

PRE-SCHOOL EDUCATION

Learning is child's play

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FOR THE STRAITS TIMES

THE early years of an individual's life have a formative influence on his future development, even though they do not entirely determine it. As the saying goes: "Great oaks from little acorns grow."

A striking example is a recent observation by Singapore Youth Award 2006 winner, nanotechnology researcher Yeo Yee Chia: "A kid has a lot of questions but as people grow older, they become less and less inquisitive. Maybe I'm like a child because I've stayed inquisitive."

How can we best nurture children's talent? Ironically, it appears this is best done by not taking an instrumental view of childhood, but by letting children enjoy the precious few years when they are children. They should be allowed ample time to engage in spontaneous, undirected play, both by themselves and with other children.

In a 2007 article in the American Academy of Paediatrics, Dr K.R. Ginsburg wrote: "Play allows children to use their creativity while developing their imagination, dexterity, and physical, cognitive and emotional strength. Play is important to healthy brain development...Undirected play allows children to learn how to work in groups, to share, to negotiate."

Another expert, Mr S. Smilansky, writing in 1990, found that play was directly linked to a wealth of skills that are essential for academic success: better verbalisation, richer vocabulary, better problem-solving strategies, higher intellectual competence, more curiosity, greater empathy, better emotional and social adjustment, more innovation, more imaginative-ness, and so on.

Mr K. Hirsch-Pasek and Mr R.M. Golinkoff, writing in 2003, found that play teaches children to think "outside the box" and helps them cope with "divergent" problem-solving - that is, where

there are many possible ways to solve a problem.

A German news magazine, *Der Spiegel*, ran a report in 1997 comparing 50 play-oriented kindergartens with 50 academically-oriented ones in Germany. The children from the play-oriented kindergartens excelled over the others in every aspect - physical, emotional, social, and intellectual. The results were especially striking among lower-income children. The results were so compelling that Germany switched all its kindergartens back to being play-oriented.

Mr R.A. Marcon found in 2002 that children who had attended play-oriented pre-school programmes, in which child-driven activities predominated, performed better academically than those who had attended academic-oriented programmes.

The benefits seem to extend all the way into adulthood. Mr S. Brown, comparing the winners of the MacArthur "genius" award with individuals in prison, found in 1999 that the latter did not have a history of play in their lives whereas the former had a rich history of play from childhood onwards.

How does pre-school education in Singapore measure up from this standpoint? While there is a mix of play and academic instruction, it appears that the balance is tilted towards the latter. The Ministry of Education's homepage says pre-school education "includes learning activities that develop language and literacy skills, basic number concepts, simple science concepts, social skills, creative and problem solving skills, appreciation of music and movement and outdoor play".

An article by Ms N.D. Subaimi in *The Straits Times* in December 2007 was more specific. She quoted the owner of a Montessori school as saying: "At Primary 1, teachers expect children to know how to multiply, divide and even work out simple fractions."

Ms Lina Ong, founder of Babies Inc, an infant school, was reported as saying: "We're probably the only country in the



world that requires children to know how to spell and count before kindergarten."

A comparison with Finland - widely acknowledged to have an excellent education system, and identified by the World Economic Forum (WEF) as having the world's most competitive economy in

2006 - is illustrative. A recent working paper by Y.W. Yong, A. Chongvilaivan, and J.Y. Chew for the Singapore Centre for Applied and Policy Economics - from which I derived most of the quotations above - observed: "Whilst children in Singapore are expected to know their ABCs

and basic mathematics when they enter primary schools, children in Finland are expected to learn the basics of reading, writing, and mathematics only when they enter comprehensive schools (at age seven)."

Evidently, the highly play-oriented nature of pre-school education in Finland has not worked to its educational or economic disadvantage. In fact, the reverse is the case. The WEF has praised Finland's "culture of innovation".

Parental pressure is often cited as a factor in the demands kindergartens place on young children here. But parents are probably responding to what they perceive to be the "expected attainments" of children when they enter primary school. Ideally, there should be a gradual, seamless transition from kindergarten to primary school, with enough time for undirected play during the primary school years as well. However, this appears not to be the case, as a spate of recent newspaper articles and letters indicates.

One reader said his daughter had to take six year-end examinations in Primary 1. Another noted: "The children (in her son's Primary 1 class) get tons of homework, frequent tests, and, yes, a list of homework for the June holidays which include maths and English exercises, reading 10 story books, making a model of the school, producing a health booklet and writing a journal thrice a week."

Reporter Tan Dawn Wei of this newspaper reported: Nearly half (of 200 primary school pupils polled) said they felt weren't getting enough sleep each day, and homework and tuition were the top reasons they cited for turning in late. "Apparently the education authorities here think that lower primary pupils should get "at least eight hours" of sleep a day; while paediatricians recommend 10-11 hours. As Ms Tan observed, "sleep deprivation can affect a child's attention, memory, decision-making and creativity".

It would appear that the "Teach Less, Learn More" initiative announced a few years ago is not being adequately practised in schools. As MOE re-looks pre-school education in Singapore, it should also reduce the "expected attainments" at primary school entry, as well as the primary school workload, and ensure that there is a smooth, painless - and ultimately more productive - transition to primary school.

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