

28 May 2019

Dr D Lloyd  
Cadeirydd  
Gweithgarwch Corfforol ymhlith Plant a Phobl Ifanc  
National Assembly for Wales  
Cardiff

Dear Dr Lloyd,

Having read the Welsh Government response to the Physical Activity of Children and Young People report, I feel that I must write to clarify some issues in relation to the comments.

The response suggests that current mechanisms are addressing issues of children's motor skill development. However the research evidence does not support this.

Firstly in relation to the Foundation Phase it states:

*'The Foundation Phase curriculum ensures that children's physical development, enthusiasm and energy for movement, including Fundamental Motor Skills, are continually promoted by providing them with opportunities to use their bodies effectively by encouraging spatial awareness, balance, control and coordination and developing motor and manipulative skills. In the Foundation Phase, children are encouraged to enjoy all physical activity and the curriculum is designed to enable children to move around while they are learning both indoors and outdoors throughout the school day'*

Whilst this is in the curriculum documentation, the evidence from our research which studied the foundation phase and its contribution to physical literacy, shows that pupils are NOT developing their fundamental motor skills (Wainwright et al., 2016; 2018). Our research was conducted in selected schools that were identified through inspection as delivering high quality Foundation Phase. Even in these schools where pupils were active in their learning, using the outdoors on a daily basis and staff were highly skilled foundation phase practitioners pupils were not progressing in all of their motor skills. The staff did not have the required training to teach the pupils the skills that we know they will not learn through play alone. This was why we introduced Successful Kinaesthetic Instruction for Pre-Schoolers in Wales (SKIP-Cymru), specifically to plug this gap. Therefore, contrary to the implications of the response, the Foundation Phase alone **does not** address the development of children's FMS.

With regards to the new curriculum the response states:

*'Considerable consideration has been given to children's physical development in the new curriculum. The Health and Well-being Area of Learning and Experience (AoLE) has been developed around progression in learning, with significant consideration given to physical development. The draft AoLE guidance has been extensively informed by Physical Literacy experts in this area. It will provide the framework from which practitioners can select the most appropriate experiences to support a child's learning, throughout the 3-16 continuum of learning.'*

In the new curriculum there is one AoLE out of the six which addresses the issue of health and well-being. Within this one AoLE there are five 'What matters statements' and only **one** of these addresses physicality.

Practitioners who have no training in the motor development of children cannot ‘select the most appropriate experiences to support a child’s learning’ as they will not know what or how to do this.

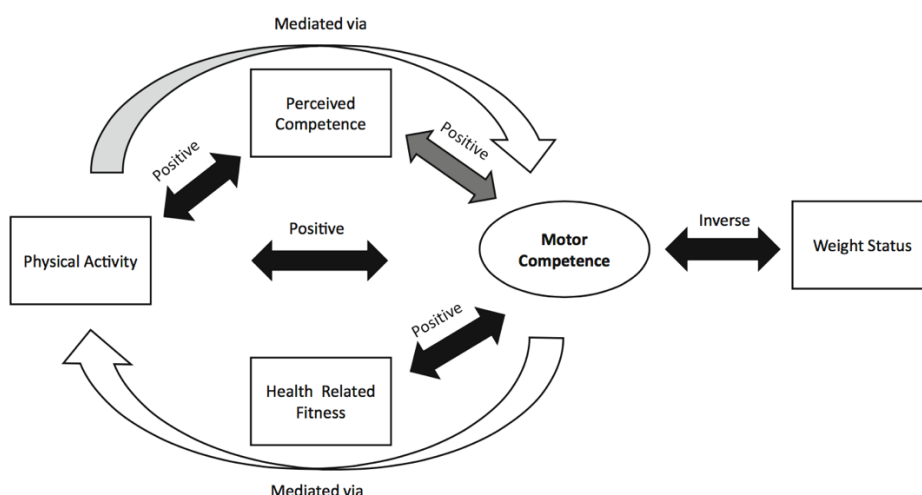
The response also highlights existing resources in schools:

*‘Existing resources developed by Sport Wales during the period of the PE and School Sport programme and the Physical Literacy Programme for Schools -for example, Play to Learn and Dragon Multi-Skills and Sport -provide a platform from which Fundamental Motor Skills can be developed, but also provide a more sustainable and transferable pedagogical model for Physical Education in the early years and into Key Stage 2’*

These resources were in existence when we conducted our research and were **not** enabling staff to develop pupils’ motor skills. It is also important to note that whilst these are good resources, without a good level of knowledge and understanding about how children learn to move, staff are unable to use them. In medicine tablets are not given to people without the knowledge of how they will address an illness, considerable training and expertise is required to know what and how to administer medication. Just giving teachers boxes of resources with a day or half a day of training does not enable them to support the motor development of children and we routinely find that teachers cannot even remember where the resources are when asked, let alone when they last used them. Resources are only as good as the expertise of the person using them and the evidence is quite clear that this form of professional development is ineffective (Chambers, 2006; Armour and Yelling, 2007).

The comment also states that ‘Play to Learn and Dragon Multi Skills provide a transferable and sustainable pedagogical model for physical education.’ These resources do not constitute a pedagogical model for physical education. There are many pedagogical models for application in physical education and each of them has an underpinning theme and is a highly complex combination of key features, learning outcomes, learner behaviours, pedagogical content knowledge, teacher behaviours and assessment strategies (Casey, 2012; Haerens et al., 2011; Seidentop, 1994; Williams and Wainwright, 2014a: 2014b). These pedagogical models are all underpinned by many years of research evidence. There is no evidence of any impact from Play to Learn or Dragon Multi Skills. However SKIP has over 20 years of published research demonstrating impact (Goodway et al., 2002; Goodway and Branta, 2003; Goodway and Robinson, 2006; Robinson and Goodway 2009; Goodway et al., 2015; and Famelia et al., 2018).

The growing research from across the globe is showing that we need to address motor competence in early childhood to change physical activity behaviours and weight status as the model below explains (Stodden et al., 2008; Robinson et al., 2015).



Of greatest concern is the impact on children in areas of socio-economic deprivation. There is a continuing decrease in children’s motor skills in these areas. Although the data sets are not large, post graduate studies measuring pupils’ motor skills in several regions in Wales are showing 100% of children in areas of low socio-economic status considerably delayed in their motor skill development. Worryingly they are not only delayed in the bottom quartile, they are all below the 16<sup>th</sup> percentile and you will be very aware of the long term health implications for these children if we do not act to address this. The original rationale for the development of SKIP was to address the developmental delays of pupils in areas of poverty in the USA and versions of SKIP have been shown from studies across the globe to do this. We are working to continue to develop this work

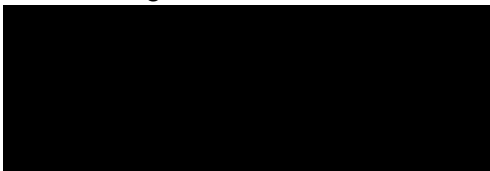
as much as we can and are currently advising on and supporting a large project in South Carolina working in early childhood centres and with parents in areas of deprivation where they are seeing similar developmental delays to those of children in Wales.

It is extremely disappointing that in Wales, where we have the highest childhood obesity in Europe and a third of children living in poverty, Welsh Government feels an appropriate response to the recommendations of the report is to quote the Foundation Phase curriculum, which published research shows does not develop the necessary motor skills. They also suggest that resources with no evidence base are a pedagogical model for physical education. By ignoring the evidence Welsh Government are in danger of failing the young children and families of Wales in particular in areas of deprivation where they are faced with a growing **crisis** of inactivity, poor motor development and rising obesity.

The Wales Institute for Physical Literacy at UWTSD would welcome the opportunity to further pilot the SKIP-Cymru work if Welsh Government are willing to support this, but a strategic approach to this work would of course be preferable.

I would like to thank the committee for their interest in and support for this crucial work in early childhood and hope that eventually we will be able to have the impact that is so desperately needed for families and young children in Wales.

Kind regards



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## References

- Armour, K., and Yelling, M., 2007. Effective professional development for physical education teachers: The role of informal collaborative learning. *Journal of teaching in Physical Education*. Vol. 26 (2) pp 177-200
- Casey, A. 2012. "Models-based Practice: Great White Hope or White Elephant?" *Physical Education and Sport Pedagogy* 17 (4): 1–17.
- Chambers, F., 2006, Teacher professional development, research into practice. Conference paper, July 2006.
- Famelia, R., Tsuda, E., Bakhtiar, S. and Goodway, J., 2018 Relationships Among Percieved and Actual Motor Skill Competence and Physical Activity in Indonesian Preschoolers. *Journal of Motor Learning and Development*. 6, S403-S423.
- Humeric Altunsoz, I. & Goodway, J. D. (2015). SKIPing to Motor Competence: The Influence of Project Successful Kinesthetic Instruction for Preschoolers on Motor Competence of Disadvantaged Preschoolers. *Physical Education and Sport Pedagogy*. DOI: 10.1080/17408989.2015.1017453.
- Goodway, J.D., Brian, A., Chang, S.H., Famelia, R., Tsuda, E., & Robinson, L. (2013). Promoting Physical Literacy in the Early Years Through Project SKIP. *International Council of Sport Science and Physical Education*. Bulletin 65.
- Robinson, L. E., & Goodway, J. D. (2009). Instructional climates in preschool children who are at risk. Part I: Object-control skill development. *Research Quarterly for Exercise and Sport*, 80(3), 533-542.
- Goodway J. D., & Robinson, L. E. (2006). SKIPing toward an active start: Promoting physical activity in pre-schoolers. *Beyond the Journal: Young Children*, 61(3), 1–6.
- Goodway, J.D, & Branta, C.F. (2003). Influence of a motor skill intervention on fundamental motor skill development of disadvantaged preschool children. *Research Quarterly for Exercise and Sport*, 74(1), 36-46.
- Goodway, J. D., Rudisill, M. E., & Valentini, N. C. (2002). The influence of instruction on the development of catching in young children. *Motor Development: Research and Reviews*. Volume 2, 96-119.
- Haerens, L., D. Kirk, G. Cardon, and I. De Bourdeaudhuij. 2011. "Toward the Development of a Pedagogical Model for Health-Based Physical Education." *Quest* 63: 321–338.
- Robinson, L. E., Stodden, D. F., Barnett, L. M., Lopes, V. P., Logan, S. W., Rodrigues, L. P., & D'Hondt, E. (2015). Motor Competence and its Effect on Positive Developmental Trajectories of Health. *Sports Medicine*, 45(9), 1273-1284
- Seidentop, D. 1994, Sport Education: Quality PE through positive sport experiences. *Human Kinetics*
- Stodden, D., Goodway, J., Langendorfer, S., Robertson, M., Rudisill, M., Garcia, C., and Garcia, L. (2008) 'A Developmental Perspective on the Role of Motor Skill Competence in Physical Activity: An Emergent Relationship', *Quest*, 60(2), pp. 290-306.
- Wainwright, N., Goodway, J., Whitehead, M., Williams, A. and Kirk, D. (2016) The Foundation Phase in Wales – A play-based curriculum that supports the development of physical literacy. *Education 3-13* Vol 44(5) pp 513-524
- Wainwright, N., Goodway, J., Whitehead, M., Williams, A. and Kirk, D. (2018) Laying the foundations for physical literacy in the Foundation Phase in Wales: The contribution of the Foundation Phase to the development of Physical literacy. *Physical Education and Sport Pedagogy* Vol 24(4)
- Williams, A. and Wainwright, N. (2014a) A new pedagogical model for adventure in the curriculum: Part 1 – advocating for the model. *Journal of Physical Education and Sport Pedagogy*. Vol 21(5) pp 481-500.

Williams, A. and Wainwright, N. (2014b) A new pedagogical model for adventure in the curriculum: Part 2 – outlining the model. *Journal of Physical Education and Sport Pedagogy*. Vol 21(6) pp 589-602.