

Coaches' Corner

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A New Year with Brain-based Teaching & Learning

"Our brain does not accept or hold on to things that don't make sense." Jan Christinson

What does this statement mean for teaching new information? If we ignore the brain research that teaches us that we must make new learning relevant and help students make connections to something they know, we will continue to experience frustration in getting results with all of our students.

Dr. Horatio Sanches, who has done extensive research in the neuroscience of the brain, spoke to teachers at the 3-C conference in October about the neuroscience of learning. He taught us that stimuli enters the brain through the amygdala, the emotional center, and is chemically charged. If too much new information is introduced at one time, the brain secretes hormones that block the transfer of the signal to higher parts of the brain where information is stored.

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5 Impacts of Lesson Study

Taken from The Core of Japanese Professional Development



1. Individual Professional Development - Japanese teachers mention many effects of research lessons on their own professional development, including feedback on their own teaching and new ideas gained from watching others teach.

2. Learn to See Children - You develop the vision to see children. Research lessons facilitate such vision through systematically gathered data during the lesson.

3. Spread of New Content and Approaches - When a new topic is added to the curriculum, it becomes a popular focus for research lessons. Research lessons give teachers the opportunity to ask questions about the new topic. Teachers have the benefit of colleagues' ideas as they search to have a better understanding of the standards. Research lessons exemplify a meaningful, motivating, high-fidelity context in which teachers can build their content knowledge.

4. Connect Individual Teachers' Practices to the School Goals and Broader Goals - School research themes show trends over time that clearly relate to national education priorities -- for example, problem-solving, autonomy and initiative, individuality, enjoyment of daily life. Not surprisingly, teachers connect their own school research themes to key themes in national educational policy.

5. Competing Views of Teaching Bump against Each Other - Education is often plagued by extreme shifts: No sooner is a hands-on, conceptual approach to mathematics advocated and tried than a backlash sends teachers scurrying for cover under math facts and skills. The more frequently different views of science education come into contact around a shared, concrete lesson, the more likely teachers are to find ways to see and combine the strengths of content-centered and process-centered approaches -- and the more likely they are to notice the benefits that students can derive from each.

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Let us know if you need help...

- ✓ Analyzing your benchmark data
- ✓ Implementing commentary
- ✓ Refining your guided instruction to meet your needs

A New Year with Brain-based Teaching & Learning

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He taught us about three factors that positively impact learning.

One of those factors is making students feel emotionally safe when we introduce new concepts or teach them. Another factor is making connections to things that are familiar to the students. A final factor is introducing information in manageable chunks. We can facilitate the transition from information by adhering to the science of the brain as we help students learn. By making information relevant from the start to the world students live in, this can be accomplished.

How will our practice change then? We will introduce new concepts with the context of a real-world or problem-based situations. We will intentionally design these situations to align to the experiences of our students. Finally, we will stop and check periodically with students to ensure that they are with us and they are learning.



1.

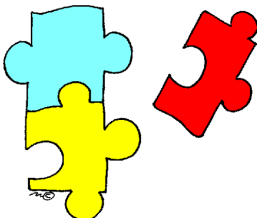
IT'S EASY AS...
Make new learning connect to their world!

2.



Make them feel emotionally safe.

3.



Teach new learning in chunks.

Refocusing Your Standards-Based Classroom

Standards-Based Classroom Look-For's ...



- Standards are posted large enough for students and teachers to utilize during instruction. This will provide a clear learning target for students. These standards are communicated to the students and referenced frequently.
- Students are communicating ideas to one another, using LOTS (language of the standards), through examples, demonstrations, models, drawings, written explanations and logical arguments.
- Students are assessing self and peers and taking responsibility for their learning.
- Teachers are developing content specific vocabulary in context.
- A content rich vocabulary word wall is co-constructed with the students.

