PROFESSIONAL LEARNING INTENTIONS:
- TO IMPLEMENT INTENTIONAL NOTE-TAKING, INCLUDING NONLINGUISTICS

ARTICLE:
The Brain Power of Note-Taking

"With easy access to digital devices and constant internet connectivity, some may think that the practice of note-taking is no longer useful. People are fixated on speed and convenience, and the act of getting a paper and pen or even opening the note application on a mobile phone may seem like a tedious task. Why jot down notes if you can quickly do a Google search when you need the information?"
Paul Holt, 2023

For the reasons Paul Holt identifies in the above quote, note-taking may be missing from the average teacher's bag of tricks. Rarely, do we see teachers explicitly modeling how to take great notes or exposing students to a variety of note-taking methods. More often than not, students are told to what to write down from a text-crowded Google slide or they are simply handed a set of Guided Notes, resulting in students thoughtlessly waiting their way through the lecture for the teacher to alert them of the missing keywords that fills in the blanks.

Let's be clear. When we say "note-taking," we're talking *"handwritten"* notes taken by the learning, which is connected to powerful brain research that impacts learning.

While a digital device might seem faster and more efficient and even expected by school leaders as a return on technology investments, research confirms that having pen and paper at hand holds significant cognitive advantages.

According to Roessingh (2020), "Researchers have found that note-taking associated with keyboarding involves taking notes verbatim in a way that does not involve processing information, and so have called this "non-generative" note-taking. [Note: Guided Notes is a form of non-generative note-taking.] By contrast, taking notes by hand involves cognitive engagement in summarising, paraphrasing, organising, concept and vocabulary mapping — in short, manipulating and transforming information that leads to deeper understanding."

BRAIN POWER
Closely related to summarizing , note-taking requires specific skills like identifying what is important and what is not, making personalized decisions about how to record information, and cultivating a lifelong practice perfect for college-readiness and the workforce (Marzano, 2001). More importantly, however, is the internal processing from note-taking that provides significant learning benefits.

Paul Holt (2023) identifies at least 15 cognitive benefits of note-taking. We've condensed his extensive list into the

Five Powerful Benefits
of Note-Taking

1. **Enhances Memory Retention:** A study that compared recall of information between longhand note-takers and students who photograph lecture slides revealed that the note-takers outperformed the photo-takers, even with an equal opportunity to review their learning materials before the test.
2. **Promotes Active Listening:** Note-taking automatically demands one's attention and engagement during learning.

> *Note-taking aids in mastering complex topics by breaking them down into manageable chunks.also helps us draw connections between ideas, fostering understanding. Note-taking encourages deep learning, facilitating critical thinking and reflection.* Beckford, (2023)

Creative and purposeful notetakers combine method and style (e.g., highlighting, underlining, color-coding) regardless of the format (e.g., two-column, outline, web) they may be using.

3. **Organizes Thoughts:** Note-taking acts as a road map for your thoughts. Note-taking provides a structured overview of ideas, making it easier to connect concepts, identify patterns, improve comprehension, and generate new insights.

4. **Facilitates Review**: Note-taking condenses extensive information into manageable, digestible chunks, aiding in better understanding and retention of complex subjects. Condensed, organized notes serve as an invaluable review for learning.

5. **Fosters Creativity:** Note-taking permits learners to personalize their study style, tailoring material to one's learning preferences and/ or the demands of the content. Adding visuals, diagrams, doodles, symbols, and other elements to hand-written notes builds long-term memory--*quickly!*

TEACHING NOTE-TAKING

Speaking of creativity, let's be honest: there is no one way to take notes. Different situations may call for different methods, depending on the content and the learner's preference. Therefore, teachers must come equipped to expose students to a variety of note-taking methods, styles, and dormats, encouraging learners to use a combination thereof to create their own unique note-taking process.

TEACHING NOTE-TAKING

Modeling

No one wants to revamp an entire set of content presentation slides from one format to another to model note-taking-- and, if we are being honest, that would actually defeat the point. Students would not experience the cognitive benefits of the note-taking process.

To model note-taking, display your lecture slides like normal, and in conjunction with them, explicitly show students in your own handwriting, in real time, how to take notes from those slide. Select a format, style, and method to demonstrate on the whiteboard. Follow this process for an entire lecture to help deepen students' initial understanding of the process.

Explain explicitly what thinking processes you are using to create your notes. For example, a high school student studying history, determined that a capital letter "C" would be her standard abbreviation for the word "century." This abbreviated carried that personalized meaning through not only in high school but throughout her post-graduate studies and into professional life.

Methods/Styles

Modeling the note-taking process is also the prime time to *give students permission* to develop their own system of symbols, abbreviations, indentions, darkened print, underlining, annotations, nonlinguistics, color-coding, etc. Modeling also is the perfect time to share highlights of your own personal style

Offer students plenty of examples and opportunities to create, develop, and share their individualized methods and note-taking styles with others.

Formats

Note-taking can take a variety of informal and structured formats. Graphic organizers, when drawn by the learner, offer organic cognitive experiences that a worksheet or even a digital template simply cannot. When using a variety of formats, learners make strategic decisions about how to organize information, which interrelated concepts belong and what can be eliminated. These thinking processes aid comprehension and develop analytical skills.

Although there may be countless formats for note-taking, we will focus on the following five.

Five Note-Taking Formats

1. **Informal Outline:** Uses indentions and labeling to indicate major ideas and related subordinate details.
2. **Cornell (Two-Column) Notes:** Divides paper into two unequal portions, with major concepts on the left and key details, diagrams, examples on the right.
3. **Web:** Outlines content in map of circles with main idea in the center and lines to related elements and sub-elements in relatively-sized circles.
4. **Target Notes:** Makes the central concept the target, this organizer outlines key components of the target and identifies each components characteristics or other details. This graphic may be worth photocopying.
5. **Collaborative Listening Viewing Guide (CVLG):** Promotes collaborative engagement when *viewing* content. This scaffolded note-taking format previews what learners should listen and look for while viewing.

Wait! What about Guided Notes? Although Guided Notes did not make our top five formats, it does have its place--primarily in Tier 2 instruction. Rather than providing Guided Notes as an whole class elixir, reserve this practice as a means of modifying and differentiating instruction for those who need it. This non-regenerative practice offers numerous scaffolding opportunities--*after adequate modeling and plenty of guided and organic practice during Tier 1 has been provided.*

FIGHT THE RESISTANCE

Expect resistance from students who have not had to take any real cognitive responsibility for their learning. Weaknesses in note-taking will likely result in student complaints: "I do not know what to write down." "You're talking too fast! "My hands hurt!" "Just give us the notes!" Fight the urge to give in! Model note-taking often. Share weekly note-taking tips.Conduct notebook checks. Give open-note learning tasks and quizzes. Connect note-taking and learning intentions. Assign students to created study guides based on notes. Leverage note-taking as an explicit part of the learning process. Make note-taking matter!

RESOURCES
Beckford, A. (2023). *The power of note-taking in advancing your knowledge.*
Holt, P. (2023). *15 reasons why note-taking is important.*
Marzano.R,.et al, (2001). *Classroom instruction that works...*
Roessingth, H. (2020). *The benefits of note-taking by hand.*