

Leadership Development

Anywhere, Anytime

Practical Tips for School Leaders – #21

June 12, 2020

Continued from: "The Sciences of Teaching", May 2020, Educational Leadership written by Carol Ann Tomlinson and David Sousa

Leadership Tip #20 reviewed the connection of the psychology of learning and recent research in neuroscience on instruction. Today I share two additional noteworthy points from Tomlinson and Sousa: the importance of social-emotional skills and neuroscience and diversity on student learning.

The importance of social-emotional skills – Interactions with others promotes learning. Student learning benefits from them working ahead of their current readiness while interacting with peers or others who can help with task difficulty (Vygotsky, 1934 & 1986). More recently, "Interpersonal relationships and communication are critical to both the teaching-learning process and the social-emotional development of students" (2015).

Research in neuroscience confirms the social aspect of learning, this is especially critical given the last few months of school in 2020. The brain has specialized cells called 'mirror neurons' that are activated when a person performs an action or watches another person perform the action. This is one of the reasons **modeling a strategy or a method is so significant**. The brain contains 'empathy neurons' which help us understand the intention of others in social situations. A group of students "working together may find their brains synchronizing with each other, supporting and extending learning" (Dikker et al., 2017). Research has uncovered that the reduction of personal interactions in an environment of increased use of technology may impact brain development (Dickerson, Gerhardstein, & Moser, 2017).

Recent studies indicate that emotions influence learning potential. "Emotions influence attention and attention drives what the student's brain decides to learn or ignore" (Tomlinson & Sousa, 2020). Emotions act as an entryway to learning and cognition. When teachers arouse enjoyment, and relevance in the student the learning is believed to be more effective and long-term.

Instructional strategies for teachers to use:

• Understand the emotional significance of instruction. Intentionally evoke feelings in students and connect them to the learning. Use of RAFT strategy, role, audience, format and topic helps students connect in emotional ways as they can show their personality and creativity by how they choose to present knowledge. Other instructional strategies to use might be role-play, song/rap writing, poetry, dramatic exercises and the use of non-linguistic representation of content to show understanding.

- In certain content areas focus on the people who made contributions in fields. Help students understand historical figures as human beings by engaging in conversations around motive and feelings. In literature spend time developing an understanding of the characters from a personal level. How are characters similar to them?
- Use collaborative groupings for students to learn from each other while they tackle content problems.

Neuroscience and diversity – Teachers should focus on all students as individuals when designing lessons. Teachers should continue to build strong relationships with all students by getting to know their interests, experiences and families. A classroom culture that attends to all students achievement requires the teacher create a positive environment, while attending to various readiness levels. Planning instruction with students' interests in mind benefits student engagement.

- Provide opportunities for students to build on their strengths while offering interventions and support to individual students.
- Ask teachers to see the classroom through their student's eyes, focus on empathy.
- Ask students to tell you how they are feeling about the classroom environment and learning.
- Honor student readiness levels. Continue to build trusting relationships with all students.
- Scaffold lessons to maximize learning and long-term retention. Provide support to all students continually.
- Utilize frequent formative assessment to determine students' knowledge progression and inform instruction.
- Provide opportunities for student choice in knowledge acquisition include small group processes as well as independent learning. Give students an opportunity to be heard when applying new knowledge in content. Develop systems in the classroom to increase student inquiry.
- Principles of educational psychology and neuroscience both indicate that students learn best when their interests are addressed.

For reflection:

What methods do your teachers use to create a classroom culture where students pull together to support growth and success for all?

Do teachers discuss learning theory in PLCs as a method of developing their professional skills?

What do your teachers think about the growing research in educational psychology and neuroscience? How does the information inform their instruction?