

# Visual Pedagogy & Slide Design

## Reference Page and Checklist

Our students' working memory is a bottleneck. It can only hold ~4 chunks of new information at once. For students with ADHD or Executive Function challenges, that capacity is even more fragile.

**The Goal:** As teachers, we must minimize *Extraneous Load* (confusing layouts, bad slides) so students can focus their energy on *Intrinsic Load* (the actual difficulty of the material).

## The 4 Additional Rules of Thumb of Brain-Friendly Slides

### 1. The "Board = Paper" Scaffold (The Anchor Principle)

- ❑ **The Rule:** If it is important enough for a student to write in their notes, it must appear on the slide.
- ❑ **The Nuance:** The slide provides the **Scaffold** (Key Terms, Definitions, Diagrams, Headers). Your voice provides the **Context** (Stories, Nuance, Examples).
- ❑ **Why:** This reduces anxiety. Students know exactly how to organize their notes based on what they see, freeing up mental energy to listen to your elaboration.
- ❑ **Avoid "Ghost Concepts":** Never provide deep commentary on a term that isn't visible on the screen.

### 2. The Animation Protocol (Control the Flow)

- ❑ **Best Practice:** Never show the whole list at once. Animate bullet points to appear **one at a time**.
- ❑ **The Science:** If you show 5 bullets but are talking about #1, students will inevitably read #5. This creates "Split Attention."
- ❑ **The Fix:**
  1. **Click:** Bullet appears (Visual anchor).
  2. **Pause:** Let them read the keyword (1-2 seconds).
  3. **Speak:** Elaborate on the point. *This synchronizes the visual and auditory channels.*

### 3. The "Speaker Notes" Safety Net (For the Absent Student)

- ❑ **The Fear:** "But if I don't put every word on the slide, how will absent students learn?"
- ❑ **The Fix:** Use the **Speaker Notes** section of PowerPoint/Google Slides.
- ❑ **The Workflow:**
  - **Slides:** Contain keywords, diagrams, and scaffolds (for the live brain).
  - **Speaker Notes:** Contain the full explanation/notes (for the absent students).
  - *When sharing:* One option is to export the deck as a PDF *with* speaker notes tailored for the student who missed class. Do not overwhelm the students present in the room by designing slides for the student who isn't there.

### 4. Visuals > Text (Dual Coding)

- ❑ **The Rule:** Whenever possible, replace a text bullet with a diagram or image + a label.
- ❑ **The Science: Dual Coding Theory.** The brain processes images and audio in separate channels. A diagram + your voice doubles processing capacity. Text + your voice competes for the same capacity.



---

## The Next Lesson Checklist

- The Sync Check:** Do my bullets animate one at a time?
- The Anchor Check:** Is every major concept I plan to discuss written on the slide as a keyword/header?
- The Notes Check:** Did I move the heavy paragraphs from the slide to the Speaker Notes for absent students?
- The Diagram Check:** Did I label the diagram directly or am I accidentally forcing students to look back and forth at a key?