

THE STATUS OF PHYSICAL EDUCATION SERVICE PROGRAMS IN UTAH'S COLLEGES AND UNIVERSITIES

Steven Ross Murray¹, Melonie B. Murray², & Kristin J. Heumann³

¹*Physical Education Program, University of California, Berkeley*

²*School of Dance, University of Utah*

³*Department of Kinesiology, Colorado Mesa University*

Submitted October 2021; Accepted in final form November 2021

Murray et. al. Physical education service programs on college and university campuses vary across the United States. In the 1920s some 97 percent of institutions required physical education for their students, and that requirement held strong, with some 84-87 percent of colleges and universities still requiring it as a graduation requirement up through the 1960s. In the last 60 years, that percentage has dropped to an estimated 39.5. To get a clearer picture of the current status of physical education service programs across the United States, analyzing offerings on a state-by-state basis is needed. The purpose of this study was to determine the status of physical education service programs in Utah's colleges and universities by examining the specific requirements of each institution to get as detailed and as accurate results as possible. Of Utah's 10 traditional institutions of higher education, all 10 (100%) offer physical education courses; 1 (10%) mandates a wellness course as a graduation requirement for all students, and 4 (40%) have physical education courses as requirements in specific majors. These results corroborate the current trend that required physical education programming is decreasing across the nation. Nonetheless, physical education service programs are robust in Utah's colleges and universities, with a wide range of offerings. These data are useful for the leaders in kinesiology as well as campus administrators to support the continuation of physical education service programs, if not to champion requiring physical education on college and university campuses because of its known effectiveness in improving the health and wellness of students and alumni.

Key Words: basic instruction programs, service programs, activity programs

Recent studies have been conducted on the status of physical education service programs (also called basic instruction programs, activity programs, or physical education requirements) in colleges and universities within the states of Colorado (Heumann & Murray, 2019) and Oregon (Szarabajko et al., 2021). Both of these states encompass part of the representative area of the Western Society for Kinesiology and Wellness (WSKW). This study is a continuation of research on the topic, but is focused on the state of Utah, where the first meeting of the WSKW was held in 1956 on the campus of the University of Utah (WSKW, n.d.).

Physical education has over a 150-year-old history in American academe, dating to the mid-1800s when Amherst College began the first physical education program in American higher education (Allen, 1869). Physical education's original purpose – and one could argue its primary purpose still – is to “help students develop personal awareness and responsibility regarding healthy lifestyle choices,” especially related to physical activity (Szarabajko et al., 2021, p. 56). However, physical education, particularly as a graduation requirement, has been eroding throughout American academe over the last few decades (Cardinal, 2020).

While once plentiful in American higher education, physical education service programs often are voluntary instead of required. Even more troubling is that they frequently are being substituted for elective recreational programming (Kim & Cardinal, 2019a; Kim & Cardinal, 2019b), which often caters to those already active and does not reach the entire student population the way required physical education would. Essentially, most students in the US today are not required to learn health and fitness skills during their collegiate experience, and without required physical education, “a large number of inactive and unmotivated students continue to be neglected... [and they] are the students who may benefit the most from [physical education requirements]” (Szarabajko et al., 2021, p. 57). Further, historical data indicate very few collegiate students (i.e., 3.43%) use campus recreational facilities regularly (Zakrajsek, 1994), and often the population not participating is made up of those most “historically disenfranchised in society” (Cardinal, 2020, p. 288; Hoang et al., 2016). If these data are accurate, American academe is failing an estimated 96.57% of the student population, or some 20 million students each year, with respect to proper physical education (Cardinal, 2017). More recent survey data suggest only 39 percent of students report they participated in campus recreational activities a minimum of three times per week (Forrester, 2014). The most recent national data show 42 percent of college students meet the recommended level of physical activity, i.e., 150 minutes of moderate to vigorous physical activity (American College Health Association [ACHA], 2021), corroborating the 2014 data. As with all research, limitations exist, especially with self-reported data, but the low to modest percentage of college students being active in voluntary recreational programming is worrisome. These facts become even more disconcerting as research indicates that during the collegiate years, students tend to become less active (Nelson et al., 2007; Small et al., 2013), gain unhealthy weight (Pope

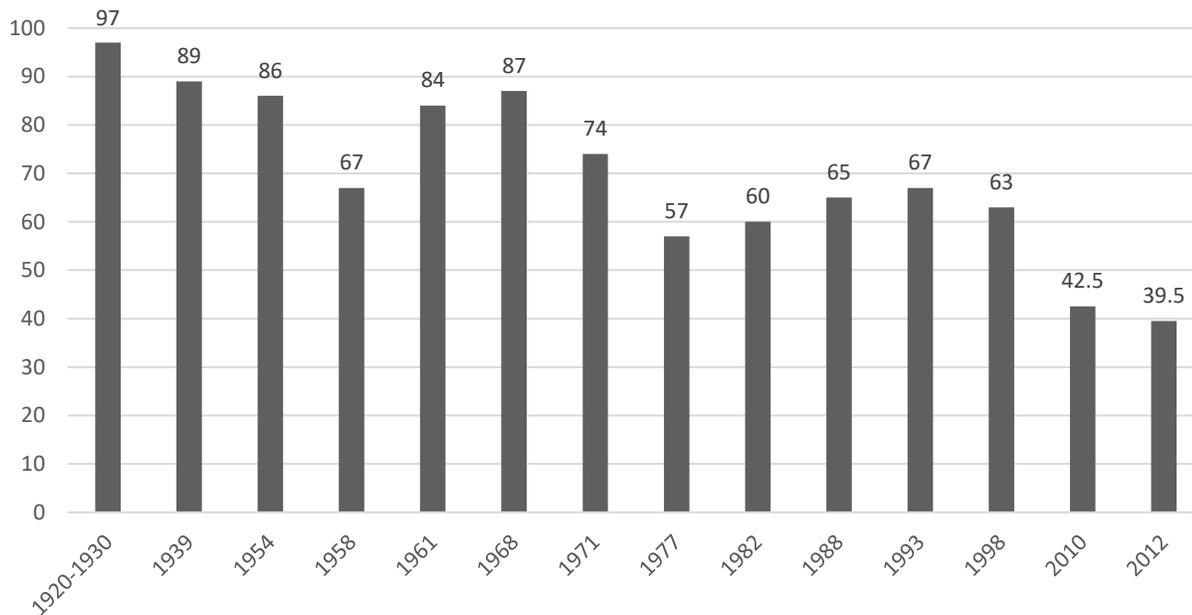
et al., 2017; Yan & Harrington, 2020), and undergo more negative stress (Petruzzello & Box, 2020), which results in the adoption of lifelong detrimental health behaviors (Sparling, 2003). It is precisely the opposite of what the results should be for a well-rounded undergraduate education.

The importance of physical education is undeniable, as considerable research indicates that physical activity is essential for sound health (Centers for Disease Control and Prevention [CDC], n.d.). In addition to building robust health in the form of such things as cardiovascular fitness (Warburton & Bredin, 2017) and combating obesity (World Health Organization [WHO], 2010), physical activity, especially on the collegiate level, has been shown to positively affect the knowledge and attitudes as well as the lifelong behaviors of alumni (Pearman III et al., 1997), build social connections (VanKim & Nelson, 2013), develop positive health behaviors (Quartiroli & Maeda, 2016), increase academic performance and retention rates (Chang et al., 2014; Sanderson et al. 2018), enhance mental health (Currier et al., 2020; Petruzzello & Box, 2020), and promote public health (Cardinal, 2016). Further, undergraduate students are desiring that institutions of higher education offer physical activity courses for physical, mental, social, and academic needs (Lackman et al., 2015), and a positive relationship exists between physical fitness and academic achievement (Donnelly et al., 2016).

These facts, unfortunately, often are ignored by administrators and faculty on college and university campuses, and those overseeing physical education programming frequently must justify their existence regularly despite the existing and growing evidence that required physical education is effective (Cardinal, 2017, 2020). Regrettably, many in physical education are losing the battle, as required physical education has been decreasing on American college and university campuses in favor of voluntary physical education activity programs (including dance programs) or campus recreational programming or some combination of these programs.

Figure 1

The percentage of American institutions of higher education requiring physical education from 1920 to 2012.



Note. Adapted from Cardinal, B.J., Sorensen, S.D., & Cardinal, M.K. (2012). Historical perspective and current status of the physical education graduation requirement at American 4-year colleges and universities. *Research Quarterly for Exercise and Sport*, 83(4), 503-512. N.B., the methodologies for the studies referenced differ markedly and have limitations.

The national trend is that fewer institutions of higher education are requiring physical education as a graduation requirement (Cardinal, 2020). Over the last century, previous researchers (See Figure 1) have investigated the national status of physical education service programs (Boroviak, 1989; Cardinal et al., 2012; Cordts & Shaw, 1960; Hensley, 2000; Hunsiker, 1954; McCristal & Miller, 1939; Miller et al., 1989; Oxendine, 1961, 1969, 1972; Oxendine & Roberts, 1978; Strand et al., 2010; Trimble & Hensley, 1984, 1990). The findings from these studies show that during the 1920s and 1930s, nearly all institutions (97%) required physical education, and that percentage generally held steady – between 84 to 87 percent – through the 1960s (Heumann & Murray, 2019). By the 1990s, the percentage averaged in the mid-60s, in 2010, the number had dropped to 42.5 percent, and by 2012, an all-time low of 39.5 percent occurred (Cardinal et al., 2012). Although these studies had limitations, and current data are needed, the trend is alarming.

Eliminating required physical education and wellness programming on the collegiate level has

been shown to negatively affect students' health-related behaviors. Ansuini (2001) found that within 3 years of terminating the wellness/physical activity requirement, one institution incurred a "marked decrease in campus well-being" related to diet, exercise, and other habits and concluded, "[t]he magnitude of these results should reaffirm the need for mandatory wellness/activity programming" (p. 455). Furthermore, the COVID-19 pandemic, which began in March 2020, altered the general behaviors of most college students, influencing their overall health and wellness. Studies have shown that the pandemic triggered a decrease in physical activity levels and an increase in mental health concerns among college students (Dziewoir et al., 2021; Wilson et al., 2021). Given the ongoing effects of the pandemic, research investigating physical education course offerings is increasingly relevant.

The value of physical education service programming is incontrovertible, and required programs seem to be more effective than voluntary ones. Nonetheless, the data on the status of physical education programming are not up to date, and a

state-by-state analysis is needed, as recommended by Heumann and Murray (2019). Using the two previous studies conducted on the state level for Colorado and Oregon, respectively, as models, this study was undertaken to examine the status of physical education service programs in the colleges and universities of the state of Utah.

METHODS

Participants

A list of all institutions (n = 23) of higher education in the state of Utah was obtained from the website of the National Center for Education Statistics (2021). For-profit and specialized schools (e.g., midwifery, computer science, online, post-graduate; n = 13) were removed from the list, as they normally do not offer physical education service programming nor general education courses, and that left 10 (2 private; 8 public), traditional, not-for-profit institutions of higher education on the list. Of those, 9 were 4-year institutions, and 1 was a 2-year institution. A traditional institution was defined as a brick-and-mortar school, offering a comprehensive curriculum, with a general education component, often based in the liberal arts.

Procedure

Using the methodological examples of the previous studies (Heumann & Murray, 2019; Szarabajko et al., 2021), publicly available information was obtained via each institution's website. The methods included searching the internet sites of each institution to examine the official catalogs (2020-2021) and the listed graduation requirements for students to earn an associates or baccalaureate degree. The course listings were examined as well to search for elective courses. We used the same operational definition as Tomaino et al. (2001) for physical education: "Physical education was considered any activity or academic course pertaining

to health, wellness, sports, or physical activity. For the course to be considered 'required,' it had to be listed by the institution as a requirement for graduation. If not, it was considered an elective" (Tomaino et al., 2001, p. 10). Additional information such as the types of courses offered was collected, and this differed from the two previous studies on Colorado and Oregon that were used as models. To be able to compare better to the Oregon study's results, the availability of a campus recreation center and accompanying programming was searched for as well.

Analysis

Data analysis was conducted by determining the current number of 4-year and 2-year colleges and universities. After reviewing the catalogs, the total number of programs that required these courses also was calculated. The percentage was then calculated by reporting the total number required out of the total number of institutions at that level.

RESULTS

The requirements of the physical education service programming in Utah's colleges and universities are presented in Table 1. All institutions (100%; 10 of 10) had physical education service programs offering a wide array of courses to their students (see Table 2). One-half of the institutions (50%; i.e., 5 of 10) either required (10%; i.e., 1 of 10) or partially required (40%; i.e., 4 of 10) physical education as a graduation requirement; partially requiring physical education meant that some degrees required some sort of physical education course, or physical education courses were listed as an option to fulfill a specific requirement. The only institution that required physical education for every student was the lone 2-year institution in the state. Each institution (100%, i.e., 10 of 10) had a campus recreation center with associated programming.

Table 1*Requirements for physical education in Utah's colleges and universities*

Institution	Type	Required Physical Education Activity	Required Health/Wellness	Health/Wellness Courses	Campus Recreation Center
Brigham Young University	4-year, Private	No	No, but Exercise Physiology can serve as an option for Biological Science requirement in General Education.	Science of Wellness, Body, Mind, and Spirit, Lifestyle and Chronic Disease Prevention, Stress Management, Personal Training Strategies	Yes
Dixie State University	4-year, Public	No	No	Health and Disease	Yes
Salt Lake Community College	2-year, Public	No	Yes	Fitness for Life, Principles of Cardiorespiratory Training, Theory/Practice of Meditation, Laughter Yoga, Environmental Yoga	Yes
Snow College	4-year, Public	No	No	Fitness and Wellness, Individual Lifetime Fitness, Principles of Nutrition	Yes
Southern Utah University	4-year, Public	No	No	Wellness Dynamics, Stress Management and Wellness Concepts	Yes
University of Utah	4-year, Public	No	No	Fitness for Life, Healthy Lifestyles	Yes

Utah State University	4-year, Public	No	No, but required to take course work concerning health and physical education for exercise science concentration	Fitness and Conditioning, Fitness for Life, Principles of Fitness, Dynamic Fitness, Physical Readiness (MSL), First Aid, Health and Wellness, Stress Management	Yes
Utah Valley University	4-year, Public	No	No	Fitness for Life	Yes
Weber State University	4-year, Public	No	No, but it is a general education option. Healthy Lifestyles. Health and Wellness coaching option in nutrition	Required courses for the concentration: Mind/Body Wellness, Methods in Health Education, Wellness Coaching	Yes
Westminster College	4-year, Private	No	No, but holistic health and well-being requirement for dance program; human performance and wellness coursework required for nursing and health sciences program.	Wellness for Life, Psychological Aspects of Performance and Well-being, Sustainable Sustenance, Meditation as Environmental Study, Nutrition for Health Performance and Wellness	Yes

Table 2*Physical activity courses offered at Utah's colleges and universities*

Institution	List of activity courses offered
Brigham Young University	Dance aerobics, pickleball, badminton, Pilates, Zumba, yoga, Indoor cycling, basketball, bowling, diving, functional fitness, golf, gymnastics, jogging, martial arts, racquetball, ice skating, ice hockey, self-defense, soccer, skiing, snowboarding, swimming, water polo, SCUBA, water aerobics, tennis, volleyball, weight training, lifeguarding, WSI
Dixie State University	Courses are part of the fitness, adventure, sport techniques program: aerobic dynamics, step workout, paddle boarding, fitness dancing, fitness ballroom dance, kundalini yoga, vinyasa yoga, yoga for athletic performance, weight training, kettlebell fitness training, individualized fitness, tennis, badminton, pington, indoor hockey, racquetball, pickleball, disc golf, golf, paddleboard yoga, bowling, basketball, volleyball, soccer, track & field, swimming, aquatic fitness, SCUBA, self defense, tai chi, Chinese kung fu, climbing, rock climbing, mountain biking, weight training for women, cheerleading, Dixie Dance Team
Salt Lake Community College	Step, strength and cardio training, cardio fitness, body strength and tone, CrossFit, indoor cycling, kickboxing, Zumba, hula fitness, belly dancing basics, jog/walk, TRX, high intensity interval training, core Pilates barre, Pilates, yoga, flexibility for fitness, tai chi chaun, strength training, kettlebell conditioning, aerobic circuit, fitness for life, pickleball, sand volleyball, competitive soccer, ultimate frisbee, water fitness, SCUBA, qi gong, aikido, Brazilian capoeira, taekwondo, kung fu, related outdoor activity, ice skating, snowshoeing, skiing, snowboarding, cheer squad, mountain biking, hiking, rock climbing, basketball, bowling, golf, racquetball, badminton, tennis
Snow College	Kayaking, sailing, rock climbing, backcountry skiing, snowshoeing, football life skills, Zumba, spinning, jogging, triathlon, circuit training, weight training, racquet sports, tennis, racquet ball, pickleball, golf, archery, bowling, basketball, volleyball, wallyball, softball, soccer, swimming, water fitness, aikido, riding and horsemanship, western swing dance, intercollegiate sports
Southern Utah University	SCUBA, skiing, climbing, snowboarding, yoga, cross-training, weight training, fitness center, badminton, racquetball, pickleball, golf, archery, bowling, varsity basketball, varsity softball, varsity baseball, varsity soccer, varsity track/field/cross-country, varsity gymnastics, varsity tennis, varsity golf, varsity rodeo, varsity volleyball, varsity football, cheer and yell leading, swimming, self-defense, karate, rhythm fitness,

University of Utah	Elementary fitness, jogging for fitness, aerial yoga and fitness, self-defense, physical education for Individuals with disabilities, ice skating, Pilates, yoga, basketball, swimming, salsa dance, skin conditioning, SCUBA, golf, swimming, fencing, metabolic conditioning, archery, ballroom dancing, American ballroom dancing, hip hop, kickboxing, stretch and strengthen, weight training, tennis, tae kwon do, gymnastics, wing chun, mixed martial arts, water polo, table tennis, barre tone, volleyball, racquetball, karate, yoga, billiards, ball/core cardio, aqua tone, cycling, bowling, tai chi, badminton, bowling, aikido, P90X, boot camp, aqua Zumba, circuit training, Zumba
Utah State University	Aerobics kickboxing, Pilates, yoga, hyper fit, fitness for life, gymnastics, aikido, taekwondo, intro to modern dance, African dance
Utah Valley University	Aerobics, lacrosse, ice hockey, power tone, swimming, Pilates, yoga, weight training, tai chi, martial arts, jiu jitsu, tennis, Kenpo karate, badminton, aikido, racquetball, kickboxing, ice skating, golf, intercollegiate sports, archery, bowling, fencing, basketball, volleyball, soccer
Weber State University	Aerobics, turbo dance aerobics, spinning, aerobic kickboxing, jog/walk, yoga, conditioning, weight training, resistance and stabilization training, tennis, table tennis, badminton, racquetball, handball, golf, archery, marksmanship, bowling, billiards, fencing, trap and skeet shooting, gymnastics, basketball, volleyball, softball, soccer, flag football, ultimate frisbee, ice hockey, swimming, lap swimming, water aerobics, scuba, self-defense, rape aggression defense, tai chi chuan, karate, aikido, martial arts tang soo do, tae kwon do, shorinji kenpo, mountaineering, canoeing, kayaking, river guide prep, river running, fly fishing, fly tying, fly casting, fly rod building, sailing, hiking, orienteering, rock climbing, intro wall climbing, bouldering, outdoor survival, backpacking, desert backpacking, yurt camping, mountain and road biking, canyoneering, winter exploration, skiing, snowboarding, cross country skiing, telemark skiing, snowshoeing, figure skating, curling, dance, modern dance, western swing, social and ballroom dance, big band swing, jazz, hip hop, reiki energy and stress relief, eagle dancers, African dance, cheer squad, personal instruction and conditioning, varsity athletics (many sports), dynamic fitness, lifeguarding, water safety instructor, transitions, hyper fit, ballet, pickleball, yoga, fitness and conditioning.
Westminster College	Strength training, downhill skiing and snowboarding, varsity athletics, beginning ballet, beginning dance movement, belly dance basics, Pilates, SCUBA.

DISCUSSION

The status of required physical education in Utah's colleges and universities is low, at 10 percent (1 out of 10), and compares similarly to Colorado, at 15.6 percent (5 of 32) and Oregon, at 14.29 percent (5 of 35). Heumann and Murray (2019) noted Colorado's rate has dropped from 41 percent in 2001 and is well below the latest-available national rate of 39.5 percent (Cardinal et al., 2012). The current national rate is unknown, as the last national study was published nearly 10 years ago, but the trend, especially from these studies on Colorado, Oregon, and Utah, indicates that it may be dropping well below 39.5 percent. Additional states need to be studied for required physical education at the higher-education level to get a clearer position of the trend to see if these states are outliers or predictors.

On a more positive note, physical education service programs in Utah's colleges and universities are universal and robust, with every institution (10 of 10, or 100%) providing a wide range of physical education courses. That is a promising statistic, and it is a greater percentage than what was found for both Colorado (27 of 32, or 84.4%; Heumann & Murray, 2019) and Oregon (30 of 35, or 85.7%; Szarabajko et al., 2021). Moreover, each institution (10 of 10, or 100%) also had a campus recreation center, with accompanying programming. Data are not readily available for campus recreation centers in Colorado, but Utah's 100-percent rate for both 4-year (i.e., 9 of 9) and 2-year (i.e., 1 of 1) institutions far exceeds the values found for Oregon's higher-education institutions. Szarabajko et al. (2021) reported that of the Oregonian 4-year and 2-year institutions of higher education, 83.33 percent (i.e., 15 of 18) and 47.06 percent (i.e., 8 of 17), respectively, had campus recreation centers.

The reason for Utah's institutions of higher education having such plentiful programs in physical education and recreation is unknown. One possible explanation could be related to the philosophical founding of the state and its citizenry. Utah was founded by pioneers of the Church of Jesus Christ of Latter-day Saints (LDS Church). Approximately 61 percent of the state's population are members of the LDS Church (Canham, 2018), and maintaining physical fitness has long been stressed by the LDS Church's

teachings (Kimball, 2003; Robinson, 1972; Thorstenson, 1984). Further, Utah is well known for its outdoor recreational pursuits (e.g., hiking, skiing), and it has well-developed physical education programming in its primary and secondary schools (Utah State Office of Education, 2016). While both Colorado and Oregon are known for their outdoor activities, their citizens do not share a similar background philosophically like the majority of Utahans do. Perhaps this could be a contributing factor, but specific research on this possibility is needed.

Colorado, Oregon, and Utah are states that rank as some of the most physically active in the country (CDC, 2021), which may explain why physical education service programs are plentiful, but not required, in their colleges and universities. As more research is gathered on a state-by-state level with respect to physical education programming in tertiary education, regional and national trends should become apparent. The relationship between each state's physical activity ratings and its collegiate physical education programming is an unknown yet interesting area of research and one worthy of exploration.

A major incentive for supporting required physical education in the curricula of colleges and universities is the promotion of individual wellness, and therefore by extension, public health (Cardinal, 2020). Many collegiate administrators today openly support the education of the whole student through a mind-body-spirit approach (National Association of Student Personnel Administrators [NASPA], (2017), or what essentially is the original model of wellness that Dunn (1959) defined.

As with all studies, limitations exist. In this study, all data were taken from the most up-to-date information available from each institution's website, but the precise offerings for each institution are unknown. Further, the filtering of the institutions based on the traditional brick-and-mortar criterion was a limitation and affected the sample size.

CONCLUSION

Physical education service programs have been involved in American higher education since the mid 1800s. The first programs centered on the prevention of illness through physical activity. Cardinal et al.

(2021, p. 509) indicated that just as the founders of collegiate physical education knew and implemented, “prevention comes before cure,” and that approach is necessary today with required physical education. Heumann and Murray (2019) made a call for more state-level research on the status of physical education in colleges and universities. Szarabajko et al. (2021) answered that call with data from Oregonian institutions. This study has provided data on Utah’s institutions of higher education and serves as another step in gaining accurate and up-to-date data on the status of physical education within the institutions of the areas that constitute the scholars of the Western Society for Kinesiology and Wellness.

ACKNOWLEDGEMENTS

The authors wish to acknowledge the assistance of Christine Murgida for data collection.

FUNDING

N/A

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*** Address correspondence to:**

Steven Ross Murray, D.A.
Physical Education Program
University of California, Berkeley
Berkeley, CA 94720
Email: smurray@berkeley.edu



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