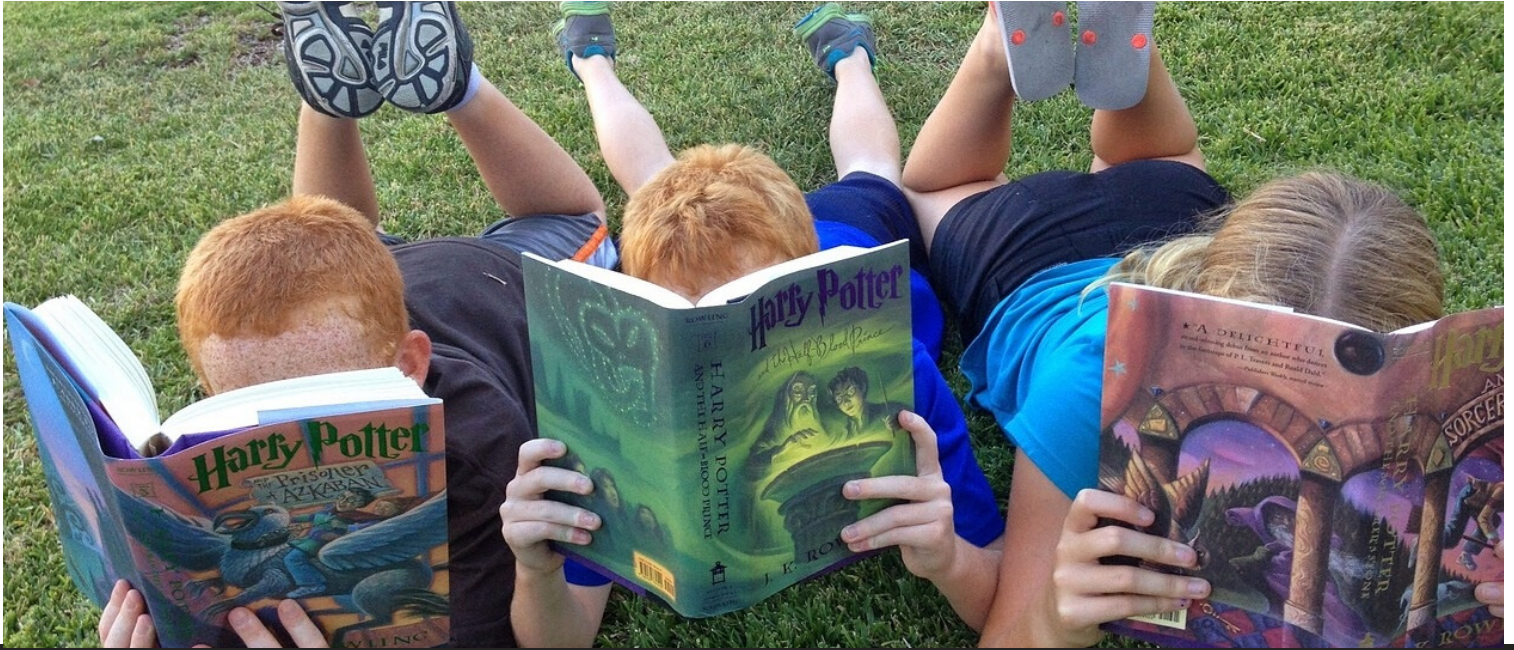


LEARNING MATTERS

The Bi-monthly Newsletter of Lethbridge School Division's Lead Teachers



LITERACY

Literacy Lead Teacher Bev Smith

We all want our English Language Learners (ELL) to find success in our classrooms.

Sometimes it seems that they just are not making the progress we think they could be. They are speaking English. They carry on conversations with us and with their peers in class and in social situations like the playground, but they seem to be struggling to explain concepts or with assessments.

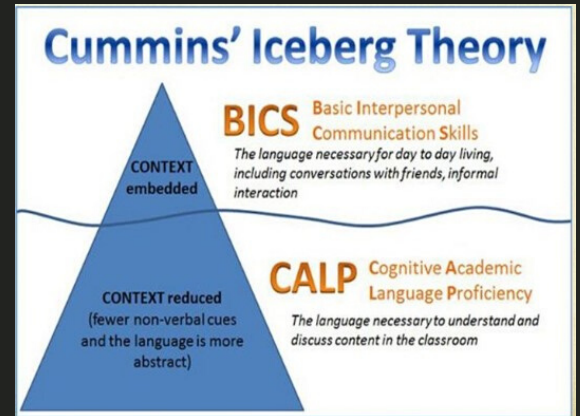
While at first it may appear that, our ELL students are able to communicate with competence, which may actually be misleading because they are doing so at a social or functional level. These skills identified by Dr. Jim Cummins as Basic Interpersonal Communication Skills (BICS) are the first to be acquired. They are referred to as “playground” or “survival” English. There are significant differences in the level of language used in basic, everyday conversations and those required in more cognitively demanding tasks/situations. BICS are generally acquired in the first 6 months to 2 years.

Cognitive Academic Language Proficiency (CALP) takes much longer for students to acquire, often up to 5 to 7 years. CALP is the type of language used in academic contexts. It is the domain specific vocabulary and language associated to academic processes not used in everyday interactions. Learners who are still acquiring this more demanding level of language proficiency should not be placed only in sheltered ESL programs. They need to be immersed in academic content, but with supports so that they can acquire CALP.

Strategies that support our ELL students are also good for all our students. A few strategies that will support our ELL students include:

- Providing language frames for example, “I believe that ____ will happen because...”
- Use of visuals such as an academic word wall with pictures or icons to represent the word.
- Preteaching vocabulary
- Graphic organizers
- Anchor charts with visual support
- Hands on learning and use of realia.

Finding success in our ELL classrooms



REFERENCE:

https://www.learnalberta.ca/content/eslapb/understanding_the_acquisition_understanding_how.html

Alberta Education. (2007). English as a second language: Guide to implementation, Kindergarten to Grade 9. Edmonton, AB: The Crown Right of Alberta.

VIDEOS:

<https://fr.coursera.org/lecture/ell-lesson/bics-calp-Ymep2>

<https://www.youtube.com/watch?v=N-JvqObf5qk>

https://www.youtube.com/watch?v=_ZH2wsh6gD4

A chalkboard with various mathematical symbols and a drawing of a person's head. The symbols include $mx + c$, ϕ , ϕ , $x_1 = x_1$, $x_2 = x_2$, and $y \uparrow$. The drawing is a simple circle with a face and a few lines for hair.

NUMERACY

Numeracy Lead Teacher Jenn Giles

Building Conceptual Understanding in Mathematics

Conceptual understanding is knowing how mathematical ideas are connected and organized. It is about knowing more than facts and procedures. With conceptual understanding, comes awareness of why mathematical ideas are important and how they are useful in the context of our everyday lives. Our goal in education is to give students opportunities to develop the ability to connect new ideas to prior knowledge ultimately reaching the goal of transfer.

It is essential to create meaningful learning opportunities that facilitate students connecting the dots between concepts and procedures. Through this facilitation, the role of the teacher is no longer to be the answer key but to act as a catalyst of learning.

When students are making connections between ideas, they are thinking. When students are thinking, they are most importantly learning. Learning does not happen when we ask students to mimic procedures and memorize facts. Facts do not transfer, but concepts will. When facts and procedures are learned with conceptual understanding, connections are formed thus making it easier to use, remember and transfer to new ideas.

How do you go about developing conceptual understanding? These are some small changes you can make to your practice to facilitate it in your mathematics classroom. You can start with the establishing a growth mindset.

Jo Boaler, a math education professor from the University of Stanford, has done research on the Mathematical Mindset and the impact it has on engagement and achievement in the classroom. It is important for not only yourself to believe that everyone can achieve high levels in mathematics, but also for students and parents to believe this as well. When choosing mathematical tasks, it is important to consider ones that allow for multiple entry points— where it is possible for everyone to contribute or feel success. Working in groups of three allows learners to learn from their peers.

Be patient and give time to develop conceptual understanding, it will not be built overnight or in a couple days. It comes from repeated exposure to learning opportunities that demonstrate the flexibility and connections within mathematical concepts. It is important to provide learners the opportunity to express their thinking with multiple representations to build flexibility. As students begin to connect the representations, they begin to deepen their understanding of the concepts in mathematics. Shifting the culture of how learners view mathematics will take time but it is an important endeavour if we want to prepare learners to become future critical thinkers and problem solvers.

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