Rachel Breidster: Welcome to Public Health Live I’ll be your moderator today. Before we get started I would like to ask that you fill out your online evaluations at the close of today's program. Continuing education credits are available after you take the short posttest and your feedback is helpful in planning future programs. We encourage you to let us know what topics are of interest to you and how we can best meet your needs. As per today's program, we will be taking your questions throughout the hour by phone. Our toll-free at 1-800-452-0662 or you can e-mail us at any time throughout the hour at phlive.ny@gmail.com. Today’s program is Comprehensive School Physical Activity Programs: Enhancing Student's Success and Academic Performance. Our guest is Dr. Aaron Beighle from the Department of Kinesiology and Health Promotion at the University of Kentucky. Aaron, thank you so much for being here.

Dr. Aaron Beighle: It’s great to be here.

Rachel Breidster: So we are talking about comprehensive school physical activity programs this morning and I would guess if you were going to poll a random group of people they would say: isn’t this gym teacher discussion? But I think you’re here to start talking about how this really goes beyond the physical education classroom and what we used to think as gym class. So can you start by talking about that?

Dr. Aaron Beighle: Sure. I think it is. It’s a much bigger approach than just physical education. I think physical education is the foundation, but a comprehensive physical education program allows schools to make much more use of their time in getting kids active in a variety of ways; and this approach provides much more substantial opportunities to be active.

Rachel Breidster: Great. So one of the movements to try to engage the larger community is through this ‘Let's Move Active School’ campaigns; can you talk about what is an active school?

Dr. Aaron Beighle: The ‘Let’s Move Active School’ has really highlighted this whole comprehensive school physical activity program. The components of a comprehensive school physical activity program have been around for a long time. There have been people doing this for quite some time. And what this has done is, it has brought it under an umbrella and allowed a more comprehensive approach and more coordinated approach. Comprehensive physical activity program includes physical education, before and after school activity, physical activity during the school day as well as family involvement and staff engagement.

Rachel Breidster: So I’m going to play devil's advocate and say why do we need such a comprehensive approach? People my age or older may say “Well when I was in school we just did gym class, we didn’t do it like this.” So why do we need this comprehensive approach?

Dr. Aaron Beighle: We have realized this for a long time that all schools are unique and have a unique set of needs. What we wanted to do with the comprehensive school physical activity program is to provide a menu, provide a variety of activities that schools can use to get students to be physically active. And it’s multifaceted and it’s comprehensive; some things will work in...
some schools and some won't work in some schools. And I think it is essential that we have a variety as opposed to saying this is the one way to do it. We need a variety of ways to do it.

**Rachel Breidster:** And where is the support for this kind of approach? Are there organizations? Or at the federal level? Are there folks that feel this is beneficial?

**Dr. Aaron Beighle:** Yes, it's—fortunately with the comprehensive school physical activity program, that has garnered a lot of support coming from like the National Physical Activity Plan has it as an essential component of the education sector, the American Alliance for Health, Physical Education, Recreation and Dance (APORD) and NASBY have created the first position statement and revisited that position statement. So support is ongoing. The National Football League with the American Dairy Council has ‘Let's Fuel Up and Play 60’ and then ultimately, more recently the ‘Let's Move Active Schools’ has created lots of interest with comprehensive school physical activity programs.

**Rachel Breidster:** Great, so certainly there is a lot of support that you’re aware of. Now, at the national level we can see that there’s support and we also have investment here in New York State at the state level. We spoke with Dr. Shah, the Commissioner of the New York State Department of Health about our state support about our state support of comprehensive school physical activity programs and how it fits within the New York State Prevention Agenda.

**Rachel Breidster:** So Dr. Shah, why should we support comprehensive schools physical activity programs?

**Dr. Shah:** Regular physical activity promotes physical and mental health and improves aspects of academic performance in children and adolescents. The national physical activity guidelines for Americans recommend that you do 60 minutes or more of moderate to vigorous physical activity daily; including muscle and bone strengthening activities at least three days a week. Yet in 2012, only about one quarter of adolescents age 12 to 15 met these national recommendations. In New York, less than half of students in grades 9 through 12 do some kind of physical activity that increases heart rate on five or more days per week; and only one quarter on seven days a week.

**Rachel Breidster:** And why is the support of physical activity environment important in the schools?

**Dr. Shah:** All those schools cannot prepare a healthy and educational future generation alone. They do provide the best opportunity for a population-based approach to increasing physical activity in youth. Children spend more time in school than any other environment outside the home. This is the time when they are establishing healthy habits that can last a lifetime. Physical activity behaviors track from childhood into young adulthood. Physical activity in adulthood reduces the risks for many chronic diseases. School environments provides the best opportunity for students of all abilities to participate in physical education and both structured and
unstructured physical activities such as active recess, classroom physical activity breaks, and walking and biking to and from school.

**Rachel Breidster:** What is the connection between physical activity and learning?

**Dr. Shah:** Children who are more physically active demonstrate greater attention, faster cognitive processing and better performance on standardized tests. There’s also strong evidence that children who participate in daily physical education exhibit better school attendance, a more positive attitude towards school, stronger academic achievement, increased concentration, improved test scores in reading, writing and math, and reduced disruptive behavior. Research also demonstrates that aerobic exercise has the greatest effect on student achievement and cognitive outcomes.

**Rachel Breidster:** And what about the connection for public health?

**Dr. Shah:** Healthier students are better learners. Higher educational achievement and years of schooling result in better health. This is due primarily to the link between better educational and improved work in economic conditions, enhanced social and psychological resources and the ability to pursue a healthier lifestyle. Physical activity reduces the risk for heart disease, diabetes, osteoporosis, high blood pressure, obesity, the metabolic syndrome and on and on. It improves various other aspects of health and fitness, including aerobic capacity, muscle and bone strength, flexibility, insulin sensitivity, and it reduces stress, anxiety and depression.

**Rachel Breidster:** How does supporting the Comprehensive Physical Activity Programs align with the New York State Prevention Agenda goals?

**Dr. Shah:** The Prevention Agenda has a goal that by December 31st, 2017, we hope to increase the number of school districts that meet or exceed regulations for physical education which means 120 minutes per week of quality physical education in elementary grades K-6th and daily physical education for children in grades k-3. Interventions for consideration include opportunities to include this physical activity before, during and after school such as active recess and encouraging school transportation policy that support walking and biking to school and implementation, monitoring, and enforcement of the state Education Department’s learning standards for physical education and nutrition in grades k-12. There are significant short-term and long-term benefits to making comprehensive school physical activity programs a high priority in our schools. To be successful it will require a collaborative effort with many partners including state and local public health, education agencies, school administrators, principals, teachers, parents and of course students.

**Rachel Breidster:** Great. Thank you so much for taking the time to meet with us today.
March 2014 Broadcast: Comprehensive School Physical Activity Programs: Enhancing Student Health and Academic Performance

Rachel Breidster: So Aaron, clearly as you described there’s support at the federal level and our Commissioner has described the support we have here in New York State, how do the schools feel about this? Is there a benefit in the schools in getting involved?

Dr. Aaron Beighle: As was mentioned in the video, there’s no doubt healthier students are better learners. We know that, we have lots of research. I think we have known that for quite some time because there’s been a role of schools in public health with vaccinations and school lunches and things. I think what we are finding out more recently from research in 2010 we have lots of educational relevant health issues, things such as pregnancy and vision and hearing. The ones I think are really important are the idea of hyperactivity and physical inactivity and how they relate to physical activity being a leading health indicator. We know from the video that there are health benefits of physical activity. The next step is to show schools that there are learning benefits. I call physical activity the leading learning indicator. The research shows that if you give kids physical activity breaks throughout the day their behavior problems will decrease and their attention spans will increase. If you ask any classroom teacher if they can get a kid to pay attention and listen and behave they can teach them. That is important for teachers to start seeing.

Rachel Breidster: So quite a few of the learning indicators you have referenced. You would say there is a number of different ways that academically students benefit.

Dr. Aaron Beighle: Absolutely. It’s a twofold benefit because we know the health benefits of physical activity but we know the academic benefits of physical activity, as well.

Rachel Breidster: Has this been studied and tested?

Dr. Aaron Beighle: Yes, there’s some work from a very good visual of this from Hillman at the University of Illinois that shows what the brain looks like with physical activity and what the brain looks like without physical activity. And obviously where there’s red there’s more blood flow. And you can see kids that are active have more blood flow and there is lots of evidence that increased blood flow is what we really need to help students academically and with cognition.

Rachel Breidster: From your standpoint, looking at that brain scan it is obvious which one has more going on. It is just common sense to increase the levels of activity in our students?

Dr. Aaron Beighle: I think it is. I think we have ample evidence that it impacts learning. What I would like to see physical activity become is a part of teaching. We have response to intervention. We have teachers that use centers. We have teachers that use smart boards. Physical activity is one of those, another component, another way of teaching that offers benefits for cognition. If we were to go back, and I was talking to a colleague of mine about this recently, if we were take schools and completely wipe clean we have no idea what a school should look like and we take all of the evidence, I don’t think there’s any doubt that physical activity would be an essential component of teaching because it’s that important to get kids up and moving.
Rachel Breidster: Let's briefly review some of the terminology that you are going to be using throughout our discussion today. There are several terms that we tend to throw around that maybe people use interchangeably but they actually mean different things.

Dr. Aaron Beighle: Absolutely. What we are trying to do with the comprehensive physical activity program is to get kids physically active. That is any movement that expends energy. That’s what we want; we want students to be up and moving. The next step to that is exercise. Exercise is a form of physical activity designed to improve your fitness level. Those are behaviors, physical activity and exercise. Fitness is an outcome. Often times we say we want a comprehensive physical activity program to get kids fit when in reality we want a comprehensive physical activity programs to get kids physically active. Focusing on fitness has other issues and there are other impact factors and impact fitness level but if we can get kids just up and moving that is what we want.

Rachel Breidster: So when we are looking at these terms would you say physical activity is an umbrella term that encompasses other components?

Dr. Aaron Beighle: I think it is this overarching physical activity and there’s lots of different ways. Exercise is one form of physical activity but so is dance, recreation activities and sports. Particularly in physical education but in other areas we need to be promoting a variety of physical activities, not just exercise because exercise has the connotation of you trying to be fit and we want to get kids physically active.

Rachel Breidster: Now, how do schools begin incorporating and promoting physical activities within their schools? What’s the starting point look like?

Dr. Aaron Beighle: First it’s recognizing, and I know schools have a lot on their plate, but recognizing that schools are a leader in this, in physical activity promotion; and then understanding that our goals have to be designed for the big picture goals for schools. Schools have academic performance and other things that are important, as well. As we look at the cost effective, we need to make it unobtrusive, can’t get into other areas; user friendly, ease of use and making it sustainable. To go in with a grant and get kids active and then leave and nothing sustainable is a disservice students, to schools. And I think we need to really include what schools need, and that’s where this whole idea of a menu and being multifaceted comes in to make it user friendly and usable for schools.

Rachel Breidster: That makes sense. So who is kind of the person behind all of this? Who leads the challenge of bringing all of this to the table?

Dr. Aaron Beighle: That's the big question. I think that we need a physical activity champion at a school. Most of the schools that I work with who don't have a designated champion really struggle. There are trainings and things out there right now for a physical activity leader through let’s move active schools; and to train people to take that role of a leader. I would like to see it be
the physical educator. I think they are in the great position to have the training, they have the resources and they understand a school, I think that’s a great place. And if there is not that available there are other folks in the school that can do that with health educators, nurses, extension agents and things of that nature. I think we have to take on, as physical educators, this role to show that we are more than just the guy in the gym or the lady in the gym. We are outside the box and trying to promote and we are the champion. But I think it is also important to understand that just because you are the champion doesn't mean you are the lone ranger; there’s other things, other people in there that have to be helping as well. You know, this idea ‘it takes a village to raise a kid’ and it takes a village to promote physical activity as well.

Rachel Breidster: And that ties back in with the let's move active schools campaign.

Dr. Aaron Beighle: Absolutely. That is this prompt, this visual that shows that physical education is the foundation. That is where it starts. But then there’s lots of other ways. And some schools if you don't have a lot of parental support at your school, family involvement might not go for right away. But I you have a few classroom teachers that would just love to get their kids up and you have a few classroom teachers that can see that benefit, I think that is when you’re able to get the ball rolling and that’s where a champion can come into play.

Rachel Breidster: So really looking at where the areas that folks are supportive and kind of tapping into what resources are available.

Dr. Aaron Beighle: Absolutely. I think that is essential to get the ball rolling. Other areas could come along. That could be where we move into, you know you start with classroom activity and then now we do recess and move forward in that way.

Rachel Breidster: Now, you say that physical education is the foundation. Can you talk more about what quality physical education is?

Dr. Aaron Beighle: I think it has to be the foundation and has to be quality. If the principal sees kids running around with no structure or teaching they are probably not going to be supportive of comprehensive physical activity programs. But a standard-based program, we have national standards, they’re five and based on physical literacy, through the national association of physical education; they develop a standard-based curriculum that have to be implemented with best practices and focus on physical activity and being student-centered; not saying that physical activity is the only outcome; we have skills and knowledge that we are teaching but through physical activity and providing kids with skills, knowledge and attitude to be active for the rest of their lives. We know from research that if we get kids active during physical education, a 30 minute lesson can mean as much as 20% of a kid's physical activity level, specially the low active kids. Some of the kids in the study were getting 1,000 steps a day outside of physical education. Without physical education they were getting 1,000 steps, with physical education it was about 3-4 thousand steps. It can impact and that’s the thing that we really need to emphasize.
Rachel Breidster: Absolutely. You also suggest, going beyond this quality physical education program, looking at how to incorporate physical education in various ways throughout the day. Can you talk about suggestions or ideas you have?

Dr. Aaron Beighle: The first is classroom based physical activity. And I think that the initial barrier is that we have to get students to do better on academic tests. There is evidence to support that more time for physical activity during the school day doesn't decrease that time. I think that is important.

Rachel Breidster: Yes, I would think that is a big pushback factor.

Dr. Aaron Beighle: Yes, there was a study that gave students as much as eight hours of physical activity during the school week. Most schools get three and they found that they didn’t have any decrease. So I think we can have these breaks. There is different ways to look at these breaks. Again, the breaks can go back to this remove inattentiveness, and decrease behavior problems, but they can be to integrate academic; they can be just because the classroom teachers we’ve worked with said they can see kids when they get fidgety and they get them up and get them a break and they can see that they start learning again.

Rachel Breidster: You also talked about different ways to structure recess and things of that nature, can you talk about that?

Dr. Aaron Beighle: Recess is another one I think we need to make better use of. I know it is being cut across the country and lots of places are decreasing the amount of recess time. And I think we need to be a lot more efficient with the recess time that we have. We have data suggesting we are getting less and less time for recess. I know at schools where they give students a half hour recess at the end of the day. That doesn’t do a lot. I think smaller breaks throughout are a lot better. I know schools have policy that you can't take away recess; which is great, except for the class when teachers make students walk a laps and that’s not taking away their activity but their taking away the true spirit of recess which is to let them have choices. So using recess as a reward I think there are unintended consequences that arise that can turn students off to physical activity. It is good intentions but we have to be careful. The biggy is helping organize this and having some type of physical activity that works. And that's where the research suggests is looking at what works. I have a colleague, we worked at the University of Nebraska, and she’s at Arizona State now, Jenn Heberty. We looked at recess and a variety. We looked at the research and found that activity zones work, giving kids recreational equipment, things like playground balls and jump ropes, that works. We went in and trained some staff we know that works, as well. We found the relatively low costs; I mean $1000 in equipment isn’t a lot of money in the grand scheme of things. That can be used to maximize the amount of time that we spend at recess. I think we have to be clear of that.

Rachel Breidster: And what about activities or efforts that are being made to increase activity before or after the school day?
Dr. Aaron Beighle: I think these are times that are missed. I think sometimes often after school program is babysitting. But there is a time we can really get kids be active if we’re efficient and we know, I have a colleague, Michael B. in South Carolina is doing a lot of work with after school programs and showing after school programs how to be efficient with their time. He is doing healthy eating as well, so collaborating with supermarkets and getting healthy snacks to further reduce rates. Some of the programs have teachers involved. One of the things I would like to see as a physical education teacher to be involved with staff and show these are activities students like and how to manage kids. I think one that is kind of a hot topic is joint use agreements where a lot of areas where gyms close at 3:30 and are not used and that is a great place for adults or kids to be active in the evening hours.

Rachel Breidster: Absolutely. When I was a kid everybody rode the bus to school. That may be a factor of where I grew up. That is not necessary the case everywhere and that’s a way to increase activity too, thinking about how we actually get to and from school?

Dr. Aaron Beighle: Absolutely. A colleague of mine in England has done research that showed kids that—there was like a holding tank where kids were held when they got to school. They found kids that road the bike or walked were more active in that holding tank. So there are safe routes to schools, walking school buses. There are lots of different programs to maximize activity and get incidental activity that has just as much health benefits of other activity.

Rachel Breidster: Right. You’ve also mentioned intermurals, fund raisers and things of that nature; those are other creative ways to...

Dr. Aaron Beighle: Yeah, I think that intermural has this connotation of being sports. It doesn't have to be sports. It can be ultimate Frisbee, a walking club. There are also ways to raise money, I know selling pedometers, and some schools have had a lot of success as opposed to selling cookie dough or those kinds of things. And again what that can do is the funds can help support the comprehensive schools physical activity programs.

Rachel Breidster: And that ties in, actually in January our show talked about healthier foods in the schools. And that was one of the things it touched upon as well, is looking at fundraisers and if we are trying to get kids healthier in schools, why we are having these bake sales and selling cookie dough, selling donuts and things like that. Now one of the things you mentioned early on in the broadcast was the idea that it takes a village and the idea that it should go beyond the physical education teacher. Who else could we get involved in trying to promote physical activity with the students?

Dr. Aaron Beighle: Another component of the comprehensive schools physical is family and community and as a foundation of the family is the parents and we know that parental support will get kids to be more active. The parents don't have to run with kids, just supporting their kids in being active will get them more active. We know if we can get parents involved and bring them in, and be more supportive of showing what we are doing in P.E. Physical Activity
homework, activity calendars, there’s a variety of things; one of the thing we did when I was teaching was we had an active open house where we let the parents have a pedometer and then they wore it during open house and we would give them a pamphlet, that talked about the benefits of the activity; just things you can talk about on the dinner table or just things to get kids thinking about physical activity that we were finding most parents didn't know. Great idea to get families involved. The next step is all the families in a school make up the community. I think there are lots of ways to get the community involved, as I talked about with after school programs and parks and rec. Rails to trails, I don't know how prevalent they are; they take old railroad beds and make biking paths which a lot of railroads were by schools in Kentucky because they were cheaper and you could build a school there. We know that if we can get involved with wellness centers, business sponsored P.E. lots of businesses now are looking to volunteer in schools. They can help in recess; they can be the recess supervisor. They can help with classroom break; supervise an extra activity break and those types of things. I think if we can get beyond just focusing on kids in schools we could have an impact.

Rachel Breidster: Sure, now so getting the family involved you have a number of ways. Getting the community involved you have a number of ways. What about the other staff beyond the physical education teacher? What about the academic teachers? Can you get them involved? How do you get them involved?

Dr. Aaron Beighle: I think you can. I think it takes time and a variety of approaches. One of the things that we have found is that as physical educators we can reach out to them and say you are a valued colleague, we care about you, we are going to do wellness things for you. We are going to have a contest. Some teachers have done a stepping contest with pedometers. I know this teacher has this, it’s called a G.O.O.S.E.. It is get out of school early. And she worked with her principal, and the teacher that did the most activity breaks or had the most kids show up to P.E. demo night, or whatever the situation was that month, got out of school half hour early on Friday and the principal went and watched the class. They painted the goose gold. They said it was amazing how many parents showed up to demo nights because they promoted it a lot more. And we know that this is related to teacher dropout. Teachers are stressed. We need to give them opportunities whether a brown bag at lunch or just a note in their mailbox that says if you drink this bottle of water there are health benefits. Try sleeping more. Little things can help teachers. And again build morale and good community within a school.

Rachel Breidster: Absolutely. That sounds terrific. I think the more you can get the teachers on board and they are sharing the messages and kids are bringing messages home to their parents and it snow ball effects from there.

Dr. Aaron Beighle: Absolutely.
March 2014 Broadcast: Comprehensive School Physical Activity Programs: Enhancing Student Health and Academic Performance

Rachel Breidster: So then, we have a lot of great ideas we have talked about, so for someone from school who is watching this broadcast I would like to start this and begin getting more involved, how would someone get started developing a more comprehensive approach?

Dr. Aaron Beighle: I think the first step is to have someone designated as a champion. It could be a committee but it’s typically one person organizes the committee. I think my—with respect to the village is having a committee. Teachers who are interested. Someone that is interested in this and then start small. Just from experience, starting trying to do five or six different things at one time. It is better to start one thing and do it well. Have a long-term plan, but know in short what you want to do. This is all included in the CDC's (Comprehensive School Physical Activity guide that is available online. And the key I think is to be persistent. You are going to hear no. I have done parent nights with no parents. I volunteered to do coaching workshops and no coaches showed up. And then the next year we have ten or 15 show up. It is important to be persistent. You will hear no a lot; this will never work, but we know it works and it will. It is a matter of being persistent.

Rachel Breidster: When you start to pull it all together, can you give us an example of what it might look like to show a comprehensive schools physical activity program?

Dr. Aaron Beighle: I think the idea is to make sure that again starting small, that pulling this together when you look at a lot of the research there is data to support this idea of how kids will be active. I think if we put them, we say the kids will get 60 minutes of P.E. I don't know what it is in New York but in Kentucky they get about 60 minutes. If we say they are active for 60 minutes. Half of that they will be active. So that would be about 6 minutes a day. And you can see on the chart, this is the classroom activity and again this is what research suggests, the total physical activity is 73 of minutes per day offered. This isn't just offering. These are interventions that were done strategically. You can get kids active about 50 minutes. That does include before school programs; so it would be a little less but I think there are ways to do it. For most schools the only thing different here is classroom breaks which I think is an essential part of a way to teach. It is not necessarily for health benefits, it is the cognitive benefits, as well. What hasn't happened is research that implements all of these simultaneously. That is being worked on now.

Rachel Breidster: Excellent. In your experience in developing these kinds of programs and seeing schools make these changes what kinds of responses have you gotten?

Dr. Aaron Beighle: The principals that I have talked to are the ones that really shocked me. This was early on in this. The principals talked about it being a culture. We were working with schools in one area of a district and so all the principals meet at their district meeting and we were getting phone calls saying we want to be a part of this. One said no child left behind changed our school but this changed the culture. This shows parents we care about not just their knowledge but it shows that we care about their health and long-term. They say it changed their school. Most of the time the principals tell me you don't know how many times parents say “we
didn't do this when I was a kid”. And they didn’t, I mean they did bits and pieces of it in some part but I think that approach is reaching out to parents and saying, education is different that it used to be. That's what we want to do with this.

Rachel Breidster: Great. All of this sounds very positive, I mean you’ve laid out quite a few different health benefits and academic benefits. It seems like the folks who have gotten involved have had a good experience. What would be the take home message to send to viewers?

Dr. Aaron Beighle: We know there are health and cognitive benefits to physical activity. That means getting kids active during the school day is a win/win. I think the big picture that the term comprehensive schools physical activity might go away; it might be something different as education things change over time quite a bit. But the concept that physical activity is good for us is not going to change. I think we have to keep pushing this because we know they are going to be healthier and we know that when we implement this there are implications for attention, confidence, and learning. I have written on the slide the wave of the future. It is here now. I think there is a lot more support. I think this is something that is here to stay and hopefully something we can implement and get kids active and healthier and better learners.

Rachel Breidster: I certainly share this hope that this is a movement that will continue going forward. Are there other resources you wanted to share with the audience or if folks wanted to find out more information online anything in particular you would share with the audience?

Dr. Aaron Beighle: Absolutely. As I mentioned earlier the CDC has more information than you can digest and you can see those on the screen. The comprehensive schools physical activity guide which is a step by step that provides the research I have been talking about and ideas. There is healthy eating and physical activity, guidelines for those. There is endless line. I think New York has specific resources, as well. This is what I mean by ground swell. Most of these are relatively new resources and I encourage the audience to look because they are everywhere.

Rachel Breidster: Thank you so much for everything that you have shared with us today. I think this really is a great movement that we have going forward. You have kind of presented to us the big picture from a more national perspective. And now we are going to hear from physical education here in New York State, Tom Winiecki from Mott Road Elementary School. As the NFL network physical education teacher of the year in 2013, Tom he has great ideas for fitness and plans for turning ideas into reality. Let’s hear what he has to say.

Hi Tom, thank you so much for agreeing to meet with us today. We are very excited to be here. If you would start by telling us a little bit about the school you work in.

Tom Winiecki: Well this building is Mott Road Elementary School. This is one of three elementary schools in the district. We are a suburb of Syracuse. And all four buildings are kindergarten through fourth grade.
Rachel Breidster: Which sounds terrific. In your role as physical activity or physical education teacher one of the things that I understand you want to get your students to understand is why it is not just important to exercise but how they can learn to actually enjoy exercising. Can you talk to us a little bit about that?

Tom Winiecki: Well, a big part of our curriculum is to teach them how this helps them physically and academically. Where we try to influence our kids and teach our students to enjoy the process that what happens when they exercise their body physically heats up. They start to sweat a little bit; they start the huff and puff, the rosy red cheeks. Those are things we teach them to embrace so they are not reasons to stop but rather a signal that says I’m ready to get stronger. My brain is getting ready to learn a little bit more. But when we put together our curriculum we wanted to avoid the argument of I like teaching this I want to do this, you like teaching this this is what you are going to do. We wanted to get beyond those arguments. We held ourselves to national learning standards. We used some software to map our curriculum like any other curriculum in the district does the same thing. We have essential questions that we ask. This is exactly what we want to do. When we presented it to our school board I looked right at our superintendent and said we are holding ourselves to a higher standard than you. She smiled and got the point that what we are doing is beyond what we think is important. It is what the United States of America says our students should learn. And our activities are based on grade level benchmarks. You will hear us refer to this is what a fourth grader should be able to do.

Rachel Breidster: One of the things I noticed in your office earlier is you have two signs on your door. One says “I can't” and the other says “I can't yet”. Can you talk about why you have the signs and what they mean to you and your students?

Tom Winiecki: There are so many reasons not to. A lot of people, students and adults, if they try something and can't do it become a reason and excuse to stop. We try to turn that around with all of our students that nobody is allowed to come in and say I can't. We tell them the first day of school. We say if you come—they say I “I can't do this”. I look you square in the eye and say you are right and I walk away. I can't help you. You have made up your mind. You closed your mind. And we turn that around and say “I can't do this yet, I try but it doesn’t work” I look you right in the eye and say show me what you got so far and I’ll see how I can help you, that’s my job. There will be a lot of times that I will help you and times one of your friends will help you. But you can't do it yet is a signal to say I can't do it today but I’m coming back tomorrow and I have another chance to get this.

Rachel Breidster: Now, one of the things that we as adults tend to talk about when we look at advantages of physical education we are thinking health care costs and childhood obesity. How do we relate those things to the elementary population?

Tom Winiecki: Well first of, when those things come up, childhood obesity, rising health care costs, health care costs are out of control. None of those things ever pass the school budget.
When people look at the school budget and tax bills how is this going to affect me now. It is so difficult to measure a student's output at a specific point in time. The raw material that comes in is not what comes in to like an automobile plant. It's not the same. We have control over them for six hours. And then there is 18 hours on their own. We do as much as we can with the time we are here. From my point of view cutting things like recess, physical education, art, music, those types of things are shortsighted. They may save money in the short term but in the long term you lose sight of the big picture. You can't measure a kid's output instantly. You can't. You can look at trends. The other things that come into play, what I can do with my students, what a music, art teacher can do or what they can learn at recess on their own when it is unstructured is so valuable. We can teach the kids—and we do. We talk about how exercise helps them physically. We can develop our skills and learn to enjoy something and I am less likely to be sick from school and more likely to be more active at recess and when the whistle blows I say is it done already as opposed to getting physically tired. Also how it enables the brain to learn more efficiently. I showed you the two brain scans of a student who has been sitting idle for 20 minutes and one who has been active. You look at those and you wonder who would you rather teach as an educator and the answer is obvious. We relate that to our students by saying if you get sweaty today, if you get the tired heavy feeling in your muscle you get the rosy red cheeks you will be stronger tomorrow, yes. But your brain will also function at a higher level for the next hour or two. Your brain has grown bigger. You grow more brain cells, connections between the brain cells increase. You are able to learn more and more effectively when you go back to your classroom if you go back and pay attention.

Rachel Breidster: So you would say that really including more physical education fits in with the bigger picture of increasing academic performance and things of that nature, as well. Providing time for physical activity doesn't decrease from the ability to learn academics.

Tom Winiecki: Absolutely not. There are research studies done that have come to the conclusion that if you take away time from an academic classroom and put it in a physical education classroom, the time that was taken away that someone loses their instructional time that they did it to someone like me and I enable those kids to move aerobically and incorporate aerobic concepts into my instruction and then they go back to the classroom it is in essence an investment. You give up 20 minutes you are going to get 90 minutes of a higher quality of a student in your classroom. So now with the APPR things were classroom teachers are reluctant to give up their class to even a student teacher anymore. If you even look at it as giving up those minutes up, I don’t look at it that way. But if you look at it as giving me those kids for as much time as I can, I will give you back a better raw material to be an educator with to tell you make those kids dance in your classroom.

Rachel Breidster: Absolutely. Another trend we are seeing in education is the use of technology. Can you talk about how technology has played a part in the work that you do here at Mott Road?
Tom Winiecki: We started with pedometers years ago. I went to a conference in South Carolina. I saw somebody present on using pedometers. I came and presented to our HSA. They purchased us a class set. It stopped within the framework of the class because I didn't have enough to let this class take the pedometers away and have anything away so it stayed within the four walls of my gym; which was fine to a point but there was an artificial end to how to use the pedometers. Last year I was very fortunate, I was awarded the NFL network physical education teacher of the year. What came with that was a $5,000 grant. Which I was able to use, and I talked with my partner and another physical educator in the district, all three of us are national board certified. We decided pedometers for entire two grade levels to use was the best use of this money. So now my fourth graders this year in the building where pedometers from the first day of school, till the end of the year. They wear them all day. When they get to the building they put them on. At the end of the day they have a booklet they record steps in. And in working with the classroom teachers we decided the carry out place value to one million because it was a common core math standard for them. They can use the numbers anyway they feel fit in instruction. I use them with the kids how many steps we get a day in school. We use some research that found the president's council in physical fitness recommended 11,000 to 13,000 steps a day for an elementary age child. We put that out there. That is the goal. We get to x by the end of the day which leaves us a certain number. Every student's number is different. When you get home you have physical education homework. We go back to what we do in class or some of our kids have electronic equipment like dance revolution or just dance at home and we use that at school. We have kids go out and record how many steps they have outside at recess. What did you do at recess to get 2,621 steps? SO now when they go home, they now have a bank of things to choose from. f I need 2,500 steps I can do this and I can do it in a half hour and my homework is done; and I had a good time doing it too.

Rachel Breidster: From your school there is quite a few ways you incorporate activity throughout the day from fitness walks to pedometers that you discussed. I would like to spend a few minutes talking about the different activities that you incorporate. Can you talk about a fitness walk that you have here at the school?

Tom Winiecki: Well, this was started a half a dozen years or so ago in a way to try to meet the state physical education mandate, increase more minutes. The schedule didn't allow us to have kids every day. I would love to have every one of my kids every day. Logistics doesn't allow that. We had to come up with a plan b. We figured out minutes and met with district administration. We decided this was the best option. Every day in the three elementary schools after morning announcements there is a morning activity time. It turns out to be about five or six minutes every day. In our building we have a fitness walk. The kids walk the right-hand side of the hallway and walk the foot print of the building. It takes them about six minutes to go around. In discussions with the staff they thought you are taking instructional time away. The suggestion was let's do this at the end of the day. Get the kids ready to go home and put the seats on top of the day, do the fitness walk and get excited and go on the bus and go home; but that’s not the
point. The point was to ready them to learn for the day. We showed them the brain scan and talked about the research. And to be very honest they reluctantly agreed. Over the course of time they realized that they don't become roweled up. It is instructional time for me that when they do tell me who they are and I can re-hit the instruction with them that this is a way to ready your brain to learn. I start announcements every day saying time to get your heart pumping and brain ready to learn. We pump the music in the hallway and they go.

**Rachel Breidster:** You talked to us a bit about the use of pedometers in the classroom. Can you talk about the different dancing games? You mentioned dance revolution. Can you talk about how that fits in with the day?

**Tom Winiecki:** This all started years ago. I have a relationship with Syracuse University and the main person who was the head of the physical education department there; we started talking. She said I have two of these pads at school. We don't use them if you would like to borrow them. We started with two vinyl pads. The kids gravitated to it. It got to the point where we wanted more. So my teaching partner Corey McMahon is an eBay person. He was able to find some metal pads that we purchased ourselves on eBay at a cut rate price. We put them in our office. There was a room next to our office. We kind of acquired that room. So we made more stations. We set it up at recess. The kids can go outside and have a great time, earn sweat trophies, have a good time or this is an option. It became a safe place because nobody is looking at you; they’re looking at the screen. They wore pedometers. The software of the game tracks how many steps you take in a row correctly. If you get over 100 their name went on the white board. So now they have their record they try to beat. They would cheer for each other when they broke a record. The pads worked. We got them to work for a couple of years. We brought the superintendent of schools out. Here is what we have. Here is what we are doing. These are going to wear out and they are relatively expensive. We do this. We showed how they do their own math and how it tied into social studies and geography and fitness aspects to it. She agreed to purchase them for all the buildings because of the way we use them. Now every building in the district has this equipment. And we use it every day at recess. The other elementary schools use it on a daily basis for the kids to come in to use. And it’s tremendous.

**Rachel Breidster:** Which is a really terrific message for them to have; now, in addition to what you are doing as a physical education instructor you have a tae kwon do instructor who comes in during the school day?

**Tom Winiecki:** He is one of the people that we enlist from the community to give our kids a bank of activities they can do when they go home. He happens to be in today and tomorrow. He comes in and takes over the schedule and goes over some of the basics of tae kwon do. And what we like is that he does it in the framework of personal and social responsibility, being respectful, making a mistake and making it a clue to helping you learn the skill better. And it might take you five tries to break the board but you got it. Or look at how focused he is. He is ready to learn. Look at that. Then everybody else sits up nice and straight. Then he volunteers his time to do
this. He is a tremendous instructor. I learn from him when he comes in. He would then come in for three weeks and run an after school club free of charge.

**Rachel Breidster:** So you are taking what they are learning in school and finding ways. You only have them for six hours. You are finding ways to make the connection so that those other 18 hours that they are not with you, they are aware of ways to continue physical activity.

**Tom Winiecki:** And enable them to say, “Mom, can we do this today?” “Well no we are busy, we are going to go—okay, what about tomorrow?” So they are taking ownership of what they can and can't do. Their community resource is the backyard, their basement, drive way, friend's house. What can I do—mom is not going to let me practice juggling in the living room but will let me go in the basement. I can use plastic grocery bags and practice. I can make this that we did in class. So to empower them to make those choices.

**Rachel Breidster:** Absolutely.

**Tom Winiecki:** Anyway I can connect what we do here at home and the ultimate response is when parents come back in or come back for open houses they say this wasn't like this when I was a kid. I say that is the best compliment you can give me because it is not a gym class anymore. It is a physical education setting where the kids are learning to enjoying doing things as adults sometimes we don't want—it is easy to say I don't want to do it.

**Rachel Breidster:** Sure. You have shared quite a bit of information with us today. I would imagine a lot of folks might be interested in learning more. Are there ways people might be able to get in touch with you? Are you willing to talk with folks interested in bringing programs to their schools?

**Tom Winiecki:** I am willing to talk to anybody. I can learn from anybody. My e-mail address is out there. Our website is there. You can contact me through there. Phone numbers, we have the voice mail here. I don't get it during the day I will get you by the end of the day and get back to you as soon as I can.

**Rachel Breidster:** Thank you so much, Tom. It has been a pleasure talking to you today.

**Tom Winiecki:** You're welcome. Thank you.

**Rachel Breidster:** It was great to have the opportunity to go out and meet with Tom. From the minute that we got there the students were engaged in his P.E. central challenge where they are competing, trying to achieve these nationally based benchmarks. You can see how engaged the students were and how active. It was a really great experience to be out there.

**Dr. Aaron Beighle:** Exciting stuff.
March 2014 Broadcast: Comprehensive School Physical Activity Programs: Enhancing Student Health and Academic Performance

Rachel Breidster: So that we’ve heard from both of you and will take a few minutes to answer questions from the audience. The first that we have is how long does a student have to exercise to get the red effect that we saw on the brain scan and how long does the red last in the brain for better learning?

Dr. Aaron Beighle: It is a great question and way over my head. If you referred to the reference that I had on the slide if it's not in there, that specific information you can probably contact the authors and they can tell you the exact information. I know there is research looking at is there activity that is too intense that gets kids too fidgeted and they can't come back down? We have to match that with activity that has health benefits and other things and benefits for the brain, etcetera. I know that research is going on. I’m sure Chuck Hillman will be able to answer that.

Rachel Breidster: And just as a reminder, all of the handouts and slides for today's show are available on our website phlive.org. And you can download the handouts so you can find that reference if you missed it during the show.

Rachel Breidster: Do you have a model recess policy that you would consider to be especially supportive for comprehensive schools physical activity program?

Dr. Aaron Beighle: I personally don't. I believe if you go to CDC website and type in recess in the search engine it would come up with policies, especially recess policies. I did write a recess brief that has resources and ideas and things you can incorporate into a policy but I’m guessing CDC has policy language that could be used.

Rachel Breidster: Would you give some examples—you referenced during your discussion that teachers can incorporate physical activity in an academic setting. Can you give examples of ways to do that?

Dr. Aaron Beighle: Some ways when we talk to teachers they didn't want a complex lesson plan. They wanted something simple. There are cards and things that are available. Things as simple as kids do jumping jacks if it is true and squats if it is false. It is a way to review things. I know of teachers that were doing graphing. They looked down and noticed that the floor was all tiles which are graph paper. The students instead of marking on the piece of paper they took steps on the tiles and went over three and had to measure the distance; and it’s up and it’s engaging and it’s active and it’s simple. What I learn most is seeing them. They just start generating. We say we designed this activity for science and realized it didn’t work for science but worked well for math. I think those types of just getting the ball started and this simple activity like we can do this. What about this and those types of things. We work with classroom teachers a lot to get some of the ideas that we create.

Rachel Breidster: Do schools need to pass a comprehensive schools physical activity policy in order to start a program?
Dr. Aaron Beighle: No. I don't think—if someone wants to do it and get it going, go. One of the things when I started getting into this and when I speak I don't want to make this overwhelming paperwork and bureaucracy to get kids active. If you want to start getting kids active just look up resources and start. It doesn't have to be a policy. Ideally it would be somewhat created into the culture of the school. Typically that takes a policy but to get going just go.

Rachel Breidster: Do you have suggestions for other partners outside the school that can participate on wellness committees?

Dr. Aaron Beighle: Yeah. It is a great idea and great question, as well. I know when we say walking to school day/bus, we work with sheriffs to make sure the roads were blocked off. Kids were blocked off. They had parents along the way. Parents are important to get involved as well as for people power. We also had local businesses that get involved because local businesses have people power but they also have potential resources and things like that. We have had police, parents who have been a big resource. We have had some field days and things where we have had nurses and things at one of the stations to talk about safety and sun safety or hydration and things like that. I think it depends on exactly what you want to do but I encourage anyone who wants to start this I think it has to be a variety of people involved.

Rachel Breidster: That is probably a great approach. It goes back to multi-faceted and taking a village.

Dr. Aaron Beighle: And not everybody has expertise. I know of an after school program that a mom, a yoga instructor came into the after school program and taught yoga for free. The kids had no idea what this was and they loved it. It is just the little things that start the ball rolling and started doing yoga more and that kind of thing.

Rachel Breidster: And the last question is can comprehensive schools physical activity programs help schools meet physical education and physical activity elements of their school wellness policies?

Dr. Aaron Beighle: I think the thing to be clear about is that physical education is a part of the curriculum and that physical activity is a health benefit in the behavior. So they are separate. I think it can help enhance the quality of a physical education the program as well as physical activity opportunities but physical education is the foundation of the comprehensive schools physical activity programs.

Rachel Breidster: Great. I think we are out of time for today. Thank you so much for being with us today. I think you have a really great amount of information that was shared with our audience.

Dr. Aaron Beighle: Thank you for having me.
Rachel Breidster: Thank you very much for joining us today. Please remember to fill out your evaluations online. Your feedback is always helpful to the development of our program and Continuing Education credits are available. To obtain Nursing Contact Hours, CMS and CHES credits, learners must visit www.phlive.org and complete and evaluation and a post-test for today’s offering. Additional information on upcoming web casts and relevant public health topics can be found on our Facebook page. Don’t forget to like us on Facebook to stay up to date. As a reminder, you can also download the companion guide to this web cast on our website. The companion live will provide you learning activities to help further your knowledge and better understanding of topics covered in this program. This web cast will be available on demand on our website within two weeks. And DVDs of any of our Public Health Live webcasts can be ordered from our website. Please join us for our next broadcast on May 15 where we discuss the changing landscape of mental health treatment in New York State. I’m Rachel Breidster, thanks for joining us on public health live.