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## Designing a Multimodal Metacognitive Practice Database

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# Digital Choice Board for Teaching and Learning with Metacognition

By Caleb Sawicki

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## **How to Use these Slides!**

1. On the following slide there is a list of 12 digital tools, select one of interest by clicking on the the title of the tile (e.g., click the words “Socratic Seminars” to go to that slide)
2. Read the text on the slide describing how the metacognitive practice is helpful for students
3. Watch the video of the use of a digital tool which emphasizes that metacognitive practice
4. Read the additional links on the slide to see more reading on the metacognitive practice
5. Repeat this process for each tool/practice of interest
6. Implement the practices in your own classroom!



Students  
Model their  
Thinking  
Padlet



Prediction  
Activities  
Lucid



Socratic Seminars  
Ideaboardz



Self-Assessment  
Google Docs  
Assignment  
Tracker



Teacher  
Think-Alouds  
Zoom



Setting Personal  
Learning Goals  
Google Keep



Reflective  
Journals  
Google Docs  
Templates



Metacognitive  
Prompts  
Quizlet



Planning Tasks  
Canva Templates



Reflection  
Discussions  
Piktochart



Exit Tickets  
AI-Generated  
Questions with  
Assessment Tool



KWL Charts  
Google Drawings  
Template

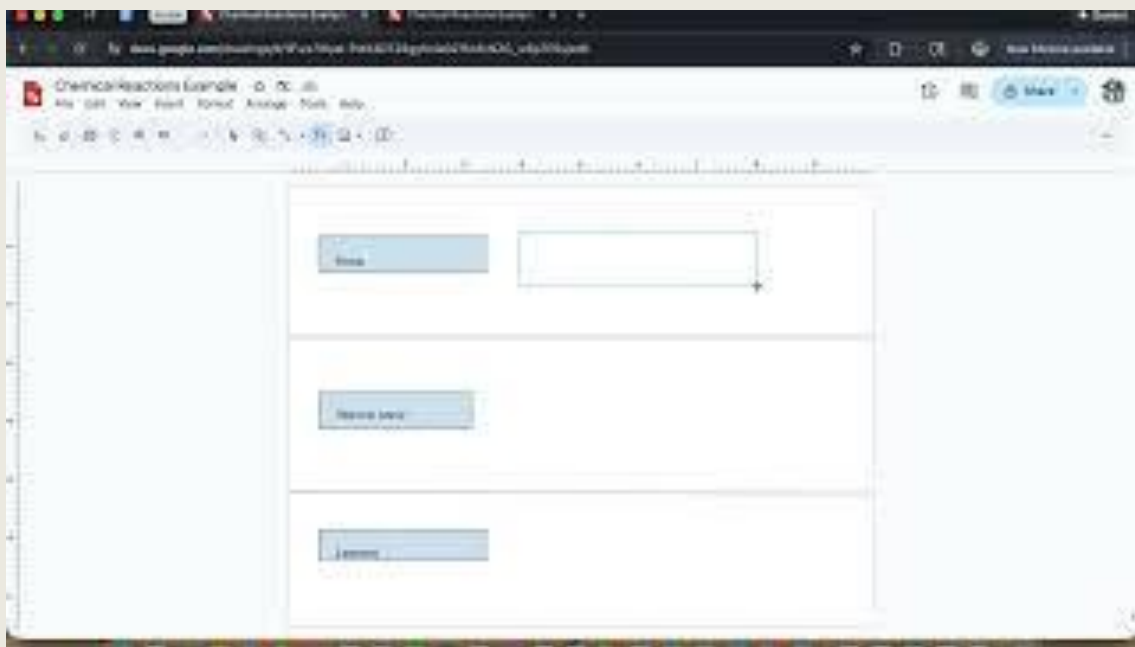
## Students Model their Thinking (Padlet)



When students model their thinking they think about their thoughts and understanding of the material. They can reason with content to problem-solve and can also compare their thoughts with peers to recognize different thinking patterns. Teachers can also use student modeling to understand their students thoughts to adjust future classroom practices. Watch this video to see how students can use Padlet to model their thinking! (Caffelle, 1992).

More Reading: [Portrait of a Learner PK-3 - Explaining their Thinking & The Importance of Critical Thinking and How to Teach It.](#)

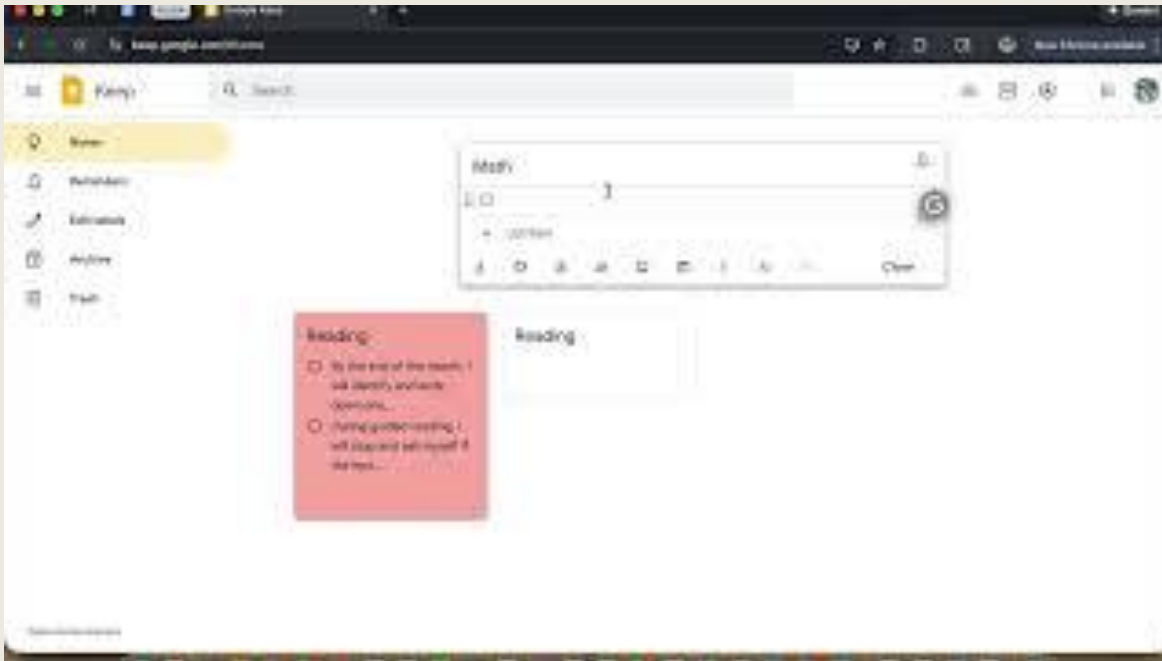
## KWL Charts (Google Drawings)



When students think about their process of thinking, a visualization of their thoughts before, during and after is a valuable tool for reflection. For both individuals and groups, a KWL chart can help students see how their thinking has progressed to determine if their thinking aligns or disagrees with their initial thoughts. Watch this video to learn how students can use Google Drawings to make a KWL Chart! (DJOUB, 2023).

More Reading: [Applying KWL Guides to Sources with Elementary Students](#) & [K - W - L Penn State](#)

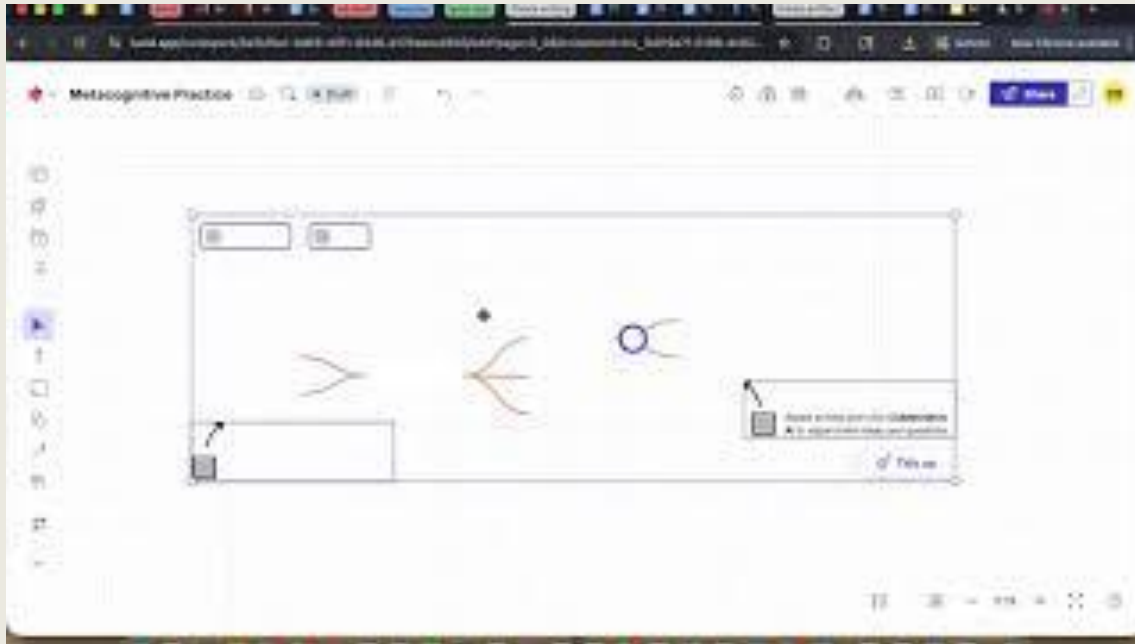
# Setting Personal Learning Goals (Google Keep)



When students set personal goals they monitor their thinking and progress during a lesson, a highly metacognitive skill. Moreover, with personally tailored goals students become motivated to achieve because of the control they have over their learning. Watch this video to learn how students can use Google Keep to set their own personal learning goals! (Communication Theory, 2023).

Learn More: [Create a Goal and Discover Your "Why"](#) & [New Research Shows That Setting Goals Helps Students Do Better in Their Classes](#)

## Prediction Activities (Lucid)



When students predict the outcome of a lesson, they are thinking metacognitively. Prediction reveals students patterns of thinking, and by making a prediction students will be more motivated to see if their predictions end up being correct. Creating a full circle of learning is metacognitive in that students think about their thinking processes. Watch this video about Lucid to learn how students can make their own predictions! (Abell, 2009).

Learn More: [Prediction and Metacognition & Relationships between Prediction Accuracy, Metacognitive Reflection, and Performance in Introductory Genetics Students \(College students, but still applicable\)](#)

## Metacognitive Prompts (Quizlet)



When students are having discussions about their thinking, sometimes they struggle to find the words. Metacognitive prompts allows students to form their thinking and metacognitive prompts can provide a gateway for students to express their thinking in a productive, metacognitive fashion along with recognizing peers' thinking methods as well. Watch the video on this slide to learn about to use Quizlet to provide metacognitive prompts! (Brad Melsby, 2024).

Learn More: [Make Thinking Visible](#) & [Sentence Frames and Sentence Starters \(emphasis on multilingual learners\)](#)

## Exit Tickets (ChatGPT and Google Forms)



When students complete exit tickets they are prompted to reflect on what they have learned and how they have learned during a lesson. Exit tickets ask students to think about their thinking which makes them more aware of their learning and helps teachers adjust their practices in the future. Watch the video on this slide to learn how you can use ChatGPT and Google Forms to create exit tickets! (Mulvahill, 2025).

Learn more: [Exit Tickets: The ultimate guide for teachers](#) & [Teaching Strategies - Exit Tickets](#)

## Socratic Seminars (Ideaboardz)



When students have discussions they are modeling a Socratic dialogue. Students drive the conversation and compare their thoughts with their peers in a highly metacognitive process. Students plan, monitor, and evaluate their own and their peers thoughts boosting an understanding of the material on a deeper, thoughtful level. Watch the video on this slide to learn how students can use Ideaboardz to have a Socratic Seminar.  
(Martinez, 2006).

Learn More: [Adapting Socratic Seminars for Elementary Students](#) & [Teaching Students to Think, Not Just Answer: Socratic Seminars in Action](#)

## Teacher Think Alouds (Zoom)



When teachers think aloud they are executing a common classroom practice. By adding a metacognitive element to think alouds students can see how their teacher is thinking about the content and in turn compare it to their own thoughts. Effective think alouds do not regurgitate information but prompt students to reflect on their thinking. Watch the video on the slide about how to use Zoom to create teacher think aloud! (Malone, K, 2020).

Learn More: [Metacognition and teacher modelling](#) & [Metacognitive Modelling – Where Does it Fit in the Classroom?](#).



## Reflection Discussions (Piktochart)



When students reflect on the lesson they just finished they are prompted to reflect on how their learning has changed, transitioned, or remained the same. However, to reach this goal, conversations do not need to be verbal, visual tools allow students to interact on a deeper level with what they learned and determine if there are any holes in their understanding. Watch the video on the slide to learn how students can use Piktochart to create an infographic during a reflection discussion!

[University of Oregon](#)

Learn More: [Teaching Young Students How to Reflect on Their Learning](#) & [Encouraging Student Talk: Discussions for Self-Reflection in the Elementary Classroom](#)



## Reflective Journals (Google Docs Templates)



When students journal after an activity they are solidifying the knowledge they were just given. Reflection journals become metacognitive when students are tasked with reflecting on their thinking processes. In many cases, students have different preferences in expression, so providing multiple templates encourages deep reflection regardless of method. Watch the video and use the template link on the slide to learn how to use different journal templates to encourage reflection! (Price-Mitchell, 2015).

[Google Docs Templates \(make your own copy\)](#)

Learn More: [Encourage Student Metacognition with Weekly Reflection Journals in Your Course](#) & [Using journaling as a metacognitive activity](#)

## Planning Tasks (Canva Templates)



When students plan tasks they are prompted to think through the whole process of completing a task, which is an important metacognitive skill because they need to recognize their position relative to each step they are taking on the assignment. Watch the video on this slide to learn how students can use Canva templates to plan tasks (Cummings 2015).

[Link to Canva Templates](#)

Learn More: [Plan, Do, Review: the Planning part of the metacognitive process & 2 Explore the Planning-Monitoring-Evaluation Cycle](#)

# Self-Assessment (Google Docs Assignment Tracker)



When students self-assess they are recognizing what they have succeeded in and where they need more support/areas open for improvement. Self-assessment, like metacognition, does not solely happen after a task/lesson is completed. Students who self-assess during or before a lesson can more readily monitor their progress and recognize where they can improve. Watch the video on this slide to learn how students use Google Assignment tracker template to self-assess. (Rickey, Panadero, and DeLuca 2025).

Learn more: [What is self-assessment? Best strategies to promote self-regulation and autonomy & Promoting Metacognition Through Student Self-Assessment](#)