

The other day I received a message from Jarrod Robinson (@mrrobbo) telling me to listen to this part of Dr. Dean Dudley's ConnectedPE session. When Jarrod takes the time to tell me something I listen! Right away I knew I was listening to something groundbreaking. Dr. Dudley had just laid out not only why we should have Physical Education in school but what Quality Physical Education should be. Here we go.

In the podcast Dr. Dudley states that most things we do in education has a positive effect. The problem is the effect can be so small that it may not be worth all the time and attention we place on it. An example of this would be if you came across research stating that students who ran 5 miles before a test would increase their score 1 point. It wouldn't make sense to waste at least 30 minutes of study time to have them go run would it? According to Mike Kaczala, your time would be better spent studying by taking the information and coming up with movements that attaches meaning to the newly acquired information. Whatever you sink your time and energy into must have extraordinary value to it. That is what Dr. Dudley who studies, under John Hattie, wants us to understand. We need to be getting the most bang for our buck.

Listen to the podcast episode here;

[spp-player url="https://connectedpe.podbean.com/mf/download/25hkwe/Episode_14_.mp3" title="Episode 14 - Quality Physical Education with Dr Dean Dudley"]

Dr. Dudley states, "Setting the bar at greater than zero is crazy. Everyone can claim they are 'making a difference'. Setting it at $d=0.4$ sets a level where the effects of teaching and learning innovations enhance achievement in such a way we notice real-world difference." In other words, let's have students learn at a level that breaks through the mundane. Google calls this moonshot thinking. Others say shoot for the moon even if you miss you'll land with the stars. I go with the classic motto if it's worth doing, do it well. I want to maximize the amount of effect I can have on my students. Dr. Dudley lays out exactly how I can achieve that goal.

Now for the eye opening part of this journey. Getting kids moving in our classes is representative a .22 or 22% positive effect in achievement. That is startling low. In student population numbers that means that assuming 20% of kids will improve anyway (because that is what happens in schools), only 7 out of 100 will see more favorable outcomes than those who didn't get this 'movement/physical activity' experience. Usually favorable outcomes come in the form of grades or test scores. We have been hanging our hats that increased movement will have a positive effect on our students. If our argument ends there we fall woefully short in our goal of creating meaningful change. Remember we need to reach .4 or 40% of that initial standard deviation in order to say that our Physical Education program is making above average gains.

The good news is we are not personal trainers. We do not just have our students moving. A Quality Physical Education Program is also equipping our students with social skills. This has

shown to have an effect of at least .4 or 40% of one standard deviation. Under the same assumptions, this means that now 13 out of 100 students have a favorable outcome than those who haven't undertaken the same program. Now we are getting some above average numbers!

We aren't done yet. We also work on developing a positive self concept with the use of play during the students elementary school years. This has shown to have an effect which can amount to as many as 17 students out of a 100 showing a favorable outcome if the same assumptions hold. Finally if we treat students as unique learners, and not by disability, cultural background, family background, etc..., we can potentially see gains of .61 of the standard deviation or favorable outcomes in 21 students. If that number seems high to you check out this article which explains how the teacher views the student's ability level affects the outcomes of their students. There is also a lot of variance across studies in this space but the average is still $d=.61$

Using the data that Dr. Dudley gives us should help us in numerous ways. The first way is that it shows us that a Quality Physical Education Program should have students focus on movement, social skills, mindfulness, creating a positive self concept, and lowering their anxiety that they experience at school and home. It should also stay away from labeling students as athletes and non-athletes. How we accomplish those goals will vary.

The second thing it shows us is that we need to refocus on how we are advocating for our programs. We can no longer be fitness trainers with fun games. We truly need to teach the whole child. We focus on movement and cognition so much that we are missing out on the beautiful part of what we do. We allow students to feel good about themselves. We provide a time and place that is encouraging to them socially as well as physically. We are the place where kids love to go when we create a Quality Physical Education program. That is how we need to advocate for our program.

The beauty of what Dr. Dudley conveyed in his Connected PE session was there is a basic framework for physical education with data to back it up. Nothing he said is really that groundbreaking. Think about it. We create an environment where students move, feel good about themselves, and learn how to get along with other people. They learn, develop friendships and lower their anxiety levels by playing games. All those things combined set up a fantastic enjoyable environment. Another benefit of that program is it should decrease absenteeism which we know has a huge negative effect on our students. How can they not flourish?

The way our students won't flourish is if we continue to ignore theories that are backed with facts and data. I understand that numbers can be manipulated and nothing can truly measure a student's progress because we are complex human beings. A student's socialization gains will not show up directly on a test. Lowering anxiety and increasing self-efficacy may be gained without the student even fully cognizant that it had occurred.

However, the numbers are a useful tool for setting aside presumptions, assumptions, biases, and opinions. They are a guide to help us figure out where we can strengthen our program by focusing on the things that really matter.

So now we have to ask ourselves the question, Is my program average or is it above average? If you aim for the latter what makes it so? I know this will shape the way I collect data, write my plans, and execute my lessons. Ignorance is no longer an option.