



Learning Centres in the Vanuatu Classroom

Acknowledgements

Acknowledgement and thanks are due to all the stakeholders who provided input into this document. This document benefited from contributions by provincial coordinators, teachers and other stakeholders.

The contents of this document are guided by all materials previously prepared by the Ministry for Early Childhood Care and Education (ECCE). This document could not have been written without the dedicated and knowledgeable support of Jennifer James, the National Early Childhood Care and Education Coordinator.

This document was prepared in collaboration with Jennifer James, Joan Littleford, and Teresa Gonzalez. The unique expertise of Mona L. Renzone is showcased in the design of the document.

This document is further informed by the following Republic of Vanuatu, Ministry of Education documents: the National Quality Framework for ECCE 2012, the Inclusive Education Policy and Strategic Plan 2010-2012, the Vanuatu Childcare and Education Policy 2010, and the Vanuatu Syllabus, Primary Years K to 3 Curriculum.

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Chapter 1

Why Use Learning Centres?

What is a Learning Centre

A learning centre or activity centre is simply a specific area of the classroom in which materials are collected that will allow children to explore a common theme. The materials are carefully chosen, often in co-operation with the children, and can change according to a current interest. The term Learning Centre emphasizes the idea that this is a place of learning and not just a place for children to have some fun. The fun will happen as a result of their learning and so it is highly motivating for young children.

A learning centre provides the teacher with an opportunity to learn about the children who are at work there. They can reveal the vocabulary the children know, the ideas they have, and their way of solving problems. Children are able to work with the materials as they are presented to them or they can combine materials, consider a problem to solve, develop a plan, work in cooperation with others and feel pride in their own thinking.

What follows is a way of understanding why learning centres are important in the early years classroom, how to assess the learning, ways of organizing for a centre based environment and then specific ideas for setting up some learning centres in the class.

Understanding Early Brain Development

Children are born ready to learn. Their brains are wired for learning but the connections between the wires are dependent on stimulation to connect them. Unlike animals of the forest or the jungle, baby humans cannot stand and run within a few hours of birth. Baby birds begin flying within a short time and fish begin swimming right away but baby humans are quite helpless. Human brains are comparatively small at birth, believed to be

because our brain is too complex and would therefore be necessarily quite large. A great deal of growth must occur and synaptic brain connections made before humans can do the tasks that are so simple for other animals from birth.

A mass of connections within the brain allows us to learn, to feel emotions, to communicate with others, and to socialize. We depend on stimulation to fire the brain, similar to a spark that provokes a flame and then a fire. When we hold babies lovingly, talk to them with a soothing voice, play little games with their fingers and toes, babies brains are stimulated and wires begin to spark and connect. Milk and later food provide similar stimulation. The brain is very adaptable and is dependent for its development on the stimulation it receives in for the first five or six years of life. The emotional, social and language stimulation toddlers experience play a critical role in how the brain is wired and therefore who these children become in later life. The experiences in the first five or six years of our lives set the foundation for later development. These years, years that children are encouraged to spend in early childhood education programmes, are critical for forming the brain in ways that set the course for the rest of children’s lives.

When planning learning opportunities for young children, it is important for the teacher to have a strong understanding of child development. There are five generally accepted stages of development through which all children progress, although they may progress at different rates. The experiences that are provided for children have a strong influence on how children progress through these stages of development. Parents and educators have a responsibility to provide the most comprehensive and well-rounded experiences for children in their care that will help them become active, involved learners.

The education of young children should not be focused on rote learning or on worksheets of pre-reading and writing activities. A programme that addresses children’s needs in all areas of development will provide the kind of early years education that will help children become thinkers, readers and writers, mathematicians, scientists and physically active, healthy adults. This is one of the advantages of a well-organized play-based learning curriculum. When a child is involved in an independent activity at a learning centre, the task is more complex and becomes integrated with other areas of child development and therefore more beneficial.

Learning Domains

- Social
- Emotional
- Language, Communication and Literacy
- Cognitive
- Physical

Understanding Child Development

Child development is generally organized using the following domains:

- social
- emotional
- language, communication and literacy
- cognitive
- physical

Social Development

Prior to school entry children have had experiences within the home and the community that are social in nature. Upon entering this new setting children need to feel confident and comfortable about themselves in order to socialize with the adults and children in the school. They need to be able to cooperate, share, care for others, make friends, deal appropriately with conflict and respect others. Learning centres are set up to be social areas of the classroom where children find an area of interest for themselves but work and play with others to complete a self-defined task.

Emotional Development

An important aspect of early child development is learning to control one's emotions – to self-regulate. This is critical in order to socialize with others, understand and empathize with the feelings of others, and deal with their emotions. When children are self-regulating they are social, caring, helpful and kind. We all need to feel valued and cared for and this is even more important for young children. When playing or working in centres children have opportunities to socialize with others and learn to control their emotions in authentic ways. In centres such as the Home Centre they are able to take on the role of another and begin to understand their point of view.

Communication, Language and Literacy Development

Pre-school years are a critical time for children to develop the language skills they require to express themselves clearly and to understand others. Literacy is based on the foundation of oral language so both should develop substantially and in parallel ways in these important years. In order to learn and use language, children have to hear it spoken and have opportunities to use the words in authentic situations. Classrooms should resound with language, from the teacher but most importantly from the children who are learning to express their thinking.

Cognitive Development

A young child's brain is expanding and connecting at a rapid rate in the years prior to about age seven. When they use the materials provided by the teacher at learning centres, they have many unique decisions to make and they are limited only by their own thinking and creativity. The teacher should become an observer of children as they demonstrate their thinking and challenge themselves to explore the materials. Learning centres should be set up to provide opportunities for children to integrate learning from language to science to mathematics, grounded in social and emotional development. The holistic nature of a learning centre allows children to be creative and imaginative.

Physical Development

Young children are undergoing great growth change. Learning to coordinate their arms and legs is a recurring competence that they must develop as they grow, get stronger, and understand how their bodies work. They are active and the teacher should make plans with this in mind. Rather than shutting their energy down by having children sit for long periods of time, the teacher should help children to use their energy to learn. Development must take place in both gross motor and fine motor skills through a variety of contextualized activities.

Learning Through Play

Children in the early years learn best through play. Its importance to children is such that the United Nations High Commission has recognized it as a right of every child. Through play, children are able to bring together skill in all areas of development and work at a task according to their own level of development. By working within what Russian theorist Lev Vygotsky called their "zone of proximal development", that area that is their current level of understanding, children are able to continuously challenge themselves to advance their learning because the new level of

UN Convention on the Rights of the Child

That every child has the right to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts.

Zone of Proximal Development

"In play, the child always behaves beyond his average age and above his daily behaviour. The 'zone' is the growing edge of learning in which children can absorb, challenge and balance risk with a chance of success."

Fromberg, D. 2002. Pg.9.

learning is within their reach.

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This does not happen if the activity is too easy – no new learning is happening with this review but practice with a known skill does serve to reinforce and solidify that skill. Nor does it happen if the activity is too difficult – the skills required linking the level of current learning and the level of learning expected can be too wide and children cannot apply their strategies effectively to the more complex task.

As the majority of children learn new skills, the gap between students intensifies as lessons become more complex to suit the learning needs of the advanced learners. It becomes difficult for this child to catch up.

When children are engaged in a play-based task, the open-ended nature of the task allows the child to work within their zone of proximal development. This allows the child to move forward sequentially and systematically in their learning. They apply skills from other areas of learning to the task and they learn skills in all areas of development.

Linda and Vanessa are playing side by side at the sorting centre.

Vanessa: "I love going to the beach to collect shells."

Linda: "Me too."

Vanessa: "I go with my brother and we pick up handfuls of shells and take them home."

Linda: "Me too."

Vanessa: "Want to play with me?"

Linda nods approval.

Vanessa: "Let's put the shells in piles."

Both girls put the shell collection out on a mat on the floor. Linda begins to pull out all of the shells with rounded edges.

Vanessa: "I have some of those shells too. I can put them in your pile."

Linda: "I like the round shells. They look like a fan. Here are some big ones." She begins pulling larger ones from the rounded pile and sub-divides (sorts) the shells. "Wow, look at these big shells!"

Vanessa adds a big pointed shell to the pile.

Linda: "No, that doesn't go there! It isn't a round shell."

Vanessa: "But I thought we were making a pile of big shells now!"

Linda: "No, it is a pile of big and round shells. That one isn't the same."

What have we learned about these two children?

Social Development: *What does this conversation tell you about these girls and their ability to interact and socialize with others? How do you know? What were the clues?*

One conversation cannot give us a complete picture and any assumptions should be backed up by other observations. However, this conversation might tell us that:

- Vanessa is a social learner - she likes to play with others. She initiated the play with Linda.
- Linda appeared a little reluctant to interact and play. She may have been happy to play by herself.

Both girls shared the materials and worked co-operatively but Vanessa definitely appeared to be the one who enjoyed the social aspect of the play.

Emotional Development: *What were we able to learn about how these two children were feeling about themselves or about their learning? How comfortable were they in the situation?*

This conversation indicates that:

- Linda may have been shy about playing with Vanessa. Further observations would have to take place to understand how she feels playing with other children.
- Vanessa might have been upset that the play that she initiated was taken over by the rules set up by Linda. When she was told that she was not following the sorting rule, she could have become disappointed, reluctant to continue, or she might have become withdrawn at being told she had made a mistake. She appears, however, to be resilient and ready to continue to play with new knowledge.

Language Development: *What did this situation tell us about how these children use and understand language? How sophisticated was their language? Do they appropriate vocabulary/ pronunciation/ grammar? How solid is their language base for building a second or third language?*

This conversation indicates that:

- At the beginning of this interaction, Linda was not forthcoming with language. Once she decided to engage in an activity with her friend, she demonstrated strong language skills and used mathematical language (some, round, big). She also used appropriate language to redirect her friend when they confused the sorting rule.

Cognitive Development: *What were we able to learn about their intellectual development? How were they able to solve problems? to think of new solutions? to share their thinking?*

This conversation indicates that:

- Linda demonstrated a strong understanding of sorting and led the play. She doubled the sorting criteria and was able to explain the new rule to her friend.

When educators plan with child development in mind they:

- the decisions that are made are appropriate to the developmental needs of young children
- assess children in ways that are based on observations and conversations that allow children to demonstrate what they know and how they apply the knowledge in authentic activities
- know when individual children are having some difficulty in one or more areas of development and know how to plan activities that will support the child
- report children's progress to parents in ways that reflect the areas of child development

Setting Up Learning Centres

While planning which centres to set up on the classroom, there are many considerations. Some centres should be set up as permanent centres. The ones that will be addressed in some detail within this document are:

- Home Centre
- Water Centre
- Clinic
- Market

Within each of these centres, it is possible to address learning outcomes from most of the 4 learning areas of Language and Communication, Mathematics, Science and Living in our Community. As well, these centres provide the teacher opportunities to address aspects of all areas of child development in holistic and naturally occurring ways – social, emotional, language, cognitive and physical development. For the purposes of this document, each of the four learning areas from the *Vanuatu National Curriculum for Kindergarten* is addressed in the following ways:

- Home Centre addresses:
 - Language and Communication
 - Mathematics
 - Science
 - Living in Our Community
- Market Centre addresses:
 - Mathematics

- Water Centre addresses:
 - Science
 - Language and Communication
- Clinic
 - Living in the Community
 - Literacy

Following the plans for these four permanent learning centres, suggestions are provided for setting up similar centres, but not in the same detail. These centres include a Sand Centre, Arts and Crafts area, a Math Centre, a Technology Centre and a Writing Centre.

Additionally, suggestions are offered on how to establish interest centres that will sometimes be a long term or permanent centre and some will only last for as long as the children are interested in the topic of inquiry.

Chapter 2

Home Centre

Home Centre

Children love to role-play situations with which they are very familiar. This is why the Home Centre is a popular play centre for young children. They are provided with an opportunity to take on the role of any family member, to see what it feels like to be the mother, to be the father, an older sibling or be the baby again.

This centre helps children to develop empathy, an important life skill, by experiencing a situation feels from the point of view of another. *How does the mother feel when her children are misbehaving and are not listening to her? How does the baby feel when nobody is paying any attention to him and he is crying?*

Literacy in the Home Centre

The Home Centre provides opportunities for children to explore literacy in the context of authentic and familiar activities. The extent of possibilities is dependent on the materials provided for the children. Children demonstrate an understanding of the purposes for literacy as they make signs, read the signs others have made, use scribbled recipes to make food for the family, or make a note to them. This also allows them to demonstrate their independent literacy skills.

Examples of Learning That Might Occur

What a Child Might Do	Related Learning Indicator	How this Relates to Literacy
<ul style="list-style-type: none"> read or tell a story to their children when playing the role of the mother or the father 		<ul style="list-style-type: none"> understanding that the pictures and the print on the page tell a story
<ul style="list-style-type: none"> write a note to their child's teacher to say that they have been sick 	<ul style="list-style-type: none"> writing for a variety of authentic purposes 	<ul style="list-style-type: none"> knowing that people find many purposes for writing and that the purpose dictates the form
<ul style="list-style-type: none"> notices the words written on the empty cracker box and recognizes some of the letters 	<ul style="list-style-type: none"> applies emergent reading skills to new text 	<ul style="list-style-type: none"> child is aware of literacy in their environment and is able to recognize individual letters

Literacy Materials That Can Be Added to the Home Centre

The Home Centre is naturally organized to provide a variety of authentic opportunities for children to play with literacy. The skills of speaking and listening are important foundational skills on which to build reading and writing. If young children are unfamiliar with appropriate vocabulary, they will not use these words when writing and will have difficulty recognizing them when reading. Children require a strong oral language base. In the Home Centre children are exposed to authentic articles they will find in their home or in their local community and learn how to label them and to use action words to describe how they function. For example children can practice using words such as pound, stir, mix, heat, beat, etc.

Children also learn how reading and writing can play an important role in the home when authentic materials are strategically placed in the centre. Pencils or pens placed by the telephone can remind children to record telephone messages; books, magazines or catalogues can be read by the father or mother independently or to the children; or make notes to themselves about what crops they plan to grow in their garden. For children whose homes are not strong literacy environments, the Home Centre can provide an example of how they might develop a literate environment on their own.

Using the Home Centre to Teach Literacy

The teacher may carry on conversations with the children as they are playing. The teacher might say:

Listening and Speaking

- *Let's make dinner. What should we eat? (Skills and Strategies)*
- *I am cooking. Can you please tell the baby a story to keep him busy? (Production)*
- *Welcome to dinner. It is nice to have company tonight. Let's enjoy dinner. (Context and Texts)*

Reading

- *Here is the song we sang and read together today. You can read it to the baby if you want. (Skills and Strategies)*
- *When we clean up today, I want you to use the signs to tell you where to put some of the things in the Home Centre. (Production)*
- *I put a recipe for biscuits in the Home Centre today. Use the pictures to help you know what to do to pretend to make your own biscuits. (Context and Texts)*

Writing

- *I am going shopping at the Market today. Please write down what I need to buy? (Production)*
- *We need to make a sign for the Centre. Would you bring all the things we need, over to the table please? (Context and Texts)*

Viewing

- *Look at the picture on this biscuit box. How do these people feel? Does the picture make you want to buy the biscuits? (Skills and Strategies)*
- *Let's make our own box for candies. What picture should we draw to be sure people want to buy our candies? (Production)*
- *We are going to celebrate xxx in the Home Centre today. What should I have brought to school to help us celebrate? (Context and Texts)*

What Might a Teacher Observe?

When children are engaged in play at the Home Centre you might see children:

- engaging in complex conversations between characters who are older or characters who are younger than themselves
- listening to others and responding to their ideas
- reading books to babies (using the pictures to tell the story)
- bringing paper and writing tools to the centre to use for writing messages or signs
- reading labels on boxes and cans in the Home Centre kitchen
- using illustrations to follow a recipe to pretend to cook

Mathematics in the Home Centre

The Home Centre provides multiple opportunities for children to explore mathematics concepts in the context of authentic and familiar activities. The extent of possibilities is dependent on the materials provided for the children. As they imitate measuring, sorting, matching or counting, they allow the teacher who is observing them, a glimpse into their process skills as they demonstrate their mathematical thinking and ability to problem solve.

Examples of Learning That Might Occur

What a Child Might Do	Related Learning Indicator	How this Relates to Mathematics
<ul style="list-style-type: none"> puts a plate in front of each chair at the table 	<ul style="list-style-type: none"> counts objects, matching one to one 	<ul style="list-style-type: none"> uses one-to-one correspondence matches one item (plate) to one related item (chair) is necessary for counting objects accurately
<ul style="list-style-type: none"> puts cans on one shelf and boxes on another (empty, used food containers) 	<ul style="list-style-type: none"> sorts and regroups a collection of objects in different ways 	<ul style="list-style-type: none"> sorts according to a specified criteria, in this case by 3 dimensional shape
<ul style="list-style-type: none"> uses spoons or cups to pretend to measure ingredients for cooking 	<ul style="list-style-type: none"> uses standard or non-standard measuring devices appropriately 	<ul style="list-style-type: none"> knows that there are tools that are used for measuring and uses them appropriately
<ul style="list-style-type: none"> tells the child, in the role of the parent: It's time to get up now. It's morning. 	<ul style="list-style-type: none"> participates in and discusses daily routines using local time markers 	<ul style="list-style-type: none"> understands that events happen regularly at certain times of the day
<ul style="list-style-type: none"> dresses the doll to go to the market 	<ul style="list-style-type: none"> explores length, weight and capacity of objects using non-standard measures 	<ul style="list-style-type: none"> compares the size of the doll to the clothes and chooses something appropriate

Mathematics Materials That Can Be Added to the Home Centre

A well-equipped Home Centre is the key to a centre that provides interesting opportunities to explore mathematics topics. Consider finding items children would typically see in their home such as: cooking pots, bowls, pestle and mortar, cooking spoons, cutlery, used food containers (biscuits), pretend currency, a scale (real or improvised), mats, a bed for baby, dolls (life size doll is best, could be hand-made), or clothes for the doll. They should have a little table for eating dinner and a place that can serve as an area for their food production.

Children will use their imagination to create the stories but they need some familiar props to help them.

Using the Home Centre to Teach Mathematics

The teacher may carry on conversations with the children as they are playing. The teacher might say:

Number and Operations

- *How many chairs do you need for your family?*
- *How many chairs do you need now that friends have come?*
- *How many utensils do we have for people to eat with? Let's sort them into ones that are the same.*

Measurement

- *How heavy is the baby today?*
- *Hello father. It looks like you need a bigger house. I think you should measure the house. Then we should make a plan for building.*
- *I see you are making a cake for your family. Tell me how much sugar you need to make it taste good.*

Geometry and Spatial Sense

- *I think we should put another table in our Home Centre. Where would it go? How can we move the furniture so that there is room?*

Patterns

- *What a beautiful dress you are wearing. Tell me about the pattern.*
- *We need some mats for our house. Let's make some woven ones in the arts corner.*

Probability

- *What should we do tomorrow at the festival?*
- *Look at the clouds. What do you think the weather will be today?*

What Might a Teacher Observe?

When children are engaged in play at the Home Centre you might see children:

- using standard measuring tools appropriately
- using non-standard measuring tools
- counting the boxes on the shelf
- using mathematical language
- predicting weather (probability)
- one to one matching as items are chosen for the number of family members present

Science in the Home Centre

The Home Centre provides a variety of authentic opportunities for children to engage in activities related to science. By thinking broadly about the learning outcomes and the related sub-strands, the teacher places items in the Centre that help children understand some of the science concepts. Children learn about recycling or composting when a box that looks similar to a composter is placed there. Children talk about how heat affects some items such as water and, if they do not know the appropriate vocabulary, the teacher intervenes and provides the words for them.

Examples of Children's Actions at the Home Centre

What a Child Might Do	Related Learning Indicator	How this Relates to Science
<ul style="list-style-type: none"> demonstrates an awareness of the correct use of the composter or recycling bin through play 	<ul style="list-style-type: none"> explores aspects of recycling and composting 	<ul style="list-style-type: none"> develops an awareness of the effects of dumping our garbage and what is needed to care for the environment
<ul style="list-style-type: none"> shows an interest in caring for the plants that the teacher is growing in the Home Centre 	<ul style="list-style-type: none"> demonstrates an awareness of various plants living in a specific environment 	<ul style="list-style-type: none"> learns to be aware of and care for the plant life in their own environment
<ul style="list-style-type: none"> pretends to mix ingredients to form something to eat for their family puts a pot on a stove, in role to heat the water 	<ul style="list-style-type: none"> demonstrates an awareness of reactions 	<ul style="list-style-type: none"> knows that when materials are mixed or together (cooking ingredients) they create something new when heated or cooled materials change - e.g., water boils or freezes

Science Materials That Can Be Added to the Home Centre

A well-equipped Home Centre is the key to a centre that provides interesting opportunities to explore mathematics topics. Consider finding items children would typically see in their home such as: cooking pots, bowls, pestle and mortar, cooking spoons, cutlery, used food containers (biscuits, etc.), pretend currency, a scale (real or improvised), mats, a bed for baby, dolls (life size doll is best, could be hand-made), or clothes for the doll. They should have a little table for eating dinner and a place that can serve as an area for their food production. Children will use their imagination to create the stories but they need some familiar props to help them.

Using the Home Centre to Teach Science

The teacher may carry on conversations with the children as they are playing. The teacher might say:

Living Things and Our Environment

- *Who is going to water the plants today?*
- *This plant is looking like it needs something? What do you think is wrong? How can we fix the problem?*

Interactions of Matter

- *What do you think will happen if I heat these kernels of corn?*
- *I just put this pot of water on the fire and now there is no water! Where did it go?*
- *I want to make a little cake? What do I need to put in my bowl?*

Energy and Everyday Life

- *I think we should put another table in our Home Centre. This table is heavy. How can we move the furniture more easily?*
- *I want to move this heavy rock out of the field. Can someone help me make a plan to move it?*

Our Earth and Space

- *I have to go to the market. Look outside. Tell me what the weather is like today.*
- *Good night family. How will we know when to wake up?*
- *Look at the clouds. What do you think the weather will be today?*

What Might a Teacher Observe?

When children are engaged in play at the Home Centre you might see children:

- mixing ingredients together to create something new and good to eat
- using tools to help them to move heavy items
- caring for plants that the teacher has placed at the centre
- pretending to work in the field, tending the plants
- talking about animals that live in their environment
- talking about sea life with which they are familiar
- predicting weather (understanding the sky)

Living in Our Community in the Home Centre

The children have an opportunity to plan and celebrate a favorite festival when appropriate materials are placed in the Home Centre. They are able to bring materials from other centres when they decorate their home with crafts made at a special craft table, they

can take on the role of celebrants, elders, religious leaders, etc. as they role play the various activities that take place in their community, and dress in appropriate clothing. When acting in role they are able to understand the relationship between family members and between family members and others in the community.

Examples of Children's Actions at the Home Centre

What a Child Might Do	Related Learning Indicator	How This Relates to Community Living
<ul style="list-style-type: none"> in the role of the mother, move the children away from the hot pot that she is using to cook 	<ul style="list-style-type: none"> act in ways that are safe in school and demonstrate an understanding of safety rules outside of the school setting 	<ul style="list-style-type: none"> children need to be aware of their own responsibility in keeping themselves and others safe
<ul style="list-style-type: none"> demonstrate an understanding of hygienic habits as they care for their baby in the role of a parent 	<ul style="list-style-type: none"> apply simple rule so hygiene and demonstrate an awareness of healthy and safe choices 	<ul style="list-style-type: none"> hygienic habits will help to keep the children in the classroom healthy and habits encouraged at school will be used at home as well
<ul style="list-style-type: none"> take on the various roles of their family members or their teacher 	<ul style="list-style-type: none"> recognize and talk about their roles within the family and the school community 	<ul style="list-style-type: none"> children learn how their behaviour affects others when they act in their role they also learn how to interact with others in appropriate ways
<ul style="list-style-type: none"> act in ways that are supported and encouraged by their community such as the way children speak or act with elders 	<ul style="list-style-type: none"> begin to recognize some of the values and beliefs of the community in which they live 	<ul style="list-style-type: none"> our identities are tied to the values and beliefs of our communities so children need to explore this deeply
<ul style="list-style-type: none"> develop and organize their own festival and related activities 	<ul style="list-style-type: none"> participate in a variety of cultural activities common in the family and community 	<ul style="list-style-type: none"> children understand how the cultural events in their community serve to bring the community together in beliefs and celebration

Material That Can Be Added to the Home Centre

The Home Centre should change regularly according to the current interests of the children. Some items will remain in the centre at most times in order to form the foundation of the role play, items such as cooking utensils and the dolls. Adult clothing added to the centre helps children to better become a new character. At all times the

teacher should encourage children to role play an adherence to safety procedures such as keeping their children safe when they are playing or pretending to watch the food on the fire so nobody is burned. They might be interested in a festival or celebration so materials would then be added to the centre so that they could create a story about the event and act out the roles.

Using the Home Centre to Teach Community Living

The teacher interacts with the children as they are playing. The teacher might say:

Healthy Living

- *I am noticing that the little girl's hands are dirty and you are going to give her something to eat. What could you do to help her?*
- *What are you going to do when you cut that meat with the big knife? (Please note that a real knife should never be left in the centre) I want you to be safe.*

Living Together

- *I can hear the baby crying. What should you do? Why do you think she is crying? How is she feeling?*
- *I heard your neighbour is not feeling well today. Maybe you could make a plan to help her.*

Ways of Living

- *I thought your grandfather looks very tired today. How could you help him?*
- *I wonder how we could set up a festival in the Home Centre for a little while? Which one would you like to plan? What would we need? How could we bring those items to our classroom? Who could help?*

What Might a Teacher Observe?

When children are engaged in play at the Home Centre you might see children:

- creating props for a festival at the craft table to bring to the Home Centre to celebrate a favorite event
- demonstrating hygienic habits such as acting out how to wash hands before eating
- using household materials in safe ways as they act out a family event such as cooking a meal
- taking on the role of various family members as they develop a story at the centre. They demonstrate an understanding of the various points of view of family members, particularly those of a different generation.
- acting in appropriate ways within the family and the community, demonstrating an understanding of values

Chapter 3

Water Centre

Introduction

The Water Centre is very easy to set up but provides numerous opportunities for children to explore science concepts and to talk with others about their thinking. The Water Centre can simply be made using a large pail or a tub filled regularly, for sanitary reason, with clean water. Depending on the focus for the learning, materials can be added that will allow children to explore a particular theme.

Water can be messy. Before opening the centre, children must be instructed about appropriate behaviour at the centre. Children should be aware that, if they choose to splash others, they would be asked to leave the centre for the day. Splashing is a safety hazard in addition to getting children's clothing or school materials wet. Inappropriate behavior must result in specific consequences and children should be aware of those ahead of time.

When children are engaged in interactive play at this centre the teacher observes the children's behavior and has a window into children's thinking and into their ways of socializing. Using the checklists from the document entitled *Observing and assessing young children's learning, 2013*¹, the teacher documents learning in all areas of child development not just the more academic outcomes.

The materials placed by the teacher at the Water Centre play a vital role in the direction the play takes. For example, if the focus is on exploring capacity in mathematics then the

¹ Ministry of Education. 2013. Vanuatu Early Childhood Care and Education. *Observing and assessing children's learning*. Pg. 2.

materials placed there would be plastic cups, spoons, etc. of varying sizes. If the focus is on exploring the properties of water then funnels, sieves, droppers, tubes or troughs would direct the play to those outcomes. Children do not need to have access to all possibilities at all times. More interest is usually generated when the materials change.

Science in the Water Centre

A careful choice of material placed in this centre is critical to the skills and knowledge developed by the children working there. Children explore the properties of water as they pour, splash, make waves, and examine objects that sink or float in water. It is the exploration of these properties that allow children to think like a scientist, to solve problems, and document their learning.

Examples of Learning That Might Occur

What a Child Might Do	Example of the Learning Outcome	How This Relates To Science
<ul style="list-style-type: none"> locate various items that they place, one by one in the water to determine which ones float and which sink 	<ul style="list-style-type: none"> recognize that matter is all around us 	<ul style="list-style-type: none"> conducting an experiment exploring properties of water (e.g., water can support certain objects and hold them up)
<ul style="list-style-type: none"> add soap to the water in increasing amounts 	<ul style="list-style-type: none"> recognize that matter is all around us 	<ul style="list-style-type: none"> exploring properties of water
<ul style="list-style-type: none"> use paper fans, windmills or hands to create waves 	<ul style="list-style-type: none"> experiment with how objects move 	<ul style="list-style-type: none"> exploring and learning to think like a scientist
<ul style="list-style-type: none"> explore water in a variety of ways using a range of materials such as sieves, funnels, tubes 	<ul style="list-style-type: none"> recognize that matter is all around us 	<ul style="list-style-type: none"> learning about the properties of water

Science Materials That Can Be Added to the Water Centre

Although any tub or pail of clean water is the most important item in this centre, a larger container allows more flexibility in manipulating material in the container. The material that children use to experiment at the water table must be changed regularly according to the purpose of the activity. If the purpose of the centre is to have children exploring the principles of sinking and floating, objects, such as leaves, nuts, metallic pieces, buttons, straws, plastic containers, etc., are appropriate. When the focus is on how water moves, the teacher should add material such as fans or windmills (handmade paper ones). Children must be allowed to consider their own ideas such as gently tipping the container at one end to move water to the other side. If the focus is on biodiversity, children may bring materials

from home such as water plants, starfish shells, and clay replicas of sea life in order to create an underwater scene that they can play with and explore.

Using the Water Centre to Teach Science

The teacher should carry on conversations with the children as they are playing. Questions or comments posed by the teacher may include:

Living Things and the Environment

- *What plants do we see growing in the water? What do you think would happen if the plants did not live there?*
- *What helps the plants grow in the water? How could we grow some water plants in our classroom?*
- *What animals live in the water near us? How do they help us?*

Interactions of Matter

- *What did you notice when we added the soap to the water? What did you notice when we added the oil? What did you learn from that?*
- *Let's make a chart of what we know about water from the experiments we have been doing.*

Energy and Everyday Life

- *I notice you got the water to move. What did you use? What kind of energy did you use?*
- *I wonder what else could have been used to move the water?*

Our Earth and Space

- *What experiment could we do in the water centre to help us know what to do when there is a big storm? What could we put in the water? I wonder what could have been used to make the wind? What could stop the wind from blowing the boats or the water?*

What Might a Teacher Observe?

Children may:

- blow lightly to create ripples of water
- create larger waves by using materials such as paper, windmill, etc.
- create a whirlpool by, for example, moving their hands in circles
- identify items that float and others that sink
- experiment with combining items that sink on their own (a button) with items that float (a large leaf)

Literacy in the Water Centre

The Water Centre is generated to explore various aspects of the Science Curriculum. However, scientists have to record what they learn so that they remember and share the information with others. The Water Centre provides the teacher with an opportunity to introduce children to a variety of text forms that help them to organize and share their thinking with others. By reading books that have been either purchased or prepared by the teacher and/or the children, children they have an opportunity to make reading and writing connections. By working together in a small group, children use language to communicate effectively with their peers.

Examples of Learning That Might Occur

What a Child Might Do	Example of the Learning Outcome	How This Relates To Literacy
<ul style="list-style-type: none"> talk about what they are doing at the centre with their friends 	<ul style="list-style-type: none"> communicate effectively using their vernacular language 	<ul style="list-style-type: none"> learning how to communicate ideas with others and to listen to the ideas of others
<ul style="list-style-type: none"> record on a t-chart (see Appendix - T-Chart), Things That Float, Things That Sink 	<ul style="list-style-type: none"> use emergent writing skills to record ideas 	<ul style="list-style-type: none"> learning to conduct an experiment exploring properties of water (water can support certain objects and hold them up)
<ul style="list-style-type: none"> listen to the teacher read and discuss a book that is relevant to the centre e.g., book on sea life. This book could be one written by the teacher alone or with the class 	<ul style="list-style-type: none"> use emergent reading skills 	<ul style="list-style-type: none"> learning that we can read both fiction and factual books factual texts provide us with interesting and valuable information

Literacy Materials That Can Be Added to the Water Centre

Because writing materials get wet when they are in close proximity to water, planning space must be provided to allow children to record their findings. A small desk or table near the Water Centre and time to record their findings in the Writing Centre are important aspects of instructional planning.

Using the Water Centre to Teach Literacy

The teacher may carry on conversations with the children as they are playing. The teacher might say:

Speaking and Listening

- *Could you explain to me what you learned at the centre today?*
- *You girls have been playing here and I heard lots of talking. I am so happy. What were you talking about?*

Reading

- *I have an interesting book about the animals that people see in Australia. Do you think they will be the same animals as we see here in Vanuatu? What animals might be different?*
- *I wonder if this book is a true story or is it one that the author made up? How can you tell?*

Writing

- *Let's write out what you learned at the Water Centre today. How would we write this down? Do we need a chart?*
- *We have learned a lot about the creatures that live in our lagoon. Let's write a book about what we have learned so others can read about it. (teacher records children's thoughts)*

What Might a Teacher Observe?

Children may create a t-chart as shown in Appendix – T-Chart of their own to record what sinks and floats using pictures

- look at books that the teacher and/or the class have written about water or about experiments at the water centre
- talk with their peers about how to manipulate the materials in the centre
- listen to the ideas of others and try them out themselves
- make signs related to the centre
- locate paper and pencils/chalkboards to create a T-chart (see Appendix) to record things that float and things that sink
- contribute ideas to a class report on what they have learned about water:
 - “It spreads out”
 - “It disappears when you only have a little bit”
 - “Some things can float on the water”

Chapter 4

Clinic Centre

Introduction

Young children may be frightened when they go to visit a doctor or health professional at a clinic. Much of this fear is of the unknown – what will they do to me? Will it hurt? Will this make me sick?

By role-playing real life situations at the Clinic Centre in the classroom, children simulate common events and learn some coping methods they can apply to real visits. By playing the different roles, they experience points of view, and learn, for example, what it is like to be the doctor or nurse. They think about how to help their patient when in the role of the medical staff, they learn how the parents feel taking their baby to the clinic as they help the baby to feel calm, or they help the frightened child who might need some medicine.

When children are playing at the Clinic Centre, the teacher has an opportunity to listen in to conversations to see how the child treats others at the centre. These conversations can be strong indicators of how children have developed a sense of empathy and help others cope with the fears often encountered there.

Community Living in the Clinic Centre

This is a centre that can be set up for periods of time and use the same space and materials as the Home Centre or, more effectively, set up as a permanent and distinct centre. Asking for unused equipment from the local clinic such as an old stethoscope, IV bag, band for taking blood pressure, etc., and empty medicine containers will make the centre very real for the children and will advance the role play in which they engage.

Examples of Learning That Might Occur

What a Child Might Do	Example of the Learning Outcome	How This Relates To Living in the Community
<ul style="list-style-type: none"> role play sterilizing the medical tools in the role of a health professional wash hands at the clinic 	<ul style="list-style-type: none"> apply simple rules of hygiene and demonstrate an awareness of healthy and safe choices 	<ul style="list-style-type: none"> the whole community is healthier when individual community members follow good hygiene
<ul style="list-style-type: none"> demonstrate awareness of some community beliefs and values through how they interact with others in their various roles in the clinic 	<ul style="list-style-type: none"> begin to recognize some of the values and beliefs of the community in which they live 	<ul style="list-style-type: none"> all members of the community adhere to a similar belief system and this helps people to interact positively with others

Community Living Materials That Can Be Added to the Clinic Centre

Children will be able to play their role more effectively if they are dressed the part. A big white shirt serves as the lab coat of the medical staff, the medical equipment and medicine itself that was discussed in the introduction, and the clothing and the baby from the Home Centre, all contribute to setting up an effective Clinic.

Using the Clinic Centre to Teach Living In the Community

The teacher may carry on conversations with the children as they are playing. The teacher might say:

Healthy Living

- I wonder what you could use to check my baby doctor. She is not feeling well. I think you should examine her. How do you think she got sick?*

Living Together

- I see that your baby is sick. What do you think you should do?*
- How do the people working at the Clinic help our community? What would we have to do if they did not work here?*
- You are making your baby feel so much better by the way you are treating him. He needed to be comforted.*

What Might a Teacher Observe?

Children may:

- demonstrate empathy toward their sick baby by rocking or singing to him
- use the tools of the medical staff in correct ways e.g., put a pressure band on the patient's arm

- thank the doctor or the nurse for their work at the clinic
- role-play the parents of a child who is sick and demonstrate an understanding of their point of view through what they say and do

Literacy in the Clinic

Children have some interesting opportunities to explore forms of reading and writing that are unique but serve an important purpose. Clinics take telephone messages from patients; write prescriptions for patients, writes out directions for the patients, and patients read large letters on a wall chart to see how well they see.

Examples of Learning That Might Occur

What a Child Might Do	Example of the Learning Outcome	How This Relates To the Clinic
<ul style="list-style-type: none"> • write out prescriptions for the baby when playing the role of the doctor (2 pills) 	<ul style="list-style-type: none"> • use pictures, letters, and some words to record ideas 	<ul style="list-style-type: none"> • understand that there are many purposes for writing • uses what they know (initial and final consonants sounds) to record an idea or thought (2 pills)
<ul style="list-style-type: none"> • talk to the parents in the role of the doctor using specialized vocabulary and changing their voice between speaking to the child and then when speaking to the parents 	<ul style="list-style-type: none"> • communicate effectively using their vernacular language 	<ul style="list-style-type: none"> • understands how to change language to suit the situation

Literacy Materials That Can Be Added to the Clinic Centre

Children should have access to heavier pieces of paper so they can make signs to show that this is the clinic, giving directions to people (Please sit here.), or the name of the doctor.

Using the Clinic Centre to Teach Literacy

The teacher may carry on conversations with the children as they are playing. The teacher might say:

Speaking and Listening

- *How will we know what to do with the medicine? Please write down what you want us to do?*
- *Doctor what do you think is wrong with me? What do I need to do to get better?*

Reading

- In the role of a parent with children say; *Here is the clinic. Look at the sign.*
- *Nurse, the doctor has written down what is wrong with my baby on this paper. Can you read it to me?*

Writing

- *How can you write out what pills the baby needs to take?*
- *What do we call it when the doctor writes down the pills that their patient needs to take?*

What Might a Teacher Observe?

Children may:

- speak softly and gently to the baby brought in for a needle
- write out a prescription for pills
- write a note for the parents to explain what medicine their child needs
- listen carefully to the parents as they explain what is wrong with their child

Chapter 5

Market Centre

Introduction

The Market Centre is designed to replicate the experience of shopping but allows children to assume the roles of shopper or merchant. Children have an opportunity to use the expressions and terms they hear when they go shopping as well as the opportunity to experience what it is like to barter for goods. The main focus for this centre is mathematics.

Mathematics at the Market Centre

While playing at the Market Centre children will have an opportunity to experience, perhaps for the first time, what it is like to trade goods, to barter or to use currency to purchase goods. The teacher will be able to observe children's understanding of quantity, their ability to group items, to add or delete numbers, to compare size, or to use numbers appropriately.

Examples of Learning That Might Occur

What a Child Might Do	Related Learning Indicators	How This Relates to the Market Centre
<ul style="list-style-type: none"> set up the empty boxes according to similar qualities 	<ul style="list-style-type: none"> sort and regroup a collection of objects in different ways 	<ul style="list-style-type: none"> demonstrating an understanding of sorting rules and choosing a sorting criteria
<ul style="list-style-type: none"> offer funds to pay for their purchases 	<ul style="list-style-type: none"> explore putting together and taking away concrete objects 	<ul style="list-style-type: none"> understanding of currency, offering a prop that represents money and using numerals in their conversation
<ul style="list-style-type: none"> role-play the trading or bartering of goods between the adult and the merchant 	<ul style="list-style-type: none"> imitate traditional bartering methods of exchange in play 	<ul style="list-style-type: none"> demonstrating an understanding of how to trade or barter one item for another and recognizing equal values
<ul style="list-style-type: none"> demonstrate an understanding of quantity 	<ul style="list-style-type: none"> explore putting together and taking away concrete objects 	<ul style="list-style-type: none"> demonstrate an understanding of how counting and how numbers work

Mathematics Materials That Can Be Added to the Market Centre

This centre requires some material that children can use to buy, sell or trade. Collect empty boxes, empty cans but not bottles that can break. Have a way to sort and then display the items for sale. They should be able to count items, group and regroup the items. In order for children to develop an early understanding of currency, it is important that they play with coin equivalents and (stones, shells, bottle tops) so that they see that value is given to the coin and it is used to make the purchase.

Using the Market Centre to Teach Mathematics

Number

- How many cans/ boxes do you have?*
- If I buy three cans, how many will you have left? Show me how you know that.*
- Tell me how you have sorted these items. What were the sorting rules you used to do your sorting?*

Measurement

- I wonder how we can figure out how many tomatoes this person would give you for these bananas?*
- What would you give me for these beautiful avocados?*

What Might a Teacher Observe?

Children may:

- sort the items they are selling into broad categories of products
- interact with the shoppers, using mathematical language (Would you like three or four of those?)
- bartering with their customers
- make change for the shoppers using currency equivalents such as stones or shells

Chapter 6

Developing Smaller Centres

Sand Centre

The sand centre has a similar purpose to the water centre. Both provide a natural way for children to explore the properties of matter (the sand and the water) in a way that is fun and yet scientific in nature. Children at the sand centre learn that dry sand is difficult to work with unless they are pouring it into a container or pouring it through a sieve. A little water added to the dry sand changes the structure of the sand but still does not allow it to hold a shape. With the right amount of water, though, sand can be molded and will hold its shape.

By adding props such as plastic or metal containers or pails for molding, digging tools such as shovels or spoons, and a source of water, children can explore the best sand and water ratio. This experimentation is important in developing problem solving and inquiry skills in young children. By encouraging children to add sticks, pieces of plants and stones, etc. the sand area becomes the setting for a story they can create and enact. Toy cars, or stick puppets can be used to tell a story. Materials should be changed frequently to encourage new challenges. Through creative, flexible thinking, the teacher can create a very interesting centre in which children can use their imagination to think and reflect.

Mathematics Centre

By preserving one area of the classroom for Mathematics, the children learn that this is the location where math material is organized and stored. Children can use these materials at any time when working on a math challenge anywhere in the classroom. It is important to find simple ways to store these materials and to label the containers for easy access.

Consider collecting the following materials:

- shells of various shapes, sizes and colours for sorting
- stones of various shapes, sizes and colours for sorting
- boxes of various shapes for investigations in 3-D shapes
- beads
- puzzles (pictures cut up in the shape of puzzle pieces will work)
- measuring tools
 - different sizes of plastic cups or containers
 - different sizes of spoons
 - rulers or strips of paper marked for measuring
 - scales or items made to look like scales

Writing Centre

By placing writing material in one location in the classroom, the teacher and the children know where to access these materials. Consider:

- pencils
- individual chalkboards
- pieces of chalk
- sticks for use in the sand
- paper of different sizes, colours, textures for making books
- stapler, needles and thread for book binding

When children know how to access writing material they have the freedom to write at any centre or to do mathematical calculations when they find the need. This freedom of access encourages children to think like a writer and when they share their writing, they think like readers. It is a powerful opportunity for young learners.

Technology Centre

Consider setting up a location in the classroom where children can explore technology. If an old, broken electrical or mechanical object is available, allow children to explore how it works. This is successful if you find items such as:

- Clock
- Watch
- Radio
- TV

Make sure there are some simple tools that children can use to take these objects apart. Consider any safety issues relative to the object they are examining.

Consider providing material that children can use to create their own inventions. A plastic water bottle and some wires and small wheels become a car.

Garden

A patch of land that can be used for a garden becomes an interesting opportunity for children to take responsibility for planning, implementing, and maintaining their own crops and/or flowers. It is most important that the children are responsible for the planning, the planning and the maintenance. It becomes their garden. This is an opportunity to apply independently what they have been observing but not controlling. Children are able to learn about how to fertilize the soil with dead plant matter, discerning between soil that is healthy for plants and soil that is not, how much space each type of plant needs, how to determine the amount of water the plants need, how to use composted food to feed the plants, how to keep the plants safe from birds, animals or insects that use the plants for their food too. A great deal of learning related to the science outcomes can occur at this centre.

Developing Interest Centres

When considering other centres to set up in the classroom, observe the current interests of the students and support them in their learning. Children might begin to play at the Home Centre and decide that they want to pretend that the home is burning. That play direction may drop off after a day or two but if children are interested in this play direction, work with them to acquire materials to extend the play. When children are involved in planning for their learning, the depth of the play changes.

When teachers use learning centres as a way to apply the skills and strategies that they are taught during whole class or small group lessons, they are able to see what children know and understand and are ready to learn next. The integrated nature of centres is highly significant in the development of the young child.

Appendix - T-Chart

Appendix - Examples of a T-Chart

Do You Like Swimming?	
Yes	No

What Floats	What Sinks

We are here today	They are away today

References

Elementary Teachers' Federation of Ontario. 2010. *Thinking It Through. Teaching and Learning in the Kindergarten Classroom: Learning in Centres*. Toronto. ON: Elementary Teachers' Federation of Ontario.

Fromberg, D. 2002. *Play and Meaning in Early Childhood Education*. Boston. MA: Allyn and Bacon.