Strategies to Prevent Visual Split-Attention with Students who are Deaf or Hard of Hearing

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Agenda

1. What is visual split attention?
2. How does visual split attention impact student learning?
3. What are the two visual fields?
4. What are some strategies to reduce visual split attention.
The Importance of Visual Information
What is visual split attention?
called a pyramid.

And it's categorized as TOP, MOP, and BOP. Or top of the pyramid, middle of the pyramid, and base of the pyramid.

And as you can see, the world's population, about half of it is in the BOP, 2 billion or a little more than that is
How does visual split attention impact student learning?
1. How many strings of beads did you see?

2. What colors were the beads?
1. How many strings of beads do you see?

2. What colors are the beads?
What is working memory?
Cognitive Overload
Cognitive Overload
Which of these shapes did you see?

- Pyramid
- Cylinder
- Cone
- Sphere
- Cube
Which of these shapes do you see?

1. Pyramid
2. Cylinder
3. Cone
4. Sphere
5. Cube
Which of these shapes do you see?

Cube
Cylinder
Sphere
Cone
Pyramid

Integrated Text and Shapes
Strategies to Reduce Split Attention
Integrated Text and Visual Prop
Non-integrated Text and Visual Prop

1. Evaporation
2. Water Vapor
3. Rain & Snow
4. Infiltration
5. Ground Water
Name 4 Rivers

- Potomac
- Rappahannock
- York
- James
What are the two fields of vision?
Vertical Field of Vision

50%

70%
Horizontal Field of Vision
Integrating a math prop with the explanation
Students have access to the math prop and the explanation.
The Two Types of Dual Access

“Eye-Looking & Ear-Listening”
(Visual and Auditory Access)

“Eye-looking and Eye-Listening”
(Double-Visual Access)
Dual-Vision Access
Dual-Vision Access
Dual-Vision Access
Each student has dual vision access
Each student should have dual vision access to the teacher’s signed explanation and the prop.
How do you integrate the signed explanation with a visual prop?
Integrated math instruction: integrate vertical or horizontal signing with the equation

\[ 4 + 4 = 8 \]
Signs and props are at eye level
Integrated Eye-level Signing with Visual Props
Student’s Dual-Vision Access
“How many shoes can you count?”
Integrated eye-level sign with shoe prop
Integrated eye-level sign “counting” with number props
Dual vision access or split attention?
Tips for Reducing Split attention

1. Evaluate each student’s vertical and horizontal field of vision.
2. Determine each student’s dual vision access to the signed explanation and the prop.
3. Make sure to integrate both the eye-level signed explanation and prop.
Points to Remember

1. Split attention overloads working memory
2. Integrate teacher with relevant prop(s)
3. Make sure EVERY student in the class can see both the signed explanation and the prop(s)
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