

## Skilled children do become more active adolescents!

It is a common belief (especially amongst those involved in physical education) that children who are skilled in fundamental motor skills will be more likely to be fit and active throughout life. However until now there has not been evidence behind this assumption. The aim of the recent Australian Physical Activity and Skills (PASS) study was to see if children who were able to perform fundamental movement skills, such as catching kicking and jumping, were more likely to become active and fit adolescents with a better 'perceived sports competence'.

The PASS followed up participants of a primary school intervention (Move It Groove It - MIGI) to improve motor skill proficiency. Participants were initially assessed in 2000 as part of the intervention when children were at elementary school (average age of 10 years). In 2006/07, as 16 year old adolescents, they were re-assessed for motor skill proficiency and also measured for physical activity level (Adolescent Physical Activity Recall Questionnaire), cardiorespiratory fitness (Multistage Fitness Test) and perceived sports competence (Physical Self-Perception Profile).

From 928 original participants in 2000, 481 were located in 2006/07 in 28 schools and 276 (57%) were assessed with at least one follow-up measure. The results showed that children who had better object skill proficiency (catching, kicking and throwing) were more active and fit as adolescents with a higher perceived sports competence. Interestingly, children who were locomotor proficient (i.e. good at hopping, jumping and side galloping) were no more active or fit as adolescents. This study shows that teaching children motor skills can have an important influence on subsequent positive health-related behaviours and outcomes. This is something physical education educators have known intuitively but now there is the evidence to be able to back it up. For more information on the PASS study there are several key publications listed below.

1. Barnett LM. Catch Kick and Throw: Motor Skills and Health. *ACER (Australian Council for Educational Research)*. 2009: March Volume 8.
2. Barnett LM, van Beurden E, Morgan PJ, Brooks LO, Beard JR. Childhood motor skill proficiency as a predictor of adolescent physical activity. *J Adolesc Health*. 2009;44(3):252:259.
3. Barnett LM, van Beurden E, Morgan PJ, Brooks LO, Beard JR. Does childhood motor skill proficiency predict adolescent fitness? *Med Sci Sports Exerc*. 2008;40(12):2137-2144.
4. Barnett LM, Morgan PJ, van Beurden E, Beard JR. Perceived sports competence mediates the relationship between childhood motor skill proficiency and adolescent physical activity and fitness: a longitudinal assessment. *Int J of Beh Nut and Phys Act*. 2008;5(40).
5. Barnett LM, van Beurden E, Morgan PJ, Brooks LO, Zask A, Beard JR. Six year follow-up of students who participated in a school-based physical activity intervention: a longitudinal cohort study. *Int J Beh Nut Phys Act*. 2009;6(48).