



Developing Effective Learning Corners for Math

Practitioner Inquiry Project 2014

Learning Vision-NCS



Description of the Inquiry

Origins

- My team and I decided to concentrate on an LV process that I do not have much experience in producing independently yet.
- The major curriculum component I was handling at the time was Math Quest.
- Designing learning corners was a good opportunity to exercise understanding of the LV-curriculum.
- Also promotes the independent learning LV advocates.
- Provides me the teacher with another tool to aid in assessing children's learning.



Description of the Inquiry

Aim

- Develop a **process** in designing Math learning corners
- Encourage **conscious and purposeful planning**
- **Provide different levels of activity** to explore a concept and **support children's extended independent learning.**
- Aid teacher in assessing children's progress



Description of the Inquiry

Details of the Project

Study Group

K2 Class, 12 children

Duration:

August to October 2014

Support from *PIECE* Workshop



Provided Structured approach - from PI Cycle:

- Planning
- Execution
- Evaluation
- Reflection

Grant

- acquiring the tools we needed to execute the project

Encouraged Collaboration

- Mentoring

The Project



Phase One

1. Pre-Activity interview and Readiness Chart
2. Diagnostic Test –Developmental Milestone Checklist
3. Plan individual goals (after initial interview and learning corner)
4. Plan supplementary learning corners (based on individual goals)

Phase Two

1. Children to utilize learning corners
2. Teacher to do observation and anecdotal recording
3. Documentation

Phase Three

1. Developmental Milestone checklist part 2
2. Anecdotal records on progress
3. Post activity interview
4. Assessment

The Project



Phase 1: Pre-Activity Assessment

- Teacher will use a Skills Checklist (from LV curriculum guide) to serve as a diagnostic test

Practitioner Inquiry Project
Skills Assessment Checklist - K2 Dickens
Topic: Non-Standard Unit

Level: Basic Skills

Names	Explores measurement using non-standard units	Uses Identical Units as Estimate of Length in non-standard units	Makes Standard Units	Sound Graph of measurement	Length Use of Language to Compare Length	Comparative
Ilyse	/	/	/	/	/	/
Rachel	/	/	/	/	/	/
Joelle	/	/	/	/	/	/
En Tong	/	/	/	/	/	/
Zoey	/	/	/	/	/	/
Andrea	/	/	/	/	/	/
Isaac	/	/	/	/	/	/
Lucius	/	/	/	/	/	/
Savion	/	/	/	/	/	/
Cedrik	/	/	/	/	/	/
Alastair	/	/	/	/	/	/
Si Rui	/	/	/	/	/	/
Caroline	/	/	/	/	/	/

Practitioner Inquiry Project
Skills Assessment Checklist - K2 Dickens
Topic: Non-Standard Unit

Level: Advanced Skills

Names	Use different tools of non-standard units	Use Identical Units as Estimate of Length in non-standard units	Personal Make Standard Units	Sound Graph of measurement	Length Use of Language to Compare Length	Comparative
Ilyse	/	/	/	/	/	/
Rachel	/	/	/	/	/	/
Joelle	/	/	/	/	/	/
En Tong	/	/	/	/	/	/
Zoey	/	/	/	/	/	/
Andrea	/	/	/	/	/	/
Isaac	/	/	/	/	/	/
Lucius	/	/	/	/	/	/
Savion	/	/	/	/	/	/
Cedrik	/	/	/	/	/	/
Alastair	/	/	/	/	/	/
Si Rui	/	/	/	/	/	/
Caroline	/	/	/	/	/	/

Practitioner Inquiry Project
Skills Assessment Checklist - K2 Dickens
Topic: Non-Standard Unit

Level: Intermediate Skills

Names	Use different tools of non-standard units	Use Identical Units as Estimate of Length in non-standard units	Personal Make Standard Units	Sound Graph of measurement	Length Use of Language to Compare Length	Comparative
Ilyse	/	/	/	/	/	/
Rachel	/	/	/	/	/	/
Joelle	/	/	/	/	/	/
En Tong	/	/	/	/	/	/
Zoey	/	/	/	/	/	/
Andrea	/	/	/	/	/	/
Isaac	/	/	/	/	/	/
Lucius	/	/	/	/	/	/
Savion	/	/	/	/	/	/
Cedrik	/	/	/	/	/	/
Alastair	/	/	/	/	/	/
Si Rui	/	/	/	/	/	/
Caroline	/	/	/	/	/	/

*Rationale:

To help teacher create an intentional activity in the learning corner and assist individualized learning



The Project

Phase 2: Activity

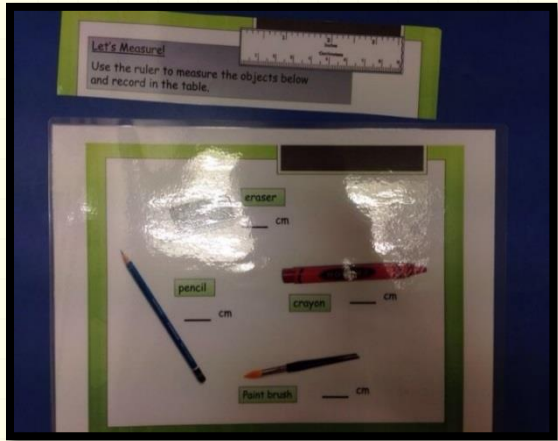
Differentiated Activities

- Teacher designs activities with different levels and complexity to let children explore the given concept.

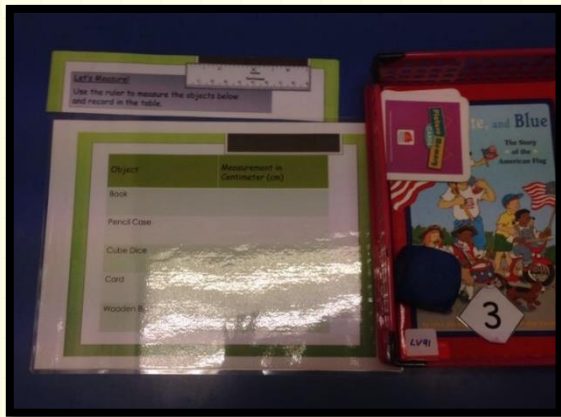
***Rationale**

To provide different levels of learning and to encourage a **wider scope of outputs** that will showcase children's learning, and **will be supportive of their innate creativity.**

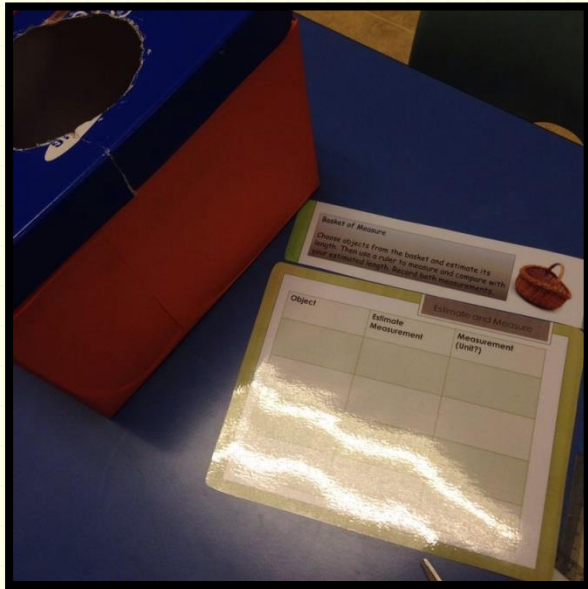
Children at the Learning Corner



Basic Level



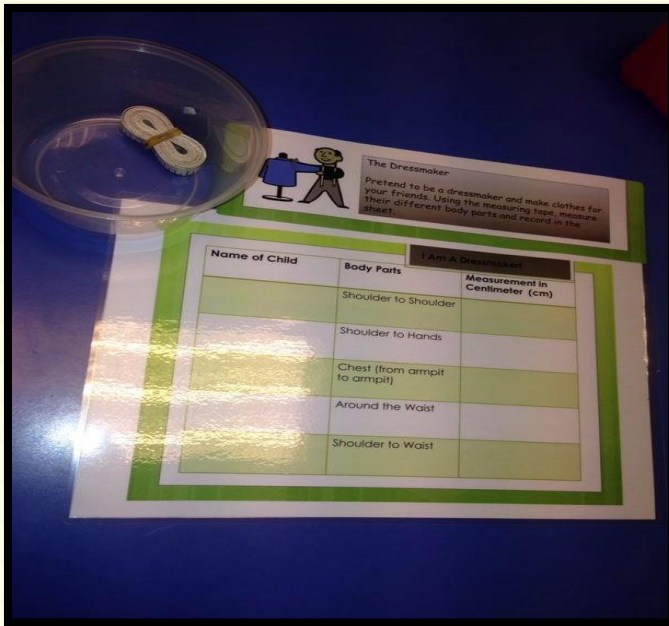
Children at the Learning Corner



Intermediate



Children at the Learning Corner



Advanced





The Project

- **Post-Activity Assessment**

Differentiated Activities

- Teacher will use Skills Checklist (from LV Curriculum) again to check children's progress in skills.

***Note:**

Teacher use anecdotal records help assess children's progress

Teacher may use conversations and questions.

***Rationale**

- *To provide assistance for teachers to gauge a quantifiable learning and aid in assessing progress.*
- *To note abstract learning.*



The Project

- **Alterations**

We took out the Pre-Activity Assessment as it was not proving to be much efficient at the time. Children have not yet been introduced, or have explored the given concept yet.

How It Helped Me As A Practitioner



- Equipped me as a teacher
 - Recognize and utilize a process I can use to tackle a challenge or improve existing process
- Responsive Practitioner
 - RESPOND. Not letting everyday learnings to just sleep and be put on the shelf.
- Developed more active collaboration with colleagues
- Helped me cultivate teaching mindset that is **Child-Centric**



Continued Practice

TOPIC: Patterns

- Activity 1 - Identify Same Patterns in a Set
- Activity 2 – Extend A Pattern
- Activity 3 – Free Activity: Create Own Pattern Using Various Materials

Math Learning Corner for Patterns

Level: N2



Activity 1

Objectives:

1. To identify the same patterns in a set
2. To recognize same patterns in a given set.

Directions:

Set 1 Cards

Take 1 set card and identify the same patterns in the row.

Set 2 Cards

Take 1 set card and identify the same patterns in the set. Place one same color counter on top of the two identical patterns









Math Learning Corner for Patterns









Level: N2

Let's make patterns
Objective:
1. To reproduce pictorial patterns with manipulatives
2. To create simple pattern






Instructions:
1. Take one task card and create the pattern with the manipulative.

					
A	B	C	A	B	C









2. Create your own patterns

I can create an ABB pattern.

				
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I can create an ABC pattern.

					
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Math Learning Corner for Patterns

Level: N2



Activity 3

Objectives:

1. To create own pattern
2. To enhance creativity using concept understanding

Directions:

Explore the different art materials and create your own patterns.



Benefits of PI

- Practitioner Inquiry (PI) an **active research** and more than just an academic exercise
- Promote innovation in practice and curriculum
- Ensures continued professional development

“Above and Beyond”





“If there is a question in your heart, let it take you to an adventure.”

PI is our footprints to the problem-solving process in Education.

-Dr. Melinda Ong, PIECE Mentor



Practitioner Inquiry Pilot Project



LV-NCS Ritchelle Bautista **Sharing Session 2015 @ ECDA**
Anisah Sultan Ali **with Dr. Melinda Eng**

Thank You!