

**Student Achievement Division  
Ministry of Education**

Viewer's Guide

**Re-imagining Literacy  
and Mathematics  
Throughout the Day**  
*Kindergarten Matters*

Multi-media resource for professional learning



support every child  
reach every student



The following themes are explored within the five sections of this resource:

Learning is ... a shift in thinking and action

Learning is ... co-constructed inquiry

Learning is ... expressing and communicating theories that give meaning to events and objects in the world

Learning is ... a process of constructing, testing and re-constructing theories

Learning is ... building relationships between contexts and perspectives

# Re-imagining Literacy and Mathematics Throughout the Day

When we view children as competent and capable, we can re-imagine what literacy and mathematics learning can look like over the course of the day in full-day kindergarten. We can create opportunities for deep critical thinking and more engaged learners.

The video clips in this resource are designed for team use or individual study. They are intended to provoke your thinking about learning. You are invited to position yourself in a “learning stance” and consider these questions as you re-imagine literacy and mathematics throughout the day.

You are encouraged to try documenting what you are seeing and hearing without judgement. Learning is complex and dynamic. Viewing the video multiple times provides an opportunity for you to think about what you are seeing and hearing from a variety of perspectives.

The following reflective frames may be helpful to keep you in an inquiry mindset and assessment for learning stance:

*“When I saw ... I am thinking this is evidence of ...”*

*“When I heard ... I wonder if it means ...”*

*“When I saw ... I am thinking it might be evidence of the conceptual understanding in overall expectation ...”*

The screen captions that appear in many of the segments are intended to model noticing and naming learning. The captions in white boxes are intended to focus viewers’ attention on particular aspects of the children’s learning, while the yellow boxes highlight assessment for learning opportunities. The green boxes are intended to provoke deep thinking and reflection.

## Video Clip:

- Introduction by Mary Jean Gallagher, Chief Student Achievement Officer and Assistant Deputy Minister for the Ontario Ministry of Education’s Student Achievement Division and Jim Grieve, Assistant Deputy Minister for the Ontario Ministry of Education’s Early Learning Division (2:34)

# Learning is ... a shift in thinking and action

“Educators/leaders want to talk more about the learning than the teaching ... the focus should be about the impact of our teaching ... we do need to adjust our focus from what we do as teachers to what the students are doing as learners.”

*Hattie, 2013*

## Video Clips:

- 1) A Shift in Thinking and Action (0:49)
- 2) Planning for Small-Group Shared Reading (2:10)
- 3) Inviting the Children Into New Learning (3:06)
- 4) Explicit Learning About Concepts of Print (5:46)
- 5) Small-Group Learning About Numbers (1:32)
- 6) Reading and Writing Connections (1:25)
- 7) Co-construction (3:29)
- 8) Re-imagining Learning Materials (1:39)
- 9) Re-imagining Teaching and Learning (3:53)
- 10) Re-imagining Children's Thinking (5:44)
- 11) Reflections on Learning: John Hattie (3:57)
- 12) Deepening Our Understanding: Supporting Children's Writing (4:38)
- 13) Deepening Our Understanding: Supporting Children's Writing Using Technology (1:56)
- 14) Deepening Our Understanding: Co-learning in Play (2:48)

## Discussion:

How do we know that children are learning to read and learning about reading?

How might small-group learning be negotiated and co-constructed in Kindergarten?

John Hattie is a Professor of Education and Director of the Melbourne Education Research Institute at the University of Melbourne, Australia. His research interests include performance indicators and evaluation in education, as well as creativity measurement and models of teaching and learning. “Know thy impact” is a phrase often used by John Hattie when he speaks about the influence that teachers have on student achievement. “Visible Learning” means an enhanced role for teachers as they become evaluators of their own teaching. According to John Hattie Visible Learning and Teaching occurs when teachers see learning through the eyes of students and help them become their own teachers.

# Learning is ... co-constructed inquiry

“Being in an inquiry stance is a shift in mindset and how we view learning and being a learner.”

Riehl, 2012

## Video Clips:

- 1) Co-constructed Inquiry (0:32)
- 2) Provoking an Inquiry Stance (2:50)
- 3) Making Connections to Build Working Theories (4:16)
- 4) Communicating Understanding Through Writing (2:59)
- 5) Noticing and Naming the Learning (1:11)
- 6) Co-constructed Negotiated Learning (1:35)
- 7) Provoking an Inquiry Stance in Mathematics (4:19)
- 8) The Inquiry Process in Action (1:30)
- 9) Being in an Inquiry Stance (2:36)
- 10) Re-imagining Learning Through an Inquiry Stance (2:26)
- 11) Reflections on Learning: Lucy West (1:45)
- 12) Deepening Our Understanding: Co-inquiry at the Water Table (5:17)
- 13) Deepening Our Understanding: Co-inquiry at the Light Table (0:48)

## Discussion:

What impact will engaging children in inquiring and delving deeply into issues and ideas that pique their interest and theories have on planning and learning?

What is an inquiry stance for educators?

How might educators learn more about children's thinking?

Lucy West has served New York City schools in a variety of roles from classroom teacher, curriculum developer, and assistant principal to teacher supervisor and Director of Mathematics Instruction for Community School District #2. She participated in the creation of the Institute for Learning at the Learning Research and Development Center, University of Pittsburgh. Her best-selling title *Content-Focused Coaching*, written with coauthor Fritz Staub, is one of the products of that collaboration.

# Learning is ... expressing and communicating theories that give meaning to events and objects in the world

“What if we started from a place where we thought of pedagogical documentation as ‘time for children’? The time adults spend observing and documenting, and then interpreting and re-interpreting documentation will make our time with children all the more meaningful and responsive.”

Rinaldi, 2001

## Video Clips:

- 1) Giving Meaning to the World (0:38)
- 2) Re-thinking Mathematics Structures (4:43)
- 3) Literacy and Mathematics Behaviours Throughout the Day (4:44)
- 4) Re-thinking Literacy Structures (5:06)
- 5) Negotiating Learning (1:31)
- 6) Revisiting Pedagogical Documentation (2:49)
- 7) Re-imagining Engagement (2:14)
- 8) Re-imagining the Learning (4:28)
- 9) Re-imagining Literacy and Mathematics Behaviours (2:59)
- 10) Re-imagining Assessing for Learning: Pedagogical Documentation (5:42)
- 11) Reflections on Learning: Vivian Vasquez and Jerome Harste (2:03)
- 12) Deepening Our Understanding: Literacy and Mathematics Behaviours at the Water Table (2:50)
- 13) Deepening Our Understanding: Literacy and Mathematics Behaviours in Block Play (1:59)



## Discussion:

How do we re-think literacy and mathematics structures and procedures in an inquiry stance?

How do we foreground the literacy and mathematics behaviours throughout the day?

Dr. Vasquez is a Professor of Education at American University. The 2013–2014 academic year marks her 30th year in the field of education. Her research interests are in critical literacy, early literacy and information communication technology. Her publications include nine books and numerous book chapters and articles in refereed journals.

Jerome Harste is an Emeritus Professor of Literacy, Culture, and Language Education at Indiana University. He was named the first Martha Lea and William Armstrong Chair in Teacher Education in Indiana University's School of Education. In 2008, he was named Outstanding Language Arts Educator by the National Council of Teachers of English in recognition of his lifetime leadership and research in language education.

# Learning is ... a process of constructing, testing and re-constructing theories

“What if we started from a place where learning does not proceed in a linear way, following progressive and predictable stages. Rather, it is [socially] constructed through advances, stand stills, and retreats that take many directions and often lead to unexpected places. It is a process of constructing, testing and re-constructing theories which are our interpretive models of the world.”

*Adapted from Rinaldi, 2005*

## Video Clips:

- 1) Constructing, Testing and Re-constructing Theories (0:51)
- 2) Constructing Theories about Quantity, Spatial Sense and Algebraic Thinking (6:37)
- 3) Communicating Understanding (1:02)
- 4) Integrated Learning in Mathematics (1:22)
- 5) The Power of Wait Time (4:18)
- 6) Seeing Children's Working Theories in Action (1:26)
- 7) The Instructional Core (3:01)
- 8) Noticing and Naming Learning (3:13)
- 9) Re-imagining the Learning Environment (3:22)
- 10) Reflections on Learning: Karyn Callaghan (4:07)
- 11) Deepening Our Understanding: Constructing Working Theories About Patterning (2:33)
- 12) Deepening Our Understanding: Constructing Working Theories About Measurement (0:57)

## Discussion:

Based on the above video clips, what are you noticing about how the educator and the child are negotiating the learning in order to construct, test and re-construct their theories about quantity and spatial sense?

What is the impact of the educator's listening and use of wait time?

Karyn Callaghan is the Program Director of the Bachelor of Early Childhood Studies Program at Charles Sturt University (on secondment from Mohawk College), President of the Ontario Reggio Association, a National Director of the Canadian Association for Young Children, and Co-originator and Coordinator of the Artists at the Centre Project in Hamilton, Ontario. She has authored publications and delivered numerous presentations across Canada and in the United States on the subject of early childhood education.

Essential decisions that enable us to improve as educators, offered by Karyn Callaghan:

1. What do I pay attention to?
2. What do I ignore?
3. When do I ask a question?
4. When do I not interfere?
5. When do I refer children to each other?
6. Why that decision and not this one? What does this show about me?
7. What do I know about myself through these decisions?
8. What are the incongruities in what children are doing and saying?
9. What are the "soft spots" in the children's theories?
10. How is the child making sense?

# Learning is ... building relationships between contexts and perspectives

“The deepest language of all is the language of relationships. It goes much deeper than the more easily measured skills like logical thinking and problem solving. Learning is about making relationships and this is the language that enables us to absorb information, and process it at a deep level.”

*Fraser, 2011*

## Video Clips:

- 1) Building Relationships Between Contexts and Perspectives (0:42)
- 2) Living with Questions in an Inquiry Stance (3:20)
- 3) Assessment For, As and Of Learning through Pedagogical Documentation (4:58)
- 4) Studying Co-Constructed Negotiated Learning: Spiral Story (8:00)

## Discussion:

What does building relationships mean to you in the context of your teaching and learning?

What is your thinking about “making learning visible”?

What might “negotiated learning” look and sound like?

## Notes

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

