

## SUMMARY

Physical education and health teachers use technology and fitness trends to educate students on a variety of new fitness concepts and their benefits. The
new approach has seen
tremendous results,
students are engaged
in the lessons and
look forward to each
unit. Most important,
students are excited
about establishing and
maintaining a lifelong fitness program.

## As the amount of physical activity children get

in and out of school has declined in recent years, youngsters have become more overweight and less fit. To help reverse that trend, some fitness experts say physical education (PE) classes should be revamped so there is less emphasis on team sports and more of a focus on lifelong fitness activities. We need PE programs that stress fitness, health awareness, and lifelong exercise habits.

For too long, some fitness experts say, PE has not lived up to its name. Traditional PE classes provide too little activity to too few students, offer little or no guidance for maintaining a healthful lifestyle, and can sometimes discourage less athletic children and even make them feel inadequate. In the
end, many students turn away from personal exercise or fitness regiments.

We are now entering a new generation of physical education, with programs that stress lifelong fitness such as walking, snowshoeing and tennis, without eliminating team sports activities. Physical education should be centered around activities that students can do throughout their lives. Ann Flannery, executive director of PE4Life, notes physical education "should be about introducing them to something they like and having them stick with it (Education World, 2016, Student Health section, para. 5)."

This does not mean team sports should be completely eliminated from the PE curriculum. Flannery also notes, "there still are lessons learned from games; it's still important to have that exposure to sports (Education World, 2016)."

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Paula Kun, spokesperson for the National Association for Sport and Physical Education, a nonprofit professional organization for physical education teachers and professors, agrees that PE curriculums have to change. Kun explains, "We want a physical education class to be a place where students try a whole variety of activities and find something they want to do their entire lives (Education World, 2016, Student Health section, para. 6)."
H.W. Kohl (2013) contends that physical fitness programs should emphasize physical fitness in the context of a healthy lifestyle by focusing on "... cardiorespiratory fitness, muscular strength and endurance (p.202)."

New Lebanon is a small bedroom community in a rural school setting. It is an old farming town with a mostly middle class population. The current junior/ senior high school enrollment is just 215 students. There are few options for our youth to get involved in any type of fitness programs or clubs.

Over the past few years there has been a wave of new fitness programs. Being from a small town with limited outlets, our students are not exposed to these new fitness programs. We think it is
important for our students to understand the many different options when it comes to fitness. We saw a need to develop this program to help students become more educated on the new fitness programs that have exploded onto the scene.

For students trying to sort out all the different programs and special claims the industry has to offer, how do they make a decision about which ones to use? We decided to go back to basics with our unit, which includes: cardio endurance, muscle strength, muscle endurance, agility, and flexibility.

The fitness unit that we developed for our 7-12 grade physical education program incorporates nutrition education and four different fitness programs: circuit training, cross fitness (X-Fit), core workout, and yoga.


## Practice

At the beginning of each day, students are welcomed with the lesson objectives posted on whiteboards outside the locker rooms and told which station they will be working in that day. During the unit, a "word wall" of vocabulary words pertaining to fitness is also posted on the whiteboards. Students have to wait until everyone is ready to go upstairs to the gym, so we see them reading the vocabulary words. We also post motivational posters near the word wall, which will have some of the vocabulary words being used in sentences or quotes. The unit-specific vocabulary words are incorporated in each of the daily objectives and students have to answer a question at the end of class, which enhances vocabulary and reading comprehension.


Once all of the students are in the gymnasium, they begin a short dynamic warm-up consisting of butt kicks, high knees, lunges, karaoke (a lateral warmup groin exercise) and dynamic stretching consisting of figure 4's, pike and straddle stretching, which lasts approximately five minutes.

Next we divide the class into three groups, planning for each group to rotate between three different stations (circuit training, X-Fitness, and core strength) throughout the unit. Over a three-day period, each student will have an opportunity to participate in all three stations. Our fitness unit runs for the entire month of November, new exercises are added and introduced to eliminate boredom and encourage participation.

Once students are separated into their groups and are refocused they are taught the daily lesson objective. We differentiate by having the students choose between competitive and non-competitive groups, this lets them work out

without the feeling of being judged or singled out. It also gives the athletes an opportunity to compete.

This unit is very easily adapted for those who have physical limitations. Each exercise or station can be changed or adapted so all students feel they can participate and be successful. For example, if students are instructed to do pushups but are unable to, they can modify the exercise by getting in a plank position, do shoulder taps or perform the pushups on their knees.

Circuit Training in the weight room consists of seven different stations, which will give the students an opportunity to work on strength for all muscle groups. For example, the day one workout has the following exercises: biceps curl, lateral pull down, triceps, pull down, back extensions, dumbbell shoulder press, lunges, and leg extensions.

Students have a choice of strength training, three sets of 8-10 repetitions, or toning, two sets of 15-20 repetitions. Students are encouraged to bring their smartphones to use technology in a more productive way. They scan in the QR codes that are posted at each station; the codes are linked to YouTube videos on how to perform each exercise correctly. These videos have been taped using one of our own students, thus enticing and stimulating interest to watch and perform the
exercise. Students work with a partner and are given a workout sheet to record their progress. The partner is also responsible for watching and critiquing their partner's form. Each station is timed for approximately four minutes. The teacher observes the students and gives individual instruction to the partners ensuring that students are on task and are using proper form.

X-Fit (our spin on the cross fit craze) consists of different aerobic, strength and endurance stations where students are to perform a predetermined number of repetitions for each exercise. The teacher walks the students through each station with demonstrations and provides visual aids of proper form. Examples of exercises would be air squats, jump rope, burpees, and bleacher dips. The students are slowly introduced to this, since it is a non-stop

workout, jogging from station to station lasting a minimum of 10 minutes with each station requiring 10-20 repetitions, increasing their endurance each day. Each time students report to X-Fit their time will build up to a non-stop workout lasting up to 20 minutes. Once they have reached the allotted time for that day, the teacher will allow students to get drinks, have them come back to the center of the gymnasium and lead the class in yoga to increase their flexibility and for cool down and relaxation.

Core Strength consists of different abdominal workout videos using some of the newest trends from Beach Body (P90X and 21 Day Fix). This is a stu-dent-led and student-driven unit supported by a teacher aide but overseen by the X-Fit teacher. Students have a choice to compete in daily challenges, the most popular one being the plank

challenge (how long can you hold a plank position). We pull most of these activities from the various forms of social media to which students are exposed.

At the end of each class, students will answer the "Ticket Out" question, which is specific to the daily objective for the station they reported to that day. This is also posted on the whiteboard and the students fill out their self-assessment cards. The self-assessment card is a tool for students and teachers to evaluate their participation level and level of understanding of the daily objectives. Students are encouraged to use the new vocabulary words from the word wall to write - using complete sentences - their understanding of the daily objectives. Students then return completed cards to the teacher for immediate feedback.

After three weeks of rotating through the different fitness stations offered, the students should be able to show the proper use of equipment, proper form and have demonstrated to the teachers a good understanding of the learning objectives that have been presented. We also incorporate the importance of proper nutrition into our daily objectives. We start out by discussing carbohydrates, proteins and fats, having the students give us examples of each. We then discuss how each is needed and used in the body for developing a strong healthy body in conjunction with the different forms of fitness.

The health and fitness unit ends with a half-day field trip, with our juniors and seniors, to a local fitness club to see the club layout, discuss protocols, and to experience the benefits of a fitness club. Because of the exposure and students' new knowledge, we usually find around two students will join the club we visit; several other students usually end up joining other clubs in the area.

In the past we taught a stand-alone weight room class which had little learning and was becoming stale. Letting the students differentiate and adding a variety of fitness programs gave the unit a fresh new feel, and made it more comfortable and fun for all to participate. The daily challenges, most notably the plank challenge, took off from just a oneday challenge, to a week. The students were pushing to beat their friends. We also saw a noticeable increase in the student level of understanding the differences in the programs we presented through the self-assessment cards.

Student participation is outstanding and they actually look forward to it throughout the entire unit. This could also be seen in our after-school Fitness Club. When we first launched the club, only two or three students would show up, now more students are taking advantage of the fitness club and attendance averages between 12-18 students a day.

## Collaboration

The lessons we teach at the junior/ senior high school are important for younger students as well. To that end, we collaborate with the physical education staff and health teacher at the W.B. Howard Elementary School.

The students first learn each component of fitness and then are asked to match the fitness component to each exercise. For example, when learning about cardiovascular endurance the students are taught max heart rate, resting heart rate and target heart rate.

Teachers instruct the students how to take their pulse to determine their resting heart rate, and incorporate math skills to calculate their max and target heart rates. The max heart rate (roughly calculated as 220 minus your age) is the upper limit of what your cardiovascular

system can handle during physical activity. The target heart rate is considered the acceptable level to reach and maintain an optimal level of fitness, and is measured as exercising within $55-85$ percent of your max heart rate. Once students are physically active the teacher stops the activity and has the students take their pulse again to determine if they are working at the max or target heart rates.

Part of our effort to emphasize physical education in the context of a healthful lifestyle includes us leading by example. We both work after school with students and compete in duathlon and triathlon competitions. The students are aware of this and come at the beginning of class the morning after the competitions to see how well we did. Our school also fields a large group of teachers who compete in the 5 K Work Force Challenge each year.


## Conclusion

The best story of positive outcomes came the first week of this school year, 2016-17. One of our students had previously tried to play on sports teams, but was impaired to do well because of his weight - he weighed more than 300 pounds. When the student showed up in September, he had dropped 75-100 pounds. When I asked what he did, he said "... ever since our fitness unit, I joined the YMCA fitness club. It has become my new passion to make a change in my physical fitness." (Personal Communication, Dezieck, J. 2016).

Among all the different fitness programs comprising the latest fitness craze, what's most important is for students to have a good understanding and a knowledge base to identify the proper fitness program for their personal needs. Ultimately having the knowledge to not get locked into just one fitness program will enable our students to establish and maintain programs for lifelong fitness that they can enjoy.

## References

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## Additional resources

Activities are designed for health benefits, and the ultimate goal for the student is to develop a commitment to regular exercise and physical activity. It is assumed that all children can achieve a health-enhancing level of fitness through regular engagement in vigorous- or moderate-intensity physical activity.

Concept-based fitness education curriculum models:

Fitness for Life: Middle School
(Corbin et al., 2007);
Personal Fitness for You
(Stokes and Schultz, 2002);

## Get Active! Get Fit!

(Stokes and Schultz, 2009);
Personal Fitness: Looking Good, Feeling Good
(Williams, 2005);

## Foundations of Fitness

(Rainey and Murray, 2005).


