NURTURING EARLY LEARNERS

A Framework For A
Kindergarten Curriculum
In Singapore

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The object of education is to prepare the young to educate themselves throughout their lives.

Robert Maynard Hutchins
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“The best educated human being is the one who understands most about the life in which he is placed.”
Helen Keller
This book is written for all those involved in the education and development of young children. It explains the principles and desired outcomes for kindergarten education, which cater to children in the immediate years before primary schooling.

This curriculum framework includes the principles for effective education in the kindergarten, which forms the basis for life-long learning.

Informed by findings from local and international research, the framework suggests the different types of learning experiences that are considered necessary in helping children grow and develop. Based on the desired outcomes for kindergarten education in Singapore, this foundation will ultimately help children construct their own meanings about themselves and the world around them and aid them in becoming responsible members of society.

We hope that you will find the contents of this book informative and helpful in your work with young children, so that together, we can nurture and develop joyful, life-long learners.
WE all know that every child has a spark. We have the duty to kindle that spark in all our children, through love, care and encouragement.

The early childhood years are now well-recognised for having great influence on how an individual thinks and behaves, through his school years and as an adult. Whether our children become self-motivated learners, and face the world with confidence, depends to a good degree on the stimulation, guidance and nurturing they receive early in life. Our preschool educators therefore play a critical role.

Our aim is to nurture each child holistically. We want to nurture clear thinkers.

We want to nurture men and women who express themselves with assurance, in language and in the arts. We want to nurture Singaporeans who are robust in health, and who show friendship and respect for others regardless of their backgrounds.

This framework for a kindergarten curriculum highlights what we consider to be key principles of a quality preschool education in Singapore. It is integral to our broader efforts in education, to nurture a future community of Singaporeans who lead fulfilling lives.

The child who has his curiosity ignited in his early years, who develops an excitement about learning and interacts easily with others, will have a headstart in life. Let’s give every child a headstart.

Mr Tharman Shanmugaratnam
Senior Minister of State for Trade and Industry and Education
THE establishment of a framework for a kindergarten curriculum by the Ministry of Education is a significant milestone for Singapore. It has been designed to explain our views on what makes for quality kindergarten education. While the framework is not meant to be prescriptive, it nevertheless points the way regarding the type of learning appropriate to children in the kindergarten years, and equally important, how teaching ought to be carried out in the early years of a child’s life.

The principles identified in the framework are drawn from best practices in early years settings. They are well-accepted tenets that undergird early years education.

These principles will guide teaching and learning in a way that is best suited to young children and ensure that a firm foundation is built for the next stage of learning.

If learning is perceived to be both fun and enjoyable, it would help set the child on a journey of life-long learning.

In developing the framework, we have drawn upon the expertise of early education specialists as well as the wisdom of practitioners in the field. We are grateful to all for their contributions. I would like to express our special thanks to our external consultant, Geva Blenkin, Research Fellow, Goldsmiths College, for her patient and invaluable guidance throughout.

I hope the curriculum framework will serve as a useful reference point to many in the field of early childhood education in Singapore.

Ho Peng (Ms)
Director, Education Programmes Division
Ministry of Education
THE early years have a crucial influence on later development and learning. Quality early experiences have been found to make a difference to the future achievements of children.

Young children are natural and active learners. They enjoy:

- observing
- exploring
- imagining
- discovering
- investigating
- collecting information
- sharing knowledge

These early learning experiences can be further enhanced by caring adults who provide high levels of interaction to promote positive attitudes to learning. This is achieved through both play and structured learning in an enjoyable and non-threatening environment.

What are young children like?
The role of kindergarten education is to prepare children for the journey of life-long learning. For such a sure start to be realised, a major aim of kindergarten education is to support and foster the holistic development of the child.

This involves the nurturing and acceptance of young children’s spontaneous, natural and varied responses to the wealth and richness of experiences and opportunities the child is likely to encounter on the learning journey.

Adult and peer support are vital to this process as children extend their individual skills and knowledge of the world to more elaborate and complex ways of learning, doing, and understanding.

Early years education has been perceived by some as a preparation for primary school. However, it is not just a preparation for the next stage. It is vitally important in itself. It should not be confused with trying to accelerate learning in the kindergarten years by providing children with a simplified primary school curriculum.

Kindergarten education aims to promote a love for learning.

A child who sees learning as pleasurable and challenging has a headstart on the journey of life-long learning and looks forward to the varied opportunities to explore and discover the many facets of our world.
AIMS OF KINDERGARTEN EDUCATION IN SINGAPORE

WE want our children in the kindergarten years to enjoy observing, exploring and discovering the world. To develop a thinking nation and life-long learners, we need to nurture children from the start, to learn to think and to think to learn.

Thinking cannot be developed in a vacuum. Language and thought are so closely related that we need to develop language abilities so as to develop thought. It is therefore paramount that a kindergarten curriculum should lay a strong foundation for language skills.

No educational programme is complete without a strong emphasis on values. No man is an island. Children have to learn to interact with others and to be aware of their own feelings and needs, as well as the feelings and needs of others. Children need to feel confident and comfortable about engaging in new learning experiences.

Successful life-long learning depends on young children being given opportunities to develop personal and social skills.

These aims are reflected in the desired outcomes of education in the kindergarten, which are in line with those of the primary school.

By the end of their education in kindergarten, 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 co-ordination and healthy habits
- Love their families, friends, teachers and school
This framework aims to guide parents and teachers to design a curriculum which will foster in children the following dispositions and skills:

- Sound moral and social values
- Good habits of working and playing with others
- Positive self-concept and confidence
- A strong sense of curiosity about things and objects around them
- An ability to communicate effectively in English and a mother tongue language
- Physical control and manipulative skills
- Positive attitudes towards a healthy lifestyle
- Positive family values and strong community ties
THESE principles are drawn from, and are evident in, good and effective practice in early years settings. The critical features of a quality kindergarten curriculum are:

- A holistic approach to development and learning
- Integrated learning
- Children as active learners
- Adults as interested supporters in learning
- Interactive learning
- Play as a medium for learning

"Education is not the filling of a pail, but the lighting of a fire."

William Butler Yeats
Principle 1: Holistic development and learning

A holistic approach to development and learning

Every aspect of a child’s development should be recognised and valued. Each one of us has different ways of learning, with individual preferences and abilities. These need to be recognised in order to maximise the potential of each individual.

Provision for children’s learning at every level must focus on knowledge, skills, dispositions and feelings. Children should be given the opportunity to explore and experiment with developing their various intelligences.

Six critical areas of learning experience have been identified for this purpose:

- aesthetics and creative expression
- environmental awareness
- language and literacy
- motor skills development
- numeracy
- self and social awareness
Aesthetics and Creative Expression

At this age, children are naturally spontaneous and exuberant in the ways they express their ideas and feelings. We should therefore provide opportunities for children to express themselves freely, as they invent, play, explore and refine ideas and feelings through a variety of media such as dance, music and art.

Environmental Awareness

The focus of activities should be on children’s emerging knowledge and understanding of their environment, including both the natural and man-made world. These should provide the early foundations for historical, geographical and scientific learning. The aim is that children will recognise, make observations and express their views about their immediate surroundings, gradually extending to the wider environments of Singapore and the world.
Language and literacy

Language plays a crucial role in the development of children’s thinking and learning. To nurture a positive disposition towards language learning, it is essential that children are exposed to meaningful language arts activities such as role playing, singing, rhyming and reading. These activities will promote children’s interactive skills in speaking, listening, reading and writing.

Children will also need to be immersed in language-rich environments, and engaged in activities which foster the use of English in everyday, authentic situations in order to help them acquire the necessary communication skills to express their needs, thoughts and feelings in English.

Motor Skills Development

Though motor skills development is a naturally evolving process, it should not be taken for granted and ignored in pre-school education. In fact, it should be recognised as crucial to the development of gross muscle and fine motor dexterity that will, in turn, affect children’s mastery of self-help routines (such as brushing one’s teeth) and skills in the other domains (such as writing or painting).

It is therefore important to recognise children’s physical needs and to provide them with the time and space for unrestricted movement, so that they can naturally develop their sense of balance, physical co-ordination, and awareness of space and direction. It is also important to provide a secure environment where children learn about their limits and build self-confidence in risk-taking.
**Numeracy**

Becoming numerate is an integral part of daily experience. Through the use of manipulatives, pictures and symbols, children notice relationships between sets and groups of things to be sorted, counted, shared, and represented. Hence activities should focus on hands-on experiences and the acquisition and use of appropriate language such as position words, number words, names of shapes, and so on.

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**Self and Social Awareness**

Pre-school years are the critical years in which children learn to make sense of their own ‘selves’ in relation to the world around them. In order to do this they have to learn the values and rules governing the society in which they live, and to develop socially and morally acceptable behaviour. They have to learn to be sensitive to the needs of others and develop the necessary social skills to establish meaningful relationships at work and at play. They have to learn how to cope with success and failure and to confront and overcome their fears and anxieties. These social learning experiences are vital to children’s long-term mental health and social well-being and to successful learning outcomes later on.

Our overriding concern should be to nurture caring, courteous, gracious and compassionate individuals who can effectively cooperate with others whilst pursuing their own ambitions, in order to lead fulfilling lives.

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**Principle 1:**
Holistic development and learning
**Principle 2:** Integrated learning

Young children learn from everything that happens to them and do not separate their learning into subjects. Their learning experiences should therefore be integrated as a whole. These interdisciplinary activities help children to understand how knowledge and skills are really linked together rather than segregated in the teaching and learning process.

Within a **meaningful context**, children discover things from observations, enquiry, exploration, and first-hand experiences.

A learning experience from one domain should naturally lead on to another learning experience from another domain.
Children as active learners

Learning is most effective when children are actively involved and engaged in carrying out tasks that are meaningful to them. These activities should be based on children’s curiosity, needs and interests. Lessons should do more than fill the children’s minds with facts. Although basic skills will be taught to help children make sense of their environment and sharpen their abilities in thinking, observing and communicating, the emphasis is on the process of knowing, understanding and forming their own ideas rather than the completion of worksheets or repetitive exercises.

Ample opportunities should be provided for children to learn from observations, enquiry, exploration and first-hand experiences. Adults facilitating these learning experiences both in the home and in school should bear the following points in mind:

- **Allow for messiness:** The process of exploration, experimentation and creation of unique products and artefacts is often a messy affair and part of active learning.

- **Ensure that the environment is safe for children:** Look out for such hazards as slippery floor, sharp objects, and make sure that the children are not exposed to naked flames.

- **Allow for mistakes:** Children should not be made to feel afraid to try something new. Even if they make mistakes or encounter failure in doing something, they should be encouraged to try again, and should be praised for their effort.

**Principle 3:**
Active learning
Principle 4: Supporting learning

Adults as interested supporters in learning

Children should be given experiences that support and extend knowledge, skills, understanding and confidence, and help them to overcome any disadvantage.

An adult planning a developmentally supportive activity first considers what the children know and can do, and then builds on the learning experiences. To do this, the adult needs to be very observant of the children’s needs and abilities. The adult has to recognise when children are experiencing frustration with the activity because of its level of difficulty.

The goal is for children to experience satisfaction and independence by working on the activity. It is only when this is achieved, that children will feel comfortable to take risks in their learning. The adult can then guide children to the next challenge or level of difficulty.

Support should then be given to build up confidence through practice and understanding.

The goal is for children to experience satisfaction and independence by working on the activity. It is only when this is achieved, that children will feel comfortable to take risks in their learning. The adult can then guide children to the next challenge or level of difficulty.

Expectations and demands on children should be realistic, based on their levels of development across all areas. The aims are to encourage a positive disposition to learning and risk-taking without fear of failing. The most effective learners are those who are able to learn from their mistakes.
Interactive learning

Participation in groups is central to how individual learning is constructed, for adults as well as children. When there is extensive and meaningful interaction between children and adults in a nurturing and positive environment, children display more exploratory behaviour and better peer relations. This principle has implications for:

**Children’s talk**: Ample opportunities must be given for all children to talk about their experiences, express their thoughts and opinions, and explain how they solve problems that occur during play. Children should be actively engaged and involved in interactions and dialogue.

**Adult talk**: Adults act as role models for the correct use of the language and should be affirming and supportive in encouraging children to express their thoughts. The best teachers listen to children and have conversations with them.

**Group dynamics**: Children should work in pairs and groups, and have many opportunities to talk to adults and their peers. Child-centred lessons will feature children asking questions or extending ideas. Settings should provide experiences and support to enable children to develop a positive sense of themselves.

**Language-rich environments**: Children also interact with materials and the environment. Much of incidental and life-long learning comes from children’s interactions with books and environmental print. As such, a variety of reading material should be put within easy reach and made accessible to them.

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**Principle 5: Learning through interactions**

*They take time to listen to and to talk with children. They value what children say.*
The secret of education is respecting the pupils.

Ralph Waldo Emerson
PRINCIPLES >>
Play as a medium for learning

Play is vital to children’s learning. Play is a vehicle for motivating children to explore, discover, take risks, make mistakes and cope with failure. It permits them to be involved in organising, making decisions, making choices, practising, persevering and expressing feelings.

While it is important to encourage spontaneous and imaginative play in children, opportunities for structured play involving a rich use of language should be provided.

This will serve to develop and extend:

- creativity
- oral and aural skills
- language associated with numeracy and early environmental awareness
- personal and social skills

Adults should therefore value play as children’s work, and guide and facilitate play as a part of the learning process.
WE recognise that good practices are based on sound principles. Good practices, at home or in school, have the following features:

- They start from the child.
- There is a positive learning climate.
- The learning environment is thoughtfully prepared.
- The activities are purposefully planned and structured.
- The resources are carefully chosen and designed.
- Children’s development is observed and monitored.
“Education is not preparation for life. Education is life itself.”

John Dewey
Starting from the child

The starting point for all adults working with young children is getting to know them: their abilities, interests and dispositions. Part of this process involves observing them carefully. This is important for several reasons:

• planning meaningful activities
• pitching the level of the activities
• supporting the child to the next level
• identifying learning strengths and potential, problems and difficulties

It is important to bear in mind that children differ according to the rate at which they acquire skills and ideas. Children should therefore not be pushed to work at a level beyond their ability, and should not be compared with others.

Children look to their teachers and parents for affirmation. Adult expectations – especially those of parents – can act to either motivate their children to rise to challenges or dampen their enthusiasm for learning. It is important, therefore, for adults to pitch their expectations appropriately, so as to safeguard the child’s self esteem, which is very fragile and precious.

Early identification of problems serves to help children overcome huge barriers in the future.

Early identification leads to interventions that help the parents, teachers and children cope with the effects of the problem.

The people most appropriately placed to identify whether a child has a problem are parents and teachers. One way to find out if children are encountering learning difficulties is to observe them closely. Look out for instances when the child is not developing in line with other children. Monitor the child over a period of time, giving as much guidance as possible. If the problem persists, seek professional help.

When help is offered at an early stage, it is often easier to resolve any difficulty the child may have. Therefore parents should be encouraged to seek professional help as early as possible.
Fostering a positive learning climate

Meaningful learning will only result when children are encouraged to seek their own answers to questions in an environment that invites experimentation and exploration.

Adults should ensure that all children feel included, secure and valued. The language used by adults should be encouraging, inviting children to ask questions and to take risks. They also need to ensure that children are guided to start taking responsibility for their own actions and choices.

Parents and teachers should work together in an atmosphere of mutual respect within which children gain confidence and emotional security.

The warm and intimate atmosphere of the home provides the most conducive environment for optimal learning.

The daily conversations at meal times and time set aside for sharing stories reinforce the positive dispositions towards learning.
Preparing the learning environment

The physical arrangement of a room can influence dispositions toward the activities carried out in the place. It can invite exploration and experimentation, or it can stifle creativity and restrict imagination.

As such, the classroom arrangement can have a powerful effect on teaching and learning. The physical layout influences the type of learning that is going to take place. For example, the arrangement of tables and chairs with a teacher seated in the front of the room will probably result in teacher-directed and table-bound activities where children are passive and wait to be told what to do.

However, an arrangement that can enable teachers to move around freely and engage in more positive interactions with children will encourage active learning.
Children need ample opportunities and encouragement to explore and try out ideas freely and independently, at their own time, and at their own pace. This can be done at learning centres set up around the room. Activities designed for these centres should encourage exploration, experimentation, cooperation and decision-making. The processes of active and social learning should be the focus of the planning, rather than the end product.

A lot of learning that takes place in the classroom is incidental. For example, certain reading skills develop when children re-read stories that they have created themselves. Children also learn to take pride in their work and realise that it is valued when they see it displayed.

With this in mind, it is desirable that children’s work be creatively displayed around the classroom or the home for an extended period of time.
Planning activities

The adult has to be clear about the purpose of the activity, and ways in which the child’s involvement may be sustained.

If the desired outcome of the activity is unclear, learning may not be optimised. It is therefore advisable to identify just one or two objectives for each activity, rather than try to cover too much all at once.

Therefore activities should provide for rich and stimulating experiences. Learning takes place when adults:

- plan experiences that are relevant, imaginative, motivating, enjoyable and challenging
- make effective use of incidental learning opportunities that arise from everyday events and routines in order to teach skills and knowledge
- guide children in understanding the purpose of the activities
- use language that is rich, clear and grammatically correct. It is important to recognise that what is said and how the adult speaks is one of the ways of introducing new vocabulary and helping children to develop the language for thinking
- interact with and support children in a way that positively affects children’s attitudes to learning
- identify the next step in children’s learning to plan how to help children make progress

The adult also has to understand that every aspect of children’s learning and development, be it personal, social, emotional, physical or intellectual, is interrelated and interdependent and this should be reflected in all planning.

For activities to be effective in the learning process, the adult has to keep in mind, an understanding of:

- the ways in which young children learn
- their interests, needs and abilities
- the nature of learning and teaching processes
- the desired outcomes
The planned activities should involve children by encouraging them to:

- learn from each other
- learn through movement and all their senses
- have time to explore ideas and interests in depth
- feel secure, which helps them to become confident learners
- learn in different ways and at different rates
- make links in their learning
- create and engage in imaginative play that promotes the development and use of language
Choosing and designing materials

The best resources and materials tend to be:

- easily and readily available
- used daily in common tasks
- non-restrictive, allowing children to be as creative as they can be
- stimulating
- of a wide-ranging variety of media
- engaging to young children, and able to sustain their interest

In view of this, it is good practice to make available blank sheets of paper and writing instruments such as pencils, crayons, charcoal sticks and paints for children to independently and freely express themselves.

The display of materials is also a means of making learning accessible to the children.

Technology (computers, television, digital cameras, etc.) plays a significant role in all aspects of Singaporean life today. While there may be potential benefits from the use of technology by young children, technology should supplement rather than replace highly valued early childhood activities which promote collaborative play, learning and creativity. The adult would ideally determine whether the specific use of technology is age appropriate, individually appropriate, culturally appropriate, and relevant to the programme content.

It is important to remember that the materials do not drive the instruction. The materials support the learning.

Worksheets and activity sheets are not meant to be the goal of the instruction, but to consolidate what has been taught.

Practice 5: Setting up resources
Observing and monitoring children’s development

The only way to teach a child is to know him or her well. Only in knowing children well can we respond appropriately to them.

Observing and recording children’s progress is vital for programme planning and evaluation. If adults are to meet the developmental needs of children, they will need to refer to these records and observations on a regular basis.

Observations of children’s progress and development can be kept in a portfolio containing, for example, their drawings, paintings, sketches, writings, or mark making and printouts of computer-generated projects. Profiling and record keeping in this manner also provide evidence to inform parents of their children’s progress.

Strong partnerships between teachers and parents can yield valuable insights into each child’s development.

As teachers and parents share and celebrate each child’s achievements and interests, children will feel valued and develop self confidence.

Teachers can then use observations – both from home and what is done in the kindergarten – to identify learning priorities and plan relevant learning experiences for each child. Parents and teachers can also match their observations to their expectations.

In this way, we can help children realise their full potential, and inspire them to become accomplished and life-long learners.
EVERY child is a social being. When children see their parents and teachers sharing their progress, and planning for their development together, they sense that they are valued by the community and family. This motivates them in their learning and spurs them on to realise their goals and ambitions throughout their lives.

Families who are regularly informed about their children’s progress in school, and who are involved in their children’s development, have happier children who have a sense of fulfilment.

Families are the most important influence on children’s lives.

Values such as honesty, respect, and responsibility for one’s actions, are instilled by parents who are their children’s first role models.

The attainment of these values ensures that our children grow to be good citizens and valuable members of society later in life. Parents can help their children spend time constructively by doing things together and talking to them about their daily lives, the things around them, family history, current events, hobbies and topics explored in school.

Because of the important roles of parents, schools should always aim to be places where families feel welcome and are recognised for their strengths and potential as partners in helping their children develop in a holistic manner. Schools should set up ways of keeping parents informed and involved in their children’s learning, for example, through newsletters, dialogue sessions and regular meetings.
“It takes a village to raise a child”

African proverb
THE kindergarten years are crucial for starting our children out right on their journey of life-long learning. It is therefore vital that we keep in mind our goals for the education of our children.

To prepare our children for education is to ensure that they are:

- joyful learners: they should find pleasure in doing what comes naturally to them
- curious learners: they ask questions readily and spontaneously to find out about the world they live in
- gracious learners: they should humbly seek to learn from and share with others
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