

## **Adolescent learning: What's new?**

*Mr. Joe Ginotti, PLN Associate Director, reviews Adolescent research and findings that inform PLN practices and philosophy for secondary schools.*

### **Key Findings in Brain-based Learning: How People Learn: Brain, Mind, Experience and School from the National Research Council:**

Students come to the classroom with prior knowledge and preconceptions. If their initial understanding is not engaged (connection made), learning will be superficial or non-existent.

A metacognitive approach stressing regular formative assessments will help students better control, monitor and deepen their learning.

### **To develop competence in an area of inquiry or study, students must:**

- (a) Understand the larger context or conceptual framework,
- (b) Develop a deep foundation of factual knowledge, skills or strategies,
- (c) Organize and reconstruct knowledge in ways that facilitate retrieval and application of learning.

### **Implications for Educators:**

Teachers must design classroom environments that are:

- Learner-centered: engaged and active classrooms that stress student collaboration and cooperative learning.
- Knowledge-centered: defining what is taught, why it is taught, and what competence looks like.
- Assessment-centered: built around ongoing and regular formative assessment making student thinking visible and accountable and leading to success on pre-designed summative assessments.

### **Organizing Instruction and Study to Improve Student Learning from The National Center for Educational Research and The institute of Education Sciences Key Findings and Recommendations:**

- Space learning over time. (revisit, review, reapply learning over time. Learning needs a focus on big ideas and larger concepts.)
- Combine multiple modalities: graphics, visual auditory descriptions, readings and presentations.
- Interweave modeling and problem-solving- Alternate between teacher led and student centered learning emphasizing student centered work over time.

- Connect and integrate abstract and concrete representations: concrete examples need to be linked to the prior and experiences of the students and the classroom.

**What we know:**

- To engage students, we must help them see connections between their lives and their work in school.
- We must create responsive and inclusive learning environments that offer a choice of texts, opportunities for lively discussion, and many pathways for engagement.
- We know a variety of effective teaching and learning strategies: i.e. teacher modeling, teaching literacy skills in context, frequent assessment, and student collaboration.
- Enhancing integrated literacy skills will improve learning in the content areas.
- The success of any secondary reform initiative depends on leadership, vision, ongoing professional development and the strategic use of resources- time, people, space, and materials.