



# REVIEW

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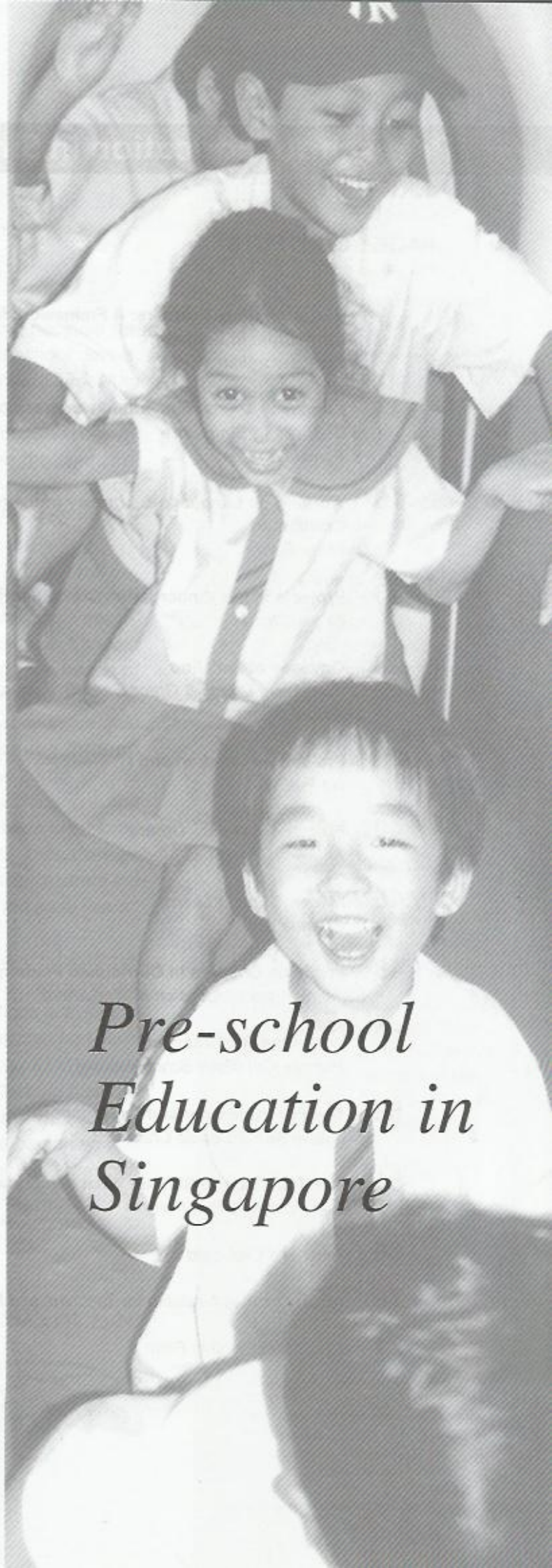
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## Pre-school Education in Singapore

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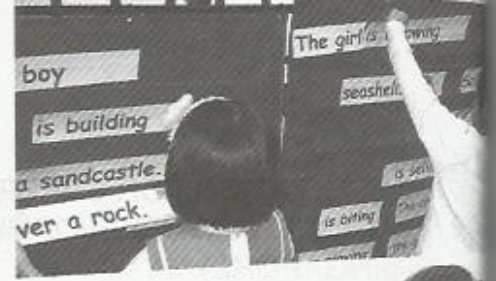
*Pre-school  
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Singapore*

# Pre-school Education in Singapore

Vol. 11 No.3

## PAGE CONTENTS

- 4** Nurturing Early Learners: A Framework for a Kindergarten Curriculum in Singapore  
*Pre-school Unit, MOE*
- 11** Numeracy & Environmental Awareness of Kindergarten Children in Singapore  
*Pamela Sharpe*
- 16** Working on Language & Literacy in the New Pre-school Curriculum  
*Linda Gan*
- 23** Projects in the Kindergarten Curriculum  
*Sylvia Chard*
- 28** Odyssey of the Mind  
*Jacqueline Chung & Grace Seet (St James' Church Kindergarten)*
- 35** Pre-school Children and IT  
*Ng Pak Tee*
- 40** From 'I' to 'We' to 'Others'  
*Angelina Tay (Soka Kindergarten)*
- 46** I Move, I Feel, I Learn!  
*Carmee Lim*
- 48** Involving Children in Curriculum Planning  
*Jenny Kwek (Ascension Kindergarten)*
- 55** Who's the Real Teacher?  
*Patricia Koh (Pat's School House)*
- 58** The PCF Kindergartens in Singapore  
*Julene Kee & Denise Chan*
- 61** The Transition to School: What's Important?  
*Sue Dockett & Bob Perry*
- 68** Teacher's Clipboard
- 70** ASCD Courses Available for Teachers and MOE Officers
- 71** ASCD Membership Form



## Editorial

The theme for this issue of the REVIEW came about because the spotlight was recently on education at the pre-school levels. January 2003 saw the launch of the new Pre-school Curriculum Framework, published by the Ministry of Education. For some time now, prior to this launch, anecdotal feedback and observations by teachers and parents concerned have noted that in the pursuit of academic excellence, a washback effect has made even the tender kindergarten years stressful for some children....for parents and teachers too!

What needs to be made clear to all is that the pre-school years are important in themselves for the nurturing of age-appropriate social, cognitive, literacy and numeracy skills. These early years should never be used to 'cram' a diluted P1 curriculum into the heads of 5-6 year-olds who are not yet developmentally ready for the curriculum of the primary school levels. The focus for these little pre-schoolers should always be **the wonder of learning through fun, play and discovery**, as demonstrated by some of the kindergartens featured in these pages. Good teaching practice abounds in Singapore. The curriculum framework serves to endorse and formalise such good practices. These articles by professionals and specialists in the field of pre-school education help illustrate the on-going efforts to continually improve education in the early years.

The next issue will look at the way various schools and educational institutions at all levels have been trying to **nurture an entrepreneurial mindset** in our young through various activities in schools. We would also like to look at how **Life Sciences** has been given greater attention in the last two years. While the REVIEW has focused discussion mainly on curriculum matters, it would also like to gather some viewpoints on what makes a **reflective or thinking teacher**. We would like to invite teachers, both the beginning and the seasoned, to share their experiences on how they see their growth and development as teachers whilst taking the learning journey on a daily basis with their pupils. Happy reading and write to us soon!

Soo Kim Bee



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# Nurturing Early Learners: A Framework for a Kindergarten Curriculum in Singapore

*Pre-school Unit, MOE*

## **Background: The Kindergarten Landscape**

The pre-school scene in Singapore is very diverse. Various community and private organisations are already providing a variety of pre-school education programmes to cater to different needs. This provides parents with a wide choice of pre-school education models to select according to parents' personal inclinations and preferences. The MOE would like the private

operators to continue to operate pre-school centres. However, it



does not mean that the MOE would let the quality of pre-school education slide.

Since 1999, in response to concerns raised through the press, the Government has been looking into improving the quality of pre-school education in Singapore by focusing on areas where we can achieve high leverage, while keeping the provision of

Desired outcomes for:		
Pre-school education	Primary education	Secondary education
By the end of their education in the kindergarten, children should:	At the end of primary school, pupils should:	At the end of secondary school, students should:
<ul style="list-style-type: none"> <li>• know what is right and what is wrong</li> <li>• be willing to share and take turns with others</li> <li>• be able to relate to others</li> <li>• be curious and able to explore</li> <li>• be able to listen and speak with understanding</li> <li>• be comfortable and happy with themselves</li> <li>• have developed physical co-ordination and healthy habits</li> <li>• love their families, friends, teachers and school</li> </ul>	<ul style="list-style-type: none"> <li>• be able to distinguish right from wrong</li> <li>• have learnt to share and put others first</li> <li>• be able to build friendships with others</li> <li>• have a lively curiosity about things</li> <li>• be able to think for and express themselves</li> <li>• make pride in their work</li> <li>• have cultivated healthy habits</li> <li>• love Singapore</li> </ul>	<ul style="list-style-type: none"> <li>• have moral integrity</li> <li>• have care and concern for others</li> <li>• be able to work in teams and value every contribution</li> <li>• be enterprising and innovative</li> <li>• possess a broad-based foundation for further education</li> <li>• believe in their ability</li> <li>• have an appreciation for aesthetics</li> <li>• know and believe in Singapore</li> </ul>

pre-school education in the hands of the private or community sector. Some areas of high leverage were identified, and this article will concentrate on two of these areas: the delineation of the Desired Outcomes of Pre-school Education, and the development of a curriculum framework.

### ***Desired Outcomes of Pre-school Education***

In year 2000, the Ministry of Education announced the Desired Outcomes of Pre-school Education. These are in alignment with the Desired Outcomes of Primary Education, so as to ensure continuity of objectives and a smooth transition in learning from the pre-school years into the early primary school years.



These Desired Outcomes were formulated carefully, in consultation with professionals and practitioners. They spell out what children should have acquired at the end of their kindergarten education. It is a set of outcomes reflecting values, attitudes and skills. The emphasis is on the whole development of the child, focusing especially on his ability to relate to others, to communicate, to have an intrinsic interest in learning, and on his physical development.

We have been asked many times, how does stating the

Desired Outcomes helps in changing mindsets and practice. Our hope is that, in stating the Desired Outcomes, all the stakeholders in pre-school education: parents, teachers and resource distributors will recognise that **child development in the pre-school years is important in itself.**

We should not be preparing children in the pre-school years for primary school, by anticipating and prefiguring the primary school curriculum. The pre-school years are crucial in themselves.





Cognitive skills that will help children to read and write independently and number concepts are important, and are not to be overlooked in the pre-school years. But they should not displace the development of broader cognitive skills among young children, such as the ability to ask questions, to begin thinking for themselves, to explore and to sort out puzzles. They

should also not be pursued to the detriment of other domains that are equally important in the early years, in the areas of a child's moral, social, emotional and physical development.

Some parents have the perception that, in order to prepare children from primary one, pre-schoolers need to go through a diluted version of the primary one syllabus. If children are expected to master some of the Primary 1 syllabus by day 1 of school, this will only raise the bar for children before they are ready for it. It does not prepare them to clear greater heights as



they grow older. Premature learning of the Primary 1 syllabus does not translate into being able to learn better when children get to their later primary years. Children who are ready for school are children who are eager to learn. They are confident of themselves, and willing to persevere. They are able to communicate easily with their teachers and classmates, make friends and know what it means to wait their turn and share what they have.

### ***The Curriculum Framework***

The second initiative for uplifting the quality of kindergarten education is the development of a curriculum framework. Not a few of our kindergartens tend to be too focused on the 3Rs, are too didactic in their approach to teaching, and put their children through repetitious exercises and worksheets.



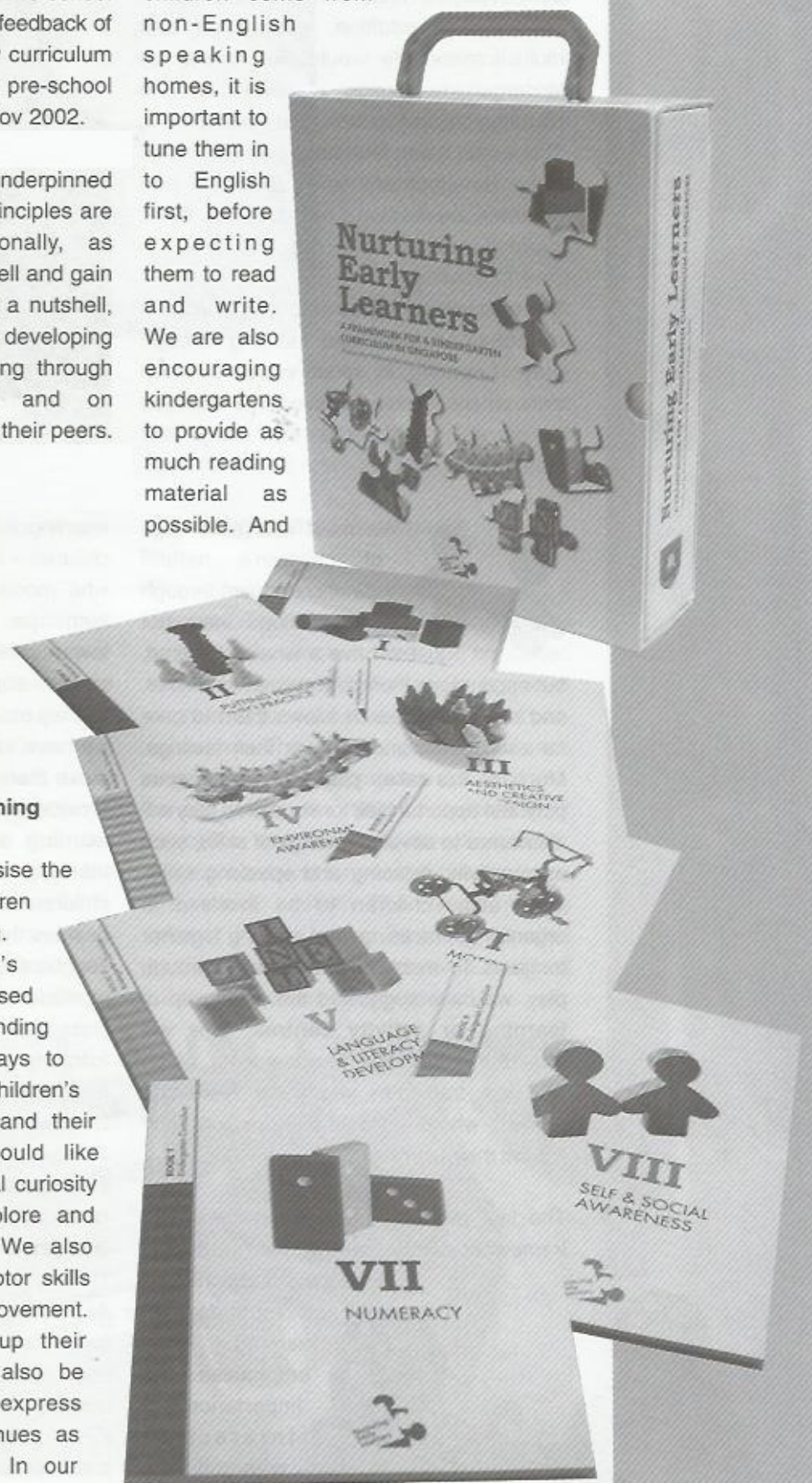
The MOE curriculum framework is built upon the Desired Outcomes of Pre-school Education and incorporates the feedback of pre-school educators. This new curriculum framework was field tested at pre-school centres between Jan 2001 to Nov 2002.

The curriculum framework is underpinned by 6 key principles. These 6 principles are widely recognised internationally, as essential for children to learn well and gain confidence at an early age. In a nutshell, the new curriculum focuses on developing the child holistically, on learning through play and experimentation, and on interaction with the teacher and their peers. The principles are:

- **Holistic approach**
- **Integrative learning**
- **Children as active learners**
- **Adults as interested supporters**
- **Interactive learning**
- **Play as a medium for learning**

The first two principles emphasise the **holistic** development of children through **integrated** learning. Every aspect of a child's development should be recognised and valued. We are recommending to pre-school practitioners ways to build up, nurture and develop children's confidence and self-esteem, and their inter-personal skills. We would like teachers to tap on their natural curiosity and encourage them to explore and discover their environment. We also need to develop children's motor skills and sense of balance and movement. This is important to build up their confidence. Children should also be given opportunities to express themselves in as many avenues as possible, besides language. In our

Singaporean context, where many children come from non-English speaking homes, it is important to tune them in to English first, before expecting them to read and write. We are also encouraging kindergartens to provide as much reading material as possible. And





pre-mathematical understandings have to be developed first, before mathematical concepts of addition, subtraction and multiplication. We would like to see all kindergartens engage in developing and nurturing children in their total development. This would mean time and space for motor skills development and aesthetic and creative expression, besides the other learning areas.

The next two principles emphasise children as **active** learners and learning through **play**. Learning is most effective when children are actively involved and engaged in carrying out tasks that they find meaningful.



We must take advantage of children's natural inclination to learn through play. Play allows them not just to have a whale of a time, but encourages them to discover, take risks, and make mistakes. It allows them to care for each other, and express their feelings. Much of this takes place in spontaneous play. But opportunities for structured play will also serve to develop a range of skills, such as creativity, listening and speaking skills. They allow children to be involved in organising, practising, and working together for goals. To enable children to learn through play, we have suggested the setting up of **learning or activity centres**. This will require a radical view of classrooms, which will now transform into richly resourced corners where children can explore and extend their learning.

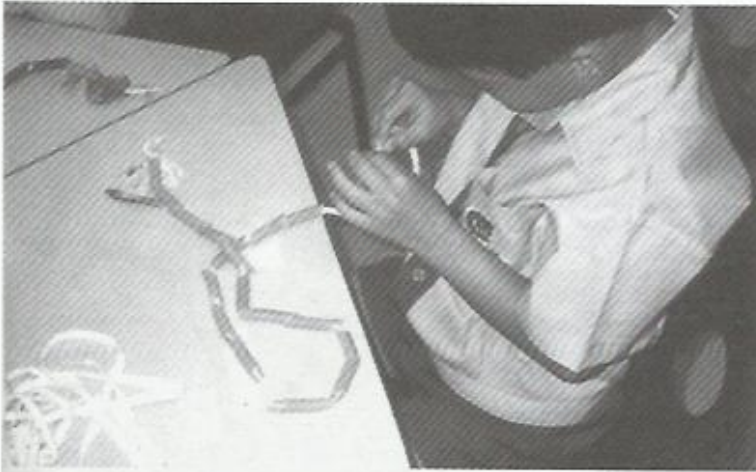
The last two principles in the curriculum framework emphasise the role of adults – teachers and parents – as supporters in learning. They emphasise the importance of **interaction with children**.



The role of the adult as a mediator of learning – making learning accessible to children – is so important. We are the ones who model for them the vocabulary and language, the attitudes and feelings towards things and concepts. We can act as their support, scaffolding their progress as they move from one level to another. But we have to be observant to know when to move them to the next level, or whether to provide more examples and support for learning at the same level. Interactive learning also takes into consideration children's interactions with their peers, besides their interactions with the teacher. Teachers will find it difficult to do a good job at mediating the learning for children if the class size is too big. We recommend the following class sizes for the different age groups: for nursery, 15 children; for K1, 20 children, and for K2, 25 children.

### ***Reflections and thoughts on designing the curriculum framework***

As we were developing the curriculum framework, we had to grapple with the perennial question faced by curriculum developers: to prescribe, or to describe. Finally, the decision was made against prescription for the following reasons:



book on each learning area (i.e. aesthetics and creative expression, environmental awareness, language and literacy, motor skills development, numeracy, self and social awareness), with brief explanations of the importance of each area in the holistic curriculum, as well as

- We should allow for diversity in pedagogical orientations and philosophies.
- Prescription would stifle teachers' professionalism – it would only offer a crutch that teachers would depend on heavily.

The result was to publish a curriculum framework, stating the principles of pre-school education. The target audience was all stakeholders, which included parents as well as the professionals (teachers and principals). The language therefore, could not include jargon and academic references. However, we were confident that the professionals would recognise that the principles are grounded in familiar and well-founded developmental theory by well-known educationists and psychologists, such as Froebel, Dewey, Vygotsky, Piaget and Gardner.

The next issue we had to grapple with was that the principles covered such broad grounds, which meant that they were open to very diverse interpretations. We then embarked on writing a series of books to give suggestions to the practitioner on putting the principles into practice. The series included a

ideas for practitioners to design lessons and activities. These suggestions were based on lessons we had planned and used for a pilot research programme.

### *Challenges that lie ahead*

The education of young children is a responsibility that should not be shouldered by educators alone. It takes the concerted effort of various stakeholders to ensure a bright start for our future generation of preschoolers. The MOE's public statement concerning the importance of the pre-school years, the desired outcomes of education, and the curriculum framework, is a mere catalyst for positive change in the pre-school sector. The Government's interest in the sector has been fuelled partly by the need to improve the quality of existing education programmes.





The fact that the MOE has published a recommended curriculum framework cannot in itself be representative of our nation's paradigm shift. Real reform can only occur when quality professional development programmes are firmly put in place to produce able, adaptable and reflective pre-school educators; when kindergartens are confident in their partnership with parents, and able to tap on community resources effectively. Both

public and professional perceptions of pre-school education will have to change – our society has to begin respecting and valuing children for who they are and what they are capable of achieving at various stages of their lives.

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# Numeracy & Environmental Awareness of Kindergarten Children in Singapore

Pamela J. Sharpe



## **Introduction**

*This paper highlights some of the major features of the new kindergarten curriculum, in particular the learning areas of numeracy and environmental awareness. In doing so, some reference will be made to the curriculum framework with its emphasis on the desired outcomes for preschool education and the six key principles upon which the curriculum is based. It will be evident that a more interactive, holistic approach to active learning has been adopted in the overall integrated design, with a supportive learning approach provided through opportunities for structured play, observation, investigation, and discovery. This new approach to learning is evident in the provision for six areas of learning experience: language and literacy, numeracy, creative and aesthetic awareness, environmental awareness, self,*

*social, and health awareness, and motor skills development.*

## **Background to the content and organisation**

Until quite recently the aims of pre-school have focused on bilingualism and preparation for primary one, with the content of kindergarten classes in pre-schools linked to an academic-type curriculum, typically stressing a subject centred, teacher directed, and achievement-orientated environment.

Individual childcare centres, catering to children, from below 2, to 6 years of age including children in kindergarten classes aged between 4 and 6 years, have been encouraged to maintain their own goals and philosophies about the care and education of children and are required to follow guidelines provided by the Ministry of

Community Development and Sport for licensing purposes.

The Ministry of Education, licenses kindergartens, monitors the physical standards and is responsible for the registration of teachers. However, it does not plan to assume total responsibility for kindergarten education, which continues to be provided independently by the private sector and community groups. Kindergartens have been free to maintain their own goals and philosophies about the care and education of young children and until the recent publication of the new Pre-school Curriculum Framework (2003), the Ministry of Education has provided curriculum guidelines for the education of kindergarten children between the ages of 3 and 6 years.

During the period January 2001 to November 2002, the Ministry of Education initiated a pilot project with early childhood experts from the National Institute of Education, to ascertain how this provision could be improved. The project focused on features such as the desired outcomes of pre-school education, the design of a new

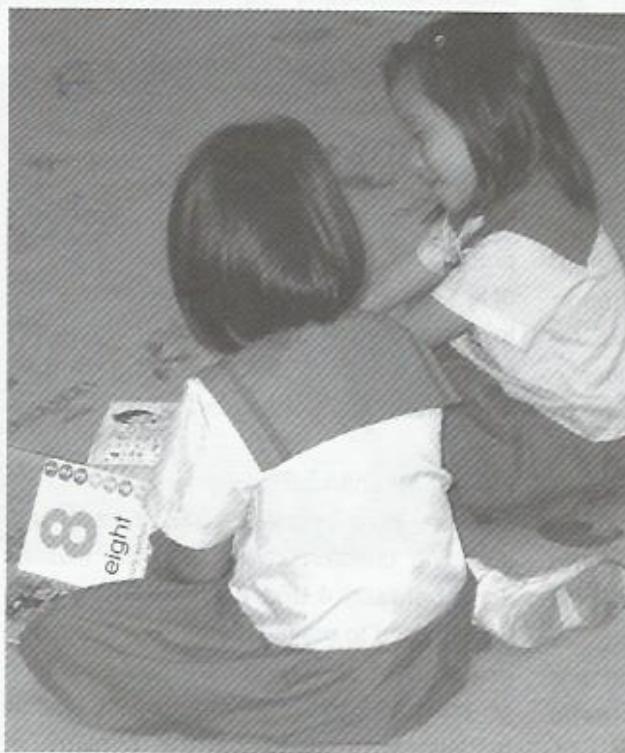
curriculum framework, the improvement of teacher quality and regulatory quality. In addition, a longitudinal study is continuing into the benefits of the new curriculum for children's learning and development as they progress through primary school.

The pilot project aimed at improving quality pre-school provision in non-profit making centres and especially those catering to children from lower socio-economic and non-English speaking backgrounds. In addition, the pilot project involved around sixty pre-school teachers who received training at the National Institute of Education on the preparation of teaching resources and the delivery of the new curriculum to the children in the selected centres.

### ***The New Curriculum Framework***

In line with the policy of strengthening Singapore's human and social capital through its education system the purpose of pre-school education has been redefined to prepare children for life-long learning where global mindsets and strong national values will be nurtured. No longer is the focus on an academic curriculum with a stress on bilingualism to prepare children for primary school. Instead, children will experience a curriculum based on six principles, which aim to foster holistic development, and the desired outcomes of pre-school education have been identified for this purpose. Hence, by the end of their pre-school education children should:

- Know what is right and what is wrong
- Be willing to share and take turns with others
- Be able to relate to others
- Be curious and able to explore



- Be able to listen and speak with understanding
- Be comfortable and happy with themselves
- Have developed physical coordination and healthy habits
- Love their friends, families, teachers, and school.

Provision is made in the curriculum for experiences in areas of:

- Aesthetics and creative awareness
- Language and literacy
- Motor skills development
- Numeracy
- Environmental awareness
- Self, social and health awareness



### **Curriculum experiences – numeracy**

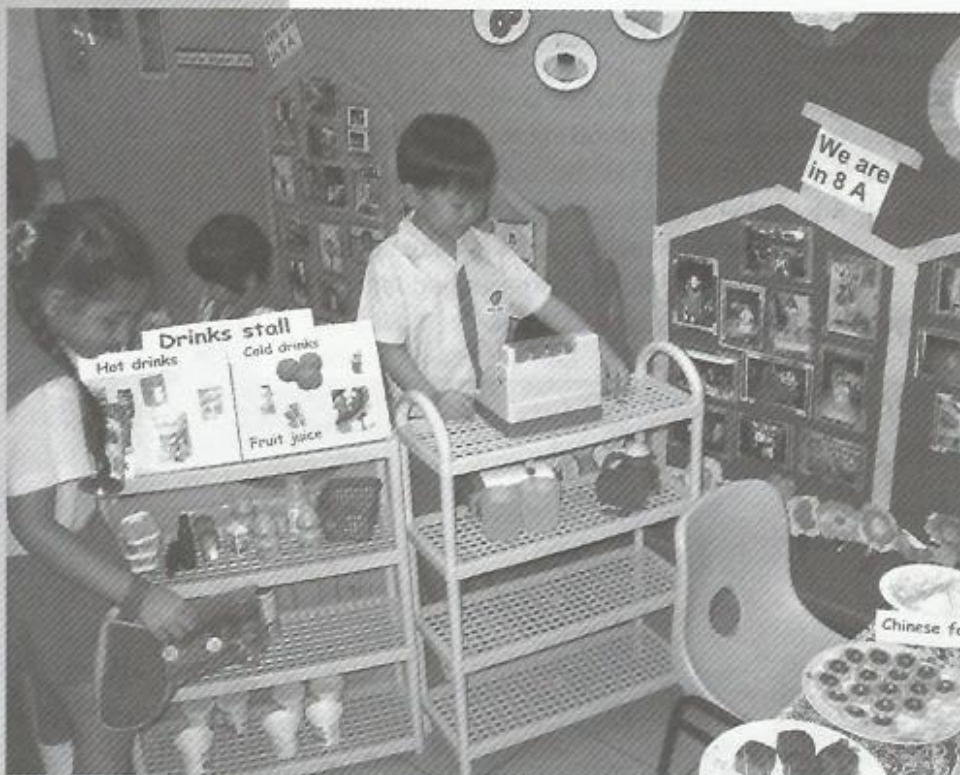
The term “numeracy” is used to describe the processes involved in using numbers in ways that relationships and connections are made, and in awareness of a system of signs and symbols in real-life situations, and when children are engaged in mathematical activities.

The teaching approach is integrated providing opportunities for meaningful interaction and play across six curriculum areas. Children experience both large and small group as well as individualized activities. Teachers are encouraged to be supportive in providing for children’s holistic development and learning and development and to monitor their aural and oral skills, social skills, and creative and problem solving skills. Childcare centres and kindergartens are encouraged to follow the new curriculum.

The new curriculum framework provides the basis for the teachers’ handbooks and is published in the form of an introductory booklet with links to guidelines for implementing the curriculum: Putting Principles into Practice. Each of the six handbooks for teachers, correspond to each of the six areas of experience (Ministry of Education, 2003). Features of the development of two of these areas will be described in more detail here.

In observing responses of some kindergarten children to the original numeracy syllabus (Sharpe 2002), it was observed that most children were conditioned into the completion of worksheets after instruction and were unable to transfer any learning to the same tasks when worksheets were replaced.

Most activities in the workbooks and worksheets required the completion of written tasks where instructions were vague and where teachers assumed the role of explaining the requirements of the worksheets rather than teaching and guiding emerging mathematical understanding. For example, children frequently miscounted when asked to count and give or share a number of objects. They confused ordinal numbers with cardinal numbers: when asked for 1st, 2nd and 3rd, children often described order in terms of numbers 1, 2 and 3. The “third” object was often seen as the “last” even when there were more than 3 objects. “Next” and “last” were often confused.



Children experienced great difficulties with the use of coins. For most of the children in the study, all coins were assumed to be one cent, where 50 cents were seen as the same value as 50 dollars. Whilst many children could identify coins they couldn't combine them to buy items or know how much change would be expected.

Manipulating numbers and handling coins involve the same kinds of part-whole relationships and combinations with whole numbers, yet few children had experience with coins in the real world and rarely were activities with manipulatives understood in the same way as with the worksheets.

To ensure understanding of numbers, the system of signs and symbols, and their relationships and connections in real-life situations, the numeracy area of the new curriculum was created to correspond to the naturally developing numeracy sequence which emerges and which needs to be guided through opportunities for play, exploration, investigation, and discovery. Teachers are therefore required to provide manipulatives and real-life experiences

where children will recognise and coordinate their use and understanding of numbers and their relationships.

New features include: the use of fingers, multi-link cubes, lollypop sticks, card and board games, number stories and number sentences using number and sign cards, coins and play money, non-standard units of measure, solid and plane shapes, the creation of and completion of repeating patterns. These kinds of activities are vital if children are to be competent in using their emerging understanding of numbers, to manipulate numbers, shapes, and measurements, to notice and create patterns and relationships

and connections involving mathematical ideas in real-life situations.

As such, detailed guidance is provided in the numeracy handbook for teachers to create experiences and opportunities for children to move towards mathematical outcomes in practical ways where activities are linked to real-life events and challenges. Teachers are encouraged to monitor progress according to the sequence of numeracy development outcomes provided in the booklet.

### ***Curriculum experiences – environmental awareness***

This aspect is a new addition to the weekly curriculum and incorporates science and nature, geography, and history. In line with the curriculum framework, experiences are designed to build on children's ideas and interests so that they increase their understanding of the world around them. In addition, is a focus on the promotion of positive attitudes to learning about living and non-living things. Teachers are required to provide experiences for children

to observe, and where the holistic focus requires them to build on their senses and their thoughts.

Provision for hands-on activity enables play, exploration, investigation, discovery and prediction. The encouragement of oral and aural language enables descriptions, comparisons, measurements, judgments, and explanations to be elicited. These opportunities for interaction depend on teacher guidance and support and enable further opportunities for communicating and recording findings. Children are also encouraged to find relationships and connections which may include references to other areas of experience as part of the integrated organisation of the curriculum.

The environmental awareness handbook provides teachers with practical advice for selecting themes or topics, setting up experiments and investigations, organising and following up on field trips and creating and providing appropriate resources and materials to ensure children are engaged, interested and challenged.

### **Regulation and quality assurance**

With this new curriculum frame work it is the government's intention to improve the quality of pre-school education especially in the non-profit centres. Whilst quality assurance is subsumed under licensing regulations for childcare centres, the new curriculum framework will provide all centres with guidelines for monitoring the effectiveness of teaching approaches, curriculum content, resources, and children's learning and development. For the new curriculum to be effective, the government recognises the need to provide teachers with continual opportunities for

professional upgrading. Hence, the new teacher training and accreditation framework, jointly administered by both ministries, is designed to support the continuing efforts to improve the overall quality of pre-school education.

### **Conclusion**

The development of the new curriculum is a positive step in the improvement of quality of pre-school education in Singapore, and involves a range of professionals who are working closely with teachers in pre-school centres to test ideas, to monitor effectiveness of the plans, to review teaching approaches, to observe the communication, problem-solving and social skills of children, and to try out a range of resources. In such a short time-frame, some clearly observable changes have been recorded which augurs well for pre-school children in Singapore.

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<http://www.mcsd.gov.sg>

<http://www1.moe.gov.sg/pre-school/education>

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# Working on Language & Literacy in The New Pre-school Curriculum

Linda Gan

## Introduction

*The learning of English and the development of emergent literacy skills feature prominently in the new curriculum, which had to take into account the needs of the pre-school children from the non-profit making centres who would be using it. The majority of these children are from lower socio-economic non-English-speaking homes, who research has revealed, are generally restricted in their ability to use English effectively for social communication and for higher order thinking (Gan, 1990).*

*Further research has also indicated such children's exposure to emergent literacy skills at home has been limited (Cheah and Gan, 1998, Sharpe 1997) and the opportunities have been lacking for them to 'play' with language through the medium of traditional rhymes, songs and games. This has resulted in a general weakness in phonological skills, considered crucial to the successful development of reading and spelling (Gan and Yong, 2000).*

## The Language and Literacy Programme

The language and literacy component of the new curriculum focuses primarily on fostering verbal fluency skills in order to facilitate children's efforts to express their thoughts and ideas in English, and to socialize with peers and adults in a variety of social contexts. In addition, greater prominence is afforded to the development

of phonemic and phonological skills, considered as a necessary precursor to developing decoding strategies for reading and spelling at K2.

Two principles underlie these objectives: firstly, that English will be most effectively and competently acquired in a community-styled climate of cooperation, with children being afforded increased opportunities to informally interact with one another and teachers. Secondly, that children will be more motivated to use English in an environment which is rich in oral and expressive activities, supplemented by a wide variety of 'hands-on' materials to encourage them to actively participate in their learning.

## Creating A Literate Environment

Children's literature plays a major role in creating a literate environment at K1 and K2 and also provides a springboard for developing language skills and forging 'cross-curricular' links. The rich variety of



*"Fixing The Child With A Glittering Eye..." A Selection Of Books Used In The Programme*

texts, ranging from local, traditional and classic stories to modern interactive and cumulative texts serve as appropriate models for language learning and exciting 'triggers' to motivate children to learn to read and write. Rhyming stories, as well as old and new rhymes and songs are used to 'sensitize' children to words that 'rhyme' and to sharpen their awareness of aural similarities and relationships in words.

Provision of a wide variety of **resources** to help teachers translate the language activities into practice is recognized as crucial to the successful implementation of the overall curriculum. Templates for many of the language activities are provided for teachers and children to produce their own aids – the 'jigsaws' and 'flip' books for the introduction and practice of phonic skills, for example. High visual support in the form of commercial picture and rebus rhyme charts are also used to supplement oral and aural skills focused lessons, with higher and lower order questions guides being provided to guide teachers in questioning children about visual stimuli and stories. An exciting store of concrete materials are provided for communicative language games and dramatic and functional role play.

An extensive array of **puppets** and soft toys are being deployed to initiate and control class discussions and 'entice' children to speak English. Puppets are also being used to demonstrate skills, like the 'Writing Worm', who, together with specially prepared instructional charts, 'guides' children in writing the letters of the alphabet. Teachers are encouraged to 'invite' some of the more appealing puppets to join the class so that the children can 'teach' them how to improve their English – and their behaviour!

**Class and individual word banks** are extensively used to motivate and assist children in building up their own reading



*A New Member of The Class Being Comforted!*

and writing material especially those from Class Dictated Stories, and to house vocabulary related to the enlarged reading texts used in the Shared Book Approach. These books, plus their supplementary individual texts are permanent additions to the expanded book collection in every classroom.

Recognising that paper and pencil activities curtail verbal interaction, worksheets are kept to a minimum and used mainly for practising handwriting and phonic skills. More **authentic, open-ended activities** have been devised in the majority of language lessons, to enable children to explore and generate a variety of ideas.

The shift to a more child-centred physical layout in all classrooms with the introduction of Learning Centres has provided increased opportunities for the majority of teachers to facilitate children's working on such activities, and to engage in one to one conversations with them.

Children In Their  
Talking Ring Playing  
"I went to market  
and I bought a....."



### **Language Objectives – the K1 Programme**

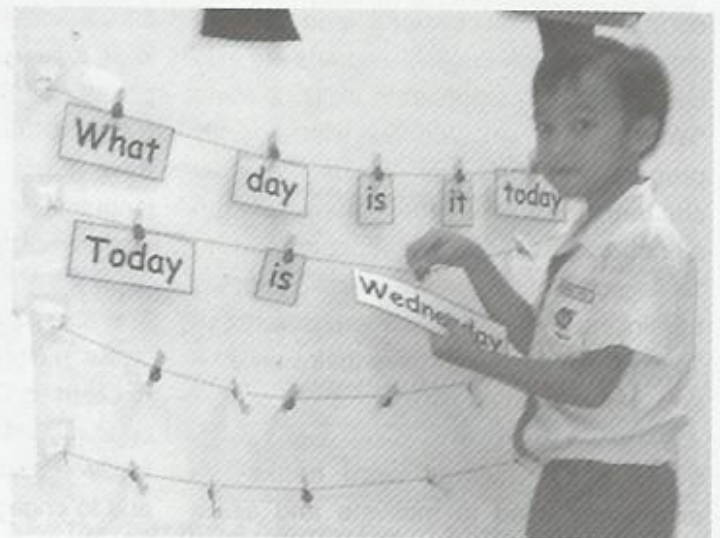
The K1 programme sets out to provide a solid oral foundation for reading and writing skills to flourish at K2. A social framework for developing language use enables children to develop their interactional competence in English during formal and informal exchanges. The emphasis is on 'talk' – children's talk! During the three, forty minute periods, designated for language and literacy every week, children are given the opportunity to verbalise their thoughts in 'productive' interactions with teachers and peers in both small and large group settings. For example, in the more **formal context** of the daily 'Talking Ring' (the equivalent of Sharing Time) children can be found:

- posing questions to one another about the date, and weather and other topical subjects

- taking it in turns to direct communicative 'round robin' language games
- listening to and reciting/singing songs, rhymes and poems, individually or in pairs
- answering questions, discussing, evaluating and dramatising stories

And in more **informal situations**:

- engaging in conversations during collaborative activities which require a group product



Day Captain Asking 'What day is it today?'



....and just conversing with friends!

- role-playing in functional everyday contexts – like taking orders in a restaurant or explaining a holiday schedule in a travel agent!
- sharing resources in the various Learning Corners, where familiar activities can be revisited or further 'explorations' can be made.

A structured developmental approach is adopted in **phonics**, with the main aim of helping K1 children make the link between sounds and their visual representations.

Hands-on activities and manipulative aids are used to refine children's general listening skills so they can distinguish specific features in words and talk about words with the 'same' or 'different' sounds at the beginning and end of words.

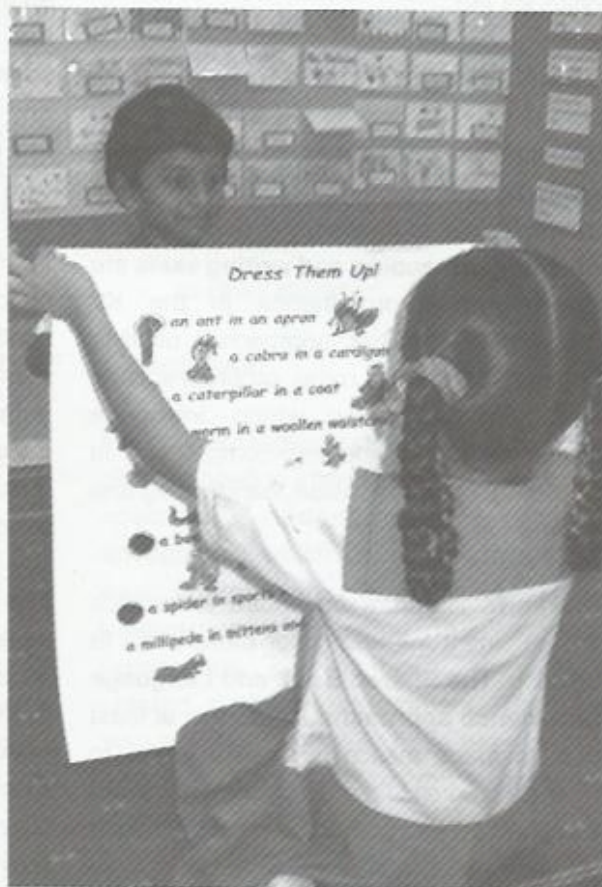
Traditional and modern updated rhymes and songs are used on a daily basis to build a strong, secure knowledge of alliteration and rhyme, and to help children hear the rhythmic boundaries within words that delineate syllables.

Children are exposed to a highly tactile and kinaesthetic approach in

order to develop their **handwriting skills** and their awareness of letter shapes. Letters shapes are reinforced through 'Tickle Me' tactile activity sheets, which immerse children in plenty of 'messy' moments as they attempt to use a variety of materials to 'shape' letters with pasta, glitter and string! These letters are not introduced in alphabetical order but sequenced according to

their 'ease' of writing and further reinforced by 'Lovely Letter' activity sheets.

Also supportive of handwriting development are the creatively contrived 'body shaping' activities, and the use of supportive fine motor skills resources like jigsaw puzzles, finger rhymes, clay and dough play.



'Pinholes' Rhyme Chart



*Tickle Me & Lovely Letters 'Hanging Around!'*

The changing scenarios in the **dramatic play corner** engage children in spontaneous literacy-related activities, which move them towards more writer-type behaviour. Print (as well as concrete play props) are in ready supply to stimulate children to read and 'play' write – for example, taking orders from customers, writing out bills, signing cheques etc.

### ***The K2 Programme***

Whilst retaining the emphasis on interactive, group-based activities for speaking and listening skills to flourish, the **development of emergent reading and writing skills** are given greater prominence in the K2 programme. A holistic approach is used to engage children in more problem-solving literacy experiences which introduce strategies for developing competency in decoding, comprehension, handwriting and expressive writing.

Children's literature continues to provide the dominant framework for these skills to develop. **The Shared Book and Language Experience approaches** feature in at least one language lesson a week in order to motivate children to read, promote letter, word identification and comprehension skills, and to 'activate' children to write their own reading materials. Target vocabulary from

these and other reading-related activities, are recorded on a weekly basis, in children's individual 'word bank' books (arranged according to a novel Pictogram alphabet). Children are encouraged to take these mini dictionaries home at the weekend to 'teach' new vocabulary to their parents!

Children's ability to appreciate the phonological similarities in words is further extended in activities in the K2 programme

with the express aim of helping children to build, read and spell words using their growing knowledge of analogy. These **phonic skills** are introduced within the meaningful contexts provided by rhymes, stories, classroom experiences, and onset and rime activities. A wide selection of story books targeting riming word families are used on a weekly basis and a variety of enlarged manipulative aids afford children the opportunity to physically blend and segment words into syllables, onset/rime and phonemes. Templates of these aids are provided for children to produce their own individual sets to take home for use with their parents. Vocabulary generated from these activities are recorded in the children's word bank books for future spelling reference. Commercial aids, like plastic/magnetic letters and rhyming games are also available in the 'Lovely Language Centre' for children to 'play' at making words, or to complete additional word study activities.

The Lovely Language Centre also serves as an arena for children to participate in a wide range of **free and directed writing activities**. Children's letter formation, using pencils and other writing tools, is further refined by the 'Writing Worm' puppet, who together with the instructional charts provided, models the correct sequence of strokes.



*"May I take your order madam?"*

Writing tasks offered to children include the provision of:

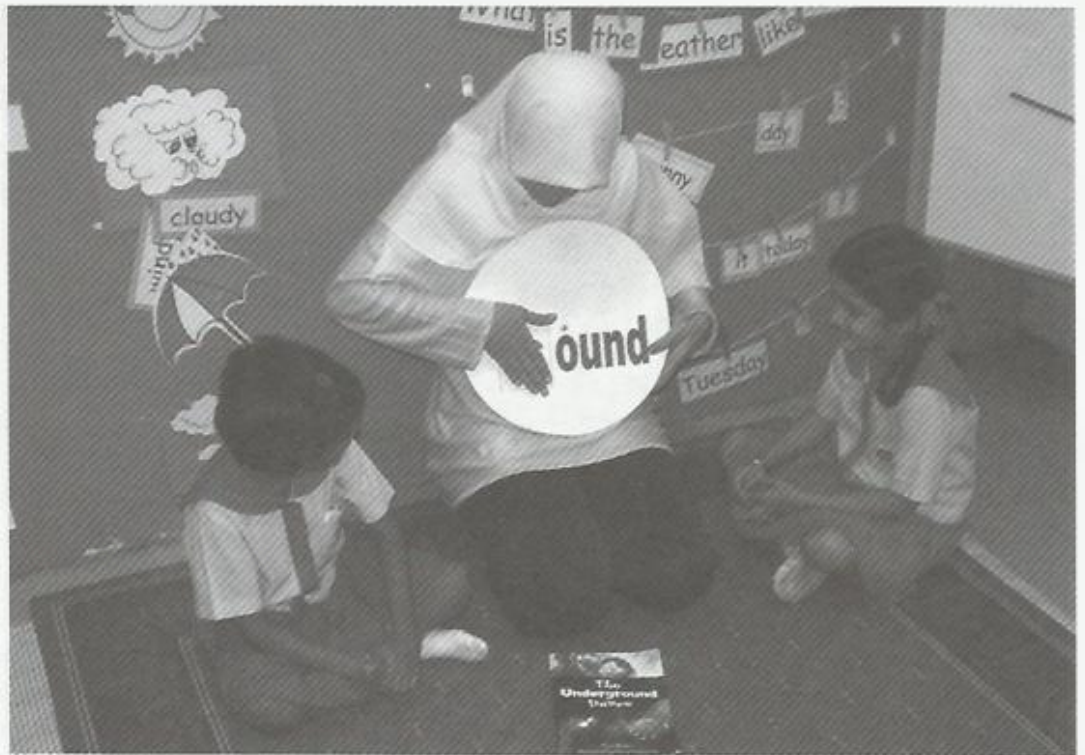
- **first-hand experiences** for class dictated stories, which involves talking about language and writing and the opportunity for teachers to model formal features of writing
- **many reasons** for children to write. For example, to:
  - entertain
  - express feelings
  - inform
  - request
  - instruct

which gives children, in finding appropriate forms for the above, practice in writing different 'texts'. For example: stories, cards, letters, lists, invitations, recipes.

- audiences for children to direct their writing to. For example:
  - to a puppet
  - to a family member (including pets!)
  - to parents/caregiver
  - to a friend
  - to older children

### **Conclusion**

For optimal language development to occur, children need to interact purposefully with a specifically designed learner-sensitive environment, which readily recognizes their own contributions to learning. Those involved in developing the language programme are confident they have created such an environment. They are also confident that they have been able to effectively 'mobilise' a more balanced approach to literacy instruction, which blends problem-solving techniques with explicit direct instruction strategies, to help



*Playing With A 'S-ound' Dial*

children to adjust to the more holistic approach recently introduced in primary schools.

They are also confident that the programme will empower children, especially those from non-English speaking backgrounds, to acquire the confidence and linguistic flexibility to use English as an effective

means of communication and as a tool for creative expression, which are fundamental to preparing them for life-long learning.

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# Projects in the Kindergarten Curriculum

Sylvia C. Chard

The Singapore Kindergarten Curriculum Framework provides a roadmap for kindergarten teachers to refer to as they plan their teaching. Six principles of learning provide landmarks or reference points for teachers as they think about and plan their classroom practice. The idea of a framework supports educational professionalism. It sets out not to be prescriptive but to give authoritative guidance to teachers for the design and development of best practices in their own classrooms. In this paper, I will show how class projects can be implemented with reference to the curriculum framework. The project approach to teaching and learning will be described in relation to the principles and practices advocated with examples of classroom investigations suitable for kindergarten children. The six principles at the centre of the Kindergarten Curriculum Framework will be printed in

bold text together with examples of the learning activities for the children.

Projects are in-depth investigations of real world phenomena (Katz and Chard, 2000). The study of plants, animals, buildings, jobs, processes and events in the everyday life of local people can enable children to make sense of their own world. Understanding things further away in time and space begins with an appreciation of how things work in a person's immediate experience. **The principle of holistic development and learning** means starting with the children's perceptions and experience of the topic of study. In a study of plants, for instance, it would be important for the teacher to learn which children had access to gardens and parks, how often they walk or play in them, which plants they know the names of, how





far they understand the fact that plants provide food for human beings as well as for animals, and that plants also provide shelter and homes for animals and birds.

The project approach to teaching and learning has been proposed to help teachers plan the development of a unit of study in three phases (Chard, 1998a). The first phase is designed to help teachers take note of the range of experience and knowledge children have at the beginning of the study. Making meaningful connections between prior understanding and new information requires children to be aware of their own and others' experiences and knowledge as a basis for the expression of their curiosity about the topic.

In a study of plants, for example, questions about how plants grow, the parts of a plant, different kinds of plant that can be found locally, the effect of location and environmental conditions on plant growth, and the uses of plants, all offer areas of study which can be embarked on. The study can begin from questions developed by the teacher with the children and emerging from conversations about plants. The teacher can spend time helping the children to review what they know and think about what they would most like to find out about the topic. It is usual to find that individual children know rather little but that a survey of the collective understanding of a class of children can provide a good base of general knowledge. This knowledge can be usefully reviewed to prepare for new experiences to be provided for all the children together.

**The principle of integration** helps a teacher to plan experiences and opportunities to allow children to investigate their questions in the second phase of the project. Field work in local parks and gardens or making a garden at school would allow children to experience first hand the nature of plants and how they

grow. Opportunities for close observation, planting and caring for plants, taking them apart, harvesting them, preparing them for food, drawing them, reading about them, studying pictures (actual size and magnified) all promote active learning about plants. Each subject area of the curriculum offers a different perspective on the topic of plants. There are books to read,



tools to measure and count plants and their parts, science experiments to design to learn more about how plants grow, art media to provide expressive opportunities for children to represent their learning, and so on. The contributions of parents with experience of plants through work or hobbies can also enrich the children's learning. Parents can be informed of the project work in the first phase and invited to contribute to the study by coming to the classroom to share their experience and knowledge with the children. The community is thus recognized as a source of experts encouraging children to appreciate the social context of learning and valuing interaction with others as a means of learning about features of the local environment.

**The principle of active learning** refers to children's desire to handle objects directly, to use their senses to appreciate colour, shape, texture, smell, taste and sound. Children make direct sense of phenomena through their actions as they indulge their curiosity; in the case of a project on plants this may involve handling plants, breaking

them apart, preparing them for food, or planting them and caring for them as they grow. Children are amazed at such counterintuitive happenings as seedlings germinating from hard brown seeds and plain earth, flowers emerging spontaneously from tight green buds, or hard vegetables getting soft through being boiled in water. This learning is much more powerful when it is caused by the children's own actions and observed first hand than when it is described in a book or shown in two dimensional pictures. Children's delight in dramatic play can be facilitated by setting up an area of the room as a garden equipped with tools and materials to enable them to design their own garden and role play some of the activities a gardener's work might involve.

In the second phase of a project, learning centres in the classroom can be used to enable children to have direct experience with plants. **The principle of adults as interested supporters of learning** is critical to the success of these activities. The curriculum provides the lists of skills and knowledge items which children can practice, master and apply, but it is the teacher who brings these understandings to life in the context of the classroom (Chard, 1998b). The questions the children can be helped to formulate in the first phase of the project can be instrumental in framing the provision of new experience and information. The children can choose from among the experiences provided according to a variety of selection criteria. They can choose the area of information which interests them most, the kind of representational media they most like to use, or the activity which affords them the most opportunity to work collaboratively, and so on.

The choice of centre can allow children to choose their optimum level of challenge, the probable length of time needed to achieve anticipated results, or the degree of persistence or level of attention to detail

likely to be required by the activity. Sometimes a child may return many times to the same kind of activity and will need guidance to broaden the range of her comfort zone with other materials. Another child may flit from one activity to another rather than stay to complete work in a single area. This child may need guidance staying with an activity to finish a representation or draw conclusions from an exploration. The preferences children show, in making choices, offer evidence to the teacher for the assessment of children's learning needs and interests.

As the children engage in project work the teacher can help the children appreciate all the work that is going on in the classroom. Implicit in the idea of choice is the fact that not all children will have the same experiences in the classroom. The jigsaw metaphor for the appreciation of individual work applies here. Each child's investigative or representational activity can be seen to contribute something distinctive to the development of the collective understanding of the topic by all the children in the class. Teachers can begin and end the time set aside for project work with a class meeting. This group time can provide opportunities for children to share the work they have done, the problems they have solved, and the new information they have learned. The children can also speak about their thinking, how they plan to follow up on their work next time, and how they think their work can help others gain a better understanding of the topic. Other children can ask questions about the work, or make suggestions for its improvement. Requests can be made for further information. When children have the opportunity to choose their activity they tend to be more interested in the work of others because they did not choose it themselves. The interaction in group discussion times helps to nurture in children the recognition of their involvement in a collaborative enterprise. They come to understand how they are

members of a community of learners, one in which they interact with and support each other as they learn.

**The principle of interactive learning** points to the importance of the teacher's role being more that of a guide than a director, in the context of the project. The guidance role is an important one that involves thought about individual differences among the children, and how best to support the learning of each child. The director role tends to mask individual differences among the children because it is expected the children will benefit from a common activity often carried out by all children in the same way. The guidance role involves studying the children and supporting their learning by facilitating different ways of working according to different learning needs and interests.

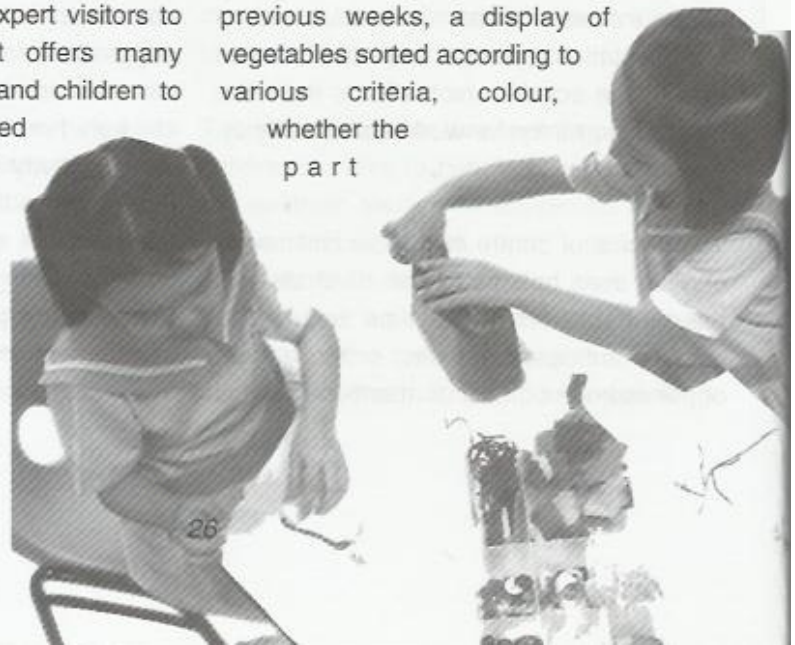
The conversations children will have in groups, pairs and with their teachers are likely to include reference to points of comparison, shape, colour, size, weight, texture, cycles, processes of planting, growth, propagation, harvesting, and cooking. Reference will be made to plants in the community, for shade, atmosphere, and aesthetic value as well as their uses in food, drinks, and medicine. According to the age and ability of the children representations will include drawings, writing, numbers, diagrams, three dimensional models, photographs with captions, accounts of the conversations with the children, questions researched and answered, accounts of field visits and interviews with expert visitors to the classroom. A project offers many opportunities for teachers and children to share what has been learned with others through detailed documentation.

Project work involves both investigation and representation. The children choose to work

on different aspects of the topic. The results of their learning are evident in the representations they complete. The representations can be displayed on the classroom walls for the benefit of the other children. These representations not only share what the children have learned but also information about how investigations were carried out and how representational strategies were developed and applied. Problem solving that is carried out in the different activities is documented by the teachers. The titles and captions that accompany the displays of children's work help parents and other visitors to the classroom know about the interests of the children and the learning that has been achieved.

Many projects last several weeks although some may be of shorter duration. The teacher may extend or limit the length of a project according to the availability of resources, variety of sources of information available, opportunities for field work and the level of interest the children have in the topic. In any case, however long the project takes the concluding phase is an important time to revisit the highlights of the children's experience and review the work done. In this third phase of the work the results of the project can be shared with parents through an open house or 'celebration of learning' event.

In the case of the project on plants there might be a timeline displayed alongside the pots of seedlings grown during the previous weeks, a display of vegetables sorted according to various criteria, colour, whether the  
p a r t



you eat grows above, on, or under the ground, or according to whether you eat them cooked or raw. There will be observational drawings on the walls to illustrate the parts of different kinds of plants and how they grow. There may be maps of gardens the children have drawn and cross sectional diagrams of the way a seed germinates under the earth. There may be Venn diagrams to compare different kinds of plants, bar charts to illustrate the number of different kinds of trees that grow around the school. There may be cycle diagrams to illustrate how some flowers close up at night and open again in the day time or develop into seeds, germinate and produce flowers in their turn.

An occasion for parents celebrating the learning achieved in the project can provide for the children to sing, dance, play, and tell about their work on the project. **The principle of play as a medium for learning** underscores the importance of the energy children can invest in learning when the activity is voluntary, spontaneous, and open-ended. The children can also individually take their parents on a tour of the classroom to explain the different work displayed on the classroom walls. It is amazing how well children can tell about the work of their classmates as they have seen it develop over the days and weeks of the project. This may also be a time when children can share their portfolios or folders of work completed in the course of the project. It is a good idea to keep such collections of work together in school until the end of the project. Then the collection presents a coherent story of the study for the child and can be revisited at will in the future. Copies of some of the work can be kept in the school in the child's developmental portfolio of work to be shared later at parent teacher conferences.

In the example shared here I have used the topic of plants to show how such a project


might progress over time in a kindergarten classroom. I have attempted to show how the principles of early learning set out in the Singapore kindergarten curriculum framework would help the teacher in developing centres where children could investigate questions, pursue interests, and represent and share their findings. The project work begins with the children's own experience and understanding, integrates curriculum subject skills and knowledge, provides for active learning that is supported by the teacher in a guidance role, offers opportunities for interaction and collaboration, and facilitates richly resourced play.


In conclusion, I wish to commend all those involved in the production of the Framework for a Kindergarten Curriculum for its thorough presentation of principles and description of related practices. I believe these to be of considerable value in supporting the work of all who teach young children. I hope the example I have presented in this short article will indicate the potential for engaging children's hearts and minds in learning through projects.

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# Odyssey of The Mind

*Jacqueline Chung & Grace Seet*

## **From the Principal.....**

"St. James' Church Kindergarten...where every child matters." These words are displayed prominently as people approach the Kindergarten office. We believe that every child, every parent and every teacher matters to God and therefore to us at St James'. Every child is valued as a gift from God, unique and special in his or her own way. Our role is to nurture the children in an environment of love and warmth where they can develop to become caring, confident and creative members of the community. While the physical environment and curriculum are important, warm and positive teacher-parent, teacher-child and teacher-teacher interactions all blend together to create an atmosphere conducive to learning. We see ourselves as a transition between home and formal school where children are gently guided in developing dispositions and skills that will become the foundation for life-long learning and successfully relating with others.

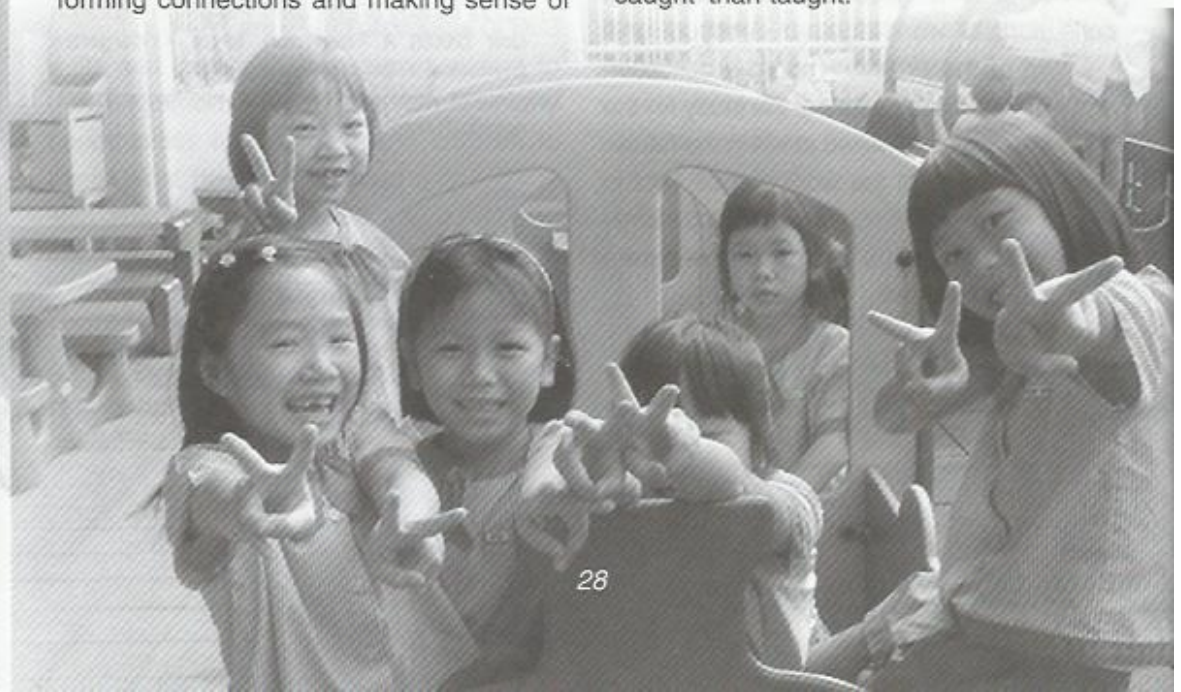
At this stage of life, children are like sponges, soaking up every stimulation their senses can absorb. They are constantly forming connections and making sense of

the physical and social world around them. They are inquisitive, eager to experiment, and marvel at new discoveries with a sense of wonder that only children possess. Every achievement is celebrated with enthusiasm and every magical moment savoured.

Visitors to St James' regularly comment on the cheerful chatter and happy faces of the children and the ease with which they communicate with the adults around them. Coming to school is a joy and learning is fun.

## **Our Teachers**

The teachers here in St James' take a genuine interest in their children and even pray for them and their families regularly. The team of 27 teachers meet, interact, plan and evaluate on a weekly basis to ensure that they remain fresh, focused and dynamic. We place a high priority on exemplifying moral and spiritual values to the children while they are at this tender age. Teachers are keenly aware of being role-models since nothing escapes the children's scrutiny. The teacher's every word and action are noted – much more is 'caught' than taught.





Children are guided to consider different perspectives and to value differences in opinions, to see the value of logic and reason as well as creativity and imagination.

### Parents

Besides children and teachers, parents also feature prominently in the kindergarten. We have a strong parent volunteer group and parent initiatives, involvement and feedback are encouraged. An open and warm relationship with parents is critical so that all can work cooperatively in the best interests of the child.

In 2002, we challenged some parents to embark on a new adventure in critical thinking and introduced them to Odyssey of the Mind.

***From Mrs Grace Seet, Coach & Parent.....***

### **Our Kindergarten's Involvement in Odyssey of the Mind**

It was in the year 2002 that the Odyssey of the Mind (OM) competition, held at National



### Learning

At pre-school level, our approach to learning is holistic in the belief that learning styles and intelligences vary from child to child. Each domain is approached with equal zest and vigour. Within the week, children read, write, count, draw and paint, dramatise, dance, make music, sing, create and play purposefully. Every experience is viewed as a learning experience, every expression worthy of attention. Sharing of ideas and thoughts are encouraged especially during the creative and critical thinking programme (MATAL) where children step out of the box and stretch their minds as they observe and think about their environment. Questions and opinions flow freely as teachers facilitate the children's growing reasoning processes.



level, was opened to pre-schoolers. The principal, Mrs Jacqueline Chung, was quick to see how taking part in such an activity would benefit her pupils. As such, she promptly rounded up a team of 7 K2 pupils and 2 parent coaches. This team went on to become the National Champions in the pre-school category that year.

In spite of all the hard work, the team enjoyed it so much that the two parent coaches are coaching again this year. Their seven team members also formed an alumni team and are competing this year, under the name of their primary school. When asked why she would go through it all again, Evelyn, coach for 2002 and Alumni 2003, said, "It was fun and the children really learnt so much from it."

This year, Mrs Chung opened up participation in OM to any child or parent in the school who was interested in such an activity. The response was enough to form 3 teams with 6 parent coaches, who competed in the National Competition in April 2003.

#### ***How parents are involved***

As teachers have to bear their full teaching load, the parents have willingly and

enthusiastically stepped in to facilitate this activity.

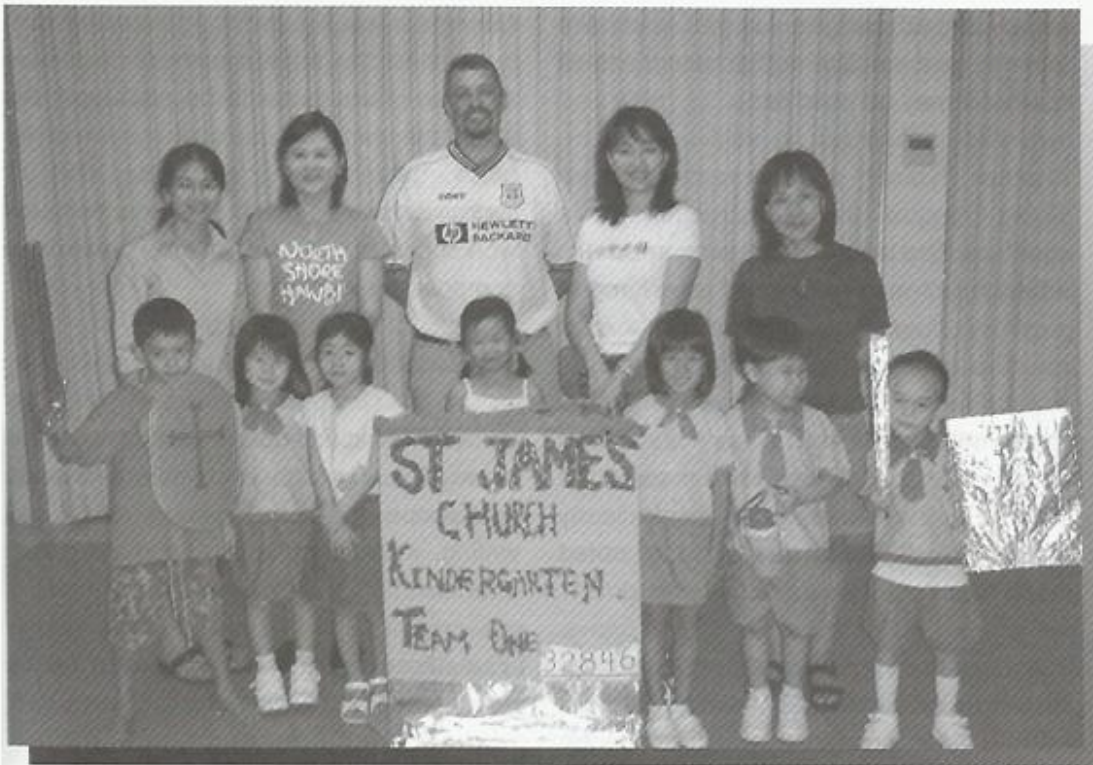
As a parent coach, I see it on one hand, as an opportunity to foster the relationship between home and school, and on the other, as an opportunity to help my daughter and her friends develop self-confidence and learn skills to help them solve problems for a lifetime.

Non-coaching parents have also been a valuable source of help. Apart from bringing snacks and helping to ferry children to and from meetings, they have also been involved in note-taking, typing, contacting and e-mailing. Over and above the practical help that they give, the support they give to their children's activities is a great encouragement to their children and the coaches.

#### ***How the children responded / benefitted.***

As pre-schoolers are still very individualistic in nature, solving a problem as a team is in itself a learning experience. They have to learn to evaluate and accept each other's ideas, compromise and make decisions. The children themselves learn to observe their team dynamics. Natural leaders and workers emerge. For some, there are distinct discoveries of talent. The children figure out for themselves if they are better than their team-mates at certain skills and they learn to allocate tasks accordingly. Several parents (Maylena and Lay Cheng) have noted that their children have developed team spirit and have definitely gained more friends.

Coach and parent (Su Eing) has observed that OM helps in building the maturity of each child. "It is a growing process through which a child learns to work things out with his peers. The children work together, play together and sometimes fight with one another. At the end of the day, the bond of



friendship remains as each learns to accept the other's strengths and weaknesses." These team-building skills that they develop will, no doubt, equip them for a lifetime.

In OM, children are presented with open-ended problems. They are encouraged to think divergently, recognise their limitations and use imaginative paths to solve problems. Coach, Su Eing, recalls, "The children in our team, being so young, could not sew the costumes they had designed. Instead of turning to the adults for assistance, they had to improvise with their own resources. Their solution was to cut scrap pieces of cloth and simply tie them around themselves in various ways." (Personally, I felt that the result was effective and very appealing.)

The children certainly develop problem-solving skills through such opportunities to explore and extend their imagination. Because the emphasis of OM is to have fun while problem-solving, the children feel free to express their suggestions and ideas without fearing criticism.

Su Eing never fails to remind her team that "criticism and rude remarks are not allowed at meetings and spontaneous play." She goes on to say that OM has boosted the confidence in some of the less confident children. "During the early stages of our training sessions, the less confident children often deliberated in their responses in problem-solving. In subsequent sessions, these children were gradually transformed from their timid selves into bolder personalities." As such, even the shyest child will learn to articulate her ideas before her teammates, thus honing her speaking skills. The product? A confident child!

### ***Dynamics of Practices***

A typical practice session lasts for two hours, outside of curriculum time. It begins with a fifteen-minute warm-up session of stretching, miming or vocalising.

Over the next half hour, the team moves into three or four rounds of spontaneous problem-solving. The team may be given just one minute to think and two to three minutes to respond. They may be asked to





improvise with a given object and take turns to give creative verbal responses as to what it may be used for.

Another typical spontaneous problem would require the construction of a structure. The team may be presented with a handful of materials, such as a lump of plasticine, four or five straws and a toilet roll. The team may be asked to create an original animal, give it a team-created name and take turns to say something funny about it. Such activities require the children to think fast and to speak clearly and audibly. A parent (Lay Cheng) noted that it has made her son more alert.

The next one-hour is used to solve the long-term problem. This year, pre-school teams had to create and perform a song with lyrics that help to teach a lesson. Team members had to make and play two musical instruments to accompany the song. The team also had to show how learning the song helps a character in the performance. Typically, the solution is presented in the form of a skit. All the sets, costumes and props have to be self-created by the team, given cost and time limitations, while the coaches only guide and facilitate.

During the weekly one-hour slots for about ten weeks, the team members decide on the type of character to be portrayed, the script, the stage-set, the costume, the song lyrics, the melody and the kind of instruments to be made. The coaches plan workshops to help the children create and compose their solutions.

### ***Process Outcomes***

Involvement in OM opens so many doors to knowledge. Through the meetings and the workshops for script writing and song writing, instrument and prop making and dramatisation, the children, for example:

- a. discover differences between writing prose and writing verse
- b. learn how to create a rhythm with the correct number of beats in each bar
- c. learn how to create a melody using sequencing technique
- d. learn different ways in which sound is produced
- e. discover differences between pitched and unpitched instruments
- f. get to know performing techniques and develop stage presence.



The activities that the children experience will no doubt generate excitement towards learning. As can be seen, there is a wealth of knowledge to be acquired from being an OMER and an opportunity to apply this knowledge to an OMER's own creations and compositions.

As a coach, I find it fascinating to see how the children's input evolves into the final product. They may or may not start off with very good ideas, but because they are given the opportunity to keep 'working at it', we see how the ideas improve from one level to another.

As a result of working on the long-term problem, the children would have written and performed their own 8-minute play, composed and performed their own song



with accompaniment and made their own instruments, sets, props and costumes. It is indeed an exciting and fun-filled way to nurture the creative thinking skills in children.

### ***Anecdotal Examples of Creativity***

Several parents (Maylena and Lay Cheng) have mentioned that their children have become more imaginative and definitely more creative. Especially while many children are complaining of boredom over

the period of school closure due to the SARS outbreak, the OM children seem to be able to entertain themselves with imaginative play or just finding their own creative thing to do.

All the prop making at OM sessions have given my daughter, Brenda, greater confidence in her own ability at craftwork. Previously, she would start out with an activity and one minute into the activity, she would say, "I can't draw this, Mummy" or "I can't cut this out, Mummy, can you please do it for me?" However, ever since she had to make her own musical instrument and membership sign for OM, she'd chase away anyone who would try to interfere with her creative work! Now, sometimes, when I wonder why the house is so quiet, I'd peep into her room and find her busy with scissors, craft paper, colour pens, toilet rolls, empty tissue boxes and yarn. Over this period of school closure, she has gathered her own resources from scrap material and created puppets, puzzles, cards, a farmhouse with a farmer, his wife and some farm animals, a pair of binoculars, costume jewellery, a tambourine and numerous paper cut-outs. She seems to be able to surprise me with something every day.

Another thing that OM has done for my daughter is that it has made her more resourceful. Because OMERs have to solve their long term problem with a limited budget, they often look around the house for scrap material that would cost them nothing; and yes...their eyes often comb the neighbourhood dumps for discarded items that can be useful for their skit. The dumps were where the youngsters of my daughter's team found the cardboard boxes and rope for their stage set, the cable reel, coconut shells and mineral water bottles for their musical instruments

and the aluminum sheet for their sound effects.

These 'OM-trained' eyes which see the usefulness of objects in more ways than one, now roam the house for discarded items which they use to their own advantage. For example, a kitchen towel roll is not just a kitchen towel roll, but a mini golf club or a baseball bat or a loudhailer or a telescope... In my home, three of these rolls have been taped together, placed at an incline and used as a tunnel through which marbles are rolled into a bucket. Another of these rolls has been turned into a doll with a shocking mop of yellow hair made of yarn. This doll sits in a tissue-box car and rides over the hills and vales of the Land of Counterpane.

Another little girl, Sheryl, on my daughter's team, has found a use for the pine leaves that have fallen from the pine tree outside her home. These dry, firm and brown cylindrical leaves are now little 'logs' tied together with twine to form a mini log bridge!

Such is the creativity of little children who have so much potential to imagine and realise their dreams in their little play world. As parents and educators, there is a lot we can do to encourage this development.



#### ***A final note from the Principal.....***

Early childhood is a unique stage in life. Sensory development is at its optimum and children should be exposed to experiences and interactions that stimulate them while being surrounded and supported by caring adults. With tender loving care, in the hands of skilful 'gardeners', young children's minds are rich and fertile grounds where seeds are sown and flowers bloom.

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***Mrs Jacqueline Chung*** is the Principal of St James' Church Kindergarten

***Mrs Grace Seet*** is a parent and was a coach of one of the OM teams.

# Pre-school Children and IT

Ng Pak Tee

## Introduction

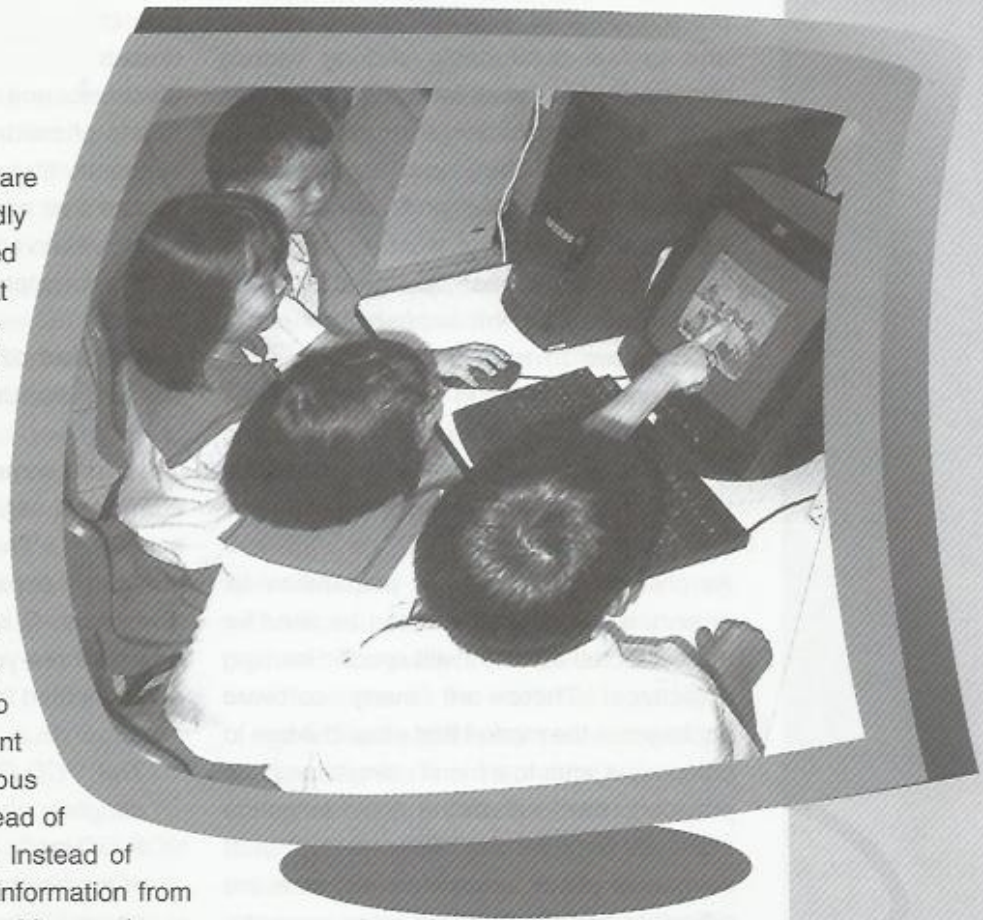
Children of this generation are growing up in a rapidly changing world characterized by dramatic shifts in what they are expected to know and be able to do. There are new areas of learning for them, especially due to technological advancement in information and communication technology – this is the age of computers and the Internet. Children of this generation are going to meet a world vastly different from the one the previous generation has faced. Instead of letters, they have e-mails. Instead of reading books, they read information from websites and CD-ROMs. Many primary schools in Singapore already have information technology (IT) programmes for their students. As Singapore reviews its pre-school education, an appropriate question here is whether some form of IT curriculum is beneficial for pre-schoolers. This article reviews what research says about using computers for pre-schoolers and discusses some potential pitfalls.

## What Research Says about Computers for Pre-schoolers

Some research has suggested that there are benefits to be reaped in using computers for pre-schoolers. According to Haugland (1992), the children who use computers with supporting activities that reinforce the major objectives of the

programmes have significantly greater developmental gains when compared to children without computer experiences in similar classrooms. These developmental gains include intelligence, non-verbal skills, structural knowledge, long-term memory, manual dexterity, verbal skills, problem-solving, abstraction, and conceptual skills.

Interestingly, through the usage of computers, these children share leadership roles more frequently and develop positive attitudes toward learning (Cardelle-Elawar & Wetzel, 1995; Denning & Smith, 1997; Haugland & Wright, 1997; Matthew, 1997). Moreover, they exhibit higher levels of "effectance motivation", the belief that they can change or affect their environment (Nastasi & Clements, 1994).



The computer centre can be a valuable activity centre for learning. However, the focus of the centre should not be to teach anything particular through the computer. Rather, it is to allow plenty of time for these pre-schoolers to experiment and explore and to feel comfortable clicking various options to see what is going to happen next. Providing children with minimal help teaches them they can operate the computer successfully. However, pre-school teachers may want to intervene when children appear frustrated or when nothing seems to be happening – just a word or two to remind the children what they need to do next to reach their desired goal. The teacher can ask probing questions or propose problems to enhance the children's computer experiences.

As children grow older, in preparation for primary school, computers can be used for more directed activities with specific learning objectives. There are many software packages in the market that allow children to compose a letter to a friend using a template provided, thus enhancing their language skills or explore the different types of animals or plants which life specimens are difficult to find. Through exploring computer experiences, these children build memory skills, learn how to seek out information, use knowledge until they have a clear understanding from multiple sources, and integrate their knowledge.

What is the earliest age at which computers can be introduced to children? This is a difficult question to answer accurately. Some researchers do not recommend that children under 3 years old use computers (e.g., Hohman, 1998) because computers simply do not match their learning style. The key is to see which stage of development the children are at. If they are the stage of learning to master skills such as crawling, walking, talking, and making friends, children should be given the chance to interact more with

human beings and natural objects through their eyes, ears, mouths, hands, and legs.

With the advent of new technologies, certainly the nature of the concept of "toy" has changed considerably over the last decade. Now, the market is filled with electronic and digital toys to capture the hearts of children. Papert (1996, pp. 188) suggests that "our concern must be to ensure that what is good about play is at least preserved (and hopefully enhanced) as the concept of toy inevitably changes."

### **Examples of how IT can be used for Pre-schoolers**

There are some people who advocate that computers are very suitable for pre-schoolers. This section describes the positive experiences of two such advocates. Thomas Pack (1998) shares how his three-year-old daughter played with and benefited from playing CD-ROMs:

*The CD-ROMs my three-year-old daughter plays with, "Elmo's Pre-school" and "Ready for Math with Pooh", are two of the best examples of the edutainment genre. They combine instructional games with high-quality, storybook-style graphics, music, sound effects, and near movie-quality animation. They are truly educational, truly entertaining...*

*Both titles were created with a great deal of imagination, attention to detail, and an understanding of the power of the interactive learning environment CD-ROMs can provide. Developed by Creative Wonders, a California company that produces several other titles in the Sesame Street Games series, Elmo's Pre-school is designed for children ages 3-5. (My daughter has been using it mostly unassisted since she was a little over two.) The CD-ROM does not require any reading. Children will quickly figure out what to do by clicking on items*

to see what happens or by listening to the Elmo character, who serves as a guide throughout the activities.

Pack describes "Elmo's Pre-school":

*Elmo's Pre-school includes five rooms in which children can play games with letters, colours, shapes, and sounds. Each room allows freeplay (unstructured play) and offers two games. In the Face Treehouse, for example, children can enjoy freeplay by choosing from an assortment of noses, eyes, and mouths to create a customized Muppet. To play the Make a Face game, the child clicks a star and Elmo tells the youngster to make a face that looks happy, sad, mad, or scared. To play the How Would You Feel game, the child clicks a moon and Elmo says to make a face expressing how someone might feel in a particular situation.*

What is so special about such software packages? Pack feels that:

*One of the best features of the CD-ROM is how it responds to a child's answers. For example, if Elmo says, "Make a face that shows how you feel when nobody wants to play with you" and the child makes a happy face, Elmo will say, "That's not how I feel when nobody wants to play with me."*

*When appropriate, the games in Elmo's Pre-school have multiple skill levels. The software tracks answers and automatically moves children through more challenging activities when they're ready. Each activity also includes a graduated help system. Elmo will give the child clues when he or she seems to be having difficulty, and, if necessary, will solve a problem himself so the child can see how to do it...Children will not quickly tire of the CD-ROM, not only because of the*

*multiple games and skill levels but also because of the many extra features children find delightful.*

Pack is full of praise about the educational value of the software:

*Overall, Elmo's Pre-school is designed to teach not only educational skills such as number recognition, spelling, and critical thinking but also social skills such as empathy, sharing, and cooperation. The software includes a Parent's Guide with educator's notes on the programme, tips on playing with a child, a skill chart, and a personal certificate children can design and print.*

Another advocate, Papert (1996), describes a CD-ROM entitled "My Make Believe Castle" in which children can play with digital characters that exist in a mythical computer micro-world. The play world contains all the essential ingredients of three-dimensional play scenes based in medieval times. The characters that can be chosen include a prince, princess, knight, dragon and wizard, and the context is a castle and its surrounds. These characters can assume identities defined by the players and so are different to traditional dolls whose "looks" are fixed. Papert suggests that such digital toys have more potential than traditional ones since they can adopt personalities that have been defined by the user, rather than the developer of the product. Moreover, such toys are transportable to a wide variety of digital worlds where the child may embark on new adventures, take risks and create new identities and stories that stimulate, excite and promote learning in a different dimension.

### **Potential Pitfalls in the usage of IT for the Singapore Pre-schooler**

Although research and certain case studies have shown that it is possible to reap

benefits in using IT for pre-schoolers, I would like to discuss a few concerns that I have, which are potential pitfalls.

### **a. Replacing “real” with “virtual”**

Because our children will be facing computers so much in the future, the fear is that they will soon lose the human touch and the touch of nature. The knowledge that they have will be built upon pseudo objects, virtual reality and touch buttons. Pre-school is a time when some of the most basic conceptualisations of the world around the child are formed. There is a danger that “real” is replaced so much by “virtual” that children grow up having the idea that some “virtual” things are actually “real”.

Children grow up without seeing real animals but simply learn about them from virtual zoos on CD-ROMs. Instead of rolling in the mud and running on the field, children spent their childhood playing computer games and immersing themselves in a virtual world. If we think only of preparing them for an IT future, we may rob them of the good clean joy of childhood. It is therefore important we strike a good balance. For example, if we use musical software, we should try to let our children experience a variety of instruments in the real world along with their experiences in the electronic world. Let them hear music from a real instrument and feel the wood, strings and keys. Such experiences with “real” things are invaluable to their understanding of the world around them.

### **b. Children’s literacy**

One of the effects on using “too much IT” is on children’s literacy. BBC News carried this story on their website on 4 March 2003. When a 13-year-old Scottish girl handed in an essay written in text message shorthand, she explained to her flabbergasted teacher that it was easier than the Standard English. She wrote: “My smmr hols wr CWOT. B4, we used 2go2 NY 2C my bro, his GF & thr 3 :-

kids FTF. ILNY, it’s a gr8 plc.” (The translation: “My summer holidays were a complete waste of time. Before, we used to go to New York to see my brother, his girlfriend and their three screaming kids face to face. I love New York. It’s a great place.”) The girl’s teacher was not impressed, saying: “I could not believe what I was seeing. The page was riddled with hieroglyphics, many of which I simply could not translate.” (BBC News, 2003)

Many children start learning how to read and write at the pre-school level. Although the above story is about a teenager, if our pre-schoolers are clicking on mouse and typing on keyboard all the time, they may grow up to become this teenager. While it is true that the Net age has arrived for this generation of kids, we have to ask ourselves whether to suit the Net age, we should allow the standard of spelling and grammar to plummet to this degree of crisis. We must also ask ourselves whether in letting them play more with computers to prepare themselves for a computer age, we have allowed other basic types of learning for the children to be eroded.

### **c. Readiness of parents and pre-school teachers**

Parents and pre-school teachers play a critical role in shaping how their children learn from computers. They are in control of what kind of access the child has to the computer and the types of software the child can run. They also determine to a large extent how productive and beneficial the child’s time on the computer will be. They need to facilitate and monitor the child on the computer so that learning is really taking place. The question is whether parents and pre-school teachers have the requisite knowledge and skills. Cheung and Hu (2002, pp. 34) writes, “to make sure computer technology is used in an appropriate way to educate our young generation, teachers need to be trained in selecting computer hardware, software,

identifying the potential advantages and dangers of using the technology, and developing meaningful instructional activities to integrate the technology into our children's learning environment." But their research suggests that many pre-school teachers are not trained and are not ready to use IT in teaching pre-schoolers. The same probably goes for the parents. How can IT be profitably used for pre-schoolers when the adults are not sure how IT should be used?

### ***Finding the appropriate role of IT for Pre-schoolers***

The real challenge is therefore to find the appropriate role of IT for pre-schoolers in Singapore. At this moment, there is still no definitive answer. Nor is there a definite need for a definitive answer yet. Although IT can have a positive and useful role to play in the development of pre-schoolers, this role must be carefully circumscribed, as computers can be misused and cannot provide an all round experience base that is critical to a pre-schooler's development.

The position taken by the National Association for the Education for Young Children (1996) sums it up:

*Computers supplement and do not replace highly valued childhood activities and materials, such as art, blocks, sand, water, books, exploration with writing materials, and dramatic play. In other words, the computer is an enrichment tool for enhancing readiness skills, problem solving and creative expression. It adds another dimension to concrete exploration and expression, like playing with sand, puzzles and crayons.*


Developments in technology have moved with extreme speed over the past few years. In an era in which IT is fast becoming a way of life, a common mode of interaction, traditional activities can now be complemented with different experiences that have been made possible with the new

information technologies. These technologies, and the activities that children may engage in with them, have the potential to extend learning in new and exciting ways. However, we have to be discerning about the potential benefits and pitfalls. In this way, we can truly facilitate the learning process and help children to make sense of their world in ways that are not hitherto possible.

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## From 'I' to 'We' to 'Others'

Angelina Tay

"I want to go to school!" cried Janice insistently. "No, my dear, you are sick. You can't go to school." explained her mother. "But I must. We have 'P' Party today!" pleaded Janice.



'P' Food: Food on display for the 'P' Party

It is unusual to have children insisting that they want to go to school, but it happens very often in pre-schools. Children have such fun learning that they cannot bear to miss a single day of school. The teachers and children have been earnestly discussing the 'P' Party the whole week and all the children were very excited.

The classroom was decorated with pink and purple balloons and streamers. Games such as "Passing the Parcel", "Pin the Tail on the Pony" and "Hit the Pinata" were played amidst squeals of laughter. On the day of the party, some parents came along to set up food stations. They involved the children in the making of pancakes, popcorns, prawn fritters, "popiah" and pastry people. The children could hardly contain their enthusiasm in getting their hands on the food. We saw the children displaying fine motor skills that they have

developed through the multiple sessions at the manipulative centre, construction centre and craft centre. Furthermore, they verbalised the use of their senses while actively engaging in the process. "Hey! The pancake got (*sic*) strawberry smell." "See Jamie draw polka dots on her pastry people." (Jamie was squeezing icing on the pastry.)

Other parents who were unable to attend, contributed a spread of potato chips, prata, pizza, peanuts, pineapple tarts, pies, etc. at the long curved table. The teachers wrote labels for the food while the children crowded around, pointing to and identifying the food. Some were reading out the letters of the alphabet in the words. "I saw a 'p' here. Huh! So many p, p, p!"

As they ate and interacted, the children used language extensively to compare and evaluate the food. This atmosphere provided children opportunities to exercise choices in terms of who to sit with, what to eat and how much they could eat. We were amazed at their level of maturation at this point, which we had not witnessed on such a big scale previously, and were touched by their sincere and self-initiated offer of food and beverages.

After the feast, the children eagerly anticipated the pattern parade, which was the finale of the event. The children took turns to show off their patterned clothing on the stage. On arrival in school they had already observed, compared and assessed each other's clothes, which were closely related to the letter 'p'.

With so many play activities, it is no wonder that Janice did not want to miss school.

This event concludes the first school year. It may seem grand, needing extra time and effort on the teachers' part. However, it is not really so. Much of the preparation is in reality, part and parcel of the regular curriculum.

Learning the letters of the alphabet in such fun and interesting ways is part of a day's lesson in the kindergarten. It is not something that is done in the "often thought of way" where the letters are introduced with an item put to it, followed by writing the letters many times over. Here, we start with the items and during the hands-on they carefully examined each item. This is followed by a discussion where the children realised that all these items start with the same letter. The letter symbol is then introduced. By now the children are keen to find out the name and sound of the symbol introduced. In this way, we aroused the children's interest in the letters so that they would want to find out more. This approach captivates the children's interest, leaving little room for boredom and motivation to start their personal exploration. Activities that follow include tracing the letter on the floor, in comstarch, their friend's back (and getting tickled all over) etc. For the letter 'p', the children were invited to explore and design patterns on self-made clothing items.

They became little "Fashion Designers". As they painted, printed and pasted, they proudly talked about their creation. They also put on their creations and paraded them for their classmates. Then they sorted themselves according to the patterns, identified same and different patterns, described the colours used, appreciated

beauty (Children made open declarations of awe) and the originality of the work of others. On the day of the party, they paraded their home clothes in the same way.

The whole year's programme brought the children from the "I" stage to the "We" stage and then to "Others". We saw children who had a strong possessiveness of things regardless of whether they belonged to them personally or to the school. Many were reluctant to share and the "I" word was popular. The children frequently sought assistance as self-help skills were found wanting. Words and phrases like "No!", "Don't want!" and "Cannot!" that were typically used in showing non-compliance gradually changed to negotiable terms that were more amicable. Opportunities for decision-making were ample in such daily school experiences and children's opinions and contributions were often recognised and acknowledged.



*Young designers: Nursery children showing off their polka dot designs*

In this way, the children developed trust, autonomy and "initiative – a sense of ambition and responsibility" (Berk, 2001, p.18). They find meaning in things that they do, thus sustaining interest and initiating self-motivation. With the development of a healthy self-concept, children are ready to reach out to their immediate environment

and interact with other children. This sense of self enables them to work together and resolve conflicts among themselves.

Therefore to strengthen this idea of working and playing together "regardless of race, language or religion", the second year of kindergarten (K1) is focused on multiculturalism. Children learn about the cosmopolitan nature of our society through organised activities and field trips. During these weekly sessions called "Interaction Time" children begin to cultivate a better understanding of similarities and differences among themselves. Furthermore, their understanding of friendship is also enhanced.

Friendship exchange events were organised for children to reach out to different types of people. They had a very enjoyable visit to Towner Garden School and were rewarded by an exchange visit from their children. A visit to a home for senior citizens had them singing together. We also have an annual friendship exchange event with the students from the Soka University in Japan.

Every February, a group of about fifteen students from the university's Children's Society spend half a day of songs, dance and games with them. When the end-of-year holiday begins for the secondary schools, a small group of alumni students come back to the kindergarten to join in the



*New friends: K1 girl making a bookmark with her friend from Towner Garden School*



*Hello Grandmas! Visit to a home for senior citizens*

activities with the children. They come back regularly each year to participate in some of our events, too. These bonds of friendship that were forged remain strong even after many years. These alumni students come back regularly as they still have very fond memories of the kindergarten and we, the staff of the kindergarten, try to maintain contact with each one of them. This underlines the importance we place on communication.

Our children are also introduced to written communication at the kindergarten. The launch of the Post Office Project was to provide children with opportunities to cherish the power of written words. Letters sent and received are little treasures that children will hold dear and connect them back to the kindergarten, years after they have graduated.



*Alumni students helping to wash and paint the tyres for the kindy children during their school holidays*



*Group discussion: K2 children examining, discussing and sorting out insects, arachids and crustaceans*

It all started when a teacher and I attended a tea session organised by the Singapore Philatelic Museum (SPM). The speaker talked about the stories of events in history that were illustrated on the stamps and how informative and useful stamps could be in learning about the country. During the conversation with the speaker after the session, the idea of a post office in the kindergarten was conceived.

We became very excited about the possibility of starting one in our school. This led to brainstorming sessions on the process of the set-up, sourcing for the materials needed and planning for the involvement of the children. Letters were sent to inform parents about the project. Many responded with positive feedback.



*Recycling: making new paper*

Teachers and children worked simultaneously on bringing this project to fruition.

First, they visited the SPM. A retired postmaster enacted the role of the post-persons and patiently explained the importance of each role. The children eagerly asked questions to clear their doubts on why seemingly trivial matters were necessary. While the teachers worked on the physical

set up of the post office, as well as looking for a suitable mailbox, the children worked on designing the stamps and interviewing the operators of the post office. Prior to this, they discussed the different roles and the job requirements, which were listed on a big piece of paper. The exchange between the little interviewer and interviewee was amusing.

Interviewer: *Why do you want to be a postman?*

Interviewee A: *Because I have strong legs. I can walk up and down the stairs.*

Interviewer: *How can you be a good postman?*

Interviewee B: *I am a good reader. I can read the address on the letters and put them in the right letter box.*

These were the spontaneous questions and answers that came about during the interviews. We could not help but be truly amazed by the seriousness the children were showing towards this project.

Everyone was eager to start operating the post office but we had yet to print the stamps and get a mail box. The teachers scanned the designs that were selected

and printed the stamps on sticker paper. Of course we could not afford to print such colourful stamps for daily usage. We printed a copy in greyscale and photocopied them on coloured paper. We only used the colourful ones for the first day cover that was launched on the day the post office was officially opened.

Soon, the children were ready to start operating the post office, but we still could not make a good enough mailbox. Then one parent, who had been showing great interest in the development of the project, sponsored a specially carpentered mailbox. We were truly grateful for the contribution. Now there was no stopping the children from embarking on this exciting activity. Each day, groups of five children from the K2 classes took turns to man the 'Post Office.'

On the day of the official opening, a selected group of children, with their role proudly displayed on their caps, showed off their proficiency in the way they performed their duties from the collection of the letters from the mailbox to the delivery of the letters. One proud and happy guest in attendance was the retired postmaster who had shown them the works just months before. A look of pure astonishment was seen on his face as he watched closely the ease with which each child emulated the exact actions of the different postpersons that he had performed for them. The children had meticulously honed their skills for this event.

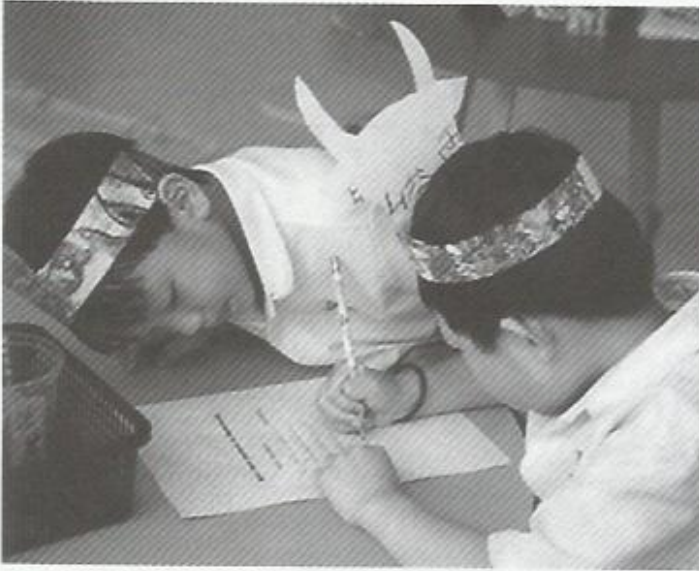
Although the official opening was the climax of the project, the children continued to look forward to their turn on duty. They felt a sense of pride and accomplishment at being able to perform their weekly duties so efficiently on their own. By then, they did not require any help from the teachers. Every child on duty knew exactly what each role entailed and they could conduct the whole operation completely on their own.

Besides the above, all the children in the school were involved in the writing of letters and posting them in the mailbox. Parents contributed used envelopes for re-use. Every week, children wrote to each other. The younger children, who were not able to write, drew pictures and sent them to friends and teachers. I have received quite a few letters myself. It is a truly wonderful experience, where children learn in a natural way, the reason for learning to read and write. They learn about written communication and the letters are the little treasures that they can revisit any time they want.

Academically, there were numerous lessons from the operation of a post office. The concept of sequence is introduced in the steps involved in the operation from collection to delivery. Cancelling the stamps is one-to-one correspondence. Sorting the letters according to the classes, matching the names of the class on the letters to the names on the sorting box and finally, deciding on the route for delivery using spatial intelligence are a few other mathematical concepts. There are infinite numbers of activities that can be expanded from this project. These include higher level

*Post office duty: Sorting letters according to the address*





*Pairwork: Two heads are better than one*

skills like buying stamps for letters of different weight and sizes (learning about money), creating games for local versus overseas delivery (as these cannot be carried out in school) and other activities that integrate the subjects across the curriculum.

Although it may seem that children are just playing and having fun, there is a lot of academic learning going on, including the often unseen and overlooked curriculum. This hidden curriculum that runs parallel to the main curriculum is that of character development. This is not taught like a subject but is deliberately and subtly integrated into the lessons by the teachers. The integrity of the teachers is an important factor, *"no matter what teachers do, all will be to no avail unless they can get students to experience things for themselves"* (Bethel, 1989, p. 104).

Finally, Graduation Day marks the end of their kindergarten education. On this very special day, each K2 child takes part in the Graduation Drama, which they would have been rehearsing for the past weeks. The drama, which is based on one of many stories written by the school Founder, Dr. Daisaku Ikeda, is chosen for the message

that the children wish to share with their parents and friends.

The preparation for this grand event includes making individual gifts for their parents and the other people who have supported them in one way or another, like the bus operators. The children also write a message to the Founder on anything that they might wish to share. These are expressions of appreciation and gratitude, values that are strongly emphasised in the

kindergarten, with regard to the "Others". The children learn that their success and glory on graduation day comes from the support of the people around them and cannot be taken for granted.

Therefore, after their graduation, the students are welcomed and they still come back to the kindergarten to talk with the teachers. Together with their friends, they participate in some of the kindergarten's activities and programmes. This is one way of expressing their gratitude to their first alma mater.

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# I Move, I Feel, I Learn

- A Multi-sensory Physical Play Programme for Pre-school Children

*Carmee Lim*

Movement is a child's most natural and satisfying means of expression. From the moment a child enters the world, he embarks on a journey of learning to move and moving to learn. Movement and physical play contributes significantly to the total development of the child. According to Paul Dennison, Ph. D., Founder of Edu-K and Brain Gym®, "Movement is the Door to Learning"

Current Neuroscience research confirms that early cognitive development is inextricably linked with physical, emotional and social development. Hence, physical play is not only for physical strength, but mental strength as well. It will develop social, emotional and cognitive skills.

The Jumpstart Kidsport's Multi-sensory Physical Play programme code named



*Scooting around*

"Smart Brain" has been implemented at the PCF West Coast Education Centre.

Marian Diamond, the Pioneering Brain Researcher, and author of "Enriching Heredity" and "Magic Trees of the Mind" says that "people exposed to multi-sensory enriched environments grow dendrites in many regions of the brain."

The Curriculum has been developed to be age appropriate and integrates motor skills, fun games, adventure, language and lots of rhythm and music. All the activities are designed to enhance both the physical and neural growth so that children will explode into learning.

The motor skills include locomotive skills eg. running, jumping, hopping, galloping,

*Fun with ribbons*





*Rhythm music*

skipping etc. Manipulative skills eg. throwing, catching, sticking kicking, rolling etc. and non-locomotor skills like balancing, twisting, turning, stretching etc. These are built into games, obstacle courses, action songs and imaginative adventure play.

Motor movements do not appear because a child grows older, but emerge from movement experiences in a safe and stimulating environment. A child discouraged from chasing balls may lag in eye-hand coordination.

Play is the essential joy of childhood and is also the way children learn about

themselves their environment and people around them. As they play, children learn to solve problems, get along with others and control their bodies. In the process, they enrich their creativity and develop leadership skills.

The most important feature of the programme is that we encourage the children to be spontaneous, creative and to enjoy themselves. We want the children to have fun learning and exploring through physical play.

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**Carmee Lim** is the founder and CEO of Jumpstart Kidsports. Formerly the Principal of Raffles Girls' School, Carmee has, since her retirement from the school system, launched a successful second career in the private sector. She is also the Executive Director of the Academy of Principals (Singapore). Email: [carmee@singapore.com](mailto:carmee@singapore.com)



*Action Song – Hokey Pokey*



# Involving Children in Curriculum Planning

Jenny Kwek

## Introduction

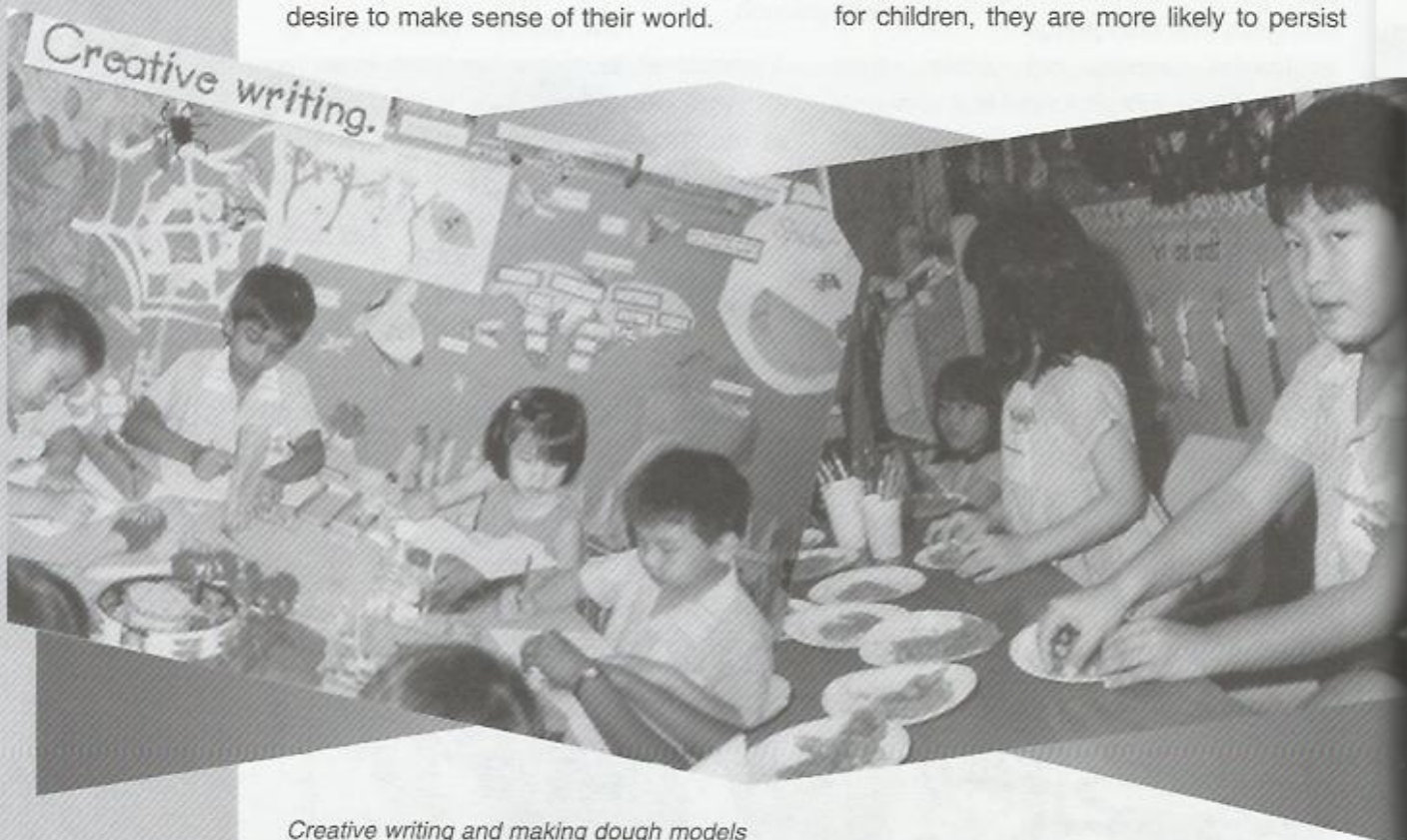
### How young children learn

Young children learn by doing. The work of Piaget (1972), Montessori (1964), Erikson (1950), and other child development theorists and researchers (Elkind, 1986; Kamii, 1985) have demonstrated that learning is a complex process that results from interaction of children's own thinking and their experiences in the external world. Maturation is an important contributor to learning because it provides a framework from which children's learning proceeds. As children get older, they acquire new skills and experiences that facilitate the learning process. Children do not need to be forced to learn; they are motivated by their own desire to make sense of their world.

### How to teach young children

How young children learn should determine how teachers of young children teach. Teachers of young children are more like guides or facilitators (Forman & Kushner, 1983; Piaget, 1972).

They prepare the environment so that it provides stimulating, challenging materials and activities for children. Then, the teachers closely observe to see what children understand and pose additional challenges to stimulate further thinking. Learning information in meaningful context is not only essential for the children's understanding and development of concepts, but is also important for stimulating motivation in children. If learning is relevant for children, they are more likely to persist



*Creative writing and making dough models*

with a task and to be motivated to learn more.

### **The Developmentally Appropriate Classroom**

Developmentally appropriate teaching strategies are based on the knowledge of how children learn.

Basing the curriculum on an in-depth understanding of child development and learning is often referred to as developmentally appropriate practice. Rather than focus first on what is to be learnt – the teacher, in a developmentally appropriate classroom, begins by working hard to understand the developmental abilities of his class and then makes decisions about what should be taught. This philosophical approach to teaching and learning is at the heart of most early childhood classrooms. The National Association for the Education of young children (NAEYC) has published two editions of a book outlining the characteristics of developmentally appropriate practice (Bredekamp & Copple, 1997; Bredekamp, 1987) for children from birth through to age eight.

Educators are aware of the two dimensions to developmentally appropriate practice:

#### **Age Appropriateness**

What is appropriate for the age of the child is based on developmental averages for that age. When a teacher selects a game that requires the child to count to ten, he is using knowledge of age appropriateness to choose a game within the developmental abilities of the typical five year old.

#### **Individual appropriateness**

This aspect takes into account what is appropriate for each child based on her unique personality and experiences.

Developmentally appropriate classrooms have many other characteristics (Bredekamp, 1987). An essential characteristic is that learning is viewed as an active process. Children in a developmentally appropriate classroom are busy exploring their indoor and outdoor environments and interacting with other children and adults. Play is considered as a vital element of this active learning known as *“child-initiated, child-directed, teacher-supported play is an essential component of developmentally appropriate practices”* (Bredekamp, 1987)

The following summarises the basic guidelines of principles and practices taken from the expanded and the revised edition of *Developmentally Appropriate Practice* (Bredekamp 1987; Bredekamp & Copple 1997).

#### **Example of Developmentally Appropriate Practice, involving children in curriculum planning**

*Children at water play.*

*I had the opportunity to observe a play activity where a group of 5 year-old children were engaged intensively at their water play and sharing their conversation.*

*“Underwater diver!” Kai Ming shouted in excitement. I looked up at Kai Ming and noticed that many of his five-year-old classmates were looking at him too. I wrote his response on the ‘Jobs’ chart. As I had done with all of the other children’s responses, I asked Kai Ming to tell me about his suggested career. Other children asked him questions, too.*

As Kai Ming was talking, I thought back to when we were making a play mat of a town to put in the block area. The children were constructing buildings to place on the mat to show the kinds of jobs that people have in a community. Kai Ming had insisted that we paint half of the poster board blue. He wanted to make a store that sold boats.

## Summary on basic guidelines of principles and practices of Developmentally Appropriate Practice

<b>Wholeness of the child</b>	Children are whole persons in whom physical, social, emotional, and cognitive development are integrated. Each area of development is important and affects every other area of development.
<b>Active involvement</b>	Children must be active participants in their own learning. Manipulation of real, concrete, and relevant materials contributes to children's understanding.
<b>Interaction with adults and peers</b>	Learning occurs when children interact with people in their environments. Interactions with both adults and other children facilitate the mental manipulation and ownership of ideas.
<b>Authentic experiences</b>	Children learn best from personally meaningful experiences that flow from the reality of their lives. When school experiences reflect the reality of life beyond the school, learning is more purposeful and relevant.
<b>Appropriate learning activities</b>	Appropriate learning activities include projects, learning centers, and such activities as building, drawing, writing, discussing, and reading. Research exploration, discovery, problem-solving, and excursions are examples of recommended educational experiences.
<b>Integrated curriculum</b>	Integrated thematic units form the foundation for appropriate curriculum, enabling children to make connections among and between ideas and knowledge. Distinctions among the various traditional subject areas are arbitrary and not very meaningful for children.
<b>Intrinsic motivation</b>	Fostering intrinsic motivation has the potential to support the development of responsible and autonomous learners, that is, learners who develop a passion and love for a life time of learning. When learners are reliant on extrinsic motivators, they become distracted and experience reduced interest in their learning. (Kohn 1993)
<b>Authentic assessment</b>	Evaluation of children's progress should flow directly from the tasks and experiences in which they have been engaged. Evaluation and instruction must be integrally related so that each informs the other.



*Re-enact events*

Soon, half of the children were asking for materials to construct boats. They placed the boats on the 'water' portion of the play mat. Now the mat had buildings, plastic cars and boats.

Each day new things appeared and the children's play became richer. The water table became a testing centre for the boats the children created. So many children were interested that we spent a whole session of group time experimenting with materials, shapes, depths and weights of boats.

Now, again following Kai Ming's lead, I said to the children, "I notice that many of you are interested in boats and water. Would you like to learn about the ocean next?"

### **Children as a source of curriculum**

Observing children and taking their interests into consideration when developing curriculum allows teachers to focus on the "individually appropriate" portion of developmentally appropriate curriculum (Bredenkamp & Copple 1997). But truly respecting what children have to offer and making them equal partners in the process of curriculum planning takes commitment and conscious effort. Educators have been

writing about this and practicing it, during most of this century but to some teachers, it may be a new approach. Some of you may also be interested in my way of including children in project planning.

Talking with children allows ample time for me to observe the children in a familiar and comfortable setting and yields wonderful ideas for possible themes. Parent surveys also help me find out what individual children are interested in and like to play with. I also find out about parents' interests and areas of expertise.

I keep anecdotal records of children's favourite materials, learning centres, activities, books and friends. I write down their specific comments or questions. I think about how my personal interests (such as travel) can complement things the children are interested in, or how they might enhance children's learning. All of these avenues give me ideas of possible topics to explore with the children. So do instances like Kai Ming's contributions.

### **Planning with children**

Once I have these potential topics in mind, the children and I sit down together and



jointly plan our project. The planning is a four-step process.

### **1 What do you wonder?**

The first step is to ask children, "What do you wonder? "What do you want to know about the ocean?" This allows each child to express ideas and gives a teacher insight into the child's level of development. It also helps teachers determine what the children may already know. Record each child's question on chart paper. With young children, I often record each child's question in a different colour or put her name beside it so the child can come back and find what she contributed. It also allows me to go back at the end of the day and add to my anecdotal records. I learn a lot about children's language development, thinking processes and misconceptions. All children are free to raise as many questions as they have, and all children are encouraged (but not forced) to contribute.

For the theme on oceans, some wonderful questions were raised:

- Do fish sleep with their eyes closed?
- How can fish breathe underwater, but I have to hold my breath?
- What makes waves?

- How deep is the ocean? I can walk in, but then it gets deep.
- What do fish eat?
- Why is the ocean water salty?
- Where do mermaids live?
- Do only fish and sharks live in the ocean?
- I've never seen an ocean. How does it look like?

The questions kept pouring out, and from time to time, I threw in a question or two of my own. I'm part of the class too and part of my role is to add things which I would like to explore with the children.

### **2 What can we do to find out?**

The second step is to ask, "What can we do to find out?" The 'we' is very important. Learning is a social process, and I want to give the children the message that their ideas matter and we can work together to find answers. On another piece of chart paper, hanging next to the first, we write possible ways to find out the answer to each question raised. No pressure is put on the children, however. If no responses come, we skip that question and come back to it later. Then, if there is still no response, I tell the children that I would

think about what we could do and that they could come to me with ideas anytime. That's one reason for leaving the chart paper up throughout the Unit. Some Units may take as long as six or eight weeks as more questions keep coming up.

### 3 What materials do we need?

For this Unit, the children suggested that we go to the beach, which was absolutely the most logical and best idea. I was able to bring in my collections of shells, starfish, seahorses, and driftwood. I also brought in some fishing equipment. We watched a movie of a family's trip to the beach. We set up a reading corner full of non-fiction and fiction books on the ocean. One child, who had been to the local fish farm, suggested we go there to see fish and find out what they eat.

Another child said we should go to the pet store because she got her fish and aquarium there. Making a beach in our classroom was another suggestion; we used the sandbox outdoors and the sand and water tables plus some plastic wading pools. Children saw that once we identified their questions, they could come up with ideas about how to find answers and could use creative problem-solving to help design activities.

Step three is to ask, "What materials do we need?" On a third piece of chart paper we listed such responses as shells, fish, sand, water, whales, books, boats,

scales, pictures and photographs, fishing poles, bathing suits, pails, shovels, sifters and nets.

The children are encouraged to make a link between what methods they want to use to answer their questions with and what materials will be necessary to accomplish their goals. If the materials they suggest do not seem directly related to their initial questions, I ask them to explain what we could do with the materials and what they might help us learn. The responses also help me understand their thinking. For example, a child might say we need soap, and I might assume that she is not following the discussion or is off track. By asking further questions, however, I discover that the child wants soap to wash the sand off of our bathing suits and the seashells! I enthusiastically added it to the list and to the child's anecdotal record.



*Once I caught a fish alive*

#### 4 *What will you bring and what would you like me to bring?*

The fourth and last step is to ask, "What will you bring? What would you like me to bring?" For the ocean project, many children wanted to bring in plastic or stuffed animals (and lots of mermaids, thanks to Disney's *The Little Mermaid*). A few had been to the beach with their families and volunteered to bring shells, photos and beach towels. Others offered such items as fishing poles, and books about the ocean or ocean life and toy boats. As parents came to pick up the children, I talked with volunteer parents to be sure their contributions would be suitable.

Through the newsletter, families were invited to send items in or to come in and share materials or activities with the group. I also put in the concepts to be explored, along with the children's ideas. In addition, I went back to information I had collected in the beginning of the year to see if the topic matched any of the parents' interests or expertise. The process was coming full circle.

#### **Putting it all together**

When the children were allowed to plan curriculum with teachers, everyone is liberated and energized. The teachers could do a planning web, alone or at another session with the children. The whole school could be included in the process as well. The result is a richness that would not exist if the teacher had planned alone. The teacher is neither bored nor burned out, excitement is built into lessons. Instead of getting frustrated, the children are more engaged in learning


because they are exploring their own questions with their interests. Parents too feel more involved and have a better idea of the skills and concepts that their children are learning in school.

Everyone wins when children are involved in curriculum planning. It is the perfect vehicle for implementing developmentally appropriate practice and curriculum (Bredekamp & Rosegrant 1992).

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# Who's the Real Teacher?

Patricia Koh

*"The real teacher is someone  
who does not try too hard to teach"*

Heather Gell was such a teacher. She was my music and movement teacher who taught me about teaching. She taught so many of us how to make the most of class time, and how to expand the space of the classroom so that we might create a whole universe of learning.

Heather Gell's passion for music and movement and her involvement with children in acting, thinking, and feeling, made me realise the importance of teaching like-skills other than the 3Rs (Reading, Writing and Arithmetic) in a more natural and creative way. The ability to communicate, to inquire, to solve problems and make decisions, and to respond and relate to other people and the environment

is what a real teacher would impart to a child.

In my mind, a real teacher must be excited about many things in life and not just about teaching a child to help him get full marks.

The Real Teacher must love every moment of her life sharing an idea and exciting the child to a world of new opportunities.

A Real Teacher must give the child the space to grow and to stretch her imagination further than anyone else can stretch it.

A Real Teacher celebrates little successes. She looks for little improvements and takes note of them.







She does not harp on little mistakes but uses the opportunity to guide the child to greater understanding.

She is overjoyed when there is a response from a child especially when the answer is out of the ordinary.

A Real Teacher loves answers which are not found in the comprehension passages. She loves spontaneity.

A Real Teacher is truly someone a child would love to be with day and night.

Are there enough 'Real Teachers' in our midst?

How many teachers would respond positively if the question, "Will The Real Teacher Please Stand Up?" was put forth?

Unfortunately, most teachers don't even realise the need to be that 'real teacher'. A teacher is often seen as someone in authority, or someone who has the power to teach and to turn someone into a genius.

*My dream is to touch every child in Singapore and around the world through the teachers I touch.*

I cannot disagree more. Every child who comes to me has something more to offer than what I can offer him. I am only there at the right time and right place to help him realise his potential. He will benefit from our interactions because I understand him and know his needs and recognise his talents.

My training in child development and early childhood education both in Australia and London has given me a greater insight into the many possibilities of working with children. It far exceeds teaching them to be great scholars. It is about opening the windows of opportunity.



My passion for training teachers on how to become 'real teachers' started in 1977. I was appointed a lecturer in the Pre-school education Department at the National Institute of Education ( then the Teachers' Training College) and later became the Head of Department. During that time, I designed a training programme for the Ministry of Community Development and trained 20 Child Care Teacher Trainers so as to create that multiplying effect of creating 'real teachers'.

Over my ten years at the Institute, I trained thousands of teachers every year. I must say that quite a number of these teachers have become 'real teachers'. Unfortunately, some of them have left the teaching service. I believe they are still the 'true teachers' in every sense of the word,

wherever they are, whatever they are doing.

My desire is to continue training 'real teachers' and it is now happening through my involvement as a Training Consultant to other Institutes.

My dream is to touch every child in Singapore and around the world through the teachers I touch. I hope in ten years' time, when the same question is being posed, a whole generation of teachers will stand up, tall and proud.

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*Patricia Koh is the founder and Director of Pat's Schoolhouse, a pre-school with several branches in Singapore.*

# The PCF Kindergartens in Singapore

*Julene Kee & Denise Chan*

In the early days of Singapore, there was very little schooling. A small number of schools were started by the British Colonial Office in the early 1800's to help children achieve literacy in English. At that time, students of various ages could join the classes conducted by intellectuals. It was not until 1900 when kindergartens were first introduced in Singapore.

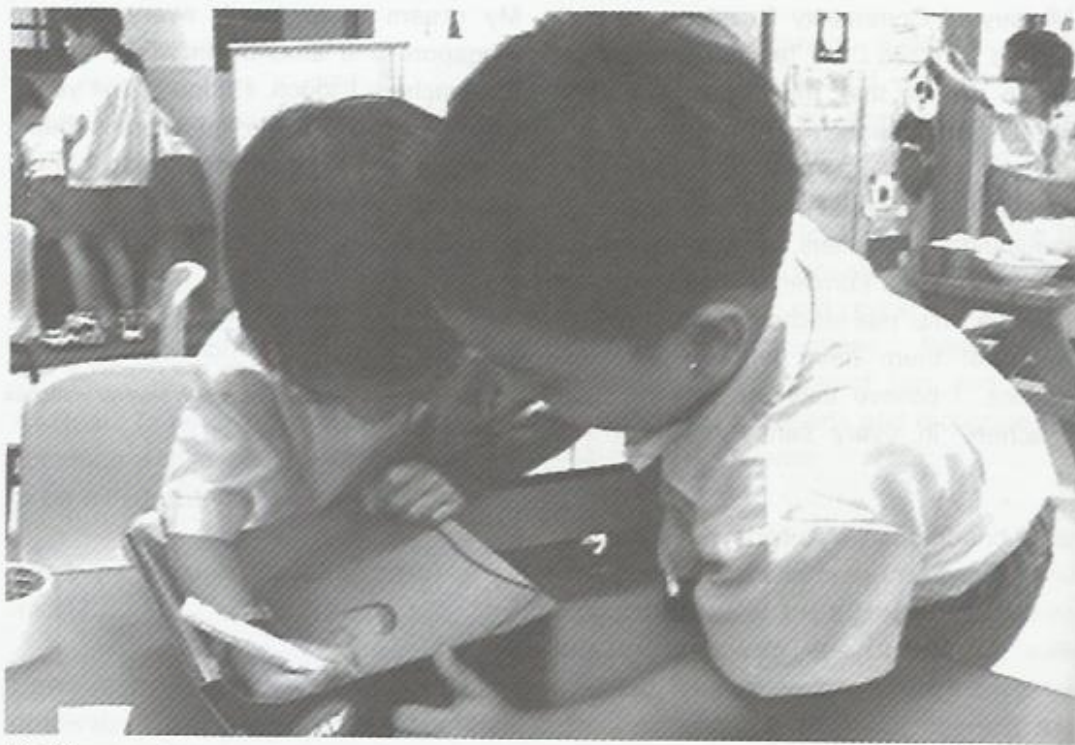
When Singapore embarked on the road to nation-building in the 1950's, the leaders recognised and placed great importance on education. Their vision was to build a multi-racial and egalitarian society.

Recognising that education is integral to the development of good and useful citizens, low-cost kindergartens were started by several People's Action Party\* branches to help children in the rural areas to prepare for

entry into primary schools. Kindergartens were set up in available spaces like shophouses and makeshift areas. As the classes became popular with parents, more branches began opening kindergartens to cater to the increasing demand.

In 1986, the People's Action Party Community Foundation (PCF) was established to run social, educational and welfare activities for the community. As a non-political, charitable organisation set up by the Party, PCF currently has more than 300 kindergartens islandwide, making PCF the largest pre-school education provider in Singapore. The majority of our kindergartens are conveniently located on the ground floors of HDB apartment blocks.

To continue to remain relevant, PCF recognises that it has to continually improve



*Working together*

\* The People's Action Party (PAP) is the main political party in Singapore



*An engaging activity*

its standards. To improve the quality of pre-school education, PCF underwent a major revamp in 1991 with "Project Pre-school" where up-to-date resources and teaching methods and upgraded facilities were acquired and implemented. Project Pre-school also encouraged teachers to keep up with current trends in early childhood education.

In 1992, PCF was among the first to introduce computer-aided education (CAE). The software had been developed according to the PCF curriculum to reinforce classroom lessons. Over the years, children have also been exposed to simulated web-surfing, creative-thinking, logical thinking and problem-solving activities.

To keep up with changes in the professional field and in attempts to maximise the learning potential of each child, teachers regularly attend training courses to enhance their skills and update their knowledge. In affirming our belief in teacher training, the PCF Early Childhood

Institute (ECI) was set up in 1996 to strengthen the foundation of our teaching staff. In the beginning, it conducted the Fundamentals and Intermediate courses as well as ad hoc workshops, seminars and conferences. In recent years, the Certificate in Pre-school Teaching (CPT) and Diploma in Pre-school Teaching (DPT) were implemented.

As part of our concerted effort to develop thinking individuals to meet the global needs of a knowledge-based economy, PCF will adopt and implement an enhanced pre-school program. The PCF pre-school program embodies three basic principles. We believe in providing children with a holistic education, engaging their mind and empowering them with English language skills.

A holistic education has always been the goal of PCF's pre-school education. In implementation, we have in the past been more focused on cognitive development. A fresh commitment is made to achieve a

holistic education for our students by ensuring that a values program, art, music and physical education program are incorporated into our timetable. The social-emotional development of our children will be supported with a learning-centered classroom.


When a child's mind is engaged, he is a thinking child, a problem-solving and creative child. He is focused and involved in the task. These are the very dispositions that the new economy demands... these are the dispositions that the PCF pre-school program will nurture, as we engage their mind. To engage their mind, teaching will be active, interactive and meaningful. Through a balance of direct teaching and children constructing their own knowledge; dispositions for the acquisition of knowledge by life long learners will be gained.

At PCF, we firmly believe in empowering our students with language skills as

language is the foundation of all learning. It is the most fundamental and important academic skill that we need to equip our students with. We will first focus on the English Language as many of our students are from mother-tongue speaking families.

Improvements will be made to our curriculum, time table and learning environment. These policies can only be as good as its implementation. As such, our teachers' commitment and skills are of great importance in ensuring a quality pre-school program for our children.

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# The Transition to School: What's Important?

Sue Dockett and Bob Perry

*The Starting School Research Project in Australia collected data from children, parents, and teachers to find out what they consider important as students start school – and how transition programs can help.*

Transition to school is an important time for children, families, and school communities. Research suggests that children who make a smooth transition and experience early school success tend to maintain higher levels of social competence and academic achievement (Alexander & Entwisle, 1988; Early, Pianta, & Cox, 1999; Luster & McAdoo, 1996; Shepard & Smith, 1989).

Over several years, the Starting School Research Project, based at the University of Western Sydney in Australia, has investigated which factors children, parent, and teachers consider important in the transition to kindergarten. We have

interviewed several hundred children and adults and conducted extensive surveys of adults across New South Wales, Australia (Dockett & Perry, 2002). By analysing the responses from parents, teachers and children, we identified eight important areas that affect transition to school:

- **Knowledge** – ideas, facts, or concepts that children know (for example, the ability to identify numbers and letters.)
- **Social adjustment to the school context** – for examples, knowing how to interact with a large group of children, or responding appropriately to the teacher.



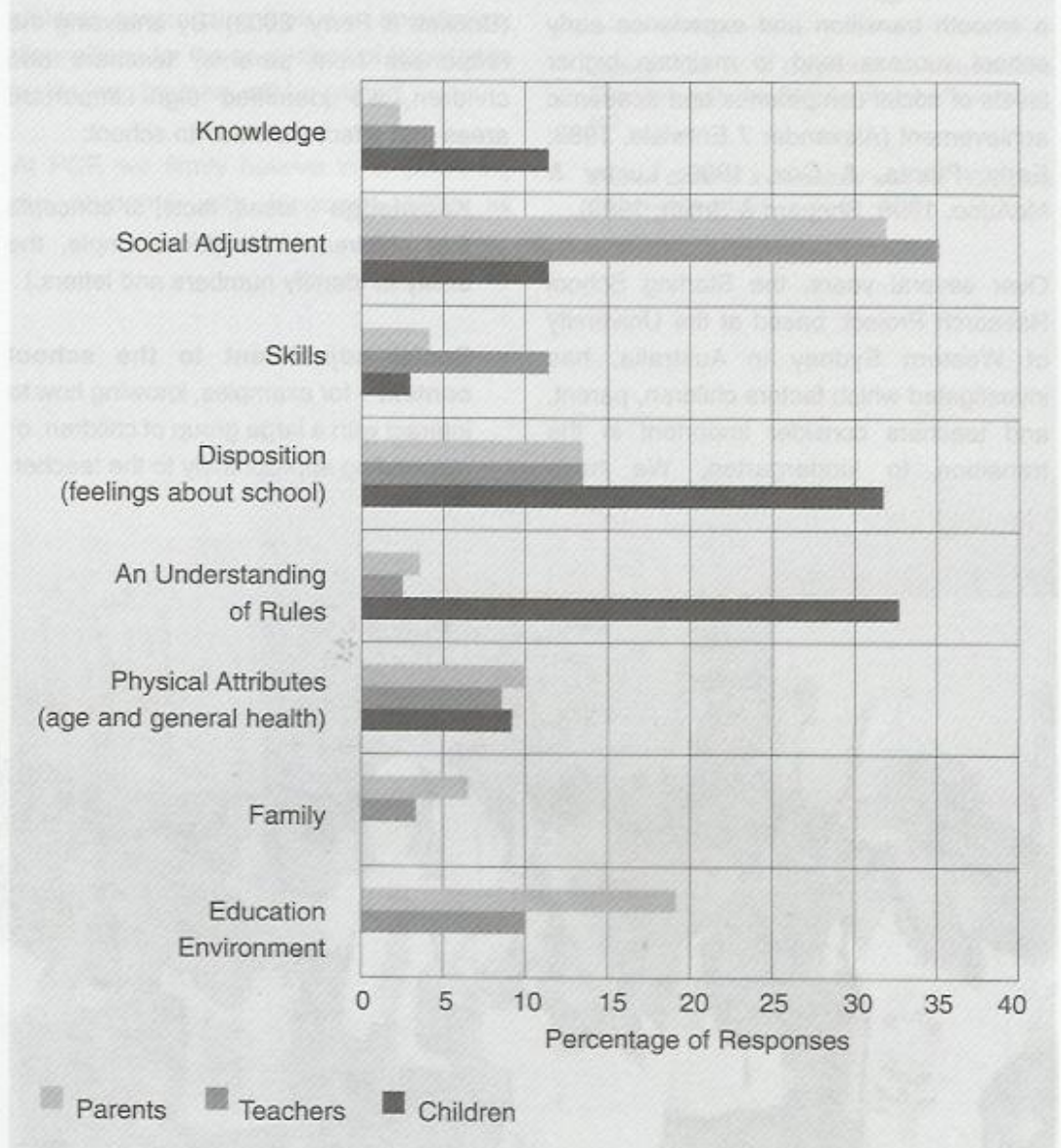
- **Skills** – for example, tying shoelaces and holding a pencil appropriately.
- **Disposition** – attitudes toward school.
- **Rules** – the expectations of behavior and action.
- **Physical attributes or characteristics** – for example, age and general health.
- **Family issues** – family interactions with the school and changes to family life brought about by children starting school.
- **Education environment** – what happens at school.

In the interviews, we specifically asked adults to “list the first five things you think of” when they considered the preparation of children for school, and we asked children to “tell us what is important when you start school.”

The responses indicate some differences among children, teachers, and parents in their views about what matters as children start school. Figure 1 reports the

**Figure 1**

**Important Factors in the Transition to School**



percentage of responses from 1,298 parents, 1,264 teachers, and 321 children. Both teachers and parents mentioned children's social adjustment more than any other category. Children also mentioned adjustment, but what mattered most to children fell under the categories of rules and disposition.

### ***Children: Importance of Rules and Disposition***

Both children about to start school and those who had recently started school could recite a long list of rules, including: "Don't run in the classroom"; "Don't climb trees"; "You can't tease anyone"; "You have to do what the teacher says"; "When you go outside, you have to wear a hat"; "Put the rubbish in the bin so the school doesn't look like a dump."

Children's responses also focused on disposition: their feelings about school, usually in the context of the importance of having friends at school. Children who liked being at school and who felt good about school usually reported having friends. In contrast, children who said they didn't want to be at school often said that they had no friends.

Interviewer: Are there some kids who don't have friends?

Connor: Yes.

Interviewer: What happens to them?

Connor: They get really sad.

Interviewer: Do you help them?

Heidi: Yes. You can't leave anyone alone with no friends.

### ***Adults: Importance of Adjustment***

Responses from parents and teachers indicated that they considered adjustment important as children started school. When teachers talked about adjustment, they

described situations in which children needed to work as part of a large group without relying on the teacher's attention to guide their behavior. Teachers also stressed the importance of children being able to take direction from adults outside the family.

When parents described adjustment, they emphasized children's ability to separate from them. Parents hoped that their child would not "stick out" from the group – that he or she would fit in. Many parents expressed concern about whether the teacher would like their child and worried about the consequences of a negative relationship between child and teacher.

Although children didn't mention these aspects of adjustment, their focus on rules may have been aimed at achieving the same end. That is, children sought to fit in by working out the rules and using these as guide for their behaviour.

Many parents also referred to the environment of the school, expressing concern about whether the school was the right one for their child. They frequently mentioned the safety of the school environment. For example, pre-school settings often have security fences and childproof locks on gates, whereas schools have low fences, open gates, and fewer teachers to supervise children. Parents worried that their children could leave the school grounds unnoticed. Parents also worried about children eating and drinking adequately throughout the day and about hygiene, particularly that children might not wash their hands after toileting or before eating.

Parents judged their child's transition to school as successful if the child expressed positive attitudes toward school. Teachers, too, were keen to have students who were excited about going to school. One teacher commented, "When children are willing to



have a go, you can teach them just about anything!"

### ***Skills and Knowledge Considered Less Important***

One striking finding of our study was the relative lack of emphasis on skills and knowledge as important factors in readiness for school. Although teachers mentioned skills more than the other groups did, they rated these as much less important than adjustment. Children reported knowledge as more important than parents or teachers did. In several of their comments, children indicated that they needed to know certain things before they could go to school. The following conversation with Alison illustrates this belief and reflects the children's common recognition that going to school was a major change that meant they were growing up.

Interviewer: Do you need to know anything before you go to school?

Alison: Trying to draw properly. Learn how to go to school.

Interviewer: How do you do that?

Alison: You play school with your brother. You have to practice. You have to get out of [being a] baby, then you get out of [going to] pre-school, and then you go to big school.

### ***Effective Transition Programs***

Many people have a key role to play in making the transition to school a positive experience. From our research, we have formulated a set of guidelines for school programs that we believe promote effective transition. Such programs



- Establish positive relationships among the children, parents and educators.
- Facilitate each child's development as a capable learner.
- Develop long-term, individualized "transition-to-school" programs, not just short-term orientation sessions.
- Have dedicated adequate funding and resources.
- Involve a range of stakeholders.
- Are well planned and evaluated.
- Are flexible and responsive.
- Are based on mutual trust and respect.
- Rely on reciprocal communication among participants.
- Take into account the context of the community and its individual families and children (Dockett & Perry, 2001).

Several communities around New South Wales, Australia, have been developing and implementing transition to school programs on the basis of these guidelines. The Starting School Research Project supported these communities through

regular input at meetings, access to resources, and information sharing. Some examples follow.

### ***Working with Remote Communities***

Cobar is a small, rural town supporting a mining and farming community. The town has two primary schools, two pre-schools, and a mobile pre-school that visits isolated families to run a pre-school session once every two weeks. During these sessions, local educators discovered that parents were eager to discuss their children's move to school. Questions included "How do I know my child is ready for school?" and "What should I do to prepare my child for school?" These parents and children often had little interaction with other families and no way to compare their children's development with that of others.

In response, a group of early childhood educators and parents, supported by our research team, developed a brochure called "Starting School with a Smile" for distribution within the

community that highlighted what parents and children could do together to prepare for school. For example, parents and children might talk to each other about why children go to school; talk with adults and children who already go to school; get involved in sporting clubs; interact with other children in a variety of settings, such as the local library; and visit the school together.

Representatives from every early childhood service participated, discussing issues with children and parents and taking photos. The brochure project clearly

responded to a need within the community by enabling early childhood professionals, parents, and children to work together. Through its text and pictures, the brochure shows children as competent learners and parents as interested and valued partners in education.

### ***Communicating Across the Early Childhood Sector***

Many of the groups developing transition programs, based on the guidelines, mentioned difficulties in getting together with their colleagues. One community focused its transition project on promoting

communication between staff in pre-school and school settings, with the aim of developing positive relationships to support children and families as children started school. The management committee at one pre-school allocated release time for one of its teachers to set the program in place. Several pre-schools invited families to give permission for the pre-school staff to contact the school that their child would attend and the child's likely kindergarten

*When parents described adjustment, they emphasized children's ability to separate from them.*

teacher. Parents were invited to be a part of any discussions between school and pre-school staff about their child. (Legally, these discussions could not occur without parental permission.) The pre-schools invited teachers from the schools to a series of afternoon teas and developed a comprehensive contact list.

The continued interaction helped teachers in different settings get to know and trust one another. After several meetings, discussions focused on what sorts of information teachers in schools would find most useful and what information children.

Parents and pre-school teachers wanted to share. From this, they developed a series of written questionnaires so that parents, teachers, or children could record relevant information and pass it on to the child's new teacher. For example, one form asked parents what they wanted to tell new teachers about their child. Another form asked each child to tell something about himself or herself.

several schools to talk about what was important in their school, what they would tell someone who was to start school, and what they wish they had known about school when they started. We then gave groups of students a digital camera and asked them to walk around the school with us, taking photos to support their discussion. The students took many photos of school toilets, out-of-bounds areas, and areas that



This program focused on developing a sense of trust and respect and offering many stakeholders opportunities to make valuable contributions. The relationships have continued to be a powerful force in promoting high quality early childhood services and connecting these services to schools.

### ***Children's Voices in the Transition to School***

In many instances, children experience transition programs but have little say in shaping them. The Starting School Research Project has promoted children's involvement in transition program in many ways.

For example, toward the end of their kindergarten year, we invited students from

had specific access rules, such as the teachers' staff room, the sick bay, and the library. Often, students stressed the importance of the rules associated with these places so that "you don't get into trouble." They also took many photos of classrooms, desks, and play areas so that other children "will know what it is like."

We compiled the photos and text into a book and made it available on the classroom computer. In some schools, children shared this book and discussed their experience with children who were about to start school.

The program involved children as competent, capable participants in transition programs and developed relationships between children in kindergarten and those about to start school.

## ***Different Contexts, Varied Programs***

These examples reflect a few of the many transition programs that various communities have developed. Transition programs should look different in different contexts because children, families and communities have different strengths and needs.


Through the Starting School Research Project, we have learned a great deal from those involved in transition and have been able to develop and support innovative and exciting programs. The project's guidelines provide a framework for the development and evaluation of programs across a range of contexts. Our continuing work highlights the significance of the transition process and the importance of helping to foster a positive start to school.

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# Teachers' Clipboard...

## The Seven Wonders

A group of students were asked to list what they thought were the present Seven Wonders of the World. Though there were some disagreements, the following received the most votes:



1. Egypt's Great Pyramids
2. The Taj Mahal
3. The Grand Canyons
4. Panama Canal
5. Empire State Building
6. St. Peter's Basilica
7. China's Great Wall



While gathering the votes, the teacher noted that one quiet student hadn't turned in her paper yet. So, she asked the girl if she was having trouble with her list. The girl replied, "Yes, a little. I couldn't quite make up my mind because there were so many." The teacher said, "Well, tell us what you have, and maybe we can help." The girl hesitated, then read, "I think the Seven Wonders of the World are:

1. to see
2. to hear
3. to touch
4. to taste
5. to feel
6. to laugh
7. and to love



The room was so quiet you could have heard a pin drop. The things we overlook as simple, ordinary and take for granted are truly wondrous!

Let this be a gentle reminder to us all that the most precious things in life cannot be bought. How wondrous life can be if we only have the right perspective! Don't you think so?



*The ASCD (Singapore) REVIEW  
Committee seeks original articles on  
teaching and learning...*

Manuscripts should be between 2000-2500 words, typewritten (Microsoft Word document) and submitted in the form of a hard copy together with a 3½" inch diskette or CD. Submissions may also be done via e-mail. Photographs would be appreciated. These visuals may also be e-mailed as jpg files. Contributions by regular mail may be addressed to:

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**The themes for the forthcoming issues are:**

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Deadline for articles: 31st Aug 2003

**Vol 12 No.2: Why I Teach: The Reflective Teacher**  
Deadline for articles: 31st Nov 2003

# ASCD Courses

## Available for Teachers and MOE Officers

The Ministry of Education (MOE) has recently acquired some ASCD courses for its officers. These are accessible through VITAL, the e-learning portal that provides teachers and MOE officers an alternative mode of training for their professional development and personal growth. MOE officers can access the courses on the Internet @ [www.vital.moe.edu.sg](http://www.vital.moe.edu.sg).

- > The ASCD courses on VITAL are

Title	VITAL Course Code
The Reflective Educator	G0114
Classroom Management: Building Relationships for Better Learning	G0115
Multiple Intelligences	G0116
Surviving & Thriving in Your First Year of Teaching	G0117
Memory and Learning Strategies	G0118
Student Portfolios: Getting Started in Your Classroom	G0119
Differentiating Instruction	G0120
Teacher Behaviour That Promote Assessment for Learning	G0121
Effective Leadership	G0122

- > MOE officers can access and register for the above ASCD courses directly through VITAL by clicking on the register button under the General Courses in the Course Catalogue. Certifications of completion will be issued upon successful completion of these courses.
- > As VITAL is linked by an interface to ASCD in the U.S., officers who register for these courses are able to interact with the ASCD trainers there as well as participate with other international participants in discussion on the ASCD portal.
- > MOE has initially purchased 500 keys from ASCD for the 9 courses. Each key costs \$146 and allows the officer a place in one of the above courses. The key is valid for one year from 1 Apr 2003 – 31 Mar 2004 allowing officers a year to complete the course.
- > Officers have to register for a course before they can browse through the course on VITAL. Should a decision be made not to start on the course, they should de-register from the course or they will be classified as "not completing the course".
- > Officers can use the online feedback system to evaluate the courses completed. This will help STB determine whether these courses would be offered again the following year.
- > Should officers wish to discuss with our local experts any issue related to any of the above ASCD courses, they can e-mail the following ASCD Executive Council members, Dr Ang Wai Hoong [whang@nie.edu.sg](mailto:whang@nie.edu.sg), Dr Cheah Yin Mee [learning@pacific.net.sg](mailto:learning@pacific.net.sg) or Mrs Soo Kim Bee [kbee@gmt.com.sg](mailto:kbee@gmt.com.sg).

## MEMBERSHIP FORM

**NEW APPLICATION**  **RENEWAL**  **UPGRADING MEMBERSHIP**

*If this application is for renewal or upgrading, please provide previous Membership No: ( \_\_\_\_\_ ) . Thank you.*

Name (as in NRIC): \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Postcode: \_\_\_\_\_

Contact No: (Home): \_\_\_\_\_ (HP/Pager): \_\_\_\_\_ (Office): \_\_\_\_\_

(Fax): \_\_\_\_\_ Email: \_\_\_\_\_

Organisation/School: \_\_\_\_\_

Occupation: \_\_\_\_\_ Sex: \_\_\_\_\_ Race: \_\_\_\_\_

**Membership Category:** *(please tick against type of membership selected)*

Types of Membership	Fees Payable	Please tick
<b>ORDINARY</b> Membership <i>For those interested in supervision, curriculum and instruction</i>	S\$30.00 per annum	<input type="checkbox"/>
<b>INSTITUTIONAL</b> Membership <i>For schools, institutions, libraries or educational societies</i>	S\$300.00 per annum	<input type="checkbox"/>
<b>LIFE</b> Membership <i>For individuals</i>	S\$500.00	<input type="checkbox"/>

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**CHEQUE:** Enclosed, please find my cheque number \_\_\_\_\_ of S\$ \_\_\_\_\_ in payment for ORDINARY / INSTITUTIONAL / LIFE membership with ASCD Singapore.

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