In China, 200,000,000 children in grades one through 12 receive physical education programming in 540,000 schools (People's Education Press, 2002). Since the 1990s, in response to this enormous task, the Chinese government has established national guidelines and standards for educating physical educators (China Ministry of Education [CME], 1995, 2003) and for addressing the fitness needs of students (CME, 2002; China State Council, 1995). Standards also have been established to outline how physical education is to be provided throughout the nation. In 1992, the China Regulations of Physical Education and Student Athletics (CME, 1992) mandated that physical education be provided to grades one through 12. Satisfactory completion of physical education is a requirement for advancement to the next grade level and for graduation. Administrative sanctions can be applied to schools that fail to provide one hour of physical activity each day, including at least three after-school physical activity sessions and two physical education classes each week. In 1995, the landmark China Law of Physical Education and Sports was passed (National People's Congress of the People's Republic of China, 1995). This law established seven mandates that schools must comply with:

1. Physical education is a regular part of school education.
2. Physical education classes are listed as an academic course that is regularly assessed and sufficient to meet the needs of special students.
3. Time must be allocated for students to participate in physical activities every day for the purpose of meeting national fitness standards.
4. A variety of after-school physical activity programs, training, and sports competitions are provided; annually, a school-wide physical activity and sport meet is conducted.
5. Physical educators need to be qualified according to national regulations and should have benefits related to the job specifications.
6. Physical activity fields, facilities, and equipment must be used for physical activities only.
7. Student physical examinations must be given, and administrative supervision for the improvement of students' fitness must be provided.

**Status of Physical Education**

Although these seven mandates are positive in principle, enforcing compliance has been problematic. As a result, implementation of the mandates has been uneven.
Old and new China offer a dramatic contrast. At left, students participate in morning exercise at the Shanghai Institute of Physical Education. At right, middle school and high school physical education classes engage in a variety of activities at the Beijing October First School.

Because of China’s limited educational resources, the government has tended to provide more economic support for urban schools, rather than rural schools. A study of the status of physical education in China’s rural communities (Qu, 1998) found that the average per-pupil funding each year was only 17 cents. The study also found that 87 percent of secondary and elementary schools in larger towns provided physical education classes two times or more per week. In smaller country towns, 82 percent provided classes two times or more each week. Wang et al. (2001) reported that elementary and secondary schools provided physical education two or more times each week in 86 percent of cities, 92.7 percent of towns, and 100 percent of rural areas in the Shandong province (located on China’s more developed east coast). However, rural areas usually have more elementary schools, fewer middle and high schools, and larger class sizes than urban areas. Rural school pupils received more physical education classes per week despite the fact that the average per-pupil funding each year in the Shandong province was less for rural areas (28c) than for towns (64c) and cities (1.05).

As in the United States, physical education classes in China can be large. The majority (82.5%) of secondary school classes have more than 45 students, and 24 percent have over 66 students, as reported in Educational Statistics Yearbook of China (People's Education Press, 2002). However, the same publication also paradoxically reported the student-teacher ratio to be 19.25 to 1 and 17.80 to 1 respectively for middle and high schools. The conflict between these statistics needs to be resolved. There is no government law or regulation regarding class size for China’s 1-12 education, and little research has been conducted on the effect of class size on learning outcomes in China. Although most schools offer physical education at least two times each week, few schools have an indoor gym, and even schools in urban areas commonly lack a practice-field because of low funding levels.

There is evidence that physical education is marginalized in China, as in the United States, particularly in rural areas. Zhong (2000) found that a large majority of parents in rural areas in the northwest (79.5%) did not believe there was a need for physical education. Parents felt that academic achievement was more important than physical education. In addition, a substantial percentage of students in grades one through 12, surveyed at 242 rural schools, reported that they had never had physical education class (27.5%) and had never seen a basketball, soccer ball, or volleyball (21.4%).

The workload of physical education teachers in China varies considerably. A physical education class in China is typically about 45 minutes in duration. Allocated time is similar for elementary, middle, and high school students. Wang et al. (2001) reported that the majority of the secondary school physical educators in the Shandong province taught 10 to 14 classes each week (67.9%). A smaller percentage had fewer than 10 (18.2%) or more than 14 classes (13.9%) each week. For physical education teachers in elementary schools, they found that most teachers (65.9%) had lighter loads (8-10 classes, 34.8%) or heavier loads (over 14 classes, 31.1%) and fewer teachers (34.1%) taught 10 to 14 classes per week. In addition, coaching has long been considered a part of a physical educator’s responsibility.

**Standards for Physical Education**

According to the regulations described above, physical education is required to appear on student report cards, and students have to obtain a minimum grade in order to advance to the next grade level. Unfortunately, many of the mandates established in the 1990s were process-oriented rather than outcome-oriented. That is, the mandates focus on general policies and guidelines for physical education rather than on defining the standards or student outcomes that children in Chinese physical education should achieve. However, taking a lead from the NASPE standards (1995) developed in the United States, China has begun to focus on student outcome standards. The goal was to design an educational system that supports the all-around development of all children through application of standards-based education. In 2000, the CME appointed a task force composed of college scholars and experts to write national physical education standards.

In July 2001, the CME published the first national stan-
dards for physical education and health. The goal of these standards is to ensure that students (1) are physically fit, and demonstrate competency in many movement forms, as well as obtain knowledge and skills of physical activities and health; (2) participate regularly in physical activity; (3) demonstrate communication and cooperation among people; (4) demonstrate individual responsibility for personal and community health, and exhibit a healthy lifestyle; and (5) achieve a positive life attitude from physical activities.

Like the NASPE standards (1995), current Chinese standards have expectations on movement forms, knowledge, fitness, individual responsibility, and lifestyle. However, while the United States standards also address diversity, enjoyment, challenge, self-expression, and social interaction, China’s standards address participation, communication and cooperation, and attitude.

Unlike in the United States, China’s content standards combine physical education and health education into a single set of standards. Health education content includes objectives on alcohol, smoking, sex education, sexually transmitted diseases including AIDS, nutrition, and drugs. Unfortunately, health content was added to the physical education curriculum without the allocation of additional curricular time or the development of a plan to train physical educators about the health content or teaching methods. In addition, the current national curriculum for physical education teacher education does not include health education pedagogy content. Thus, preservice physical educators are not explicitly prepared to teach health education standards.

In the summer of 2001, the CME published national standards for all subject matter areas. About 38 national experimental districts across the nation’s 27 provinces and regions were established to implement and evaluate the new standards over a four-year period. In the fall of 2001, approved standards-based textbooks were distributed to the 38 national experimental districts. Teachers were trained to implement the standards through the use of the textbooks. Since 2001, the number of students using the textbooks has increased. While only 17 percent of the nation’s counties, cities, and districts used the new standards-based physical education and health textbooks in 2002, by 2003 they were being utilized by 40 to 50 percent of schools, or about 35 million students (“This fall,” 2003). Since 2001, the CME has advocated the use of physical education textbooks for middle and high school students. However, instead of having textbooks for each grade or semester, publishers have developed a single standards-based textbook for all three years of high school physical education.

In 2002, the CME published the China Student Fitness Standards and Execution Methods to facilitate the achievement of fitness standards. Application of the requirements began in 2004 and applies to all 1-12 schools and universities across the country. Every two years, first and second graders are required to have data collected on their height, weight, and ability to do sit-ups. Third and fourth graders are required to have data collected on their height, weight, and ability to do both the 50-meter run and the standing jump for distance. From fifth grade to the university level, a total of six tests items are selected from a test bank. The tests must include height, weight, and vital capacity, but the school may choose the remaining three items from the following list: steps test, 50-meter run, 800-meter run, 50-meter by eight shuttle run, standing jump for distance, sit-and-reach, sit-ups, and grip power. The tests are administered every two years, and satisfactory completion is required for advancement to the next grade level and for graduation. Some physical educators have argued that such a requirement may not be fair in some circumstances because of weight and height differences among students. A study comparing the use of fitness testing in the United States and China (Keating, Huang, Deng, & Qu, 2003) found that the 1990 fitness test battery in China included many skill-related test items (e.g., long/high jumps, 50- and 100-yard dashes, shot put, shuttle run, medicine ball), whereas fitness programs in the United States focus primarily on health-related fitness items.

**Physical Education Teacher Education**

The qualifications required of China’s physical educators are varied. Recent data (People’s Education Press, 2002) indicate that less than a third of secondary physical educators have either graduate degrees (1%) or bachelor degrees (29%). The majority of physical educators have associate degrees (58%) or high school diplomas (12%).

According to China’s Law of Educators (National People’s Congress of the People’s Republic of China, 1993), teachers at the elementary level should hold a diploma from a two- or three-year teacher-training school, which are also called Regular Specialized Secondary Schools. These schools usually have a three-year program for graduates from middle schools or above if they choose not to go to high school or college, but would like to teach at the preschool or elementary school level. Teachers at the middle-school level should have a diploma awarded by two- or three-year teacher college or a bachelor’s degree or graduate degree. Educators at the high-school level should hold a bachelor’s degree or a graduate degree. The government encourages people who have college degrees to teach in elementary and secondary schools regardless of whether they have graduated from a teacher education program.

In China, college physical education teacher education (PETE) programs have requirements for admission that are regulated by the CME and the General Administration of Sport. The height requirement is 5.58 feet or above for males, and 5.25 feet and above for females. All students must be 22 years old or younger and unmarried. The requirements also include both fitness tests and special sport tests. Sixty percent of the entrance exam is based on performance ability in fitness tests. One test is chosen from each of the following categories: (1) 100-meter dash; (2) standing jump for distance, standing double jump, standing triple jump; (3) standing shot put, standing backward toss shot.
Students participate in gymnastic exercise during a class break at the Beijing October First School.

put by both hands; (4) cross obstacle run for time (agility test), triangle obstacle run for time; and (5) 800-meter run. Forty percent of the entrance exam focuses on the sport-skill tests, which are selected from one of the following six areas: track and field, gymnastics, soccer, basketball, volleyball, and martial arts. Students who pass the fitness tests and special sport tests are eligible to take academic exams for admission to a PETE program.

In 2003, the CME published the most recent four-year PETE college curriculum guidelines. In accordance with the new guidelines, college PETE programs comprise the following five sub-areas: (1) methods of physical exercise, (2) teaching and coaching, (3) social physical education and sports, (4) sports medicine, and (5) traditional physical education and sports. Although it is called PETE, the new curriculum guidelines do not focus strongly on the pedagogical preparation of physical educators. Rather, they focus on the content knowledge and performance of a variety of sport activities. Of the five sub-areas, only the teaching and coaching sub-area has a single course dedicated to physical education teaching methods. This is because the other four sub-areas are largely designed to prepare students for careers in disciplines other than teaching physical education (e.g., sports medicine). In addition, this new national PETE curriculum (CME, 2003) has no required courses in human development, motor development, motor learning and control, or diversity. For students pursuing the teaching and coaching sub-area, there are no courses on elementary or secondary methods of teaching and adapted physical education. The guidelines do require, however, that PETE majors have one to two weeks of observation, eight to 10 weeks of student teaching or practice, and a thesis to graduate.

The Future of Chinese Physical Education

In 2002, a nationwide “China Inhabitant Nutrition and Healthy Condition Investigation” was conducted (China Ministry of Health, China Ministry of Science and Technology, and National Bureau of Statistics of China, 2004). This was the country’s first national investigation on food intake, nutrition, and threats to health such as hypertension, diabetes, and obesity. The final report of the investigation indicated that as China’s economy and society have developed, food intake and nutrition have improved and malnutrition rates have dropped. The study also indicated, however, that with improved nutrition, certain health problems were becoming more prevalent. For example, the adult hypertension rate is now approaching 20 percent, an increase of 70,000,000 people since 1991. The prevalence of type 2 diabetes for people over 20 years old in urban areas has risen from 4.6 percent to 6.4 percent. From 1992 to 2002, the prevalence of overweight and obese adults has increased 39 percent and 37 percent, respectively. The percentage of Chinese adults who are overweight and obese now stands at 22.8 percent and 7.1 percent, respectively. The child obesity rate is currently at 8.1 percent. High-fat meals and a decrease in physical activity are correlated with being overweight and obese and with developing type 2 diabetes.

These findings are disturbing, and they present an enormous challenge to the Chinese government. Ten years after the China State Council announced the China Fitness Guidelines for All the People (China State Council, 1995), the health and fitness status of the Chinese people has deteriorated. Thus, China is confronted with a serious problem in need of immediate attention. China has begun to confront the problem by implementing a number of national laws and regulations on physical education, health education, sport, and recreation. However, in order to meet the challenge of overweight, obesity, and related health problems, China’s government needs to (1) modify its laws and regulations related with physical education, health, health education, sport, and recreation; (2) enforce the laws and regulations related to physical education; (3) practice education equity; and (4) have realistic outcome-based national strategies and practices.

The Chinese people have long struggled over physical education, sport, and recreation terminology. Western physical education, sports, and recreation were introduced into China about 100 years ago. Since that time, terminology has varied; however, since the middle of the 20th century, the term ti yu has been used to refer to either physical education, or sports, or recreation, and every possible combination of the three areas. During the 1980s, Chinese scholars began to challenge this term without success (Liang, 1992; Lin, 1984, 1999). The confusion caused by the use of one word with multiple meanings has already had an impact on the national physical education and health course standards (CME, 2001), as well as on the new national PETE curriculum (CME, 2003).

It will be difficult for physical education to become a truly professional discipline in China while the chaos of terms exists. For example, the government has been criticized for allowing funds that were allocated for ti yu to be used for sport competitions and events, rather than for physical education. Therefore, the lack of clarity between sports and physical education because of this term has increased teacher-coach conflict and the marginalization of
physical education in schools (Lin, 1999). It is extremely hard for the Chinese public to identify the exact meaning of ti yu in books and other written forms unless they are written in a language other than Chinese. Until terminology is clarified, it is likely that the negative impact on physical education will remain.

Chinese national standards for physical education need to be student-centered, quality-oriented, and outcome-based. The experiences of other countries should be studied comprehensively so they may be used to aid China's current educational reform movement. Solid research efforts should be initiated to support the Chinese standards-based reform movement. Research is needed in many areas of physical education, and a research agenda should be established that includes accountability and standards-based outcome assessment; equity and social justice; class size and learning outcomes; public advocacy and parental involvement; lifespan, health-related, activity-based curriculum development; lifespan motor development, learning, and control; technology; comparative physical education; admission requirements, curriculum, and field experience for PETE programs; and continued education, training, and support for inservice physical education teachers.

A key aspect of China's educational reform is to transition from teacher-centered to student-centered teaching. This will require smaller classes. With large class sizes, it is difficult for teachers to communicate with individual students in order achieve quality learning outcomes. China's government needs to reduce class size across the country. This will be costly, but without such an investment, the success of the current education reform will be problematic.

Physical education teacher education programs in China need to provide high-quality physical education teachers for children in grade one through 12. These programs should provide leadership for the standards-based reform movement. Instead of the CME providing a "one size fits all" curriculum for PETE programs, a better strategy may be to publish national standards for PETE programs and allow each PETE program to formulate its own standards-based curriculum that is properly supervised and assessed. The standards for PETE programs have to be consistent with the national standards for physical education in elementary and secondary schools, but the different programs need not be identical.

It is time for experts and scholars in China's government, professional associations, and PETE programs to demonstrate leadership in establishing goals for better teaching practices. The global community can have a positive impact on the reform movement in China by contributing information based on sound research and practice. The ultimate objective is for the people of China to enjoy the emotional, social, and health benefits of quality physical education throughout their life.

References

This fall the whole country will have 35 million elementary and secondary students enter the new courses. (2003, July 7). China Education Daily.

Guoli Liang (liangg@uw.edu) is an assistant professor at the University of Wisconsin–Whitewater and an adjunct professor at Shandong Normal University, Peoples Republic of China; Richard T. Walls is a professor of educational psychology at West Virginia University, Morgantown, WV; and Chunlei Lu is an assistant professor at the University of Ottawa, Canada.