

# ABC'S AND 123'S USING LITERATURE TO TEACH MATHEMATICS

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## Today's Objectives

- Best Practice
- Theory and Research
- 21st Century Learner
- Theory into practice example

## Best Practice

- Help students immerse themselves in mathematical reasoning
- Provide authentic contexts that are inherently meaningful for students
- Build on student's prior knowledge, while recognizing the different types of conceptual change that may be needed

Zemelman, Daniels, & Hyde (2012)

## Theory and Practice

- Children's Literature can offer young people a window to new, unfamiliar territory – a country or culture they have never been to or a mirror in which they see themselves and their own world.

(Hateley, 2011)

- Interactive read-alouds are one of the best teaching strategies to use because they can lead children to be better readers and also offer the guidance of a teacher during reading time.

(Morgan, 2009)

- When the literature is integrated within mathematics instructions, it can help children "experience the potential wonder of mathematics ... and helps them make sense of the world

(Hong, 1996)

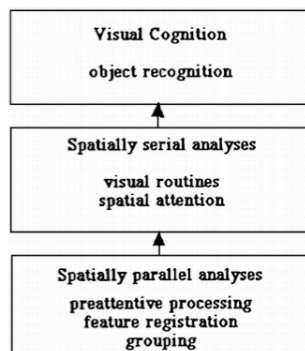
## 21<sup>st</sup> Century learner

- Innovative technological approaches allow a rich end user experience concerning sensorial stimuli, allowing for an enjoyable simultaneous interaction with the content thus enhancing the learning process

(Diaz, 2009)

- Studies have shown that immersion in a digital environment can enhance education in at least three ways: by allowing multiple perspectives, situated learning, and transfer

(Dede, 2009)



Trick, & Pylyshyn, 1994

## Augmented Reality Literature

- **Grapes of Math** by Gregory Tang
- **Roll Over** by Merle Peek
- **How Many Seeds in A Pumpkin** by Margaret McNamara
- **1+1=5 and Other Unlikely Addition** by David LaRochelle
- **Grandfather Tang** by Robert Andrew Parker
- **The Greedy Triangle** by Marilyn Burns

## Aurasma

<http://www.aurasma.com>

- Free software program
- Free downloadable app
- Can be viewed on iPads, iPhones, and Androids
- Sync by subscribing to your channel.  
Today's images are on the *NCTM Auras* channel



## Contact information

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