?

Physical Education's Role in K-12 Education

When examining K-12 education, each subject matter content area has a purpose to educate students within that discipline. Every program in every discipline across America struggles with student differences, but those disparities do not marginalize the value of learning the content. For example, Language Arts/English promotes reading and writing. The end goal is not confined to simply teaching children to read and write while in school, but rather to holistically promote literacy with the goal of improving the quality of a child's life forever. While there are disparities in effectiveness, it does not marginalize the importance of learning to read. The purpose of physical education should also aspire to that same lifetime purpose, but through the avenue of physical literacy, with one critical outcome being to promote health-enhancing PA and fitness across the lifespan. If we were to minimize, and thus devalue our focus and purpose in the physical, what unique value do we provide to K-12 education?

Shifting the emphasis on content standards and/or adding more content will diminish the profession's ability to accomplish its mission. Time allocated and resources for physical education in schools continues to be minimized and is reflective of its marginalization relative to the focus on other core subjects. This argument can be valid from a school administration level if all they see from many teachers is a "rolling out the ball" approach, rather than adequately educating and preparing students in physical literacy. As districts/schools/administrators are evaluated on how well students perform in core subjects, our profession has made it easy for administrators to marginalize physical education based on the lack of a consistent curricular focus that is aligned with objective standards and data to support them. In other words, we continue to self-marginalize our profession with a diffused or even a non-existent curricular focus and lack of assessment, which has diminished our profession in schools.

So, to now promote the idea that our national standards are going to have a primary focus in a social domain would, in our opinion, continue to dissolve our unique value in the K-12 setting. If we are no longer focusing on educating in the physical, but rather from a social domain perspective, we will no longer be needed, as schools can hire counselors, social workers, and psychologists to address that content as many schools are already adding more of these positions in their districts. It must also be understood that physical education is not the only subject that addresses social elements, as it is infused throughout the educational process.

If our profession were to focus on emphasizing standards within a new social domain, rather than the long-standing emphasis in the psychomotor, physical fitness, cognitive, and affective domains, children's (and our society's) ability to learn and demonstrate health-enhancing physical habits will be hindered, and our profession, as we know it, may be at risk to be even more marginalized or eliminated in the school setting. Physical education should be the exclusive provider of subject matter in the physical domain as we provide content that no other subject can. If we demand that physical educators teach the subject matter content well, we can effectively influence all students lives as developing healthy levels of PA and fitness should be advocated for everyone at any age.

Assessing Existing Standards

One of the primary components of a valid evaluation effort is to identify the purpose of the entity being evaluated [16]. A valid evaluation of the current content standards should then begin by identifying and assessing the merit of the entity's mission or purpose. Once that is completed, the goals and objectives can be assessed according to their contribution to achieving the program's purpose. SHAPE America's stated goal for physical education programs is to develop physically literate individuals and cites the benefits derived from achieving physical literacy [1]. As indicated in the current national standards the first three standards are directly related to developing skills in movement (psychomotor) and knowledge (cognitive) to enhance PA and fitness (physical fitness). The last two standards are within the affective domain for personal and social interaction along with valuing PA, which both play a critical role in influencing PA behaviors.

The three defenses provided by the currently proposed draft rewrite fails to address physical education's unique and measurable purpose of physical literacy, and if or how including content representing the five standards fail to contribute to health and wellness. An assessment of changing times does not change or even de-emphasize the value of physical literacy. Is regular participation in health-enhancing PA less valuable than it was nine years ago? The rationale by the Task Force cites "inequities" in the current standards. "Inequities" implies lack of fairness or justice. The Task Force fails to explain how becoming physically literate, motorically competent, knowledgeable (regarding fitness and PA), and developing personal/social skills is unfair. We contend that every child should learn, with an appropriate developmentally based progression, how to manage their own activity behaviors and habits in ways that maximize their health and well-being.

The Ultimate Purpose of Content Standards

It is our concern that the focus on rewriting the current standards might possibly be a result of confusing content standards with "opportunities to learn" standards.

Content standards focus on the dissemination of information that needs to be acquired to meet the discipline's intended outcomes. In physical education's case, that outcome – our unique contribution to overall well-being – is physical literacy (primarily in the form of skills and knowledge acquisition). The standards' primary purpose is to guide programs in prioritizing content that results in achieving that goal. Content standards are not intended to address the context or conditions in which students learn (e.g., instructional practices, feedback, assessment), as important as each of those are. In essence, the content standards are not intended to direct methodology. Many elements the Task Force considers to be Guiding Principles are more predicated around instruction rather than content, which in itself becomes problematic in their focused charge.

Every student deserves the benefits that are derived from becoming physically literate. Unfortunately, not every student has the same opportunity to learn. There is no question that differences exist in terms of what students are receiving in physical education (by state, by district, or even within the same school), nor that barriers exist that are preventing students across America from experiences they need to foster their own physical literacy journey. It may even be argued that many programs are implemented in ways that are not suited to the needs of all learners. But those programs should not marginalize the value of physical education's inherent core content of teaching students how to develop and sustain health-enhancing PA and fitness habits.

Current Grade-Level Outcomes Focus and Value

A curriculum framework needs to provide a pathway in incremental steps that guides learners to the intended outcome. Learning occurs best when it is goal-oriented, systematic, sequential, and cohesive. Learning experiences should focus on a strong foundation of core competencies with subsequent learning experiences that build on and enhance core competencies. What is taught and when it is taught is a function of intent (what students need at any grade level, relative to progressing towards the goal) and readiness (physical, psychological, cognitive, and emotional).

The affective domain is part of the curriculum framework at the elementary, middle school, and high school levels, and appropriately so. However, de-emphasizing the psychomotor, physical fitness, and cognitive domains to add a new social domain does not align with physical education's unique potential contribution to student's lives and does not align with the current PA and fitness deficiencies across our nation. However, the current standards framework in place does provide the opportunity to achieve our purpose, if done well. Thus, it is critical to understand what we provide across educational age-related levels. If we know what physical education should accomplish by the end of elementary, middle, and high school, then we should be more intentional at providing curriculum, instruction, and assessment to reach our intended goals. Current National Standards Grade-Level Outcomes have a practical vision, unfortunately, there is no evidence indicating these outcomes are being met based on the general lack of assessment at all levels.

At the elementary level, physical education has the potential to equip every child, regardless of background, to be competent movers. We should be focusing on developing competent movers as a plethora of data demonstrate that competency in a broad foundation of motor skills positively impacts physical (PA, fitness, weight status), self-concept, cognitive and social-emotional development [17-26].

The current SHAPE America grade-level outcomes for K-5 [1] state, "By the end of Grade 5, the learner will demonstrate competence in fundamental motor skills and selected combinations of skills…" (p. 26). As highlighted, the very first element listed focuses on movement competence, which logically makes sense, as a critical antecedent in a child's ability to successfully navigate their world and interact with others is being able to effectively interact with the environment and others (peers and adults) [27]. As students learn to move and become competent and confident in various forms and contexts of movement, it promotes a cascading effect in other developmental domains [20, 21, 22, 28, 29]. If students do not have a baseline of movement competence by the time they leave fifth grade, evidence demonstrates the likelihood of them being physically active and fit across childhood and into adulthood is significantly hampered [30,31]. Even more alarming is that recent literature also is indicating that motor competency levels in children continues to decline and is reaching epidemic levels with over 75% of children (ages 3-12) in two large scale studies performing at or below the 25%tile on a normative test of 12 motor skills [30, 32]. Thus, does it make sense to use the limited time we have in physical education with our students to de-emphasize the focus on movement competency and devote more of our instructional time to a newly derived social domain?

In essence, we should be focusing on current objective data to decide what our purpose is and provide additional evidence on the critical needs of children in the physical. Based on current data, we need to get much better at what we currently do as physical educators and hold ourselves accountable for student learning via assessment. The aforementioned data demonstrate the critical importance and unique focus of our field to effectively promote children's lifespan physical health that, coincidently, promotes positive developmental trajectories in other critical domains, including social-emotional development [18, 20, 22, 27].

The current grade level outcomes for grades 6-8 [1] state, "By the end of Grade 8, the learner will apply tactics and strategies to modified game play; demonstrate fundamental movement skills in a variety of contexts; design and implement a health-enhancing fitness program; participate in self-selected physical activity…" (p. 42). The first two elements again focus on developing and applying basic movement patterns competently and confidently in an array of conditions and contexts. Based on the current data that demonstrates secular decline in movement competency across childhood, we are not accomplishing that goal. The second addresses applying personal choices within movement to stay physically active and fit outside of school. As we dive more into this content, what percentage of eighth grade students can design and implement a health-enhancing fitness program?

Health-related fitness knowledge is low amongst all age populations [33, 34, 35, 36], while at the same time a large number of students no longer participate in sport by the time they reach middle school [37], which is aligned with the decline in skills necessary to successfully participate in sport. In addition, and contrary to popular belief, an alarming percentage of children who do participate in sport do not demonstrate adequate physical fitness levels [38]. Again, would it make more sense to revise and improve the curriculum to better equip students to be physically active and fit for a lifetime, than "rewrite" the standards with language that primarily focuses on a social domain where there is limited objective evidence that it will help students gain the skills needed for lifetime activity/fitness?

The high school grade level outcomes [1] state, "By the end of high school, the learner will be college/career-ready, as demonstrated by the ability to plan and implement different types of personal fitness programs; demonstrate competency in two or more lifetime activities; describe key concepts associated with successful participation in physical activity…" (p. 56). Are high school students prepared to plan, implement, and sustain personal fitness programs that include different lifetime activity skill sets to meet their needs and resources for lifetime activity/fitness? It doesn't take a meta-analysis to conclude that answer is no.

Think about the relevance of physical education if students were graduating high school with the ability to develop and execute fitness plans to meet their needs, goals, resources, and life circumstances. Imagine the outlook of administrators, school board members, parents, etc. toward physical education if they received assessment results (e.g., school district data, student artifacts, and student report cards) that clearly demonstrated students' ability to accomplish the previously mentioned objectives. In effect, this would substantiate physical education's role as an academic subject paramount to any school district/building to impact the well-being of our society by improving PA, fitness, and health. An area in our society (and in our schools) that is failing.

As physical educators, many would agree that the current grade-level outcomes are objective and achievable. How and what we should be teaching (e.g., health-related fitness education, outdoor recreation, sports/games, gymnastics, dance, etc.) to reach these outcomes is a long-standing debate based on our lack of a developmental curricular focus and has partially resulted in the lack of consistent and achievable goals in our profession. Regardless of our past issues, attaining the current standards outcomes remains highly relevant within our unique subject matter. Instead of debating about implementing a new social domain focus and changing the purpose and direction of our subject matter, we should be having a debate about what curricula should be taught at each level to best reach the previously listed grade-level outcomes. In essence, our purpose to educate and promote the "physical" aspect of physical education should not change. Our curriculum and the need to assess outcomes of our curriculum should.

Conclusion

This article is not to argue for the removal or de-emphasis of the affective domain from the current standards or K-12 curriculum framework. Since Hetherington's four core objectives in 1910 [39], as pointed out by Lund and van der Mars [15], and reinforced by Seefeldt's publication of *Physical Activity and Well-Being* in 1986 [40], content experts have acknowledged the importance of affect as one of the four pillars of quality physical education. The authors of this paper agree that a long-term commitment to engaging in health-related PA requires competency in the psychomotor, physical fitness, cognitive, and affective domains. However, creating and almost exclusively emphasizing a new social domain, while de-emphasizing our principal and unique role in the physical is not prudent. Based on the evidence we currently have that notes teaching to and effectively assessing our current domains will yield positive and progressive cascades in multiple developmental domains (including social-emotional development) across childhood, adolescence and adulthood, we should fully commit to achieving those goals.

The intent of this article is to relay the need of keeping the "physical" aspect of physical education as the main purpose. This will accomplish four critical needs: 1.) provide students the needed content to stay active and fit for a lifetime; 2.) provide a service to our society by countering the negative effects of inactivity (e.g., declined fitness levels, obesity, disease, anxiety/depression, increased healthcare costs, decreased work productivity); 3.) retain our uniqueness and relevance in the school system; and 4.) drive debate and continued research to better enhance what and how we teach and assess to improve the first three elements.

As previously documented, we continue to lose ground in terms of PA, fitness, and obesity levels in our society. Aligned with this issue, we are losing our value in the school system and, as a result, physical education is losing time and resources to accomplish our unique educational focus. Now we are considering altering our historically grounded purpose (educating the physical) at a time where we are needed more than ever. We need to rejuvenate the passion for our purpose and improve the implementation of effective curriculum, instruction, and assessment to positively impact children and our society within the physical realm. We are physical educators, we educate students to be physically active and fit for a lifetime, let's get back to it, and let's do it better.

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