Leadership - Director Pamela Harris-Giles, IZone 2.0

Reading & Writing Instruction- What Does Recent Research Reveal?

Last month, during our IZone 2.0 Zone Meeting, we engaged in a robust discussion about writing instruction. School leaders across IZone 2.0 shared best practices, challenges, and next steps to keep writing instruction at the forefront of daily learning opportunities for students.

As instructional leaders, it is important that we continue to build our knowledge and stay abreast of what recent research says about reading and writing instruction, particularly in the early elementary grades.

Please click here to view a quick, informative article from EdWeek that discusses four ways reading and writing interlock.
K-8 Literacy - Dr. Matara Harris

Greetings Great Leaders and Educators,

As we progress through the remainder of this school year, remember that the strategies used during the first semester are still impactful and important to implement during the second semester.

As we learned during our dynamic workshop, led by Dr. Marcia Tate, brain-based strategies support instructional delivery. Keep in mind this excerpt from *Worksheets Don’t Grow Dendrites*:

*The person doing the most talking about the content is growing the most dendrites, or brain cells, regarding the content. Making all students a part of the conversation helps to ensure that the content is understood and remembered. Brain research tells us that we learn 70%-90% of what we are capable of teaching to someone else.*

*Click the neuron below to access a summary of the brain-based strategies:*

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K-8 Science - Mrs. Angela Rowe-Jackson

M.A.D. Scientists at Work

An Effective Explain Lesson

During the Explain phase of the 5E instructional model, students connect prior knowledge to their experiences in the Exploration (see last week’s TDR). Then, the teacher explains the concepts, and students draw conclusions about their investigations.

The Explain phase consists of two parts. First, the teacher asks students to share their initial models and explanations based on experiences in the Engage and Explore phases. Second, the teacher provides resources and information to support student learning and introduces scientific or technological concepts. Students use these resources and information, as well as other students’ ideas, to construct or revise their evidence-based models and explanations. Be sure to implement the teaching strategies below and encourage the student behaviors listed.

**Teaching Strategies**

- Formally provides definitions, explanations, and information through mini-lecture, text, internet, or other resources
- Encourages students to explain concepts and definitions in their own words
- Asks for justification (evidence) and clarification from students
- Builds on student explanations
- Provides time for students to compare their ideas with others and, if desired, revise them

**Student Behaviors**

- Explains using evidence from investigations
- Uses labels, terminology, and formal scientific language
- Compares current thinking with former thinking
- Adjusts ideas, models, and explanations as new evidence or reasoning is presented

Skipping phases of the 5E model decreases students’ opportunity to gain a conceptual understanding of the content, so plan carefully!

Resource: *Why Use the 5E Model for Science Instruction?*

Created by: Coach Dexter Flannagan

"Together, we are ONE in SCIENCE!"

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K-8 Math - Mr. Romond Arnold

What Does it Mean to Learn Mathematics?

Hello IZone 2.0 Mathematicians,

Often our misconceptions of what it means to learn math in school hinder students’ learning. Most people think that math is all about learning procedures and memorizing rules. At both the high school and elementary levels, procedurally-focused learning is not conducive to supporting students’ understanding of important mathematical concepts.

Students who rely on memorization are half a year behind their peers who approach math by relating concepts to existing knowledge and monitoring their own understanding. It is important to attend to mathematical learning goals while fostering creativity early in a student’s education. We must create more opportunities for students to explore mathematical ideas in interactive ways.

Instead of doing math worksheets, all students need intentionally-designed activities that allow them to think and engage like mathematicians by testing out different ideas, experimenting with strategies, and explaining their thinking. Unlike traditional math worksheet problems that can only be solved one way, students should engage in problems that have many possible solution strategies and are ripe for discussion and debate.

What can we do as educational practitioners and leaders?

1. Be curious about how students think. We aim to support scholars in developing perseverance, confidence, and critical thinking skills when solving math problems. Rather than telling them the exact steps for solving a problem, a good first step is to ask open-ended questions ("How did you figure it out?"). Then, watch to see how the students respond before asking another question that is based on what you observed ("I noticed that you moved the blue bears. Why did you do that?").

2. Support teachers to change things up. The creative nature of math should be every teacher’s focus. It’s okay if math assignments don’t look like traditional math worksheets. If teachers give homework, it should be interactive and exploratory in nature, not stagnant.

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High School - Dr. William Kinard

Exit Tickets

During the third quarter of this school year, IZone 2.0 educators are placing more emphasis on the use of exit tickets and the valuable data these checks for understanding can provide. With that in mind, a few tips are listed below for educators to remember when analyzing exit ticket data.

- Sort the data based on your own criteria from the lesson or for your specific students.
- Examine each set of data. What do you notice? What needs attention?
- Identify areas that need to be taught, retaught, or further investigated.
- Adjust your next lesson to accommodate your findings.
- Revise your next exit ticket if you notice your prompt isn’t yielding useful data.

Source:
The Center for Professional Education of Teachers (CPET)