





20-MINUTE BURSTS OF EXERCISE INCREASE BRAIN PROCESSES AND ENHANCE COGNITIVE CONTROL FOR UP TO ONE HOURAB

30 MINUTES OF PE CAN IMPROVE CHILDREN'S FOCUS IMMEDIATELY THEREAFTER°





# ACTIVE CHILDREN DO BETTER

ACTIVE CHILDREN DO BETTER IN EVERY POSSIBLE WAY. THEY PERFORM BETTER IN SCHOOL AND ARE BETTER BEHAVED. PHYSICAL ACTIVITY CAN INCREASE ATTENDANCE RATES AND LEVELS OF CONCENTRATION. ACTIVE KIDS HAVE IMPROVED CHANCES FOR BETTER PHYSICAL, FINANCIAL, EMOTIONAL AND SOCIAL OUTCOMES IN THE FUTURE.

EVERY JUMP, KICK, SPRINT AND THROW INCREASES A CHILD'S CHANCES OF SUCCESS, IN SCHOOL AND IN LIFE. MAKING SURE ALL CHILDREN RECEIVE THAT OPPORTUNITY STARTS WITH A PHYSICALLY ACTIVE PRIMARY SCHOOL.

THESE ARE SCHOOLS THAT INTEGRATE FUN OPTIONS FOR PHYSICAL ACTIVITY INTO THE ENTIRE SCHOOL DAY. THAT MEANS BEFORE, DURING AND AFTER SCHOOL.

HOWEVER, TODAY'S GENERATION OF CHILDREN ARE THE LEAST ACTIVE IN HISTORY. WITH EACH PASSING YEAR, THEY ENGAGE LESS IN ACTIVE PLAY AND SPORT AND HAVE FEWER OPPORTUNITIES FOR QUALITY PHYSICAL EDUCATION. THE COST OF PHYSICAL INACTIVITY IS HIGH, AND CHILDREN BEGIN PAYING THE PRICE AS EARLY AS PRIMARY SCHOOL.

WHEN CHILDREN DO BETTER, SCHOOLS AND COMMUNITIES DO BETTER. IF ATTENDANCE, BEHAVIOUR AND GRADES ARE THE AREAS A SCHOOL LEADER IS LOOKING TO IMPROVE, RESEARCH SHOWS PHYSICAL ACTIVITY WILL HELP TO ACHIEVE IT. CREATING A STUDENT BODY THAT MOVES IS AN INVESTMENT IN A SCHOOL CULTURE THAT WILL THRIVE.

THIS GUIDE FOR DESIGNING ACTIVE SCHOOLS IS FOR SCHOOL CHANGEMAKERS AND LEADERS. THESE ARE THE PEOPLE WHO MAKE DECISIONS THAT SHAPE A SCHOOL'S PHYSICAL ACTIVITY CULTURE AND INFLUENCE HOW ACTIVITY IS INTEGRATED THROUGHOUT THE SCHOOL DAY. THE CHOICES THEY MAKE TODAY WILL MAKE ALL THE DIFFERENCE IN A CHILD'S FUTURE.

FOR AN ONLINE VERSION OF THIS GUIDE AND RELATED RESOURCES, VISIT: DESIGNEDTOMOVE.ORG/RESOURCES.

## IN THIS DOCUMENT

This document provides a summary of the evidence base in support of active schools and serves as a blueprint for school leaders to create change today.

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A synthesis of the most compelling research showing how physical activity in the school setting can improve student outcomes, classroom management and overall school performance.

An explanation of the vision for an active school and the three priority areas active schools deliver: 1) 60+ minutes of daily physical activity, 2) high-quality PE and 3) a culture of physical activity for all.

**This section provides a framework** and tools for school leaders to get others on board, assess where they are and take action.

**Need some inspiration?** There is plenty of great work being done around the world. Here are a few stories.

**There are many existing tools** to help you create an active school. This section offers a wide selection of the best ones—expert endorsed, globally relevant resources designed to make the task at hand a lot easier.

## ABOUT THE LANGUAGE WE USE

**Designed to Move: Active Schools** is intended for a global audience of school leaders or 'changemakers' (such as 'head teachers', 'principals', 'head masters/mistresses', or simply 'heads'). The people who have provided input and guidance on this work operate in many different countries throughout the world. Some of us refer to youngsters as 'kids', while others use the word 'children'. Both are used interchangeably here. Likewise, the term 'students' (as schoolchildren are often called in North America and Australia) is used interchangeably with 'pupils' (as they're called in Europe and Africa). Broadly speaking, these are references to children between the ages of 6 and 12.

With the exception of certain first-person narratives, Oxford English is used. In addition, the following operating definitions have been adopted for terms used commonly throughout this document.

- PHYSICAL ACTIVITY: This refers
  generally to all types of active movement—
  exercise, active play, organized sport,
  in-class activity breaks, active transport to
  and from school, movement in physical
  education class, etc.
- SPORT: This document uses a broad definition, borrowed from the Council of Europe's Charter of Sport: 'Sport means all forms of physical activity which, through casual or organized participation, aim at expressing or improving physical fitness and mental well-being...' Organized sports and school clubs such as football, basketball and cricket fall into this category, as do organized dance, tennis and martial arts.
- PHYSICAL EDUCATION OR PE: This document uses the International Council on Sport Science and Physical Education's definition: 'Physical education develops physical competence so that all children can move efficiently, effectively and safely and understand what they are doing'.
- MODERATE-TO-VIGOROUS PHYSICAL ACTIVITY (MVPA): Organizations define and measure the

- intensity of activity in different ways. Here, MVPA is referred to as a benchmark—the level of intensity active kids should achieve for maximum benefit. For these purposes, moderate intensity suggests activity that causes conversation to become labored and the active kid to sweat. With vigorous physical activity, maintaining conversation is impossible.
- PHYSICAL LITERACY: This is an outcome of effective physical education. Physical literacy is the ability to move with competence and confidence across all aspects of life (at home, in the workplace, in recreation and leisure time, during travel, in daily interactions with other people, etc).
- FUNDAMENTAL MOVEMENT SKILLS:
   These are the gross motor, locomotor, balance and ball skills that form the building blocks of a child's ability to perform, participate in and enjoy physical activities throughout life.
- MOVEMENT: This term is used broadly to relate to physical activity and refers solely to those who are moving as a part of physical activity.

- PLAY: Unless specifically referred to as 'sedentary play', the word signifies active types of play—physically active games, running and jumping, free movement, etc.
- ACTIVITY BREAKS: These are brief periods during class time in which children have the opportunity for structured or unstructured physical activity that is unrelated to the curriculum. It is solely for the purpose of giving children's bodies and brains a break.
- ACTIVE CURRICULUM: This refers to the physical activity that is connected to the lesson plans.

It is also important to note that academic research on the school-related benefits of physical activity often looks at connections to specific types of activity, its delivery or its measurement—such as physical fitness, exercise, or participation in organized sport or physical education. Where possible, mentions of research findings are accompanied by specific clarifications. However, this is not always practical where graphics are concerned. Those interested in learning more are encouraged to refer to the citations for details.

i For more information, please refer to the International Council on Sport Science and Physical Education's International Position Statement on Physical Education.



PHYSICALLY ACTIVE CLASSROOMS LEAD TO IMPROVEMENTS IN MATHEMATICS AND LITERACY TEST PERFORMANCE (SPECIFICALLY IN READING AND SPELLING)<sup>D EF</sup>





PHYSICAL FITNESS IS ASSOCIATED WITH HIGHER TEST SCORES°







# THE CASE FOR ACTIVE SCHOOLS

**ACTIVE CHILDREN DO BETTER IN SCHOOL** 

The research has been done. Physical activity can positively impact everything educators are trying to achieve. When children move regularly in school, behaviour, attention, attendance and academic performance often improve. In the future, these children will have better income prospects, improved physical and mental health, and higher productivity.

# ACTIVE CHILDREN DO BETTER IN SCHOOL

Hundreds of studies" from around the world point to the same conclusion: Regular physical activity throughout the day can lead to better behaviour, attendance and academic performance. This is true in both the short term (immediately after physical activity has taken place) and the long term.

## ACTIVE KIDS HAVE BETTER ATTENTION, BEHAVIOUR AND ACADEMIC PERFORMANCE **BRAINS WORK BETTER LEARN BETTER AND FASTER ACQUIRE, PROCESS AND RETAIN NEW BETTER GRADES** INFORMÁTION BETTER **IMPROVED MATHEMATICS AND** PLAN AND ORGANIZE WORK BETTER **READING SCORES** BETTER PROBLEM-SOLVING AND **ENHANCED THINKING SKILLS TIME MANAGEMENT** STRONGER SCHOOL CONNECTIONS **IMPROVED SENSE OF BELONGING HAPPIER STUDENTS** HAPPIER AT SCHOOL **MORE MOTIVATED** BETTER ATTENDANCE AND PARTICIPATION HIGHER SELF-ESTEEM IMPROVED ATTITUDE AND BEHAVIOUR AT SCHOOL **MORE CONFIDENT BETTER BEHAVED IN CLASS** 20-MINUTE BURSTS OF EXERCISE INCREASE BRAIN PROCESSES AND ENHANCE COGNITIVE CONTROL FOR UP TO ONE HOUR AFTER. $^{\rm H\,I}$

<sup>&</sup>lt;sup>II.</sup> It is important to note that the studies referenced here vary significantly in their research design. For example, some look at participation in physical activity or sport while others assess the relationship between activity and school benefits based on physical fitness levels. The purpose here is to show the range of possible outcomes.

## THE BENEFITS ARE EXTRAORDINARY

Physical activity creates a self-reinforcing cycle of benefits. Active children's brains work better, giving them improved capacity to learn. At the same time, better attitudes about school and improvements in their psychosocial health create a more conducive mind-set for learning. The net result is improved academic performance.

## ACTIVE CHILDREN'S BRAINS WORK BETTER

Recent advances in brain science leave little doubt that physical activity helps brains work more effectively. 123 Active children are better prepared to learn. Physical activity improves cognition, 45 concentration, 6 attention, 789 memory, 10 planning 11 and a host of abilities that are fundamental to educational success. 1213 It also helps to fuel brain processes that support mathematics and literacy. 1415 1617 18 19 20 21

## ACTIVE CHILDREN DO BETTER ACADEMICALLY

Physical activity is positively associated with improved educational achievement and academic performance. There is also increasing evidence that physically active and physically fit children can achieve better educational attainment than their sedentary peers.<sup>22 23</sup>

## ACTIVE CHILDREN ARE HAPPIER

Happy children perform better in school and in life. Studies show that positive physical activity experiences can boost children's and young people's self-esteem, 24 25 26 27 28 29 enhance their mood, 30 31 32 and help them develop stronger and more varied friendships. 33 34

# ACTIVE CHILDREN HAVE STRONGER SCHOOL CONNECTIONS

Physical activity and sport help make schools happier places for students. Children who take part in sport clubs have a greater sense of belonging to the school, <sup>35</sup> are happier while they attend it, and place a greater value on the learning they experience. <sup>36</sup> <sup>37</sup>





# PHYSICAL ACTIVITY IMPROVES OVERALL CLASSROOM AND SCHOOL OUTCOMES

When all children have the opportunity to be physically active, the school as a whole is better off. Taken together, the gains made by active pupils benefit the broader school environment. In addition, there are specific areas against which schools are measured and assessed that get a significant boost from physical activity.

fig 2

## PHYSICAL ACTIVITY POSITIVELY AFFECTS THE WHOLE SCHOOL ENVIRONMENT



## PHYSICALLY ACTIVE CLASSROOMS ARE EASIER TO MANAGE

When kids are active, whole classrooms are better off. For example, physical activity can be a great tool to address behavioural issues in the classroom. Studies have found that physical activity programmes are associated with improved overall discipline in schools.<sup>38 39</sup> Short bursts of activity have been associated with improved concentration. 40 When physical activity is used as a break from classroom learning, children demonstrate improved attention in classroom work immediately following the activity break. Active classroom lessons have also been shown to reduce children's time off-task,41 and physical activity more generally is linked to better overall behaviour.42

## ACTIVE CLASSROOMS CAN BENEFIT TODAY

There is a huge opportunity to enhance overall classroom performance through in-class physical activity. Active classrooms incorporate physical activity breaks, active learning and movement activities throughout the day. Why do active classrooms matter?

- Students who do short bouts of a few minutes of fun exercise are much more able to focus on their schoolwork than those who don't.
- Just five minutes of moderate-to-vigorous physical activity can significantly improve 'fluency in mathematics and classroom concentration'.
- Research shows that physically active classrooms lead to improvements in mathematics and literacy test performance (especially in reading and spelling).<sup>46 47 48</sup>

The great thing about this approach is that it is a fun and free way of increasing children's physical activity levels during the day, 49 50 while keeping them more focused and engaged with their learning.

# ACTIVE SCHOOLS MAY HAVE HIGHER ATTENDANCE AND SCHOOL COMPLETION RATES

Physical activity is positively associated with school attendance. In fact, one study showed that children who participate in sport activities were twice as likely to attend school as children who did not. 51 Another study <sup>52</sup> of a physical activity intervention with disaffected students in the UK found that participating students' attendance was better during the programme than before it. Physically active children and young people are also less likely to opt out of schooling,53 and extracurricular involvement in a variety of activities has been associated with lower dropout rates. 54

## PHYSICAL ACTIVITY IMPROVES OVERALL SCHOOL PERFORMANCE

Increasing the amount of physical activity in school (even with reductions to time spent on core subjects) does not harm general academic performance. Most studies show it actually increases academic performance and improves standardized test results. <sup>55,56</sup>In fact, one study found that better physical fitness was associated with 40% higher test scores. <sup>57</sup>



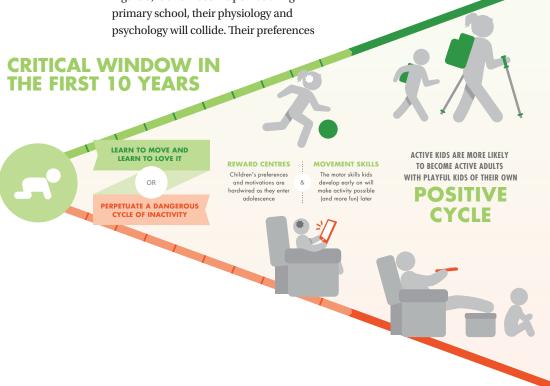
## PRIMARY SCHOOL YEARS **ARE A CRITICAL WINDOW**

Physical activity sets children on a positive trajectory that will influence the rest of their lives. Their fitness and activity levels are associated with better grades, attendance and behaviour during their primary school years. When they get older, the combination of physical activity and better school outcomes will influence their health, how productive they are, their financial prospects and the likelihood of their own children being physically active. 58 59 60 61 62 The science tells us primary school is the time to set this trajectory in motion.

Basic movement skills (such as crawling, walking, running, jumping, throwing and catching) in the earliest years contribute to physical, cognitive and social development. 63 These early experiences are so important that some experts say children who don't get a broad enough foundation early on will never develop one. They start out behind and they'll have a very difficult time catching up. It's called a 'proficiency barrier', and the children who experience it are likely to be shortchanged forever.

Even children who get the basic physical literacy skills early in life are at serious risk of becoming inactive teenagers and adults. During adolescence, children start opting out of sport and physical activities. They do so for a lot of reasons. Sometimes, they just don't have recess/break times, physical education or access to sport. Other times, what they do get is the exact opposite of fun. 64

The unseen problem, depicted in Figure 3, is this: At some point during and motivations for activity will be hardwired. Neurologically, their brains will record whatever they do and enjoywhether it's tennis or TV-and encode it for life. The brain cells needed for those activities are kept. 65 66 67 The rest are thrown out. That's why an inactive kid is likely to stay that way. For the same reasons, an active kid will also stay active-and that's why early positive experiences in primary school are key.



## A PROBLEM WE CAN FIX: MOST CHILDREN AREN'T MOVING

In early adolescence, children's activity levels have been shown to decline sharply. For example, between the ages of 9 and 15, American children's weekly moderate-to-vigorous physical activity decreases by an average of 38 minutes each year they get older.<sup>68</sup>

Studies in Europe and the United States find that a gender gap exists by age 9, with boys more active than girls. <sup>69 70</sup> By age 15 among children in Europe, moderate-to-vigorous physical activity is cut in half from 9-year-old levels (a 48 per cent drop for boys and a 54 per cent drop for girls). <sup>71</sup> For American children, it drops by 75 per cent between ages 9 and 15. <sup>72</sup> A study among Chinese youth showed that on average, children got only 20 minutes of moderate-to-vigorous daily physical activity in school. <sup>73</sup> Moreover, 92 per cent of them get no physical activity outside of school. <sup>74</sup>

This decline in children's physical activity points to a significant problem for parents, public health advocates, governments and economies. It's also a major issue for school changemakers who need children to be physically active to reach their full potential. When looking at the problem in the schools context, there are three major issues to consider: 1) children are opting out when it matters most, 2) quality experiences can be difficult to find and 3) some children are harder to reach.

## CHILDREN ARE OPTING OUT WHEN IT MATTERS MOST

The primary school years are when children will learn to love physical activity for the rest of their lives. Or not. Sometimes it's a choice—when it's fun, age-appropriate and non-threatening, they're likely to opt in.

Pay special attention to the kids who opt out or are pushed out. At the critical moment when their lifelong preferences and behaviour patterns are being established, many children are consciously choosing not to be active or they are being pushed out of sport based on perceived ability. Children and schools pay a high price for that, but they don't have to. The best news of all is that we have a chance to fix things right now.

## QUALITY EXPERIENCES CAN BE DIFFICULT TO FIND

Sometimes programmes are available, but they're unproductive or even detrimental. Remember waiting to be picked for a team? Ever stand in line to climb a rope? For every great programme out there, there are a hundred others that punish children for losing or only let the strongest, biggest children with 'ability' play. Meanwhile, safety issues keep children from walking or riding their bikes to school and regulations prevent people from using school facilities after school.

## SOME CHILDREN ARE HARDER TO REACH

Some children are more likely to be excluded from physical activity than others. This is true in the school context and is also likely to be true throughout their lives. If we design programmes and activities with the most vulnerable children in mind, they are more likely to work for everyone.



## **EVERYONE WILL BE BETTER OFF**

School leaders have a lot more people to answer to than just the students. For most principals and head teachers, much of the day is dedicated to managing the expectations of the school administration and school governors, teachers, staff and parents, as well as students. The impact of active schools on this 'school ecosystem' may be one of the most underestimated aspects of this work.

After all, when students are happier, healthier, better behaved, better performing and poised for long-term success, all of a school's stakeholders are better off.



## SOLUTIONS CAN START TODAY

Creating a fully active school will take time, but physical activity and its many advantages can start as soon as today. To get the maximum benefit, children need at least 60 minutes of moderate-to-vigorous-intensity physical activity every day. However, this can occur in a series of shorter bouts of activity. Better yet, research has shown that even brief bursts

of physical activity can contribute to improved cognitive functioning and academic engagement.

For example, the cognitive benefits of a 15- to 25-minute burst of moderate-intensity exercise have been found to last for at least 30 minutes after the exercise was finished. Twenty-minute bursts of exercise increase brain processes and

enhance cognitive control for up to one hour after exercise stops. <sup>76 77</sup> And a single 30-minute physical education programme led to an improvement in children's focus immediately thereafter, leading researchers to argue that physical activity should be scheduled 'before important subjects like mathematics and not at the end of the school day.' <sup>78</sup>

## **MORE ABOUT THE RESEARCH**

fig 5

#### THE EVIDENCE

#### **ACTIVE CHILDREN DO BETTER AND SO DO ACTIVE SCHOOLS**





KIDS' BRAINS WORK BETTER

PAPERS LOOKED AT SCHOOL ENGAGEMENT



KIDS FEEL MORE CONNECTED TO SCHOOL

87
PAPERS LOOKED AT
PSYCHOSOCIAL
FACTORS



KIDS FEEL HAPPIER

52
PAPERS LOOKED AT
ACADEMIC
OUTCOMES



KIDS GET BETTER GRADES

PAPERS LOOKED AT
LIFELONG EFFECTS
AND OTHER BENEFITS



KIDS DO BETTER
THROUGHOUT LIFE

#### IMPROVED SCHOOL PERFORMANCE AND WELL-BEING

WHAT'S BETTER: GRADES, ATTENDANCE, BEHAVIOUR, COMPLETION RATES, PHYSICAL AND MENTAL HEALTH, EMOTIONAL WELL-BEING.

In 2014 NIKE, Inc. commissioned Richard Bailey, PhD, an international authority on the relationship between human development and physical activity, to examine the evidence base around physical activity and academic performance. Professor Bailey and his team completed a review of the available evidence including grey literature and case studies. In total, 325 academic papers from 18 countries were reviewed, as noted in Figure 5.<sup>111</sup> The review focused on the elementary/primary years of schooling, but with a look at all compulsory years of schooling. To the extent possible, the work

drew on data from around the world. The project sought to identify evidence regarding the effects of both brief and sustained physical activity in the school context. It also looked at different types and settings for physical activity (physical education, sport clubs, recess/break times, travel to and from school, classroom-based activity and general physical activity, among others).

Overall, this research confirmed that physical activity offers enormous benefits across numerous dimensions of a student's school experience, as detailed throughout this document.

It should be noted that the findings presented here reflect research that examined many different types of physical activity, in a variety of school-based settings. In some cases, the findings are associated with students' physical fitness. In others, they relate to participation in a certain type of physical activity. To learn more about each piece of research, please refer to the citations in this document.

Ecountries included (in order of volume of papers reviewed): United States, United Kingdom, Canada, Germany, Australia, Switzerland, Finland, Norway, France, Sweden, Spain, Korea, Portugal, Chile, Taiwan. Greece. New Zealand. Iceland.





# WHAT IS AN ACTIVE SCHOOL?

An active school provides all children with great experiences in physical activity and sport before, during and after school. The result is improved performance, behaviour and attendance. This section digs even deeper into what an active school looks like.

# ACTIVE SCHOOLS DO THREE THINGS WELL FOR ALL CHILDREN

There are numerous resources, documented standards, guidelines and accepted best practices that define the requirements for an active school. Please see the Tools & Resources section for a list of these. **BROADLY SPEAKING, THERE IS CONSENSUS THAT AN ACTIVE SCHOOL DOES THE FOLLOWING THREE THINGS REALLY WELL FOR ALL CHILDREN:** 

# INSPIRES 60 MINUTES OR MORE OF DAILY PHYSICAL ACTIVITY

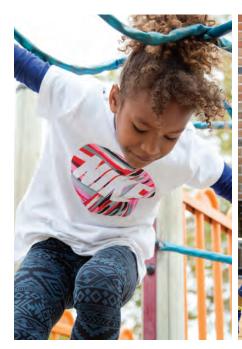
Children move before, during and after school—to and from school, in classrooms and corridors, in the gym and on the playground. Bursts of 10+ minutes count towards the target.

# DELIVERS HIGH-QUALITY PHYSICAL EDUCATION

Children are taught regular physical education that is high-quality, inclusive, focused on physical literacy and likely to give them a positive experience.

# CREATES A CULTURE OF PHYSICAL ACTIVITY FOR ALL

Children are surrounded by leaders, parents, staff and a community who support and invest in physical activity and sport as a way for children to succeed.





# ARE YOU AN ACTIVE SCHOOL? A FEW THOUGHT STARTERS & CONSIDERATIONS

School leaders will need to take a variety of actions on the path to becoming an active school. The pages that follow outline some of the most common recommendations from experts in the field. These are not meant to represent an exhaustive list. Instead, they are features of active schools that often get overlooked.

These recommendations are organized by relative importance and planning/resources required. For example, providing opportunities for children to be active is considered an essential standard, and investing in teachers' professional development is considered a best practice. The recommendations are grouped into the following sequential categories:

## THE ESSENTIALS:

The minimum standards that schools should seek to achieve first. This includes basic rights of movement as well as actions that are legally required in many places.

### **IMPROVEMENTS:**

How to take an active school to the next level—solutions that require time and coordination to implement.

#### **BEST PRACTICE:**

Longer-term strategies that require resources and planning.

To gauge how your school is doing today and to find ideas for making your school more active, check out the Active Schools Assessment on page 30.









# INSPIRES 60 MINUTES OR MORE OF DAILY PHYSICAL ACTIVITY

Children move before, during and after school—to and from school, in classrooms and corridors, in the gym and on the playground. Bursts of 10+ minutes count towards the target.

## THE ESSENTIALS

## 1. EVERY STUDENT HAS THE CHANCE TO MOVE FOR 60 MINUTES/DAY OR MORE

We often think children are moving when they aren't. It can be easy to notice children who are already active. Take a look around your school and playgrounds for the children who are sitting still. Getting them moving could be as simple as giving a little extra encouragement to try out a new game or piece of equipment, or letting them know an injury doesn't necessarily mean they have to sit out completely.

## 2. ADULTS ENCOURAGE CHILDREN WHO AREN'T MOVING TO BE ACTIVE DURING BREAK TIMES, SPORT OR PHYSICAL EDUCATION CLASSES

Kids' play can be primarily sedentary (for example, in front of a screen or device). Recess and lunch breaks are ideal times to get children moving, as are classroom breaks.

## 3. CHILDREN ARE HAVING FUN WHILE THEY ARE MOVING AND BEING ACTIVE

Sometimes children move, but the experience may not be a good one. Perhaps they're bored or the level of competition is inappropriate for the age group. Solutions can be very simple. For example, 8-year-olds define fun as feeling they're good at a task or skill rather than winning. They also love having a choice in what they do and engaging in movements that feel right for their bodies. Schools around the world are discovering that abandoning rules that inhibit creative play (think rolling

around in tires or jumping curbs on scooters) is resulting in more physical activity and more fun for children at break time. Teachers say it shows up in better behaviour and concentration when children come back to class.

### **IMPROVEMENTS**

#### CHILDREN ARE ALLOWED TO USE SCHOOL FACILITIES BEFORE AND AFTER SCHOOL, AND DURING LUNCH AND BREAK TIMES

This isn't about spending a few minutes on the playground while waiting to be let in. It's about children getting supervised options for structured and unstructured play, in the school and on the playground. It also includes before- and after-school activities—everything from formal sport and play programmes to walking school buses.

## 2. CHILDREN HAVE INPUT INTO THEIR ACTIVITIES, EVEN OUTSIDE OF BREAK TIMES

Children respond well when they have a choice about what they do. Active lessons, activity breaks and before/after-school programmes can all give children a say, a least part of the time (for example, 'Dance if you want to do X for our warm-up. Now if you want to do Y, jump up and down...').

#### 3. THE SCHOOL HAS A PHYSICAL ACTIVITY STRATEGY

Setting expectations starts with policy. Download the following report to get started: <u>Quality Physical Education Guidelines for Policy Makers.</u>

#### 4. OPTIONS FOR MOVEMENT ARE CULTURALLY AND AGE-APPROPRIATE

For younger children (3-5), emphasize fun free play and basic skills like throwing, running and balancing. For the next age group (6-8), focus on simplicity, fun, variety and fundamental movement skills and age-appropriate physical literacy development. For older children (9-12), introduce elements of teamwork and activity-specific skills and expanded physical literacy.

## **BEST PRACTICE**

## 1. CHILDREN HAVE A CHANCE TO BE ACTIVE DURING CLASSROOM LESSONS

How about simply letting children stand or move during class? Many of us learn better when we're moving our feet, fidgeting or standing. Allowing children to stand or fidget during lesson time could significantly boost concentration and learning outcomes! Give teachers resources to get children moving—either as part of lesson plans or as breaks during class. And be

sure to celebrate the teachers who inspire active students.

## 2. TEACHERS FEEL CONFIDENT LEADING PUPILS THROUGH PHYSICAL ACTIVITY BREAKS IN THE CLASSROOM

It is likely resources already exist within your school to make it easier on classroom teachers. Teachers responsible for physical education, sport coaches and parents (in some cases) can be qualified resources to share tips, strategies and ideas.

# DELIVERS HIGH-QUALITY PHYSICAL EDUCATION

Children are taught regular physical education that is high-quality, inclusive, focused on physical literacy and likely to give them a positive experience.

### THE ESSENTIALS

## 1. ALL STUDENTS RECEIVE AT LEAST 150 MINUTES OF PHYSICAL EDUCATION PER WEEK. (SOMETIMES THIS MEANS USING SPACE CREATIVELY)

Does your school value physical education and treat it as a credible academic subject? Physical education is a nonnegotiable, essential element of a child's ability to develop physical literacy. Like mathematics and literacy, it should be perceived as an important aspect of children's holistic education. All students, regardless of their circumstances, ability or interest level, must have access to quality physical education. Even when children have temporary injuries, don't assume they can't participate.

#### 2. CLASSROOM TEACHERS AND PE STAFF ARE TRAINED TO DELIVER A HIGH-QUALITY EXPERIENCE

Many schools do not have a dedicated physical education teacher. However, it is still possible for the staff leading physical education to be sufficiently trained, especially when given the opportunity to participate in continuing professional development. In addition, certified external coaches can work with classroom teachers to improve their confidence and competence in teaching physical education, as well as integrating activity into the classroom.

#### 3. ALL CHILDREN FIND PHYSICAL EDUCATION FUN, AND THE EXPERIENCE IS ENGAGING, RELEVANT AND MEANINGFUL

The idea that physical education can be fun may seem far-fetched to those adults who found their childhood experiences to be less than ideal. This doesn't need to be the case. Giving children choices among several structured activities (such as at different stations), building in motivation and encouragement, and focusing on age-appropriate activity can make all the difference.

## 4. PE CURRICULUM IS WELL PLANNED, BROAD AND BALANCED, AND INCLUDES A RANGE OF ACTIVITIES LIKELY TO APPEAL TO YOUNG PEOPLE

Children need a variety of activities, encompassing a wide range of movement types, skills and intensity levels. This keeps their attention and delivers optimal benefits of exercise while ensuring that they are practicing the full range of skills that will allow them to enjoy physical activity in the future.

## **IMPROVEMENTS**

## 1. LESSONS ARE INCLUSIVE FOR ALL, AND CHILDREN WHO ARE INJURED OR UNABLE TO PHYSICALLY PARTICIPATE ARE ACTIVELY INVOLVED

Many schools waive physical education requirements under certain circumstances, such as when children are injured or having academic difficulties. However, all children need to move and all movements can be modified to meet the needs of children with injuries, unless otherwise specified by a doctor.

## 2. PE MAXIMIZES PHYSICALLY ACTIVE TIME AND KIDS ARE ACTIVE FOR AT LEAST 50 PER CENT OF THE LESSON

The educational aspect of physical education should not be overlooked. PE sessions provide an opportunity for children to learn how and why they should be moving, and how to do it safely. However, it is not uncommon for children to spend significant amounts of their PE lesson time standing in line, waiting to participate in an activity. Programmes should strive for equal amounts of practice and theory, with very minimal wait time.

n: There are many recommendations for the ideal amount of physical education in primary school. For example, UNESCO's Quality PE Policy Guidelines set a minimum standard of 120 minutes/week and a benchmark of 180 minutes/week.

#### BEST PRACTICE

#### THE SCHOOL INVESTS IN THE PROFESSIONAL DEVELOPMENT OF TEACHERS RESPONSIBLE FOR PHYSICAL EDUCATION

Physical education teachers can be an essential resource in your active school. Movements that kids learn to execute properly in PE class can be used in other contexts, such as activity breaks and active lessons.

## 2. STUDENTS RECEIVE PROGRESS REPORTS THAT ILLUSTRATE THEIR ACHIEVEMENTS AND OPPORTUNITIES TO IMPROVE

Children need to know how they are performing. They enjoy reaching personal achievements and contributing to group goals. PE lessons present an important opportunity to build group and individual feedback loops into programmes, set goals with students and help them measure their progress over time.

#### 3. PE PROMOTES PHYSICAL LITERACY AND ALL STUDENTS ACQUIRE THE MOTIVATION, CONFIDENCE AND PHYSICAL COMPETENCE TO ENGAGE REGULARLY IN PHYSICAL ACTIVITY

Do children learn core movements to use during in-class activity time? PE classes should focus on physical competency, physical literacy and knowledge of physical movement. Many schools don't offer physical education every day. However, teachers delivering physical education can teach basic medium- to high-intensity movements/exercises that are appropriate for children to perform during academic classes. Students receive progress reports that illustrate their achievements and opportunities to improve.

# CREATES A CULTURE OF PHYSICAL ACTIVITY FOR ALL

Children are surrounded by leaders, parents, staff and a community who support and invest in physical activity and sport as a way for children to succeed.

#### THE ESSENTIALS

## 1. TEACHERS SPEAK POSITIVELY ABOUT PHYSICAL ACTIVITY

Teachers know it's often all about presentation. When getting active is presented as a fun option with plenty of variety to suit children's interests, they'll be much more inclined to enjoy it.

## 2. PHYSICAL ACTIVITY IS NEVER USED-OR WITHHELD-AS PUNISHMENT

It's tempting to withhold recess/break times when a child is misbehaving. But the irony is that physical activity has been shown to improve behaviour. Likewise, everyone has seen a child forced to run laps or do push-ups as punishment. The unintended message? Physical activity isn't fun.

## 3. THE SCHOOL PROMOTES AND SUPPORTS OPTIONS FOR ACTIVE TRANSPORT TO AND FROM SCHOOL

In some countries, active transport to school is declining. Even where active transport remains common, safety is a concern. School leaders can champion Safe Routes to Schools programmes that provide options that kids enjoy and parents feel comfortable with.

#### **IMPROVEMENTS**

## 1. SCHOOLS PROVIDE FUN OPPORTUNITIES FOR THE WHOLE SCHOOL TO COME TOGETHER FOR PHYSICAL ACTIVITY

Even when children have opportunities to move, not all of them do. Some children choose to sit out. It's important to understand why (shyness, fear of injury or failure, preference for a different activity, etc), and address it.

## 2. CHILDREN ARE ENCOURAGED TO SET AND WORK TOWARDS ACHIEVING REALISTIC PHYSICAL ACTIVITY TARGETS

Do you have systems for tracking or logging how many minutes of physical activity are "programmed" into the schedule of each day? Consider reporting on this at the end of each term in the same way you'd report on the number of hours children spent in mathematics class for that term.

## 3. TEACHERS, STAFF AND SCHOOL LEADERS CELEBRATE ALL CHILDREN'S PARTICIPATION

Educators know better than anyone how far a little positive reinforcement can go with a child. High fives, cheers, stickers, stars and a boisterous 'Good job!' can make the difference between a great experience and a forgettable one.

## **BEST PRACTICE**

## 1. CHILDREN UNDERSTAND HOW AND WHY PHYSICAL ACTIVITY IS GOOD FOR THEM

There's no doubt movement can and should be fun, but children still need to understand how their bodies work and why physical activity matters. This can be reinforced throughout the day—during academic lessons and PE, by recess/break time supervisors, and by anyone who celebrates children being active.

## 2. CHILDREN SEE THE ADULTS AROUND THEM BEING PHYSICALLY ACTIVE

All children need positive role models and this is especially true when it comes to physical activity. When they see teachers, staff, school leaders and parents enjoying activity, children will be more inclined to join in too.

## 3. PARTICIPATION IN PHYSICAL ACTIVITY IS INCLUDED IN STUDENTS' REPORTS

Physical education often appears on report cards, but physical activity does not. The best active schools prioritize physical activity in every way, including building it into children's report cards. This includes all forms of participation such as activity during breaks, before- and after-school programmes and in-class movement time.











## HOW TO BECOME AN ACTIVE SCHOOL

Leaders of active schools around the world generally agree there is no shortage of simple and low-cost actions that can have a high payoff on overall school performance. The following pages describe the three-phase journey to becoming an active school, including a simple quiz to determine how you're currently doing.

**PHASE 1: MAKE THE CASE & GET OTHERS ON BOARD** 

**PHASE 2: INSPIRE & LEAD A NEW VISION FOR YOUR ACTIVE SCHOOL** 

**PHASE 3: DO SOMETHING ABOUT IT** 

## PHASE 1:

# MAKE THE CASE & GET OTHERS ON BOARD

Successful leaders of active schools agree that getting others on board is a critical component in creating an active school. In the school context, transformative change will occur when:

### LEADERS ENABLE IT

## REAL CHANGE CAN'T HAPPEN IN A SCHOOL WITHOUT A SCHOOL LEADER WHO ACTS AS A CHAMPION AND

A ROLE MODEL. The school leader is the one who can inspire teachers to be excited about a way of teaching that gets kids moving. Leaders give teachers the tools and autonomy to integrate physical activity into the school day. And the best leaders lead by example, meaning that it's a good idea to join in some schoolwide fun. This sends the message that physical activity is important (and it's also expected).

## TEACHERS DELIVER IT

## IT'S ESSENTIAL THAT TEACHERS UNDERSTAND HOW TO DELIVER QUALITY PHYSICAL ACTIVITY BECAUSE THEY HAVE THE MOST ENGAGEMENT WITH CHILDREN DURING THE

**DAY**—be it through PE, recess supervision, activity breaks in the classroom or integration of physical activity into academic lessons. And, it must be fun. Always.

## **PARENTS DEMAND IT**

#### PARENTS NEED TO UNDERSTAND HOW IMPORTANT

**THIS IS.** Without physical activity, their children are being shortchanged—not just today, but for the rest of their lives. Once parents know what their kids are missing, it should be easier to encourage them to support efforts to get kids active.

### KIDS WANT IT

# It's NOT ENOUGH TO REQUIRE KIDS TO MOVE. They have to have fun doing it. When kids have fun being active, they learn that physical activity in all of its forms is a great thing. That's how they learn to love it for the rest of their lives. In the big picture, that starts to unlock a series of positive rewards that can last a lifetime. In the short term, it's what makes a school a high-performing one.





## TALKING POINTS TO ADVOCATE FOR ACTIVE SCHOOLS

Messages and supporting facts to help make the case are included below. These messages will work when speaking to anyone who has a stake in kids' futures—teachers, parents and administration/school governors.

### THE MAIN MESSAGE TO CONVEY

Active kids do better when physical activity is an integrated part of their lives. As students, they have better grades, test scores, attendance and behaviour. Throughout their lives, they have better health, wellness, happiness, longevity and prosperity opportunities. Now we need to get teachers and parents on board to help make this a reality, and there are very simple things we can do to bring about the benefits.

## **FACTS TO SHARE**

## PHYSICAL ACTIVITY LEADS TO BETTER-PERFORMING CHILDREN AND SCHOOLS

- The science is clear on physical activity. It creates better students and better schools.
- Physical fitness contributes to better brain functioning, memory, test scores, academic achievement, mathematics proficiency and attention.
- Quality PE improves standardized test scores, behaviour and concentration.
- Play, both structured and unstructured, gives kids the fundamental motor skills that are the building blocks for all future movement.
- Activity breaks during lesson time provide an immediate boost to attention, behaviour and performance.
- Sport participation improves cognition, verbal and mathematics test scores, concentration and attendance.
   It's also linked to higher university attendance rates and future income.

## **MESSAGES TO INSPIRE**

## PHYSICAL ACTIVITY IN SCHOOL WILL HAVE A PROFOUND IMPACT ON A CHILD'S LIFELONG TRAJECTORY:

- For many kids, the person who coaches them in sport and play is one of the most significant influences in their lives. Teachers and parents can play that role, with or without a professional coach. These are the people who instill confidence in kids and inspire them to achieve their very best.
- It's the person who says, 'Come on in, join the fun, you're
  doing great' who makes all the difference. When grownups have the courage to change the rules of the game to
  make it fun for every kid, that's when we create early
  positive experiences. And that's what changes kids' lives
  now and in the future.
- You can do this in PE. You can do this during class time (yes, even mathematics). You can do this in before-school programmes and after-school sports.
- When you do, you'll influence kids' lives for the better, and you'll change things for the next generation too.

Always have an ask of your audience—the simpler, the better. For ideas of what to ask for, see "Top 10 Quick Wins Schools Can Implement Today" later in this section.

## PHASE 2:

## INSPIRE & LEAD A NEW VISION FOR YOUR ACTIVE SCHOOL

We've reviewed dozens of the tools that are available to determine how active a school is. Here's a simple quiz that addresses the most prevalent and globally relevant themes in the existing assessments. It's a quick gauge to determine just how active your students have the opportunity to be before, during and after school. You can also use this tool as a very simple way to identify some areas that you might want to focus on in the near future.

## **60 MINUTES PER DAY QUIZ**

## **HOW WELL ARE YOU COVERING THE ESSENTIALS?**

- Aside from physical education classes, what is the maximum possible time that a typical student in your school could spend moving? (Include breaks and any allocated curriculum time for physical activity.)
  - a. Under 30 minutes/day
  - b. 30-60 minutes/day
  - c. More than 60 minutes/day
- 2. How many students in your school are getting at least 60 minutes of moderate-to-vigorous physical activity at school each day?
  - a. Don't know/ Less than 50%
  - b. 50% 80%
  - c. Over 80%

- 3. How much time during breaks do kids actually spend moving?
  - a. Don't know/ Less than 50%
  - b. 50% 80%
  - c. Over 80%
- 4. Do children get activity breaks during class and is movement built into classroom lesson plans?
  - a. No
  - b. Occasionally
  - c. Yes, in most classes, as a general practice
- 5. Is it fun for children to be active in your school? That is, do they seem to enjoy moving?
  - a. No
  - b. Don't know
  - c. Yes

#### IF ANSWERS ARE MOSTLY A OR B

There's some work to be done. Check out the Quick Wins and Tools & Resources in this document for short- and long-term strategies to improve.

#### IF ANSWERS ARE MOSTLY C

Looks like you have the basics well covered! Check out the next set of questions to see how close you are to improving.

## ARE YOU IMPROVING AS AN ACTIVE SCHOOL?

- 6. Do all students have opportunities to use the school facilities or playgrounds before and after school?
  - a. No
  - b. Occasionally, or under special circumstances
  - c. Yes, as a general practice
- 7. If options to use facilities before and after school exist, how many students are participating?
  - a. Don't know/ Less than 50%
  - b. 50% 80%
  - c. Over 80%
- 8. Do kids ever get a choice in the activities they participate in, even outside recess/break times?
  - a. No
  - b. Occasionally, by exception or ad hoc
  - c. Yes, as a general practice. We encourage it, but it's not required

- 9. Do you require your teachers to deliver age-appropriate movement?
  - a. No
  - b. We pay attention, but it's not a formal process
  - c. Yes
- 10. Do you have a system or process in your school to monitor your students' physical activity? (Include formal reporting, informal observations and any other methods.)
  - a. No
  - b. We pay attention, but it's not a formal process
  - c. Yes
- 11. Does your school have a policy for physical activity—formal or informal—that describes target levels of physical activity for children and other guidelines around quality of instruction?
  - a. No
  - b. Not a policy per se, but a generally accepted practice exists
  - c. Yes

#### IF ANSWERS ARE MOSTLY A OR B

Work on progressing to 'C' responses.

#### IF ANSWERS ARE MOSTLY C

It looks like you're performing well! Check out the next set of questions to see how close you are to best practices.

## **ARE YOU A BEST PRACTICE SCHOOL?**

- 12. Do your staff feel confident in delivering age-appropriate movement?
  - a. No
  - b. Don't know
  - c. Yes

- 13. Are school staff trained and confident in providing safe, fun options for physical activity, whether it's for an active break or an entire physical education class?
  - a. No
  - b. Don't know
  - c. Yes

#### IF ANSWERS ARE MOSTLY A OR B

Work on progressing to 'C' responses

#### IF ANSWERS ARE MOSTLY C

Congratulations! You're excelling and can be an amazing resource for others who want to emulate you.

## **QUALITY PE QUIZ**

## **HOW WELL ARE YOU COVERING THE ESSENTIALS?**

- Do you have a formal curriculum time for physical education?
  - a. No
  - b. Yes, for part of the year
  - c. Yes, for the whole year
- 2. Does every student in your school receive at least a weekly physical education class?
  - a. No
  - b. Don't know
  - c. Yes
- 3. Who teaches physical education in your school?
  - a. No one
  - b. School teachers, staff or external resources with little to no formal training in delivering physical activity or physical education to children
  - c. School teachers, staff or external resources who have received some training/professional development in delivering safe physical education to children

- 4. If a student arrives at their PE class with an existing injury (such as a sprained wrist or broken leg), how would the teacher typically respond to the situation?
  - a. Don't know
  - b. Give the student an exemption or waiver from the class
  - c. Provide some safe variations or alternate options for physical activity, provided it is medically safe to do so
- 5. What is the PE experience for students with disabilities or other unique medical conditions?
  - a. These students are not required to attend PE class
  - b. These students participate in the PE class in a self-directed way; they do what they are comfortable with
  - c. A case-by-case assessment is performed to determine individual physical development needs, and an appropriate set of activities is included for these students in PE class

#### IF ANSWERS ARE MOSTLY A OR B

There's some work to be done. Check out the Quick Wins and Tools & Resources in this document for short- and long-term strategies to improve.

#### IF ANSWERS ARE MOSTLY C

Looks like you have the basics well covered! Check out the next set of questions to see how close you are to improving.









## ARE YOU IMPROVING AS AN ACTIVE SCHOOL?

- 6. Does your school have a policy for the amount of physical education each student should receive, learning objectives and expected outcomes?
  - a. No
  - b. Yes, but it is not fully implemented (for example, teachers choose not to deliver it or they lack the resources to do so)
  - c. Yes, and it is delivered to all students
- 7. Under what circumstances would a student be excused from PE class or allowed to miss it?
  - a. Whenever a kid is feeling unwell, sick or injured or appears unable to perform any physical activity
  - b. If the teacher or instructor is uncertain about how to safely instruct the student in some form of physical activity
  - c. If the class is medically inadvisable for the student or if specialized supervision/ equipment is required but unavailable

- 8. Do children receive organized physical activity outside of the PE class and typical PE class venue?
  - a. No
  - b. Sometimes—either via ad hoc opportunities or routinely arranged events
  - c. Often—many other classes have components of physical education built into them
- 9. In a typical physical education class at your school...
  - a. Children usually spend a lot of the time waiting for their turn to try an activity or use a piece of equipment
  - b. Sometimes children remain idle while they wait for their turn or for equipment to become available
  - c. There is little to no idle time for children. Activities and classes are designed in a way that allows all kids to be doing something active (even while waiting their turn)

#### IF ANSWERS ARE MOSTLY A OR B

Work on progressing to 'C' responses

#### IF ANSWERS ARE MOSTLY C

It looks like you're performing well! Check out the next set of questions to see how close you are to best practices.

## **ARE YOU A BEST PRACTICE SCHOOL?**

- 10. Does the physical education syllabus include aspects of physical competency, physical literacy and knowledge of foundational physical movement? (See the physical literacy tear-sheet at the end of this chapter for more information)
  - a. No / Don't know
  - b. Yes
- 11. Do kids learn core movements/ sequences/ activities during the PE class that they can use outside the PE class (for example, at home or in any other active break time)?
  - a. No / Don't know
  - b. Yes
- 12. Do children have a way to formally measure and track their progress in physical education class?
  - a. No
  - b. Yes

- 13. Are children taught that these are movements they can use anytime?
  - a. No / Don't know
  - b. Yes
- 14. Do staff in your school leverage the PE teachers to help them develop active options for their classes?
  - a. No
  - b. Yes
- 15. Do you have the same continuing professional development requirements for physical education that you do for other subjects (such as mathematics or science)?
  - a. No
  - b. Yes

#### IF ANSWERS ARE MOSTLY A

Work on progressing to 'B' responses

#### IF ANSWERS ARE MOSTLY B

Congratulations! You're excelling and can be an amazing resource for others who want to emulate you.

## PHYSICAL ACTIVITY CULTURE QUIZ

## **HOW WELL ARE YOU COVERING THE ESSENTIALS?**

- 1. Do teachers talk about physical activity like it's fun? Does your staff find it fun to move?
  - a. No / Haven't thought about this or noticed it
  - b. One or two will, but it's not the norm at our school
  - c. Yes, the vast majority do
- Is physical activity ever used or withheld- as punishment?
   (e.g. running laps or foregoing recess/ break times as punishment)
  - a. No / Don't know
  - b. Occasionally
  - c. Yes

- 3. Does your school support and encourage walking and cycling to and from school?
  - a. No
  - b. Occasionally, by exception or ad hoc
  - c. Yes, as a general practice

#### IF ANSWERS ARE MOSTLY A OR B

There's some work to be done. Check out the Quick Wins and Tools & Resources in this document for short- and long-terms strategies to improve

#### IF ANSWERS ARE MOSTLY C

It looks like you're performing well! Check out the next set of questions to see how close you are to improving.

## ARE YOU IMPROVING AS AN ACTIVE SCHOOL?

- 4. Are all kids encouraged to be active, irrespective of perceived skill at a particular activity? Do they often hear positive messages and sentiments about being active?
  - a. No / Don't know
  - b. Occasionally
  - b. Yes
- Do teachers, staff and school leaders provide positive reinforcement when they see kids being active? (e.g. high fives, cheers, encouraging comment)
  - a. No / Don't know
  - b. Occasionally
  - c. Yes

- 6. Scenario: a staff member is walking around the school during a break. Many children are engaged in some form of physical play and some children are completely sedentary. Which one of the following options best describes the typical practice at your school for handling the sedentary children?
  - a. Our staff aren't specifically on the lookout for sedentary kids
  - b. Sedentary kids are praised for not misbehaving
  - c. Staff find out why they're sitting still, and encourage them to try out some form of physical activity (if medically safe) that addresses the reason
- 7. Do teachers and other staff have opportunities to celebrate kids' participation in physical activity?
  - a. No / Don't know
  - b. Informally, if they want to
  - c. Yes, it is expected

#### IF ANSWERS ARE MOSTLY A OR B

Work on progressing to 'C' responses

#### IF ANSWERS ARE MOSTLY C

It looks like you're performing well! Check out the next set of questions to see how close you are to best practices..

## **ARE YOU A BEST PRACTICE SCHOOL?**

- 8. Do your kids understand how and why physical activity is good for them?
  - a. No / Don't know
  - b. Yes
- 9. Do your staff understand how and why physical activity is good for them (and for kids)?
  - a. No / Don't know
  - b. Yes
- 10. Does participation in physical activity show up on students' reports or any other school reporting?
  - a. No
  - b. Yes

- 11. Do you encourage your staff to be active and engage in daily physical activity?
  - a. No, we don't intentionally encourage or discourage being active
  - b. Yes, we intentionally encourage & support being active
- 12. Do kids see the adults around them in your school (yourself, other teachers, school administration and governors) being physically active?
  - a. No / Occasionally
  - b. Yes, as a common practice

#### IF ANSWERS ARE MOSTLY A

Work on progressing to 'B' responses

#### IF ANSWERS ARE MOSTLY B

Congratulations! You're excelling and can be an amazing resource for others who want to emulate you.





## PHASE 3:

## DO SOMETHING ABOUT IT

The primary school years are when children need to develop strong foundations in movement, from which more nuanced capabilities may develop later on. For school leaders and teachers, it's important to understand the types of physical movement skills children should have mastered by the time they enter school. It is also a period to further develop children's basic skills so they're prepared to learn how to move competently and confidently in a variety of contexts throughout their lives.

This section includes key actions that can have a powerful effect on the school environment. It was compiled through consultation with experts and a review of effective strategies that schools around the world have used to get children active throughout the school day. They're presented here as at-a-glance summaries of information and ideas. You'll find the following here:

- **PG.37** What Should Children Be Able to Do by the First Day of School?
- PG.38 Top 10 Quick Wins Schools Can Implement Today
- **PG.40** Designing for Early Positive Experiences
- PG.41 Primary School: Preparing Children for a Lifetime of Movement
- **PG.42** Active Classrooms: Physical Space Optimized for Physical Movement
- **PG.43** Age-Appropriate Movement
- **PG.45** Teaching Children to Move with Confidence and Competence—Pointers for Teachers
- **PG.46** Adapting Activities to Maximize Participation
- **PG.48** Sample Activities





# WHAT SHOULD KIDS BE ABLE TO DO BY THE FIRST DAY OF SCHOOL?

From around age 7 to puberty, kids enter what are sometimes called 'the skill hungry years'. This is when kids learn the skills they'll need to participate in and enjoy physical activities such as, running, jumping, skipping, throwing and catching. These aren't sport-specific skills. Instead, they're integral to many of the sports and games kids will play.

Before they ever get to school, kids go through rapid physical growth and brain development. When they get lots of opportunities for active, creative play, they get the chance to develop the movement skills that will form the foundation for all future activity.

But what happens when a kid lacks the ability to execute the fundamental movements necessary to learn new skills? We're talking about the gross motor skills—standing, walking, balancing—as well as a range of fine motor skills like running through obstacle courses and climbing ladders.

For kids to get the most out of their physically active school, they should possess the following skills by the time they arrive at primary school:

- · Climb jungle gyms and ladders
- · Run on toes
- · Balance on one leg for a short time
- Kick a ball from a standing position
- Gallop
- Hop forward
- Do lame duck skip (only one foot 'skips')
- Throw a ball 3.5 meters overhand
- Kick a large rolling ball
- · Run through an obstacle course avoiding objects
- Maintain balance on a movable platform
- · Throw a ball with direction and force

And if they can't? Then teachers, coaches, administrators and school governors need to focus their efforts on getting kids up to speed, giving them opportunities to acquire all of these skills. Once they do, kids will then be able to competently participate in age-appropriate games and activities.



The skills listed here can be found on the Australian Capital Territory's (ACT) Kids At Play web page on Fundamental Movement Skills located here. Because the ACT's list is thorough and consistent with the opinions of many Active Schools reviewers, we opted to duplicate it here.

# TOP 10 QUICK WINS SCHOOLS CAN IMPLEMENT TODAY

### **GIVE CHILDREN BREAKS**

When children get physical activity breaks, they're better able to learn for 30-60 minutes following the activity. Building activity breaks into lesson time, using movement to help teach academic concepts, and rewarding children with extra physical activity time are great ways to get started.

# GET THEIR HEART RATES UP

Cardio fitness is a critical factor when it comes to academic performance. Use activities like star jumps, jogging on the spot, or skipping that get children breathing hard as often as possible. The better the fitness level, the better the performance in school.

# **ENCOURAGE BASIC MOVEMENT SKILLS**

Movements like walking, running, jumping, throwing, catching and skipping are the building blocks of a child's physical, cognitive and social development. For more information on how to build these skills, see the sample activities section of this document.

# ENCOURAGE FREE PLAY DURING BREAK TIMES

Children have a natural instinct for play that helps them develop the fundamental movement skills. Let them play according to their own rules and preferences.

# MAKE SURE EVERYONE IS INCLUDED

Notice which children aren't moving during free play or group activities. They might need a little encouragement, or someone to show them an alternative activity they can do.

### MIX IT UP

Give children choices and a chance to experience variety in physical activity options. This increases movement skills and decreases boredom.

# CELEBRATE GREAT COACHING & TEACHING

For children to get the most out of physical activity, they need grown-ups to create a positive, fun, inspiring environment.

# MAKE PHYSICAL ACTIVITY A PRIORITY FOR STAFF

Providing positive experiences in physical activity, PE, physically active play and sport is a powerful driver of a student's overall development. Make physical activity a priority for your school. Discuss it in staff meetings and allow for more physical activity to be a part of your school day.

# CHALLENGE MISPERCEPTIONS

Increasing the amount of physical activity does not lower academic achievement.

Motionless children are not better-behaved children. Active classrooms contribute to better performance in maths and literacy, and improved behaviour overall.

There is no evidence that increasing PE time has a negative effect on educational attainment.

### LEAD BY EXAMPLE

Show them how it's done: Take every opportunity to get up and move with children.



# DESIGNING FOR EARLY POSITIVE EXPERIENCES

When children enjoy physical activity and have positive experiences with movement, they are on a trajectory to keep moving throughout their lives. Experts have already identified the key elements in creating early positive experiences.



### **DESIGNED TO PROVIDE UNIVERSAL ACCESS**

Girls, children with disabilities, and those from low-income or single-parent families are often the most excluded from opportunities to engage in sport and physical play. These are also the same kids caught in the physical inactivity cycle. When programmes are designed with these population segments in mind, they are more likely to work for everyone.



### **AGE APPROPRIATE**

What's fun for a teenager may not be fun—or even safe—for a little kid. Design activities that are appropriate for your audience.



### GEARED TOWARDS RECOMMENDED GUIDELINES ON DOSAGE AND DURATION

How much? How long? How hard? What format? For maximum return, kids should be getting at least 60 minutes of moderate-to-vigorous, fun physical activity every day.



### **FUN**

Some things never change. Kids don't like to be bored. For kids to choose a lifetime of physical activity, sport and play, the options available to them must be fun. This is non-negotiable. If the choices are boring, kids will choose something else every time.



### **FOCUSED ON INCENTIVES AND MOTIVATION**

A little motivation goes a long way. When it comes to kids and sport or play, it's not about getting paid to play or giving everyone a trophy. It's about tying tangible and intangible rewards to kids' effort and progress, so they can experience the short-term, ongoing payoff of their sweat. This could be a gold star on their report card, a stamp on the hand or public recognition if the class achieves 100% participation in a physically active programme (such as a walking school bus programme).



### ABLE TO GIVE FEEDBACK TO KIDS, INDIVIDUALLY AND FOR THE GROUP

Kids of all ages get excited about reaching personal achievements and contributing to team goals. Building group and individual feedback loops into programmes and activities lets kids know how they're doing.



### LED BY WELL-TRAINED TEACHERS, COACHES AND MENTORS

Teaching physical education, coaching and generally creating an environment for physical activity, sport and physical play is serious business. Doing it well requires a high level of training and ongoing professional development. This is what can completely change the trajectory of kids' lives.

# PRIMARY SCHOOL:

# PREPARING CHILDREN FOR A LIFETIME OF MOVEMENT

RUNNING
JUMPING
KICKING
THROWING
BALANCING
TWISTING
TURNING

Basic movement skills provide the building blocks for more complex and nuanced movements. These could be related to any type of physical pursuitfor example health care or carpentry—as much as any organized sport. This is a chance to let kids discover the full range of movements that will enable them to accomplish whatever tasks they attempt in life

# LEARNING THE ALPHABET BEFORE LEARNING TO READ

**FUNDAMENTAL MOVEMENT SKILLS** are the building blocks for all later movement. These are the basics of balancing, walking, running, skipping, turning, jumping and throwing that serve as the foundation of physical activity. Learning fundamental movement skills properly is what gives kids physical competence. This is a matter of having the confidence to move in ways that are appropriate for their age.

KIDS MUST LEARN
FUNDAMENTAL MOVEMENT
SKILLS BEFORE THEY CAN
ENJOY PHYSICAL ACTIVITY
AND SPORT.

### TO TEACH PHYSICAL ACTIVITY, RELY ON YOUR BASIC TEACHING PRINCIPLES.

Teaching physical activity is a lot like teaching any other subject. When a child struggles with reading, he is not written off as a poor reader. Likewise, a student who hasn't mastered a certain movement skills is not 'clumsy' or not a 'natural athlete'.

Start with the basic, fundamental skills. While it is admittedly subjective, most teachers can recognize when a child is moving with competence and when they are not. When a kid has mastered a particular skill, they can aim to do it:

- 1. Faster
- 2. Longer
- 3. With fewer errors
- 4. With more variations

Elements can also be combined—meaning that once a kid is comfortable with running and kicking, she can focus on performing those skills together.

# **ACTIVE CLASSROOMS:**

# PHYSICAL SPACE OPTIMIZED FOR PHYSICAL MOVEMENT

Active classrooms are apparent the moment you walk into them. Children are standing, exercising or moving around from one learning activity to the next. Active classrooms have plenty of space, but they aren't any larger than typical classrooms. They are simply set up to enable and encourage physical activity. The layout of an active classroom sends the message that physical activity is the norm.

Below are a few examples of the ways teachers throughout the world are reconfiguring their classrooms. In general, there are two types of active classrooms.

# 1. CLASSROOMS THAT PERMIT KIDS TO STAND UP, MOVE AND FIDGET

### **RELAX THE RULES:**

In long business meetings, it is becoming increasingly acceptable for people to stand up, move around and stretch. Why? Because it helps them focus and become more engaged. Kids respond equally well when they're allowed to stand and even fidget during lessons.

### **CLEAR OUT THE OBSTACLES:**

Arrange desks so children are better able to stand up without blocking another's view, move across the classroom quickly and fully participate in active lessons and brain breaks.

# 2. CLASSROOMS ARE INTENTIONALLY DESIGNED TO PROMOTE PHYSICAL ACTIVITY

### **SET UP STATIONS:**

Minimize desk time in favour of thinking time. Stations set up throughout the room allow kids to move back and forth as they go from one task to the next.

### **USE ACTIVE FURNITURE:**

Schools have experienced great results when they replace traditional desks and chairs with furniture that lets kids move around a bit. For example, stability balls can take the place of chairs, and adjustable desks can give kids a chance to choose whether to stand or sit without sacrificing desk space. This has a greater impact than one might assume, in part because when kids fidget or move around, they're working their cores.



ACTIVE CLASSROOM
LAYOUTS CAN BE LOW-COST,
AND IMPLEMENTED IN A
WAY THAT REQUIRES NO
EXTRA SPACE OR IMPACT
ON THE MASTER SCHEDULE.

# AGE-APPROPRIATE MOVEMENT

The following pages summarize the types of physical activity that are appropriate for kids of different ages. The age groups presented here should be viewed as general rather than precise categories, given that each child has a unique learning curve for physical movement. This checklist is intended as a quick guide that refers to children's functional ages, rather than their chronological ages.

# **AGES 3-5**

### **OBJECTIVE:**

Learn fundamental movements and link them together



Encourage the child to run—**NOT JUST IN A STRAIGHT LINE,** but with stops and starts and changes in direction. Tag and chasing games are excellent.



Play **GAMES MAKING BODY SHAPES**—upside down and right-side up. Slither like a snake, roll on the floor like a rolling pin or roll down a small grassy slope.



Play **THROWING GAMES**—and start with soft objects that the child can hold easily in his or her hand. Try to get the child to throw at a target, and sometimes to throw as hard as they can. Get them to use both their left and right hand when they throw.



For quiet times, or when in small spaces, **PLAY BALANCING GAMES.** Stand on one foot and then try the other. Try balancing on different body parts, and try walking along any painted lines on the ground.



**JUMP,** make shapes in the air and jump to see how high the child can go, or how far. Make an imaginary 'river' and get the child to jump from one bank to the other. Try jumping from one foot, or from both. Make sure the children bend at the knees when they land.

# QUESTIONS TO CONSIDER BY AGE

### CAN THE CHILD...

- Throw a ball?
- Stand on one leg?
- Hop?
- Skip?

### DOES THE CHILD...

- Smile and appear to enjoy activities?
- Appear to be enthusiastic about learning new things?

# **AGES 6-8**

### **OBJECTIVE:**

Learn all fundamental movements and build overall motor skills



### STRENGTH, ENDURANCE AND FLEXIBILITY

need to be developed, but through games and fun activities rather than a training regimen.



Continue to play catching, throwing, hitting, running and other physically demanding games with both boys and girls. If possible, involve children in programmes that offer a wide variety of different activities (multi-sport programmes). TRY AS MANY DIFFERENT ACTIVITIES AS POSSIBLE.



**HAND AND FOOT SPEED** can be developed especially well by boys and girls during this stage. If this window of opportunity to develop speed is missed, body speed later in life may be compromised.



Children at this age have a strong sense of fairness and should be introduced to the **SIMPLE RULES AND ETHICS** of sport and play.

# QUESTIONS TO CONSIDER BY AGE

### CAN THE CHILD...

- Run, stop and change direction without stumbling?
- Kick a ball 6 meters?
- Skip on alternating legs?

### DOES THE CHILD...

- Smile and appear to enjoy activities?
- Appear to be enthusiastic about learning new things?

# **AGES 9-12**

### **OBJECTIVE:**

Learn overall sport skills



Develop endurance through **GAMES AND CHALLENGES** 



Keep children working on **FLEXIBILITY**, **SPEED**, **ENDURANCE AND STRENGTH.** For strength activities, they should use their own body weight, Swiss balls or medicine balls—not heavy weights.



Develop movement skills into sport skills. Ensure a **PROGRESSION OF SKILLS** from basic to complex. For example, kicking progresses from kicking a ball, to kicking a ball farther, to kicking a ball while moving, to kicking with accuracy.

# QUESTIONS TO CONSIDER BY AGE

### CAN THE CHILD...

• Focus long enough to learn what is being taught?

### DOES THE CHILD...

- Appear to move with control?
- Appear to move with confidence?
- Smile and appear to enjoy activities?
- Appear to be enthusiastic about learning new things?

# TEACHING CHILDREN TO MOVE WITH CONFIDENCE & COMPETENCE POINTERS FOR TEACHERS

Teachers don't need to be movement experts to support and facilitate children's natural desire to move.

### A FEW POINTERS:V

- ALWAYS PUT ENJOYMENT AHEAD OF SKILL. If kids love moving, they will be naturally motivated to move more and the skill will come.
- ALLOW EVERYONE TO PROGRESS AT THEIR OWN PACE.
   Children should enjoy moving. Part of that is achieved by encouraging them to do their best as individuals, and never comparing them to others.
- **ENGAGE THE WHOLE CLASS.** Every child should be able to participate, improve and have fun within each session. Adapt activities as needed to allow every child to participate.

- THINK BEYOND SPORT. What other activities could you encourage? Can your children express their emotions? Can they act and tell a story? Can they avoid accidents, and fall safely if they trip? Can they dance to music? Can they play well with other children?
- GIVE CHILDREN EXPOSURE TO DIFFERENT ENVIRONMENTS OR TERRAINS. For example, undulating surfaces, gradients and water. Setting up an obstacle course in the room or combining indoor and outdoor activities could contribute significantly to children's ability to develop movement skills in different contexts.

<sup>&</sup>quot;More detailed guidelines for teaching physical literacy (and physical education) can be found at the websites: Mapping Educational Specialist knowHow (MESH) and The International Physical Literacy Association (IPLA).

# ADAPTING ACTIVITIES TO MAXIMIZE PARTICIPATION

The child matters more than the game or activity, so it is perfectly OK to tinker with the rules and other aspects of an activity to make it more engaging, fun or accessible for a child.

# SOME OF THE MOST COMMON REASONS FOR ADAPTING OR MODIFYING ACTIVITIES:

- To make them more difficult for children ready for a new challenge
- To make them more accessible for children who need an easier option
- To make them more interesting or fun

There is no set formula for how to adapt or modify an activity. As a start, the information below provides some examples of the most common factors you could modify. Ultimately, the possibilities are endless, based on the extent of your creativity, the resources available to you and the specific needs of your children.



### **SPACE**

### **EXAMPLES OF MODIFICATIONS**

- Increase or decrease the size of the playing area.
- Vary the distance to be covered in activities to suit different abilities.
- Establish zoned areas where participants are grouped according to levels of ability (each group performs a version of the activity suitable for their ability level).



### TASK

### **EXAMPLES OF MODIFICATIONS**

- Ensure that everyone has equal opportunity to participate. For example, in a ball game, all the players (not just select ones) have the chance to carry, dribble, pass or shoot.
- Break down complex skills into smaller, component parts.
- Allow participants to practice skills or components individually or with a partner before commencing a team game.



### **EQUIPMENT**

### **EXAMPLES OF MODIFICATIONS**

- In ball games, increase or decrease the size of the ball.
- Provide options that enable participants to send or receive a ball in different ways. For example, use a chute or gutter to send, or a catching mitt to receive.
- Use a bell/rattle ball to assist in the inclusion of some players, especially those with visual impairments.



### RULES

### **EXAMPLES OF MODIFICATIONS**

- Simplify rules for younger children or those less experienced in the activity—for example, offsides rules are not suitable for all football/soccer players.
- Be creative about more inclusive rules—for example, requiring that everyone get to touch the ball at least three times before a goal can be made.



# SAMPLE ACTIVITIES

# ACTIVITY & OBJECTIVE FAINTING GOATS<sup>80</sup> (10 MIN)

Introducing controlled falls using a game

# ACTIVITY & OBJECTIVE CLUMSY CRAWL (7-10 MIN)

Introducing controlled sideways falls while moving

### HOW TO CONDUCT THE ACTIVITY

(These are rough guidelines and should be modified/adapted to suit the needs of your particular class)

- Spread the learners out around the playing area. Preferably use a matted floor or grassed area.
- Select one person to be the 'shepherd'. The rest are the 'goats'.
- Whoever the shepherd touches becomes the new shepherd.
- Goats can fall to the ground to avoid being tagged for up to 10 seconds. While they are on the ground, they are safe.
- Goats can't fall to the ground unless the shepherd is more than 3 meters (10 feet) away.
- Emphasize that when children 'faint', they should move onto their backs **safely**:
  - 1. By rolling into that position (rolling like a ball using a smooth circular movement, not falling flat to a pointy star shape).
  - 2. Once they are on their back, slap the floor using cupped hands to break the fall.

#### HOW TO CONDUCT THE ACTIVITY

(These are rough guidelines and should be modified/adapted to suit the needs of your particular class)

 Spread the learners around the play area and ask them to all move in a clockwise direction in a crouching/monkey walk, switching between two feet and all fours but staying low to the ground.

### Stage 1: Practicing the slap movement

The teacher shouts 'left slap' or 'right slap'. Learners look in the specified direction, reach forward with that hand, and slap the floor in front of them.

### Stage 2: Introducing the fall

Children continue to move around, except now the teacher shouts 'left fall' or 'right fall'. Upon hearing the instruction, learners fall/roll in that direction if they have a clear path (slapping the floor like before, to help break the fall). Encourage a roll instead of a sudden stop.

### **EQUIPMENT**

Space big enough for a class to run around and not be too restricted

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 Space big enough for a class to run around and not be too restricted

### WHAT TO OBSERVE

(Signs that indicate confidence, competence and enjoyment)

- Can the children fall safely as per the instructions?
- Do the children appear to confidently commit (safely) to the fall, without delay or hesitation?
- Do the children appear to be enjoying the activity?

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### **ACTIVITY & OBJECTIVE**

### WHOLE-BODY ROCK-PAPER-SCISSORS

(5-7 MIN)

Making different shapes with the body; using visual cues to anticipate others' movements

### **HOW TO CONDUCT THE ACTIVITY**

(These are rough guidelines and should be modified/adapted to suit the needs of your particular class)

- Ask children to make the shapes of a rock (curled up), a sheet
  of paper (stand or lie flat) and a pair of scissors (stand as a large
  cross/star and move arms in and out). These are rock, paper
  and scissors.
- Ask the children to form pairs in a large circle and play the game using their whole bodies. '3, 2, 1, Go!' Rock 'blunts' scissors, scissors 'cut' paper and paper 'wraps' rocks.
- Progress: replace 3-2-1 with 'run to the cone/line and back'.
   Introduces a secondary activity, variability in thinking time and practice in stopping safely.

### **ACTIVITY & OBJECTIVE**

### **BUILDERS & BULLDOZERS**

(7-10 MIN)

Understanding the range of actions that can be performed by the body

#### HOW TO CONDUCT THE ACTIVITY

(These are rough guidelines and should be modified/adapted to suit the needs of your particular class)

Children undertake the role of a builder or bulldozer and attempt to 'build' or 'bulldoze' the 'buildings' (cones) in an allocated time.

The cones are spread randomly in a designated area.

Some are tipped over (bulldozed), while others are sitting as they would normally (built).

The class is divided into bulldozers and builders, and each has a specific job to do. The builders attempt to build by using a predetermined body part (such as left hand, right hand, elbows or feet) to move the tipped-over cones to an upright position.

Meanwhile, the bulldozers try to bulldoze the buildings by knocking the cones down using the same body part.

The teams change roles and repeat the game.

### **EQUIPMENT**

- Space big enough for a class to run around and not be too restricted
- Optional cone or other line marker

### WHAT TO OBSERVE

(Signs that indicate confidence, competence and enjoyment)

- Can children perform the actions of rock, paper, scissors in the game?
- Are children able to reflect on strategy and tactics such as attempts to deceive opponents?
- Do the children appear to be enjoying the activity?

#### **EQUIPMENT**

· Cones, stopwatch

#### WHAT TO OBSERVE

(Signs that indicate confidence, competence and enjoyment)

- Are children able to coordinate the movements in quick succession (for example, turning being able to turn the cones over quickly, safely stopping, getting low and moving on afterwards)?
- Do the children appear to be enjoying the activity?





# STORIES & ADVICE FROM SCHOOL LEADERS

When it comes to making physical activity an everyday part of school culture, schools face many challenges. Time, space and money are three of the most common challenges, but access to resources varies widely. Some schools have a physical education staff, while others have only one PE teacher for the entire school (and, of course, many others have none). Some schools have a gym and playfield, while other schools have neither. And nearly all have a master schedule already filled with requirements, leaving little room for additions.

Fortunately, a handful of schools are already showing us that nothing is impossible. Here are seven stories from school leaders who found creative solutions on their way to creating active schools.

CYRUS WEINBERGER RED HAWK ELEMENTARY SCHOOL

RED HAWK ELEMENTARY SCHOOL

BRUCE MCLACHLAN SWANSON PRIMARY SCHOOL

**DENISE GLADWELL** ST. BREOCK PRIMARY SCHOOL

JAYNE GREENBERG
MIAMI-DADE COUNTY PUBLIC SCHOOLS

JOE MILLS
DRAYTON COMMUNITY INFANT SCHOOL

JEFF WOOTEN

KELLIS HIGH SCHOOL

AM RAI
MONTPELIER PRIMARY SCHOOL

# **CYRUS WEINBERGER**

### **RED HAWK ELEMENTARY SCHOOL**

Erie, CO, USA / 776 Students / Grades: PK-5



'The brain research already tells us how movement can help achieve educational goals. Red Hawk proves it. Our numbers are off the charts. We were the only school in the district last year [2012-13 school year] to improve on 100% of our standardized tests – at every content level and every grade level.'

We built Red Hawk from the ground up to be a Core Knowledge School. Many families in the area had chosen to leave the Erie community to attend schools outside of the district, so it was important to create a school that represented the community's values. I started by asking the parents what they wanted most in their local public school. It turns out what families want for their kids is pretty simple. They want them to do well in school, they want them to be happy, and they want them to live healthy, long lives.

Brain research tells us there is a direct correlation between fitness levels and academic performance. Physical activity is also connected to a variety of factors like increased brain development, improved focus and attention, better attendance and fewer behavior issues. That's really why we

decided to make physical activity a central component of our school. Despite the overwhelming research supporting the importance of movement in schools, there was some pushback because people saw it as giving up academic time in favor of physical activity. We spent a lot of time educating families and involving them in our process. Now our results speak for themselves.

# WHAT WE DO & HOW WE MAKE IT WORK

# 60+ MINUTES OF PHYSICAL ACTIVITY FOR EVERY CHILD

We schedule 35-40 minutes of physical activity every day, immediately before the most difficult classes so children can concentrate better.

Children participate in 20 minutes of physical activity every morning as an entire school. Students are engaged in activities like the 'Red Hawk Walk', in which kids receive a Popsicle stick for each lap around the school (they know that when nine are collected, they have hit the one mile mark), tag games, jump rope, running laps, and in-class aerobic circuits or dance videos. On Fridays, we bring the entire school together for a high-energy dance routine that is often led by students. There is a rotating schedule that directs classes to different parts of the building. Students are able to modify activities to meet their fitness level or to meet any restrictions they may have.

We have in-class cardio and dance breaks. Teachers have 15-20 minute periods to integrate movement breaks whenever they like. This can be done in a single block or during short bursts when teachers feel like they are losing students' attention. Of course, we also encourage children to physically move during other breaks and recess.

All of this is locked into the schedule so that we don't have to try to wedge it into the school day. That's a critical factor for success.

### **QUALITY PE**

There's a strong interplay with our PE teacher. The first five minutes of every PE class is spent teaching 'circuits'—base-level, high-intensity exercises like burpees or frog jumps, for example. Kids learn the exercises in PE, so they end up with a menu to choose from in the classroom and the classroom teacher doesn't need to teach it.

# CULTURE OF PHYSICAL ACTIVITY

On Fridays we have 'All-School Movement' with students, faculty, staff and parents joining together for a group workout.
Originally we held this as a one-off event so that parents could see what we meant when we said we wanted to be an active school. Everyone ended up having so much fun that this is now a weekly fixture at Red Hawk and a huge highlight.

When I walk into a room and kids are taking a movement break, no one gets nervous. At many schools, if kids aren't sitting quietly or doing something academic at that moment, teachers worry that it's going to come back on their evaluation. At Red Hawk, teachers are celebrated for giving kids a chance to move.

Movement is an expected part of our school day. This is not about adding a few exercises here and there, but in all aspects of our daily culture. The kids love it, and so do our teachers. Practically speaking, that means they're finding new resources and looking for ways to connect those resources to the curriculum.

### **IMPACT**

- The only school in the district during the 2012-13 school year to improve on 100% of our standardized tests at every content level and every grade level. There are now some schools who are promoting physical activity programs (and this number is growing), but Red Hawk has the most comprehensive program
- 48% of 3rd graders, 39% of 4th graders, and 36% of 5th graders scored 'advanced' in mathematics (2013-14)
- Teachers report increased focus and fewer behavior issues
- 93% of 3rd-5th graders report liking Red Hawk (2013-14)
- 93% report liking their teacher (2013-14)
- 87% report having fun at school (2013-14)

# TAKING IT BEYOND RED HAWK

We believe in a broader approach in terms of how we get people excited about movement both in the neighborhood and in the classroom. The idea is that when people see the success, they're going to want more and more of it.

'I don't think there's anything that unique. There are pockets of what we do in most schools. What's different is that we've put it together in a system that's really built into the fabric of the school.'

### THOUGHT LEADERSHIP

In our first year we connected with ASAP [After Schools Acceleration Project] and Childhood Obesity 180 as the recipient of a \$100,000 innovation grant. In our second year we decided to do a conference highlighting the best examples of active schools. We put together a teacher toolkit of free resources to help a classroom get started. More than 250 people showed up from 12 different states.

# LEVERAGE THE GRASSROOTS

We recently received a \$100,000 grant from Kaiser Permanente Colorado to help spread movement programs to other schools. We understand that different schools are in very different spots, so the key was to figure out a grassroots approach to spreading these ideas. We're training 75 teachers over the next year and a half, and providing them with mentors they meet with monthly. It's a step-by-step process that looks to get a small cohort building in 30 minutes of movement each day in addition to PE and recess. As interest builds, we'll add more teachers the next semester. Eventually, it generates enough attention that the principal can say 'This really works, and we need to look at changing the master schedule to incorporate a school-wide approach.'

# SCALE / UPTAKE AT DISTRICT LEVEL

Based on the work we've done, our district has been looking at ways to scale up movement programs. For example, they've secured a grant of about \$1.4 million through the Colorado Health Foundation. As a result, every elementary school in the district over the next 3 years will have a running club and different pieces of the movement program. The reaction to our work has helped pave the way for some larger work in a variety of schools.

# QUICK THINGS YOU CAN DO TO CREATE AN ACTIVE SCHOOL

My top tips & advice

I've had many school leaders visit Red Hawk to see what they can learn from what we're doing. Here are the top suggestions.

# IF YOU DON'T HAVE MUCH SPACE

Get a group of people together and walk around your school, pausing in front of each possible space where you could run an activity. Brainstorm all of the types of movements you can do in that space, using the materials and equipment you already have. It's actually very easy to get the ideas flowing.

Very few people get to design a school from the ground up. And a lot of the people who come to see our programs don't have a lot of space to work with. The beauty of movement is that you can do it anywhere, in any kind of building.

### **HERE'S AN EXAMPLE:**

One of the schools in our district got flooded and they had to relocate to an old administrative building for months. They had no space and had to cut recess because the commute time actually cut into the school day. When they asked us to take a look at the space, we saw a narrow corridor on the side of the building. It turns out it was the perfect location for relay races, circuit exercises and jump rope, among other things. It completely transformed kids' experience all because people were willing to think creatively.

# IF YOU DON'T HAVE RESOURCES

You don't really need much fancy equipment or materials. The things you need to get children doing foundational types of movement—like running, throwing, pulling—are pretty basic and likely things that you already have (such as balls or ropes). Even something like dancing to music can be a fun way to involve all muscle groups, and it can be done just about anywhere.

Don't have enough equipment for everyone? Create a circuit with different stations and then have kids swap periodically to do a different activity.

# DON'T KNOW HOW TO LEAD AN ACTIVITY?

Whoever runs your PE class can also be your best resource. You could do as we do and actually have the kids learn the drills in their PE class that they then do at other times during the school day.

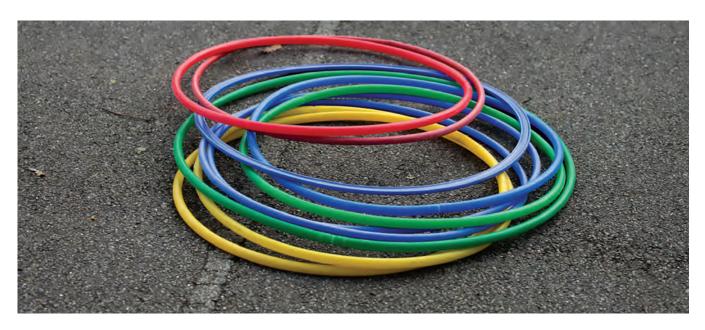
Take a closer look at your entire school network—I guarantee you will have more people than you realize who could help brainstorm various simple activities for kids—for example, your staff who are active outside of work, or parents who might already be coaches or play sports. At Red Hawk, many of our older children love to lead the class in an activity and come up with all sorts of fun and creative things for the rest of the class to do.

If you have a lot of playground space, letting kids play by themselves is also quite simple. They have a natural instinct for movement at this age and sometimes just letting them play is the best thing you can do.

# **BRUCE MCLACHLAN**

### **SWANSON PRIMARY SCHOOL**

Auckland, New Zealand / 500 Students / Grades: 1-8



'Children are as active as their environment allows them to be... we consciously decided that we weren't going to make an announcement that we would be doing something different. We didn't let the children know or ask the parents' permission. We simply stopped saying 'no.'

A few years ago, we were asked to be part of a university study. The idea was to modify the playground to determine if you could reduce bullying or obesity—the kinds of problems all schools are dealing with these days. Schools are often asked to be part of university studies, and this was one of many such requests. However, this study was of special interest because it was about play.

I have always thought that play is a more important aspect of the education a school provides than we often take it to be. A lot of learning happens as a result of play. It has a hidden curriculum and the creativity, teamwork and problem-solving associated with it are skills that benefit children throughout their education.

It was time to challenge the way things were being done. We created a play environment where children are very much left to their own devices. We stopped saying "no." The results have exceeded every possible expectation.

# WHAT WE DO & HOW WE MAKE IT WORK

# WE STOPPED SAYING NO

We looked at why we had so many controls on the playground and if our concerns were valid. People argued that the world had become a more dangerous place. This may be true, but did this make the playground any more dangerous than it was when we were children? It didn't. Misperceptions have led to a lot of well-meaning but arbitrary rules. I am no exception. I have been the principal who has said 'walk your bike across the school grounds' or 'don't slide down that bank.'

Ultimately, we were the ones getting in the way of a positive, productive, active play experience. We decided to turn a blind eye to nearly every choice children made on the playground.

# WE ESTABLISHED RULES, BUT NOT MANY OF THEM

Children may play with anything and climb anything. They can get as dirty as they like. If it rains, they can even get wet if they choose!

Two conditions: They must not intentionally hurt other people or damage other people's property.

# WE ALLOWED CHILDREN TO CREATE THEIR OWN PLAY

Children do a far better job 'designing' their play than adults do. They know what they enjoy, what is fun for them and what they are comfortable with. They naturally have an appropriate amount of risk aversion and they learn quickly through trial and error. The bonus is that teachers' time is freed up to plan lessons or have a well-deserved break!

### I TOOK ON THE RESPONSIBILITY AS PRINCIPAL

Initially teachers and playground supervisors were concerned that they were responsible for whatever might happen to children on the playground, and rightly so. When we created our free playground, I told the teachers I would take responsibility if anyone got hurt. This emboldened teachers to allow free play.

# TEACHERS WERE ENGAGED IN THE PROCESS

It took several group discussions with the teachers to get them feeling comfortable with the changes.

In one of these discussions, we started to list the current rules. We quickly realized we had developed customs and practices over time, but we actually had no rules. That was eye-opening for everyone.

I asked the teachers how they used to play themselves. They all said they were allowed to do the things that we weren't allowing our kids to do. Once we all started thinking about that and the illogic of it, we could visualize the children's play experience differently.

### WE DIDN'T ANNOUNCE ANYTHING FORMALLY

Neither to the children nor to their parents. We weren't breaking or changing any rules, so we didn't need to ask permission.

This allowed us to shift our playground management without debate. Children were allowed to evolve naturally into free players, and we've seen that they will naturally take on whatever activity or movement they feel ready for.

### **IMPACT**

- Our children are more ready to learn after they've had an active recess
- Children who have a history of attention issues return from recess more ready to learn
- Children are easier to manage after active recess
- Children are more resilient and independent
- Problems are solved on the playground rather than being brought back to the classroom
- Reduction in bullying
- Reduction in injuries
- Reduction in sanctions on the playground (the timeout room has been eliminated)
- · Increase in creativity

# FINDINGS THAT CHALLENGED OUR ASSUMPTIONS

### CHILDREN PREFER ACTIVE PLAY, EVEN OVER TECHNOLOGY

In our experience children prefer active play. When allowed to play freely, a child that was not active before, probably will be now. I believe a lot of our children would be sedentary if we didn't allow them to play freely.

People often assume that technology is getting in the way of children being active. We allow smart phones and technology in our school, but you seldom see them on the playground. The children are too busy playing.

# WHEN CHILDREN PLAY, THEY DON'T SET OUT TO HURT THEMSELVES

Children are excellent at managing their own risk. They climb up the first few branches of a tree and don't move on until they feel comfortable enough. We have children riding scooters, bikes and skateboards at speed, and crossing over each other. They quickly learn to watch out for each other.

### ADULTS DON'T NEED TO DESIGN PLAY, THEY JUST NEED TO ALLOW IT

Children are born wanting to play and know how to do it naturally. Adult tendencies to structure playtime can result in more sedentary options than children themselves would choose. We offer play as a reward, which

undermines the fact that children require play for healthy development.

We just need to provide the opportunity for play. The children will take care of everything else.

### WHEN CHILDREN ARE ALLOWED TO PLAY, ADULTS' LIVES ARE MUCH EASIER

Our children are so busy and engaged during their recess that they return to class far more motivated to learn.

We've found that the time they're at risk of getting in trouble is when they are bored, not when they are playing. We no longer need to operate a time-out space at recess and we have reduced our playground staff.

Our children are bringing fewer problems to the teachers and are sorting it out themselves. They quickly learn that dragging teachers into problems cuts into their playtime.

'Our children are so busy and engaged during their recess that they return to class far more motivated to learn.'

# QUICK THINGS YOU CAN DO TO CREATE AN ACTIVE SCHOOL

My top tips & advice

A lot of people have visited Swanson School to see what they might replicate in their own schools. We've achieved one of the easiest ways to provide children with the 60 minutes of daily physical activity they need. Every school can do this.

# IF YOU DON'T HAVE MUCH SPACE

Let children solve the problem. Your physical environment might not be as constraining as you think. Given the option, children will find a way to play and will be active no matter how constrained the space.

# IF YOU DON'T HAVE RESOURCES

Stop saying 'no' and let kids do what they do best. Allowing children to play costs nothing.

# IF YOU DON'T HAVE TIME

Revolutionize the time you already have. We didn't change the schedule. We changed the way we used the recess time already scheduled.

# IF YOU DON'T HAVE ACTIVITIES

Leave this one to the kids too—they're much better at it than adults.

# **DENISE GLADWELL**

### ST. BREOCK PRIMARY SCHOOL

Cornwall, United Kingdom / 203 Students / Grades: Nursery, Foundation & Years 1-6



In 2005, London submitted a bid to host the Olympic Summer Games. Our staff and pupils were excited about it, but we were 400 km from London. We knew if we couldn't go to the Olympics, we could bring the spirit of the Olympics to St. Breock. Our staff worked together to develop some new sport opportunities and devoted curriculum time for topics related to the Olympics.

At the start, we simply wanted to take the excitement of the Olympics bid and convert it into sporting opportunities for St. Breock's pupils. In doing so, we quickly discovered the powerful impact that sport, and in particular the Olympic and Paralympic values, can have on the school community and so we continued our investment in this area.

By the time the London Olympics took place in 2012, our staff and pupils were more enthusiastic than ever. We had also received an Ofsted rating of 'good' that year. (As with many countries, a government body assesses schools in the United Kingdom. In our case, we answer to a department called the Office for Standards in Education, Children's Services and Skills, or Ofsted.) Our strong rating validated our approach and gave us the freedom to be more creative in our teaching. We were ready to make a significant commitment to becoming an even more active school.

In 2013, the government announced a sport and physical education premium for primary schools. Schools receive £8,000 per school and an additional £5 per pupil to create a measurable and sustained improvement in school PE and sport.vi

Our staff and parents were already extremely supportive of physical activity, having seen the benefits firsthand, so the funding was seen as an opportunity to expand our existing efforts and test new approaches.

This funding is set to continue into 2020 and represents a commitment to securing a more active and healthy future for our children and young people.

viFor more information on this policy, visit www.gov.uk/government/policies/getting-more-people-playing-sport.

# WHAT WE DO & HOW WE MAKE IT WORK

### **60+ MINUTES PER DAY**

Physical activity is offered in a variety of formats:

### **EVERY DAY (ALL STUDENTS)**

- 80 minutes of break time: 20 minutes in the morning and 60 minutes at lunchtime per day
- Daily Wake and Shake devised and led by older pupils as a wake-up to learning each morning

### OTHER WEEKLY PHYSICAL ACTIVITY (ALL STUDENTS)

- · Physical Education: 2 hours per week
- Sport For All Fridays: 1 hour per week
- Swimming: 1 hour per week (for one of three terms)

### ADDITIONAL AFTER-SCHOOL PHYSICAL ACTIVITY (TARGETED STUDENTS)

1 hour per day, 4 days per week of sport-specific clubs along with 'Energy and Change4Life clubs' (focused on movement games for those who would not automatically choose to be involved with organized sport). By necessity these are generally invite-only opportunities for targeted students. The result is likely to be well over 60 minutes of physical activity per day, although students vary in how they execute it. One boy came to me and announced that he had managed 20.5 hours one particular week, and this was verified by his mum!

### CUSTOMIZED OPTIONS (FOR UNIQUE CIRCUMSTANCES)

We develop programmes that are geared towards the specific needs of students who might otherwise not participate. For example, for one term per year, students take swimming. However, students who are not progressing as quickly are invited to continue for an additional term. We also have a before-school climbing club that

specifically targets students who are chronically absent or late, and a special 10-week programme for less active children that allows them to try different kinds of physical activity and learn about healthy choices.

### **OUR PLAYGROUND**

Our playground provides one of the most important chances for children to freely elect to be active during the day. To ensure that all children have opportunities and are encouraged to move, we appointed a 'Positive Playground' environment and have weekly awards for the children that have performed as Premier Playground Players.

We employ a 'positive playground coordinator' who works with a 'Crew'—a group of Key Stage Two children who are in charge of coordinating and modeling activities for the younger children. The Crew organizes weekly challenges for the children such as jump rope, floating stick and problem-solving contests. Challenges are age-appropriate, and success is celebrated at the school assembly on Mondays. The Crew has a voice in curriculum content and which after-school clubs we run.

The playground is organized so that there are opportunities for all children to be active, no matter what their interest. For example, on Wheely Wednesdays children are allowed to bring their 'wheeled' sports (such as scooters, skates and bikes) onto the playground. Behaviour has improved drastically since our inclusive sport options were introduced.

### **QUALITY PE**

Physical literacy and understanding how to move are critical to children's development. This is why we value providing not only sport, but also physical education. As a result of the PE and School Sports Premium, we have been able to rearrange the way sport is taught at St. Breock.

In the past, classroom teachers taught physical education with very little training. When we began to integrate activity into our school very seriously, we required all classroom teachers to co-teach at least one session per week with our sport specialist. This allowed teachers to build the confidence, skills and subject knowledge necessary to teach high-quality PE. Co-teaching a weekly PE lesson enables teachers to better understand how to teach PE and sport in safe and age-appropriate ways. The approach was so effective that teachers are now able to teach the PE classes on their own and the quality of the lessons is very evident.

As a result, our sports specialist can now focus on other aspects of our Sport For All approach, organize inter-school competitions for six local primary schools, head our Gifted and Talented Academy, source high-quality professional development and work towards greater cohesion between school phases—specifically primary to secondary.

# CREATING A CULTURE OF ACTIVITY

At St. Breock our mission statement is 'Standing Still is not an Option.' This means that we constantly challenge ourselves to achieve our personal best and then set the bar even higher. Our commitment to being an active school and ensuring that all pupils have appropriate options to lead healthy and active lifestyles is a vital part of that. This extends throughout our school culture and across the whole school community.

'Our PE curriculum is far-reaching and continues to expand year on year. We provide high-quality teaching in PE and sport, training for classroom teachers and teaching assistants, leadership programmes for our pupils, specialist staff in PE, Outdoor Learning and Positive Playtimes, and diversified sports such as mountain biking, tennis, dance and yoga. Since becoming a more active school, attendance is up, behaviour issues are down and attainment and achievement standards have been consistently high. Our budget for all of this is £55 per pupil. It is certainly money well spent.'

For example, we offer Sport For All on Friday afternoons, during which the whole school has the opportunity to try new sports including climbing, boules, Tchoukball, basketball, archery, fencing and mountain biking. Children wear their Sport For All kits on Fridays and, importantly, so do the teachers.

Sport For All has been a key way to get parents involved as well, as many have volunteered their time and passions to help coach these sessions. We also host after-school events for parents and children (like yoga) to engage the parent community. It's also important to note that we celebrate everyone's success, which is

why three parents were recognised at our recent community sport awards evening for showing the Olympic values of courage and determination in committing to a new sport.

Sport For All has provided a great entry route for our children to join local community sports clubs and for us to form strong partnerships with the clubs. A real 'win win' situation.

In order to maximize our sphere of influence and therefore the opportunities for our pupils, we offer free parent and child swimming sessions four times a year. This has grown to be a hugely popular event. We provide teachers and lifeguards,

and transport to and from the pool. It is wonderful to see families learning together and supporting each other.

Adults recognise the important role they have to play as role models and I am no exception. For example, during a leisure ride one weekend, I saw boys playing football and rugby, but I saw no options for girls. Now I lead our Saturday cycling club for girls and their parents.

### **IMPACT**

### ATTAINMENT & ACHIEVEMENT

- Since 2012 (when we dramatically increased our activity efforts), our standards in attainment and achievement have been in the highest quintile of all schools nationally. While we have always performed well, the year-on-year consistency in the top quintile correlates directly with our becoming a more active school.
- Our pupils understand the concept of personal best, which transcends through both sport and also across the rest of the curriculum.

### ATTENDANCE & SCHOOL ENGAGEMENT

- Parents, teachers and children are proud to go to the school and be part of the activities.
- Attendance on Fridays has increased 2% since Sport For All Fridays was introduced.
- Punctuality among targeted pupils has increased 5% since our morning climbing programme was introduced.

### BEHAVIOUR & CLASSROOM MANAGEMENT

- Students have received fewer sanctions and exhibit better behaviour. Ofsted gave us a rating of 'excellent' for behaviour, noting that children are especially skilled at managing their own behaviour.
- Teachers observe that children are more confident in their physical literacy. All children, including those who are typically not the most sporty, have found activities they like and are engaging outside of school time and joining local community sports clubs (64 percent of our pupils play sport outside of school).

# QUICK THINGS YOU CAN DO TO CREATE AN ACTIVE SCHOOL

### My top tips & advice

# IF YOU DON'T HAVE MUCH SPACE

### RETHINK HOW YOUR SPACE IS CURRENTLY BEING USED

One change we made that has been better received than expected was to eliminate football during break times. We realized it used a lot of the available play space, was largely dominated by boys and often resulted in behaviour issues and sanctions. That space is now used for free play and one can typically observe four or five different Crew Challenges taking place at any given time. Importantly, we have also received no complaints and have not had to issue a single break-time sanction since developing this new approach to playground activity three years ago.

# IF YOU DON'T HAVE RESOURCES

### SEEK THINGS THAT DON'T COST MONEY

They exist. For example, you might find a parent who can help. Many of our parents help coach activities. We even have a mum who played hockey for England. She's helping us to run an after-school hockey club and provide training to one of our members of staff at the same time!

So first, explore the resources available to you within the school. Then go out wider to the community. Community clubs have space and they are always looking to recruit. Invite them in to do taster sessions. We have local people who are running businesses who are eager to help with space, coaching and supplies. The trick is that we asked. Local schools can also swap expertise. I have a dance specialist. Three miles down the road, there might be a tennis expert. Why can't they swap places from time to time?

It's also critical that the whole school team is on board. Everyone needs to embrace flexibility so when opportunities are identified, they can find a way to make it work. One place to start is with the theme weeks that many schools love so much. You have history week or Africa week. Try hosting a sport week and engage teachers and children in what that looks like. Ignite the flame. In return you will receive highly motivated and engaged children and they can't fail to influence the adults. Have FUN.

In short, use what's available to you, spread your net wide and make networking links. The results will be amazing.

# IF YOU DON'T HAVE TIME

I'm very sympathetic to this issue. I know it's difficult, especially for schools that the government has designated as needing improvement. It takes a great deal of courage to add physical activity when you have specific targets in mathematics and reading you must hit. But increased commitment to PE can help this happen.

### CURRICULUM CROSSOVER IS ONE PLACE TO START

This is a way to simultaneously maximise activity and academic time. It is not difficult to build literacy and mathematics objectives into physical education.

There is growing evidence that the highest performing schools are also the most active. And, here in the UK, Ofsted is now looking beyond the standards to focus on the foundation subjects—in particular, PE. But regardless of your school's situation, I would also say that there has never been a better time to make the leap to be an active school and influence the life chances of your pupils.

# JAYNE GREENBERG

# MIAMI-DADE COUNTY PUBLIC SCHOOLS, DISTRICT DIRECTOR OF PHYSICAL EDUCATION AND HEALTH LITERACY

Miami-Dade County, FL, USA / 355,000 Students (392 Schools) / Grades: K-12



'Our goal as educators is to create lifetime learners. By making high-quality physical education and physical activity fun, we see a chance to create lifetime learners who fall in love with fitness and embrace it for life.'

Most of the stories included in this section are from primary school principals and head teachers. However, changemakers for active schools exist at all levels of school administration. Here, Jayne Greenberg shares how one of the largest and most diverse school districts in the United States can inspire nearly 400 active schools.

I am a former physical education teacher, so I might be more inclined than most to think that kids should get as much physical activity as humanly possible. I am also a school district administrator, which means I understand the realities of budget cuts and time constraints.

Our district is the 4th largest in the United States. It is also one of the most socially and culturally diverse, with students speaking 125 different languages and dialects. Our size and diversity present us with a unique set of challenges. This is why we initially set out to create a world-class fitness program to reduce health disparities. That's still our mission, but what we've found is that creating opportunities for all of our kids to be active all day long makes for betterbehaved, higher-performing students.

Years ago, our physical education classes were focused on team and individual sports. We found that the kids who liked sports (often the same ones who excelled at it) stuck with physical education and physical activity when they got to middle school. The kids who didn't care for sports voted with their feet. They opted out as soon as the chance came. This inspired us to find other solutions and to do the most important thing of all: make it fun.

# WHAT WE DO & HOW WE MAKE IT WORK

### **60+ MINUTES PER DAY**

In elementary school, children are required to participate in 150 minutes of physical education every week, alongside 45 weekly minutes of recess. In Miami—Dade we mandate that the weekly 150 minutes are split into 30 minutes each day of physical education for every kid. These are minimums. From there, teachers are encouraged to embed physical activity into classroom lessons and brain breaks, as well as provide additional recess. Here's how we make sure every child gets at least 60 minutes of daily physical activity:

- Mandated 30 minutes physical education daily
- Minimum 45 minutes per day of active recess in addition to 30 minutes of physical education
- · Intramurals before and after school
- Classroom physical activity breaks throughout the day

### **MAKE IT EASY**

Ultimately, recess and physical activity are at the sole discretion of the classroom teacher. They're busy enough, so I do everything I can to make it easy on them. Sometimes this means I need to get creative. For example, the school district has a TV station. We use it for PE AcTVity. Classroom teachers can connect to guided physical activity breaks at any time. We use whatever content people will give us, a lot of which is free. It didn't take much for us to use an existing resource to make it easy for teachers to incorporate physical activity breaks into the classroom. It didn't require any extra training or planning.

### MAKE IT ACCESSIBLE

At Miami-Dade County, physical education does not short-change kids with disabilities. Our experience and practice show that when you implement standards and modify activities appropriately, kids with disabilities get just as good a physical activity experience as anyone else. We have kids with disabilities golfing, sailing and kayaking in a truly integrated way with other kids. It may sound like a difficult thing to implement, but the real key is believing that all kids are able to participate.

### **MEASURE IT**

We measure whatever we can. Wherever it's possible, we give kids pedometers and other tools to measure their activity levels. We also try to be aware of how much they're moving through programs like Go Noodle, and we monitor fitness through the use of FITNESSGRAM.

### **QUALITY PE**

### MAKE IT IMPORTANT—ELEVATE PHYSICAL EDUCATION

We've elevated physical education to be on par with other academic subjects, and that's not just something we say. In Miami, we're holding physical education teachers accountable in the same way every other teacher is held accountable to teaching standards and benchmarks. This is important because it helps us to ensure students are getting the cognitive understanding, and becoming physically literate as an outcome of quality physical education—that teachers are teaching what they should be teaching and students are learning it.

We hold PE teachers accountable and evaluate them in exactly the same way we do teachers of Common Core academic subjects. I spent the last three years developing health and physical education assessments for grades K-8 in Florida. This means we now have real benchmarks and standards tied to accountability.

### **FOCUS ON QUALITY**

I've seen programs that have become 'throw out the ball' programs where kids are left to their own devices to play the sport of the day in PE class. This is great for 'free play' time, but physical education needs to serve a much more profound purpose for kids. In Miami, we're looking at the 'quality' in quality physical education. Our standards and benchmarks are focused on teaching foundational movement skills based on exercise physiology and mechanical principles. If that translates to kids kicking a soccer ball, that's great, but we make sure that our PE classes teach kids the right foundational movements to kick that ball safely and effectively.

# CREATING A CULTURE OF ACTIVITY

### MAKE IT FUN

To start with, we believe physical activity can be fun. That means we incorporate technology wherever we can and encourage adults to join in. We also try to expand the options as much as possible, so we've moved beyond the traditional soccer and basketball. Now we have programs for paddleboarding, sailing, netball and girls' flag football, to name a few.

### **BE A ROLE MODEL**

I see myself as an advocate for quality physical education and developing a culture of healthy schools, students and staff. I just happen to be doing it district-wide, for a very large school district. We do a lot of training and professional development, so we take advantage of every teacher workday and I regularly hold professional development sessions. At one point, I even got a grant to work with pre-K and Head Start teachers because we found that 36 percent of our 3- and 4-year-olds were already overweight

and obese. So we started training our pre-K and Head Start teachers to deliver physical activity lessons.

Always look for opportunities for kids to be active. We also integrate physical activity into every school program we possibly can. For example, we're currently in the process of providing mobile devices to our students, enabling them to become a part of the digital age in physical education. Other schools are doing the same thing. The difference for Miami-Dade schools is that all of our schools see the opportunity to get kids moving. Our PE TV station and other video content are available online so students can do activities at home with their parents as well.

We also leave some things up to the schools. So, for example, with active learning we ask our physical education teachers to work with classroom teachers to develop safe, appropriate content, but what that looks like is at each school's discretion.



### **IMPACT**

- Reduced absenteeism: 32% decrease in the number of days kids were absent after we implemented the 'I Can Do It, You Can Do It' fitness program for students with intellectual and physical disabilities, visual and hearing impairments and autism. The study observed 1,200 students in 45 different schools.
- Kids participating in 'I Can Do It, You
   Can Do It' also showed significantly
   improved performance on fitness
   measures. Ability to perform 13% more
   cardio laps and 83% more push-ups at
   the conclusion of the program.
- Last year we distributed 1,500 awards to students with disabilities who met guidelines for fitness levels and recommended minutes of daily physical activity.
- At the middle school level (where students are allowed to waive physical education), 94 percent of students take daily physical education.
- By 2016, 100% of Miami-Dade middle and high schools will have wellness centers.

Looking ahead, quality evaluation is one of our highest priorities. In fact, we're just now implementing a measurement including the evaluation program that links FITNESSGRAM with standardized test scores.

# QUICK THINGS YOU CAN DO TO CREATE AN ACTIVE SCHOOL

### My top tips & advice

# IF YOU DON'T HAVE RESOURCES

# TAKE ANOTHER LOOK AT HOW YOU CAN ALLOCATE YOUR EXISTING RESOURCES AND BUDGET

Most schools I know of are on school-based funding, which means how the money is spent is a school-based decision. School boards and states have different mandates, but a lot of it is at the principal's discretion. If a principal cuts options for physical activity, it's because they don't see the need for it.

### THERE'S A LOT THAT CAN BE DONE FOR FREE

You may know of someone who is willing to give you content for delivering physical activity lessons, or you can find many free publicly available resources, like we have. We use JAM (Just A Minute) School Program and GoNoodle to implement and measure physical activity throughout the school day.

### **EXPLORE OUTSIDE FUNDING**

I should point out that my budget is zero. There is absolutely no funding in the school district's annual budget to carry out this work. The important thing is that it didn't stop us. We get grants from federal and foundation sources—often to try new things and implement new technology. We also get support from corporations and local businesses. The money is out there, if you take the time to look for it. For example, explore grants from local or foundation councils, or other organizations looking to pilot new work.

# IF YOU DON'T HAVE TIME

### **MAXIMIZE THE MASTER SCHEDULE**

For example, take a look at the times when you have all-teacher meetings or planning sessions. In Miami—and this is the case in many schools—the teachers have planning time each day. There are no kids there during planning time. So that's when we have daily physical education in elementary school. We scheduled it during the teacher planning period. It's the only way we were able to offer 30 minutes of physical education, five days a week, for every single kid.

### REPLACE SEATED TIME WITH ACTIVE TIME FOR EXPONENTIAL PAYOFFS

It's not about sitting at your desk with your hands folded anymore. Replace chairs with balance balls and get kids to move throughout the classroom to learn different elements of the curriculum. I have a lot of optimism for the future. The generation of teachers coming in now is open to new ideas of how kids learn. And they've heard this idea that sitting is the new smoking and they don't particularly want to sit at a desk all day either.

# IF YOU DON'T HAVE SPACE

There are always options to get kids moving in whatever space you have available. You just need to be creative!

### TECHNOLOGY CAN BE REALLY HELPFUL:

None of our elementary schools have gymnasiums. Not one of them. One of the programs we did is JAMmin' Minutes, which are one-minute exercise routines. We converted them to QR codes. So now whenever people see those QR codes, they can scan them to their mobile devices and do a technology-based indoor fitness trail throughout the hallways. We gave each school two iPads (that we secured through a federal grant) so whole groups of students could do the trail, but it also works for anyone with a phone, including adults.

### EXPLORE AGREEMENTS WITH NEARBY PARKS

We rely heavily on this strategy. This is critical for PE and sports activities at our most space-constrained schools. In one case where a park is located across the street from a school, we actually have an agreement to close down the street during school hours. We also have community partnerships with golf courses, sailing clubs, local gyms, tennis courts, etc., that provide services at no cost to the students or school district. In addition to solving space issues, it often gives kids access to professional instructors and uses space that might otherwise go underused on weekdays.

# **JOE MILLS**

### DRAYTON COMMUNITY INFANT SCHOOL

Norwich, Norfolk, United Kingdom / 250 Students / Reception — Year 2



'Our approach to physical education and physical activity starts with our vision. It talks about our belief that all children can learn about active, healthy lifestyles and have fun while doing it. This is so important to us that our vision is posted throughout our school. You can't visit Drayton without getting a good idea of what it means to us to be an active school.'

—Claire Bates Head Teacher, Drayton Community Infant School Younger children thrive on physical activity, especially when it's provided in a fun, age-appropriate way. Here, Early Years Lead & Physical Activity Coordinator Joe Mills explains how Drayton Community Infant School provides high-quality PE and high-volume physical activity—all with a unique focus on fundamental movement skills.

We've always thought of Drayton as a school that prioritizes physical education and physical activity, so it was surprising when a parent remarked that he rarely saw the children in their PE kits. This made us consider how we could elevate both physical education and physical activity to the level of the other subjects we teach.

We started by asking parents for their opinions about our existing efforts and then consulted with staff about priorities and opportunities. We found that our learning community—Drayton staff,

children and parents—generally agree that physical education plays an important role in improving children's fitness, health and self-esteem. This informed our overall vision for PE as an opportunity for all children to:

- Learn how to improve their fundamental movement skills in a fun and enjoyable environment.
- Gain an understanding of healthy, active lifestyles that encourage life-long habits and participation.
- Compete against themselves and others to reach their full potential.

Our Action Plan arose from our vision. This document outlines our priorities, resources, and leaders for all aspects of our physical activity and physical education policy.

# WHAT WE DO & HOW WE MAKE IT WORK

### 60+ MINUTES OF PA FOR EVERY CHILD

### 75 MINUTES PER DAY OF ACTIVE BREAKS

We take break times seriously. Children receive a 15-minute break each morning, alongside 75 minutes during lunch (some of which is spent eating, of course). These are led by midday supervisory assistants who have been trained to set up games and encourage physical activity during the longer lunchtime break.

### **WEEKLY SWIMMING (HALF TERM)**

Each year group has a half term of weekly swimming during school. For added physical activity, the children walk 650 meters with parent volunteers to the pool at a nearby school.

# ADDITIONAL OPPORTUNITIES TO PARTICIPATE IN BEFORE- AND AFTER-SCHOOL CLUBS AND OTHER ORGANIZED SPORT

We also offer after-school clubs, including street dance and tennis, that are coached by external providers (the football club is run by myself). Approximately 35 percent of our students participate in total through the week. In addition, we offer a beforeschool breakfast and gymnastics club for disadvantaged pupils once per week.

### 60 MINUTES PER WEEK CURRICULUM PE TIME

Alongside physical activity, PE is incorporated into classroom lessons and an outdoor learning / forest school session once per week for each class, children receive an hour of PE each week.

### **QUALITY PE**

Pupils are required to receive 120 minutes of curriculum PE each week. This is difficult for us to schedule exclusively, so we arranged to provide one formal PE class per week with the class teacher. We incorporate the remainder into classroom time and outdoor learning, which is organized by our outdoor learning coordinator.

We have also recently hired a PE Coordinator who will focus on developing the PE curriculum while I am charged with looking after the healthy, active lifestyles part of the subject. One significant area of focus for us is on fundamental movement skills. We believe it is important for all primary schools to teach fundamental movement skills, but our pupils are among the youngest, so we consider it essential. One of the challenges has been to train classroom teachers on what skills to watch for and teach. We researched extensively and narrowed it down to a set of simple activities that are the focus of each year group. This informed our Fundamental Movement Skills curriculum map as follows:

### **FUNDAMENTAL MOVEMENT SKILLS**

### (FMS) CURRICULUM MAP 2014-15

Adapted from 'Get Skilled: Get Active', NSW Department of Education and Training, 2000.

COLOR KEY:		RECEPTION	YEAR 1	YEAR 2
Skill is introduced and observed	STATIC BALANCE			
	SPRINT RUN			
Continued development of skill	VERTICAL JUMP			
	CATCH			
Skill is not yet introduced	HOP			
	SIDE GALLOP			
	SKIP			
	OVERARM THROW			
	LEAP			
	KICK			
	TWO-HAND STRIKE			
	DODGE			

Our PE staff are also working on a more customized fundamental movement skills curriculum. We've funded the training of our PE teaching assistant so she can teach whole classes on her own. As part of that training, she has recorded the children's movement in these skills on an iPad. Together, we will analyze the videos to see where they need help on movement skills. From there, we intend to create groups to focus on specific skills that need strengthening. All of this contributes to creating a better physical activity experience for children—now and in the future.

# CULTURE OF PHYSICAL ACTIVITY

### ENGAGE THE ENTIRE LEARNING COMMUNITY

We make a priority of asking staff and parents for their opinions about PE and physical activity options. These inform the programmes we offer (For example, extracurricular gymnastics was added when parents reported their children's interest in it), as well as how they are taught.

# HAVE A VISION AND PROMOTE IT WIDELY

Insights from our learning community informed our vision for PE. It guides our action plan, how we talk about healthy lifestyles, and the pupil progress we celebrate. Most importantly, it is posted everywhere. There are very few places an individual can go at Drayton without seeing our vision posted.

# CELEBRATE CHILDREN'S ACTIVITY AND INVOLVE THE PARENTS

All children receive Active Body Books to record any physical activity they undertake. Children are encouraged to decorate their books however they choose, as long as they record all physical activity—from walking to school to playing a game with friends or family. This is not intended to take the place of in-school physical activity. Instead, it provides an opportunity to teach children about the importance of moving, engage families, identify children who may require additional support, and celebrate progress. The children hand in their books every six weeks and are celebrated in a special assembly.

### **IMPACT**

- Efforts to make PE and physical activity enjoyable appear to be paying off. 97% of parents say their child enjoys PE and 83% report that their child 'really likes Sports Day'.
- Anecdotally, parents report increased physical activity as a family since the introduction of Active Body Books.
- Teachers say students are better behaved and more focused after participating in Breakfast Club gymnastics programmes.

# QUICK THINGS YOU CAN DO TO CREATE AN ACTIVE SCHOOL

My top tips & advice

# IF YOU DON'T HAVE MUCH SPACE

### **USE YOUR CLASSROOM**

If you can move the tables and chairs, children can move. The limited space of a classroom is also an excellent space to focus on fundamental movement skills.

### USE YOUR COMMUNITY

We have arrangements to use the pool belonging to a school down the road. Our children regularly have supervised learning in the woods surrounding our school.

# IF YOU DON'T HAVE THE TIME

### **INVEST IN YOUR TEACHERS**

PE itself doesn't actually require much time. High-quality physical education can be delivered in just 2 hours per week. The key for us is to invest in teacher training so they are confident and prepared to provide physical education to all pupils.

### MAKE THE SPACE YOU HAVE AVAILABLE FOR USE

We make our hall available for physical education and physical activity to every teacher, every morning. This enables them to supplement planned activities with breaks, playtime and additional PE where appropriate.

### RECOGNIZE THAT ANYTIME IS THE TIME FOR PHYSICAL ACTIVITY

While physical education is planned, physical activity is something that can occur at anytime during the day. It can be linked to classroom lessons, break times, before-school programmes or time between lessons. The only requirement is the proper attitude and a willingness to make movement a priority.

# IF YOU DON'T HAVE THE RESOURCES

# THERE ARE ALWAYS COST-FREE SOLUTIONS; SPEND A LITTLE TIME—AND CREATIVITY—TO IDENTIFY THEM

Many impactful things we do don't actually cost much money. We encourage active lifestyles and ask children and parents for their ideas. This is free. Our Active Body Books cost nothing, save the cost of paper.

### FOCUS LIMITED RESOURCES ON PROFESSIONAL DEVELOPMENT

We are fortunate in that we receive a PE and Sports Premium from the government to support our efforts. However, this funding is temporary, so our primary emphasis is on upskilling teachers. When the funding is gone, our teachers and children will still be here.

# **JEFF WOOTEN**

### KELLIS HIGH SCHOOL AND SPECIAL OLYMPICS PROJECT UNIFY

Glendale, AZ, USA / 1,800 Students / Grades: 9-12



'Our Special Olympics Project UNIFY program is more than a physical education class. It's an opportunity for all of our students to understand that they are more alike than they are different. Students have built strong, positive relationships with each other and they've gained the confidence, teamwork and movement skills that will help them excel in life. Project UNIFY is the embodiment of our school's mission: Every student, every day, prepared to shape tomorrow.'

Kellis is a great example of a school that excels at universal access and creating an inclusive culture of physical activity for all of its students. Here, Principal Jeff Wooten describes how they worked with Special Olympics to develop an inclusive PE class that includes kids with and without intellectual disabilities. The following pages focus on this program, Project UNIFY, which has learnings for all schools around quality physical education and a strong physical activity culture.

When I first came to Kellis three years ago, I met with all of the teachers before the start of the school year. I wanted to know what made them proud to be part of the Kellis community, so I asked them to write down a few things that make Kellis great. Every single one of the responses mentioned our Special Olympics program. It didn't take me long to figure out why.

When school leaders set out to develop a Special Olympics Project UNIFY program at Kellis, they wanted something that would transform our school culture on two levels. First, they wanted to see a fully integrated student population, instead of having one group of students over here and one group over there. Second, with only one credit of PE required over four years in our district, there was a chance to promote physical education and physical activity in a more visible, ongoing way.

Our Project UNIFY program pairs students with and without intellectual disabilities in a daily PE class. The program is available to every special education student who chooses to participate. An equal number of general education participants are then able to join the class as teammates. Right now we've got 20 sets of teammates (40 kids total) who work together in each class.

This program provides a non-threatening environment for all participants. Students who may not typically be excited about PE or sports are engaged and involved in new ways.

# WHAT WE DO & HOW WE MAKE IT WORK

#### **QUALITY PE**

## PHYSICAL EDUCATION IS BUILT INTO THE MASTER SCHEDULE

Our Project UNIFY program runs every day from 12:45 pm to 2:15 pm. Students meet in the classroom to talk about the day's plans and instructions and then walk together to the locker rooms to get ready for practice. The setup leaves plenty of time for kids to get the physical activity they need.

We were fortunate in that our class times are already set up to be 90 minutes long. That gave our Special Olympics coaches an opportunity to maximize the activity time while still allowing time for setup and instruction.

### PHYSICAL EDUCATION IS DELIVERED BY QUALIFIED PERSONNEL

Trained coaches lead everyone. All of our teachers and coaches are passionate champions. We work together to plan out every session, every day. New teachers receive training through Special Olympics and instructors regularly share new ideas and techniques with each other.

#### WE MAKE IT FUN FOR ALL

All students in the program do track & field (based on its ability to integrate multiple types of activity and for practical purposes of field scheduling). Individual type sports such as this help to level any differences in ability level between students, and ensure that everyone is involved in a meaningful and safe way. In addition, teammates choose two other sports (one for each semester) to focus on. Options are varied and include flag football, volleyball, dance, softball, basketball and cheer. Typically, track events will be practiced daily while a particular elective sport is addressed

simultaneously. To ensure that everyone is able to participate in activities they enjoy, we ask students what they'd like to see offered. For example, when it became clear that some students weren't interested in some of the more traditional team sports, we created a dance class that's now one of our most popular offerings.

### PARTICIPATION CONTINUES AFTER SCHOOL

Kellis has an active Best Buddies<sup>vii</sup> program after school. While that program can include all sorts of activities—such as going to the movies or shopping—we encourage our Project UNIFY teammates to join and identify physically active ways to participate. Our teammates also participate in structured competitions against other local schools after school and on weekends.

#### A UNIQUE CO-TEACHING APPROACH

The program is implemented by special education and physical education teachers in a unique co-teaching environment. All of the kids in our class have different abilities, so the general education students participate in a two-week orientation at the beginning of the year to better understand their peers with special needs. This is key because our Special Olympics athletes vary greatly in terms of their physical and emotional needs.

Students without disabilities often enter the program thinking they will be helpers or coaches, but soon realize that they are there to be equal teammates and friends. As they progress through the course, they discover that they are the ones learning the most from their peers.

## CULTURE OF PHYSICAL ACTIVITY

### WE CELEBRATE PARTICIPATION AND MAKING AN EFFORT TO BE ACTIVE

Every kid is cheered by everyone, every time. Special handshakes and group cheers boost the fun factor. We watch for kids who are sitting on the sidelines and encourage them to join in.

#### IT'S ABOUT THE WHOLE CAMPUS

Our experience with Project UNIFY is a reflection of our campus as a whole. Whether it's class schedules, extracurricular activities, access to teachers and classes or sports, every single student at Kellis has the same opportunities. Inclusion is the norm, not the exception.

## WE DO THINGS DIFFERENTLY TO ENSURE THAT ALL OF OUR ATHLETES ARE RECOGNIZED EQUALLY

Our teachers and administration are constantly committed to celebrating participation and making the program better. We think outside the box and try to provide our Project UNIFY athletes with the same experiences as their peers. For example, all of our varsity sports hang a team picture in the main office, hold an awards banquet and award varsity letters (an award offered in U.S. schools for excellence in extracurricular activities). Beginning in 2013, Kellis Project UNIFY athletes and partners also had their picture hanging in the main office and they attended an awards banquet where they received varsity letters embroidered with Special Olympics. Imagine the emotion when the first Special Olympic athletes walked the campus wearing letterman's jackets.

vii. Best Buddies © creates opportunities for people with and without intellectual disabilities to establish one-to-one friendships. The program operates in almost 1,700 middle school, high school, and college chapters in 50 countries.

# MY TOP TIPS & ADVICE ON: THINGS YOU CAN DO FOR INCLUSION

I won't pretend our program was easy to design. What we wanted to do required a good amount of time and space. We also needed a lot of different people to buy into it. Our top priority is universal access to sports and PE—where kids of all abilities have a great time playing sports together. Other schools might not have exactly the same makeup we do, but they can definitely learn from the way we've created great experiences for kids and made physical activity part of our culture. Here are a few thoughts on some of the common obstacles.

#### IF YOU DON'T KNOW HOW TO CREATE MODIFICATIONS

- Let the needs of individual students guide you in how you could create modifications, focusing on what they can do or need to do.
- See if the students can come up with the answer. We have a widespread expectation that everyone can participate and have built-in ways for kids to take ownership of activities. Our students without disabilities are given strategies for supporting their peers in developing stronger sports and life skills. Kids also participate in a 'huddle' before every session to hear about plans for the day and get reminders about the rules.
- Student recruitment: much of the success will rely on the attitude and commitment of students without intellectual disabilities. It is important to recruit students that will support their teammates and the philosophy of the program. A best practice is targeting students with a sports ability level that is similar to that of their peers with disabilities. This balance will help contribute to a quality and safe sport experience.

 Invest in training: Our coaches and teachers receive training and resources through Special Olympics to coach and teach in an inclusive environment.
 Special Olympics has partnered with the National Federation of State High School Associations to offer a 90-minute online training at no cost. This course is called 'Coaching Unified Sports' and can be accessed by anyone in the world at: www.NFHSLearn.com.

## IF YOU DON'T HAVE SPACE OR FIELDS

- To minimize waiting and lessen the need for a single large space, establish 'stations' for activities to be practiced.
- Work with other schools to have competitions and group practices.
- · Use local park space.
- Rethink how your existing space is used.
   Running in the hallways isn't always bad.

## IF YOU CAN'T ALLOCATE THIS MUCH TIME

Once people see this kind of work in action, they always seem to find ways to make it fit into the schedule. Special Olympics has offices all over the world, so I'd encourage anyone to inquire about visiting a local Special Olympics school program. If the experience is anything like mine, it will change your life.

#### IF YOU DON'T HAVE THE PARTNERSHIP RESOURCES

Our program wouldn't exist without our partnership with Special Olympics Project UNIFY. If you're interested in something similar, but think you can't find the right partner, think again. Special Olympics has offices in 170 countries. Find yours at <a href="https://www.specialolympics.org/program-locator.aspx.">www.specialolympics.org/program-locator.aspx.</a>

#### **IMPACT**

#### **RESULTS & IMPACT**

- How many PE classes have a
   waiting list? In its first year, general
   education students were actively
   recruited to participate in the
   program. After four years, the
   program had 45 general education
   applicants for 20 spots.
- Our teammates are friends on and off the field. A couple of years ago, I wouldn't have believed you if you told me special education<sup>viii</sup> and general education students would be having lunch together, hanging out after school, or going to prom together. Now they are.
- We haven't studied it formally, but parents tell us that their kids are healthier and less inclined to be absent.
- Project Unify athletes from our special education programs demonstrate drastically increased confidence and social skills.
- Overall, the program contributes to increased acceptance and social integration across our campus.
- Feedback from parents has been overwhelming. They appreciate the fact that their child gets to have a full high school experience including physical activity, social connections and recognition. Many continue the relationships they've built after high school and continue to participate in Special Olympics.

viii In the United States, special education is a common term to describe the approach schools take to educating students with special needs—physical or intellectual disabilities, for example.

# TIPS FOR DESIGNING A GREAT PROGRAM

Project UNIFY is intentionally designed to provide a great experience that includes everyone. It turns out our design mirrors the design considerations that experts say work best for young people. That's probably why a lot of what we do could be adopted by any kind of program anywhere in the world.

#### UNIVERSAL ACCESS

Kids with disabilities are among the most excluded populations. We figure there's no good reason, so we changed the equation. Our coaches and teachers also routinely watch out for kids who are opting out of activity and find ways to encourage their participation.

#### COACHING

The class is led by one trained PE teacher, one special education teacher and several instructional assistants. In addition, all of the general education teammates undergo a two-week training to prepare for their role in the program. All of these individuals must be passionate educators and students with hearts for others, both with and without disabilities.

## DOSAGE AND DURATION

By scheduling preparation time before the class period, all kids in the program get the chance to move for a full 60 minutes. Class time is also structured around stations—each with its own coach—to minimize wait times and provide variety.

#### **FEEDBACK**

Coaches and teammates provide constant feedback throughout class sessions. Practices build towards competitions with other schools, and goals are established around what will be achieved at practice and in competition.

#### **FUN**

Coaches work hard to establish a relaxed and fun environment. At the beginning of the year, teammates create their own special handshakes and every class session begins with a group cheer. We also have rules modifications to ensure that students have the best possible experience, and that every athlete is celebrated by the entire group.

## INCENTIVES & MOTIVATION

Each term the entire class receives new T-shirts. In addition, as noted previously, students are now eligible to earn varsity letters, something that was previously available only to varsity athletes.

#### AGE APPROPRIATE

With high school-aged kids in the program (ages 14-18), practices are appropriately geared toward competition. At the same time, activities are focused on developing a wide range of skills to suit different functional ages. Pairing students of a similar grade level also promotes the development of age-appropriate interactions and friendships.

## **AM RAI**

#### MONTPELIER PRIMARY SCHOOL

London, United Kingdom / 668 Pupils / Nursery, Foundation and Years 1-6



There's a non-negotiable, overarching principle associated with being an active school: The head teacher has to be very clear about ensuring an active and healthy approach. They must be committed to it. If the head teacher doesn't see physical activity as part of children's broader entitlement, then it will be nearly impossible to create an active school. It requires a genuine drive.'

When I first came to Montpelier nine years ago, the environment for sport was complicated. Parents recognized that their children's physical activity levels were declining, but they approached it from different angles. Some envisioned a focus on competitive sports, while others simply had difficulties finding ways to encourage their children to be active.

We also have a very diverse population, with pupils coming from the Middle East, the Asian sub-continent, Japan and elsewhere. Many of their native countries do not yet face childhood obesity epidemics and physical inactivity has not fully taken hold. Once they came to London, they encountered a very different reality.

At the same time, lack of interest among children, along with parents' financial pressures and work commitments, were obstacles to children's participation in after-school clubs.

With this as a backdrop, it is not surprising that our internal health and behaviour surveys suggested that a significant portion of 8-to-9 year-olds and even some reception students were showing signs of obesity.

We began incrementally to garner support among teachers and parents, as well as to test

new approaches. In 2008, we tendered a contract to external sport providers to run our breakfast club and after-school club. We made it very clear that competitive sport was not the focus—this was about healthy living and exercise, including active games and a wide variety of non-competitive sport options.

We chose a group called Fit for Sport because of their expertise with programmes that promote children's healthy lifestyles. Primary schools in London face high levels of teacher mobility due to the city's cost of living. As a result, it was important that we identify an external provider who could provide a quality experience consistently, as well as support our teachers' development.

In school, we promote brain breaks during lessons, run by teachers. We based these efforts on educational research showing that purposefully increasing blood flow to children's brains enhances concentration and learning. As they began to see results, the whole school community warmed to the idea of children being active at unusual times. From there, we had wider support to expand on children's activity options.

Based on the success of our efforts, we extended the contract with Fit for Sport to include afternoon sports in 2010 and active lunchtimes in 2012.

# WHAT WE DO & HOW WE MAKE IT WORK

#### **60+ MINUTES PER DAY**

### IT IS NOT ENOUGH FOR PUPILS TO HAVE MOMENTS OF ACTIVITY

To benefit academically, physically and behaviourally, we realized early on that children need to be active throughout the day. We do this through a combination of activity options designed to meet the needs and interests of all students. These include:

- 45 minutes of daily structured outdoor active lunch breaks
- 36 minutes (average) of daily PE
- · In-class activity breaks
- Weekly swimming
- · Optional daily breakfast club
- After-school clubs including dance, gym, tennis, cricket, rugby and multi-sport three times per week that allows children to participate in a range of activities

To optimize scheduling, we looked at times of the day when behaviour issues were most prevalent, particularly among children who already have communication difficulties. We found many of these problems arose after the lunch break. We opted to engage sport specialists during the lunch hour to serve lunch and offer structured physical activity options during the break time. The vast majority of children participate.

#### **QUALITY PE**

#### EACH CHILD RECEIVES A MINIMUM OF 180 MINUTES OF PHYSICAL EDUCATION PER WEEK—INCLUDING 60 MINUTES OF INDOOR PE AND 120 MINUTES OF OUTDOOR PE

Indoor sessions are led by classroom teachers. We use Fit for Sport to train our classroom teachers and help them plan and deliver lessons. We do a lot of continuing professional development to make sure teachers can teach fundamental skills.

To extend opportunities for more vigorous activity, we ensure that every child receives a minimum of two hours of outdoor sport mainly taught by Fit for Sport specialists, who are supported by classroom teachers. We also use outdoor opportunities to let teachers address other tasks.

## CULTURE OF PHYSICAL ACTIVITY

### MONTPELIER PUPILS COME TO SCHOOL EXPECTING TO BE ACTIVE

We emphasize active play from the earliest ages and provide the widest possible range of fun activity options. Physical activity is a non-negotiable part of our school curriculum. Children and staff know that it will happen no matter what the weather.

Coaches and PE teachers are also seen as essential members of the staff who meet weekly with curriculum leaders to align teaching plans.

We constantly seek out opportunities to expand options for activity. For example, five days per year the school is closed for teacher development. When this happens, we make the school open to all children for structured play and physical activity.

#### **IMPACT**

#### **RESULTS & IMPACT**

Since implementing active lunch breaks, as well as brain breaks during lesson times and before and after school clubs, Montpelier has reported improvements including:

- Significant reductions in behavioural issues following break times: the deputy head used to spend 15 hours per week on disciplinary issues. Since implementing active lunch breaks, that time has dropped to 1 hour per week
- Increases in overall physical activity and participation in sport clubs
- Attendance has increased from approximately 90% to 96-97%, primarily due to reductions in illness-related absences
- Preparedness for learning has been positively impacted—children understand that if they are struggling with concentration, they may need to stretch or take a walk to refocus

Teachers also report that students are better behaved and demonstrate better concentration following physical activity. Importantly, pupils say they enjoy learning more because the teachers make learning fun. Active learning plays an important role in this assessment. The use of brain breaks and short physical breaks during lessons regularly enhance learning.

# QUICK THINGS YOU CAN DO TO CREATE AN ACTIVE SCHOOL

My top tips & advice

## IF YOU DON'T HAVE MUCH SPACE

### OUR ACTIVE LESSONS TAKE VERY LITTLE SPACE

For example, we do kung fu punctuation where children do physical movements to learn the punctuation marks. You're linking basic learning developments to physical activity. We hope that creates a link forever. There are inexpensive online courses with instructors that come on screen that children can do behind their desks.

## THERE ARE SCHOOLS WITH EMPTY MUSIC ROOMS AND HALLWAYS FOR HOURS AT A TIME

This is about not being so rigid. A lot of schools have only one indoor space. The key is to make sure it's used throughout the day. If schools are flexible about the timing of certain aspects of the curriculum (for example, letting go of saying 'math and reading must take place at a particular time') then they can ensure that space is maximized.

## IF YOU DON'T HAVE THE TIME

# THERE'S A DIRECT LINK BETWEEN ACTIVITY AND ACADEMIC PERFORMANCE, LEARNING AND BEHAVIOUR, SO I CAN'T SEE THE ARGUMENT THAT THERE'S NOT ENOUGH TIME

Even so, there are chances throughout the day to get children moving that don't impact the timetable. For example, we build activity into lessons and allow children to move while they are learning. Structured physical activity during lunch break times provides an excellent opportunity for children to engage in active play at a time of day when it's critically important.

## IF YOU DON'T HAVE THE RESOURCES

## THE HUMAN RESOURCES ISSUE IS MASSIVE AND THE SCOPE OF CREATIVE THINKING AROUND THIS IS LIMITED

We were one of the first schools to take on external specialists for young children. If you do use external providers, you get economies of scale because it opens up teacher time for other things. It reduces stress levels of teachers and children.

## FINANCIAL PRESSURES REQUIRE CREATIVITY TOO

In our case, we engaged sport specialists as lunch servers in addition to delivering the lunch break activity curriculum. This allowed us to transition the budget for lunchtime staff to sport providers.



PHYSICALLY ACTIVE AND PHYSICALLY FIT CHILDREN ACHIEVE BETTER EDUCATIONAL ATTAINMENT THAN THEIR SEDENTARY PEERS.JK







5 MINUTES OF MODERATE-TO-VIGOROUS PHYSICAL ACTIVITY CAN SIGNIFICANTLY IMPROVE FLUENCY IN MATHEMATICS AND CLASSROOM CONCENTRATION.<sup>1</sup>



## ONE VISION, TWO ASKS

## WE ARE DESIGNED TO MOVE

More than 80 organizations from around the world have come together in support of Designed to Move, a collaborative framework for action that outlines an approach to increasing physical activity levels globally. The framework is oriented around two simple ASKS that any individual, organization, company or government can take on to significantly alter social, economic and health outcomes for the better.

#### **VISION**

## FUTURE GENERATIONS RUNNING, JUMPING AND KICKING TO REACH THEIR GREATEST POTENTIAL

#### ASK 1

## CREATE EARLY POSITIVE EXPERIENCES FOR CHILDREN

A generation that enjoys positive experiences in physical education, sports and physical activity early in life has the chance to shape the new future. This generation could break cycles of inactivity where they already exist, or prevent them before they start.

#### ASK 2

## INTEGRATE PHYSICAL ACTIVITY INTO EVERYDAY LIFE

Economies, cities and cultures can be shaped and designed to encourage and enable physical movement. To ensure a better future for all, they need to be the norm.

These two **ASKS** come together by focusing on the large-scale solutions and areas of investment that have the best chance of changing the way people move.





## TOOLS

There are many free resources available to support the creation of active schools. This section offers a range of expert-endorsed, globally relevant tools to help school leaders, teachers and others get started.

# TOOLS & RESOURCES

**KEY** 

**USER** 

TEACHERS / PA LEADERS

SCHOOL LEADERSHIP

G GENERAL

#### **CURRICULUM**

NAME OF RESOURCE (CLICK TITLE TO VISIT WEBSITE)
ORGANIZATION // COUNTRY

#### 1. ACTIVE ACADEMICS: ACTIVITY DATABASE

**ACTIVE ACADEMICS // UNITED STATES** 

A resource for classroom teachers that combines physical activity and classroom content. The resource includes standards-based activity ideas that utilize the Common Core Standards as well as national standards in the United States for Pre-K through 5th grade.

USER | 1 USAGE | LONG TERM

#### 2. ACTIVE FOR LIFE LESSON PLANS BY AGE

**ACTIVE FOR LIFE // UNITED STATES** 

Ready-made lesson plans focused on physical literacy and fundamental movements. Activities are organized by recommended age groups (3-5, 5-8, 8-12)

USER | 1 USAGE | IMMEDIATE

#### 3. AFTER SCHOOL ENERGIZERS CLASSROOM BASED PHYSICAL ACTIVITIES

**EAST CAROLINA UNIVERSITY // UNITED STATES** 

Energizer ideas that combine physical activity and academic concepts.

USER | 1 USAGE | LONG TERM

#### 4. AFTER SCHOOL PA ACTIVITY GENERATOR

SAN DIEGO COUNTY OFFICE OF EDUCATION // UNITED STATES

Instantly generates fun activities for kids in a variety of settings and across a variety of physical activity realms (street games, multicultural, indoor, outdoor, large group, etc).

USER | 1 USAGE | IMMEDIATE

#### 5. APPROPRIATE INSTRUCTIONAL PRACTICE GUIDELINES FOR ELEMENTARY SCHOOL PE

NATIONAL ASSOCIATION FOR SPORT AND PHYSICAL EDUCATION // UNITED STATES Guidelines for effectively teaching PE in elementary schools.

USER | (1) USAGE | LONG TERM

#### 6. ENERGIZERS: CLASSROOM-BASED PHYSICAL ACTIVITIES

**EAST CAROLINA UNIVERSITY // UNITED STATES** 

Evidence-based activity ideas for movement breaks in the classroom.

USER | 1 USAGE | IMMEDIATE

#### 7. GONOODLE FOR SCHOOLS

**GONOODLE // UNITED STATES** 

A set of 5-minute classroom brain breaks to incorporate physical activity into classrooms.

USER | 1 USAGE | IMMEDIATE

#### 8. GRADE LEVEL OUTCOMES FOR K-12 PHYSICAL EDUCATION

**SHAPE AMERICA // UNITED STATES** 

A summary of the standards and motor-skill competencies that students should be able to meet at each grade level.

USER | ( G USAGE | LONG TERM

#### **INSTANT ACTIVITIES**

PE CENTRAL // UNITED STATES

An online tool that instantly generates activity ideas for kids, sorted by age and lesson type.

USER | 🕡

**USAGE | IMMEDIATE** 

#### 10. INSTRUCTIONAL FRAMEWORK FOR FITNESS EDUCATION IN PHYSICAL EDUCATION

NATIONAL ASSOCIATION FOR SPORT AND PHYSICAL EDUCATION // UNITED STATES A fitness framework outlining what students should understand and be able to do at specific grade levels.

USER |

**USAGE | LONG TERM** 

#### 11. K-5 ENERGIZERS

**EAT SMART, MOVE MORE NC // UNITED STATES** Energizer activity ideas for primary school teachers.

**USAGE** | IMMEDIATE

#### 12. PHYSICAL EDUCATION CURRICULUM ANALYSIS TOOL (PECAT)

**CENTERS FOR DISEASE CONTROL AND PREVENTION // UNITED STATES** 

Self-assessment and planning guide designed to help school districts and schools assess their PE curricula, based on national standards in the United States.

USER |

USAGE | LONG TERM

#### 13. PRIMARY SCHOOL PHYSICAL LITERACY FRAMEWORK

YOUTH SPORT TRUST // UNITED KINGDOM

Supporting primary schools to develop the physical literacy of all their pupils through the PE curriculum, extracurricular school sport and competitive school sport.

USER | 🕡

**USAGE | LONG TERM** 

#### 14. RECIPE CARD LESSON PLANS FOR PE

**EVER ACTIVE SCHOOLS // UNITED STATES** 

Easy-to-use lessons for classroom teachers to integrate physical activity and physical education into lesson plans.

USER | (1) (G)

**USAGE** | IMMEDIATE

#### 15. RUNNING START PE LESSON PLANS

**NEW YORK ROAD RUNNERS // UNITED STATES** 

10-20 minute PE lesson plans with clear, simple instructions to develop the basic mechanics of running.

USER | 🕡

**USAGE** | IMMEDIATE

#### 16. SCHOOL TENNIS LESSON PLANS & ACTIVITY CARDS

LAWN TENNIS ASSOCIATION // UNITED KINGDOM

A series of lesson plans and activity cards (available for download) that provide the content and structure for a 5-week series on tennis.

USER | 1

**USAGE** | IMMEDIATE

#### 17. SPECIAL OLYMPICS GET INTO IT CURRICULUM

SPECIAL OLYMPICS // GLOBAL

Online resources that include age-appropriate and inclusive lessons, activities, videos, athlete stories and supplemental materials, designed to be taught in the context of class periods or a community setting, as part of a club, an afterschool activity or a community-based event.

USER | 1 G



**USAGE** | IMMEDIATE AND LONG TERM

#### 18. SPECIAL OLYMPICS YOUTH AND SCHOOLS

SPECIAL OLYMPICS // GLOBAL

An education- and sports-based strategy that increases athletic and leadership opportunities for students with and without intellectual disabilities. Inclusive sports provide all students the opportunity to train and play together as teammates while forming friendships, fostering respect for each other and becoming leaders on and off the court. Curriculum PE, extra-curricular sport clubs and competitive sport.

USER | (1)



**USAGE | LONG TERM** 

#### **KEY**

#### LISED

TEACHERS / PA LEADERS



G GENERAL

#### 19. TEACHER RESOURCES - THE FA SKILLS PROGRAMME

THE FA SKILLS PROGRAMME // UNITED KINGDOM

Online resources for classroom/PE teachers wishing to deliver football in schools. Resources include lesson planning templates, assessment criteria for children and game cards for specific skills.

USER | 1

**USAGE | LONG TERM** 

#### 20. TENNIS ACTIVITY WEEK PACK

LAWN TENNIS ASSOCIATION // UNITED KINGDOM

A ready-to-use pack of cross-curricular lessons, based on a tennis theme.

USER | 📦

**USAGE** | IMMEDIATE

#### 21. VOLLEYS AND VALUES

LAWN TENNIS ASSOCIATION // UNITED KINGDOM

Lesson plans that allow teachers to use tennis activities to teach academic lessons including literacy, numeracy, science, foreign languages, ICT and physical education.

USER | 📦

USAGE | IMMEDIATE AND LONG TERM

#### 22. YOUNG ATHLETES TOOLKIT

SPECIAL OLYMPICS // GLOBAL

A toolkit designed to create opportunities for young children (ages 2.5-7) with intellectual disabilities to have greater access to motor activity programs, organized play and sport skill development.

USER | (1)

USAGE | IMMEDIATE AND LONG TERM

#### WHOLE OF SCHOOL

#### **23. ACTIVE 8**

**CANFIT // UNITED STATES** 

An 8-step guide to help young people incorporate physical activity into everyday life. The resource includes tips on types of appropriate exercises, exercise do's and don'ts, a physical activity picture guide and guidelines on how to engage youth in improving their physical activity environment.

USER | 📦

**USAGE | LONG TERM** 

#### 24. ACTIVE TRAVEL TO SCHOOL GUIDE

SUSTRANS // UNITED KINGDOM

Designed for teachers, parents and governors, the guide contains a suggested programme and top tips for events, activities and lessons to inspire more journeys by foot, bike or scooter.

USER | (1)

**USAGE** | IMMEDIATE

#### 25. BAM! ACTIVITY CALENDAR

CENTERS FOR DISEASE CONTROL AND PREVENTION // UNITED STATES

Calendar allows kids to track their activity throughout the week and provides a glossary and ideas for a range of activity options.

USER | 🕡

**USAGE** | IMMEDIATE

#### 26. BECOME OUTSTANDING

YOUTH SPORTS TRUST // UNITED KINGDOM

This self-review tool will help you assess the quality of PE and school sport at your school and will then help you identify your school's priorities.

USER |

**USAGE | LONG TERM** 

#### 27. CATCH PROGRAM

**CATCH // UNITED STATES** 

Curricula and programming focused on transforming children's health. The program includes tools and trainings for early childhood, K-8 and after-school programming.

USER | 🕡

**USAGE | LONG TERM** 

#### **KEY**

#### **USER**

TEACHERS / PA LEADERS



SCHOOL LEADERSHIP

G GENERAL

#### 28. COMPREHENSIVE SCHOOL PHYSICAL ACTIVITY PROGRAM

CENTERS FOR DISEASE CONTROL AND PREVENTION & SHAPE AMERICA // UNITED STATES Step-by-step guidance for schools and school districts to develop, implement and evaluate comprehensive school physical activity programs.

USER | (1) G

**USAGE | LONG TERM** 

#### **USER**

**KEY** 

TEACHERS / PA LEADERS

SCHOOL LEADERSHIP

G GENERAL

#### 29. CRITERIA FOR DEVELOPING AN ACTIVE SCHOOL WITH LET'S MOVE! ACTIVE SCHOOLS

LET'S MOVE ACTIVE SCHOOLS // UNITED STATES

This resource provides a framework for integrating physical activity before, during and after school.

USER | (1) **USAGE | LONG TERM** 

### 30. EDUCATING THE STUDENT BODY: TAKING PHYSICAL ACTIVITY AND PHYSICAL EDUCATION

**INSTITUTE OF MEDICINE // UNITED STATES** 

Great ways to get to 60 minutes/day: This infographic provides ideas on how to integrate physical activity throughout the school day.

USER | (1) (1) (G)

**USAGE | LONG TERM** 

#### 31. EFFECTIVE PROFESSIONAL LEARNING

YOUTH SPORTS // UNITED KINGDOM

Maximizing the Primary PE and Sport Premium through effective professional development of your staff.

USER | **USAGE | LONG TERM** 

#### 32. JAM SCHOOL PROGRAM

JAM SCHOOL PROGRAM // UNITED STATES

A free resource for schools, JAM teaches kids healthier lifestyle habits and offers many short physical activity options that kids and adults can engage in throughout the day.

USER | 1 1

**USAGE** | IMMEDIATE

#### 33. OPPORTUNITY TO LEARN GUIDELINES FOR ELEMENTARY, MIDDLE SCHOOL, AND HIGH SCHOOL PHYSICAL EDUCATION

**SHAPE AMERICA // UNITED STATES** 

Guidelines on physical education implementation by stage of schooling (elementary school, middle school, high school). Information for administrators, teachers and program designers to determine what physical education should encompass at each level of schooling.

USER | (1) (1) (G)

**USAGE | LONG TERM** 

#### 34. OUT OF SCHOOL HOURS CLUB TOOLKIT

LAWN TENNIS ASSOCIATION // UNITED KINGDOM

A toolkit with lessons, activities and materials for primary schools to implement tennis clubs before and after school.

USER | (1)

**USAGE** | LONG TERM

#### 35. PHYSICAL ACTIVITY SKILLS MANUAL

**DISCOVER VITALITY // SOUTH AFRICA** 

A manual of appropriate fundamental movement skills to be taught in primary schools. Includes a summary of the benefits of physical activity, a primer on physical literacy and recommended strategies to encourage physical activity.

USER | 📦

**USAGE | LONG TERM** 

#### 36. THE ASSOCIATION BETWEEN SCHOOL-BASED PHYSICAL ACTIVITY, INCLUDING PHYSICAL **EDUCATION, AND ACADEMIC PERFORMANCE**

CENTERS FOR DISEASE CONTROL AND PREVENTION // UNITED STATES

A data-driven overview of studies done on the link between physical activity and academic achievement.

USER | G **USAGE | LONG TERM** 

#### 37. THE PRESIDENTIAL YOUTH FITNESS PROGRAM

THE PRESIDENTIAL YOUTH FITNESS PROGRAM // UNITED STATES

A free program that provides schools with the tools needed to help kids achieve a standard of physical fitness. The program includes curricula as well as assessment tools.

USER |

**USAGE | LONG TERM** 

#### 38. PRIMARY SCHOOL TEACHER TRAINING COURSE

LAWN TENNIS ASSOCIATION // UNITED KINGDOM

A 3-hour free training for UK teachers on how to deliver tennis instruction in primary schools. By participating in the USER training, teachers gain access to a variety of tools and resources.

**KEY** 

TEACHERS / PA LEADERS

SCHOOL LEADERSHIP

G GENERAL

USER | • • •

**USAGE I LONG TERM** 

#### 39. SCHOOL CLUB LINK GUIDE

**ENGLAND ATHLETICS // UNITED KINGDOM** 

Guide for school administrators on the importance of and how to set up community links with sport clubs. It provides links to organizations that can help in specific areas, such as courses for teachers, competitions, and resources for pupils with disabilities.

USER | (1)

**USAGE I LONG TERM** 

#### 40. SCHOOL PHYSICAL EDUCATION PROGRAM CHECKLIST

**SHAPE AMERICA // UNITED STATES** 

Checklist for schools to gauge the quality of their physical education program.

USER |

**USAGE | LONG TERM** 

#### 41. SCHOOL SPORT COACHING GUIDANCE FOR PRIMARY HEAD TEACHERS

SPORTS COACH UK // UNITED KINGDOM

Online portal to help head teachers make decisions related to the school sports premium. The tool focuses on finding the right coach to meet the school's needs.

USER | (1)

**USAGE | LONG TERM** 

#### 42. STATE PHYSICAL EDUCATION STANDARDS DATABASE

SHAPE AMERICA // UNITED STATES

A summary of state standards for PE in each of the 50 U.S. states in a single user-friendly database.

USER | (1)

**USAGE | LONG TERM** 

#### **43. SUSTRANS BIG SHIFT**

SUSTRANS // UNITED KINGDOM

An online challenge to motivate the school community to travel more actively.

USER | 1 1



**USAGE | LONG TERM** 

#### **44. SUSTRANS SUPERHEROES**

SUSTRANS // UNITED KINGDOM

Individual award scheme that recognizes pupils' achievements in active travel to school.

USER | • • •



**USAGE | LONG TERM** 

#### **45. WALK ONCE A WEEK**

LIVING STREET // UNITED KINGDOM

A plan to encourage children to walk to school at least once a week. The programme includes a collectible badge students can earn each month they participate.

USER |

**USAGE | LONG TERM** 



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neurocognitive, and scholastic performance in children with attention-deficit/hyperactivity disorder. Journal of Pediatrics, 162(3), 543-551.

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Figure 1 - Active Kids Have Better Attention, Behaviour and Academic Performance

Hillman, C. H., Pontifex, M. B., Raine, L. B., Castelli, D. M., Hall, E. E., & Kramer, A. F. (2009). The effect of acute treadmill walking on cognitive control and academic achievement in preadolescent children. Neuroscience, 159(3), 1044-1054.

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## **KEY CONTRIBUTORS**



ALLIANCE FOR A HEALTHIER GENERATION



**BANYAN SOLUTIONS** 

BRITISH HEART FOUNDATION





FIT FOR SPORT





**INSTITUTE BOLA PRA FRENTE** 



LTA AND TENNIS FOUNDATION



**NAHT EDGE** 



NATIONAL CENTRE FOR SPORT AND EXERCISE MEDICINE ENGLAND, SCHOOL OF SPORT, EXERCISE AND HEALTH SCIENCES, LOUGHBOROUGH UNIVERSITY



NIKE INC.



PREMIER LEAGUE



SPECIAL OLYMPICS



SHAPE AMERICA



SUSTRANS



UNDP



**UNESCO** 





WHEELHOUSE



YMCA VICTORIA



YOUTH SPORT TRUST

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Fit for Sport

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