

# Physically active schools 2020: New pathways and possibilities

© **Thomas Skovgaard**

Department of Sports Science and Clinical Biomechanics  
University of Southern Denmark

*Published on idrottsforum.org 2015-03-18*

**I**n Denmark, the current government has initiated the biggest reshaping of primary and lower secondary schools in forty years.

From the very early discussions, in 2012, of the ongoing reform process, there has been near unequivocal agreement among all parties involved that children and young people should be more physical active during the course of a school day.

At the same time, the precise positioning and status of the PE area in the transformed Danish school system is yet to be decided. Taking this unsettled

situation as an inspiring challenge, the present article focuses on the following question: How is PE and, more generally, physical activity to be addressed in the public school of the future?

THOMAS SKOVGAARD currently holds a position as Associate Professor, Director of Studies (MSc Sports Performance) and Head of the Research & Innovation Center for Human Movement & Learning ([www.fiibl.dk](http://www.fiibl.dk)) which aims to produce new knowledge on school-based physical activity interventions, physical education and pedagogies.

## The new public school in Denmark

Under the slogan *Make a good school better*, the current government in Denmark has, with broad cross-party agreement, initiated the biggest reshaping of primary and lower secondary schools in forty years. The immediate outcome is a school day in which both pupils and teachers are present at school for a greater number of hours – a school day in which the ambition is to alternate between teaching, play, movement, projects, workshops and so on. Once the reform has been rolled out in its entirety, there will be clear changes in the time frame, in the content and in the ways in which resources are used for teaching – ensuring, ideally, that all pupils realize their full learning potential.

### Active Schools

From the very early discussions, in 2012, of the ongoing reform process, there has been broad agreement among political parties, employers and employees in the educational world and the principle voluntary sports organizations that children and young people should be more physically active during the course of a school day.

It is, therefore, part of the reform program that physical activity form part of the syllabus for all year groups at public schools corresponding on average to 45 minutes per day. The aim is to promote health and well-being among children and young people and to support motivation and learning in school subjects. Exercise is to form part of subject teaching, including Physical Education (PE), and of so-called support teaching<sup>1</sup>. As part of the school reform process, PE will also become an examination subject in 9th grade. The purpose of this is to underline the importance of human movement and to strengthen what the pupils can learn from the subject.

There remains, however, uncertainty as to the precise positioning and status of the PE area in the transformed Danish school system. Taking this uncertainty as an inspiring challenge, the present article focuses on the fol-

---

1 Support teaching (in Danish: “Understøttende undervisning”) is from now on part of the curriculum in public schools. Support teaching is yet to be defined in more detail and put into continuous practice, but basically it is weekly hours where teachers and pedagogues can focus on additional curriculum activities such as physical activity, Danish and math.

lowing question: How is PE and, more generally, physical activity to be addressed in the public school of the future?

## Future scenarios

A number of questions immediately present themselves: How and to what extent is PE as a school subject to be integrated with an increase in school time for other activities involving play and movement? What qualifications and competences are to be expected of the educators who are to deliver activities involving PE, play and movement? Are the professionals who are to take charge of this area expected to have qualification as teachers, as teaching assistants or as something else? Is it something that teachers, teaching assistants and others are to work together to develop – and what role should, can and will the voluntary sector play?

The questions are many and various. And – just to clarify expectations – this article will not provide definitive answers. Instead, in what follows, two scenarios will be sketched as regards physically active schools of the future. Building scenarios, understood as formulating aspects of possible futures, is a useful way to challenge our ideas of developments-to-be. Scenario processes can initiate creative considerations as to the opportunities the future can offer, and as to which of these we would like to grasp hold of and influence. In other words, scenarios do not constitute a set of future possibilities carved in stone. They are first and foremost tools to encourage thinking that leads to action. In this context the aim of these scenarios is to stimulate action-oriented thought processes about human movement and PE as an active part of everyday schooling for Generation Z – children and young people born since around 2000.

## The ideal scenario 2020

All Danish schools are offering children and young people an active school day, which involves a minimum of 45 minutes of exercise. The PE teachers' traditional target of *One Hour a Day*, as proclaimed by the 1814 Education Act, has been almost achieved for the first time. The positive situation has its roots in well-coordinated collaborations between many parties, all of whom

provide solid support for the overall ambition regarding physical activity and PE as a subject. This collaboration has proved to be sustainable and is meaningful locally – among pupils, for teachers and teaching assistants, for the management and administration of schools, for parent groups, the school board and voluntary, community-based sports organizations. Physical activity is simply part of the school's everyday practice and it has found its place as an active element in subject teaching, in breaks, in support teaching and in the transition to after-school time.

## The unfortunate scenario 2020

Danish schools have acted in very varying degrees upon the requirements of the latest school reform to introduce more exercise in all their year groups. Schools, of course, maintain that they are achieving the general aim to provide just under an hour's activity per day, and they point to the fact that PE is now an examination subject in the 9th year. Not all the country's municipalities, however, have formulated precise aims and visions for physical activity in their schools. At the same time, local administrative organs across the country are struggling to find ways for practice and development that actively contribute to achieving the targets that have been set up for this area. Furthermore, school management, school boards and local sports associations do not in this respect always prove to be willing partners. The pupils are the real losers. They are not reaping the many rewards that a balanced policy on physical activity and education could provide for their learning, their health and their well-being.

## How to promote the ideal 2020 scenario?

*In the first place* the relevant decision-makers should be constantly reminded that human movement is good for body and soul. For many years the country's schools have been obligated to formulate aims to increase children's motivation for and enjoyment of physical activity – both as an aim in itself and, even more importantly, as a way to strengthen their health, general development and well-being. With the new school reform, physical activity moves even more to the fore as part of the structured activities and learn-

ing offered by schools. In this regard it is important to stress that children and young people who go to schools that have well-planned strategies and initiatives in the area of exercise and physical education delivered by competent professionals may very well have better conditions for academic performance. Thus, recent research suggests that physical activity and aerobic fitness levels are associated with improved cognitive function and academic attainment – and it does not appear that time ‘taken away’ from academic subjects, to make room for physical activities, has a negative effect on the academic ability of children and young people. In other words: It’s not a ‘zero-sum game’. Actually it is more likely that, for instance, academic performance and physical activity work in a synergistical manner. At the same time it has, over the past decades, become ever more evident that regular physical activity contributes independently to strengthen both general well-being and specific aspects of physical, psychological and social health in children and young people.

*In the second place* the many suggestions and specific attempts to involve the major sports organizations and local clubs in the delivery of school sport and exercise activities should be further expanded and improved upon. Collaboration between schools and sports associations is nothing new in Denmark. What is new, however, is the focus and weight that are attached to more formalized public–voluntary partnerships on the delivery of school-based physical activity and, even, PE. It is likely that, at the level of the municipality and the individual school, we will see agreements in greater numbers and broader in nature being entered into between public and voluntary parties in the area of school sports. The latest extensive Danish mapping of PE as a subject (the so-called SPIF report) shows that collaboration between schools and sports associations increased during the period 2004-2011. This development is certainly to be welcomed. At the same time it is clear that there is a whole raft of challenges associated with this – among them securing up-to-date teaching and learning strategies delivered by teaching staff that receives necessary supervision and are engaged in continuing professional development. Committed and efficient school management is, also in this instance, crucial in order to consolidate well-working public–voluntary partnerships that contribute with the greatest effect to the end goal of creating a school day in which physical activity is integrated as a usable learning and health promoting tool.

*In the third place* involved teaching staff must receive continuous opportunities for targeted competence building and professional sparring. This kind of further training must (naturally) be carefully prepared and should

be tailored to the needs, wishes and challenges experienced by well-defined target groups. More than structured competence development is needed, however, if knowledge and qualification are to be increased. Collaborative structures, connecting professional groups and crossing municipal boundaries and ministerial areas of responsibility, must also be established – in order to reap full value of the further involvement and acquired skills of the teaching staff in relation to physical activity and PE. It is a matter of building up a shared professional mind-set as regard efficient ways to design a physically active school setting for a diversified group of pupils. The contribution of physical activity to children's well-being and learning performance is conditional on the context and especially the social climate generated by teachers and other significant adults. For example, positive experience with physical activity will form part of a "virtuous cycle" and improve self-concept and overall well-being, while negative experiences will transform the relationship to a "vicious cycle" through which the person becomes more and more disaffected in relation to physical activity. PE and physical activity as part of recess and during other curricular activities have the potential to strengthen the psychosocial well-being of children and adolescents. However, research shows that too often the experiences have the opposite effect on subgroups of students. These students see no purpose in the activities, fear failure and experience destructive relationships. In Denmark, a recent survey of PE in public schools has documented a polarization of students as "sportive students" and "non-sportive students". The "sportive students" dominate PE and outperform the "non-sportives". Thus, there is a need for further development of approaches to integrate physical activity and movement competences in the school day in ways that include all students and promote their well-being. One obvious starting point is the long tradition, in both the Danish school system and teacher training programs (bachelor of education), with adhering to the principles of differentiated learning. Building on well integrated strategies to differentiate education according to students' needs, educators can be further qualified to carry out formative assessment, differentiate instruction and activities and support student motivation for and engagement in school based physical activity.

*In the fourth place* we need to remember that the links between sport, exercise, well-being, health and learning are by no means solely about keeping the individual, in this case the child/young person, fit and in good physical condition. A broad-based promotion of health, of which physical activity can form a part, covers '...the process of enabling people to increase control over their health and its determinants, and thereby improve their

health', to quote WHO's ideal definition of health promotion. In schools it is, then, a matter of reinforcing and focusing on individual, social and structural resources, which can support and develop children and young people in their everyday life. It goes without saying that a task such as this cannot be achieved within a single subject area such as PE. It is one that has to be a matter for the whole school in close cooperation with parents, the local community and policy makers at local, regional, national and, even, international level.

The 21st century version of the link between physical activity, health, well-being and learning may well end up adding an increased recognition of – and thereby increased space and time for – bodily movement and physical activity in that part of the daily life of children and young people that is occupied by the time just before, during and immediately after the school day. At the center of this development stands that segment of the school's teaching staff that has special professional competence and interest in matters related to physical activity. Whether these members of staff are called PE teachers and whether they will have a particular subject, i.e. PE, as a primary point of departure is difficult to say. In time they will perhaps form part of the school's health promotion team, whose overall mission was so aptly expressed back in the 1950's by L.M. Jakobsen, the then chairman of the school medical staff in Denmark:

There is scarcely any other teacher who, as the PE teacher, has the opportunity to direct developments towards what presents itself as the goal itself...: that the whole child physically, psychologically and socially is allowed to grow and to mature... and thereby is given better opportunities and an easier access to take their place in society at large when life outside school calls them.

The sentence may well have echoes of the olden days and lack finer shades of meaning, for example as regards how the school can contribute to strengthening the individual child's and children's acquisition of knowledge and experience in order to support their build-up of competencies for both education and life. But the ideal target and intention for the school's efforts in the broad area of well-being and health today bear a strong resemblance to that outlined by Jakobsen nearly 60 years ago.

Physical activity, whether as a subject or as a phenomenon, has much to offer in this respect - a point worth stressing at a time when the most sweeping school reform for decades in Denmark is being turned into reality.

## Selected references

- Bailey, R., Hillman, C., Arent, S., & Petitpas, A. Physical Activity: An Underestimated Investment in Human Capital? *Journal of Physical Activity & Health*. 2013, 10(3), 289-308.
- Biddle, S., & Asare, M. Physical activity and mental health in children and adolescents: a review of reviews. *Br J Sports Med*. 2011, 45(11), 886-895.
- Bonell C, Humphrey N, Fletcher A, Moore L, Anderson R, Campbell R. Why schools should promote students' health and wellbeing. *BMJ*. 2014, May 13;348.
- Braemer, M. Frivillige skal ikke udhule velfærden. *Ugebrevet A4* (2013, 16. juni).
- Bugge A & Froberg K (eds.). *Forsøg med Læring i Bevægelse*. Danish Ministry of Education, 2015.
- Chaddock L, Pontifex MB, Hillman CH & Kramer AF. A review of the relation of aerobic fitness and physical activity to brain structure and function in children. *Journal of the International Neuropsychological Society*. 2011, 17: 975-85.
- Kulturministeriets Udvalg for Idrætsforskning. *Fysisk aktivitet og læring - en konsensuskonference*. Kunststyrelsen, 2011.
- Martin A, Saunders DH, Shenkin SD, Sproule J. Lifestyle intervention for improving school achievement in overweight or obese children and adolescents. *Cochrane Database Syst Rev*. 2014, Mar 14;3.
- Pedersen BK, Andersen LB. *Fysisk aktivitet – håndbog om forebyggelse og behandling*. Sundhedsstyrelsen, 2011.
- Rasberry CN, Lee SM, Robin L, Laris BA, Russell LA, Coyle KK, Nihiser AJ. The association between school-based physical activity, including physical education, and academic performance: a systematic review of the literature. *Prev Med*. 2011, Jun;52 Suppl 1:S10-20.
- Sandford, R. A., Armour, K. M., & Warmington, P. C. Re-engaging disaffected youth through physical activity programmes. *British Educational Research Journal*. 2006, 32(2), 251-271. doi: 10.1080/01411920600569164
- Schwartz P. *The Art of the Long View: Planning for the Future in an Uncertain World* Paperback. Crown Business, 1996
- Singh A, Uijtdewilligen L, Twisk JW, van Mechelen W, Chinapaw MJ. Physical activity and performance at school: a systematic review of the literature including a methodological quality assessment. *Arch Pediatr Adolesc Med*. 2012, Jan;166(1):49-55.
- Skovgaard, T. Skole og Bevægelse i 2020. *MOVE*. 2015, 1(1), 44-49.
- Verburgh L, Königs M, Scherder EJ, Oosterlaan J. Physical exercise and executive functions in preadolescent children, adolescents and young adults: a meta-analysis. *Br J Sports Med*. 2014, Jun;48(12):973-9.
- Von Seelen, J. & Munk, M. *Status på Idrætsfaget 2011*. Haderslev: KOSMOS, 2012.
- WHO. *The Bangkok Charter for Health Promotion in a Globalized World*. Bangkok, 2005.