

# NR.NUM17.003EMP Ways of Knowing: Knowing Ways to Teach and Learn Mathematics - Infusing Literacy/Numeracy/Competencies Summer



## PRESENTED BY

**Geri Lorway, Thinking 101 & Erik Stern, Erik Stern & Geri Lorway, Thinking 101**



## SERIES SESSIONS

Date	Time
August 21, 2017	9:00 AM - 3:30 PM
August 22, 2017	9:00 AM - 3:30 PM
August 23, 2017	9:00 AM - 3:30 PM
August 24, 2017	9:00 AM - 3:30 PM
August 25, 2017	9:00 AM - 3:30 PM



## LOCATION

**Grande Prairie Regional College - 10726-106 Avenue**

## FEE

**\$395.00**

## QUESTIONS?

Contact Us:

[nrlc@arpc.ab.ca](mailto:nrlc@arpc.ab.ca)

[780-882-7988](tel:780-882-7988)

## REGISTER ONLINE

Visit our website to register:

[nrlc.net](http://nrlc.net)

## Program

**Thinking101 and NRLC presents: Summer 2017**

**Register at (do not use register button): <http://thinking101.ca>**

Our summer work will include making sense of the Numeracy/Literacy progressions and the impact they can have on reaching all learners at all levels. Developing a better understanding of the power of teaching students to THINK as they learn, not after. We can, we MUST.

According to the Alberta Program of Studies for Mathematics, 2004, 2016,

"First Nations, Métis and Inuit students often have a holistic view of the environment—they look for connections in learning and learn best when mathematics is contextualized. They may come from cultures where learning takes place through active participation. Traditionally, little emphasis was placed upon the written word, so oral communication

and practical applications and experiences are important to student learning and understanding. By understanding and responding to nonverbal cues, teachers can optimize student learning and mathematical understanding. (p 2)

Since these words were written into the 2004 Program of Studies researchers, neuroscientists and educators have confirmed that in today's world ALL learners look for connections in their learning and learn best mathematics is contextualized. BERCS cards contextualize the learning.

Oral communication and practical applications are critically important to ALL students' learning. Learning begins from experience. This is true for us all, not just our FNMI students. Language comes later. First there is visual/temporal/spatial reasoning as the brain associates, connects and creates pathways for understanding. The links to actions, words and visual representations must come before or beside the symbol system for mathematics. BERCS is the framework I share with students and teachers to remind us as we plan, teach, learn and self-assess that all learners benefit from a holistic approach to learning. (Lorway, 2016)

Who should participate?

Classroom Teachers, Administrators, Instructional Leaders

Coaches for Numeracy or Literacy, Educational Assistants

*Our focus will provide a whole school, cross graded perspective on what it takes to create, support and sustain a school wide approach to building a Numerate, Literate, mathematically successful student body.*

**August 21 to 23: Focus is K to Grade 3**

**August 23 to 25: Focus moves to Grade 4 to 6**

**Register for 3 days or 5 days. On line at: <http://thinking101.ca>**

**Site: GP Regional College 9am to 3:30 daily Lunch provided.**

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## Presenters

### **Geri Lorway, Thinking 101**

*Geri Lorway does not promote or support "discovery learning". She promotes and supports teaching children how to think, how to reason and problem solve, how to comprehend and communicate both written and oral language in grade appropriate ways, how to use their visual spatial skills to learn, recall and apply FACTS.*

*The basics that form the foundation for success with Readin', Ritin' and 'Rithmetic all connect when we teach kids to THINK as they learn.*

*Geri's career in education spans more than 35 years. She has taught in single & multi grade classrooms, been a principal, a District Principal, a District Consultant and currently continue as a University Professor, action researcher, coach and mentor to teachers, parents and students across Western Canada. As she works in classrooms across the province, her knowledge and understanding evolves. Teaching is change because learning is change.*

### **Erik Stern**

**Erik Stern** holds a B.A. in Biology from UC Santa Cruz and an M.F.A. in Dance from CalArts. His has choreographed over fifty works for professionals and students, and is sought after as a presenter and teacher on Arts Integration. His evening-length work Demolition Derby, when a mind loses its license to drive was performed in New York City with support from the Alzheimer's Association and Myriad Genetic, Inc. Erik danced with Tandy Beal & Company for 10 years, and has appeared as a guest artist with Repertory Dance Theatre and other groups.

Since 1987 Erik has co-directed the Dr. Schaffer and Mr. Stern Dance Ensemble with Karl Schaffer. The California-based company has received over 50 grants, including seven from the National Endowment for the Arts, and toured throughout North American and to Europe, Asia and Australia. Their innovations connecting mathematics and dance on stage and in the classroom have resulted in a book, numerous articles, countless workshops, performances and residences, and led to their position as Teaching Artists with the Kennedy Center Partners in Education program.

Erik is a Professor in the Department of Performing Arts at Weber State in Ogden, Utah, where he has collaborated with mathematics faculty to pioneer an interdisciplinary general education course connecting arts and quantitative literacy.

[www.mathdance.org](http://www.mathdance.org)

Karl and Erik's TEDx Manhattan Beach Talk

<https://www.youtube.com/watch?v=Ws2y-cGoWqQ>

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