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Guidelines and Resources for Organizing Thinking

Students need direction in organizing their thinking, as most do not know how to do this automatically. Teaching them strategies for finding patterns and relationships, note taking, and reflection on their own learning will enhance, refine, and clarify what they are learning.

Effective Practices for Organizing Thinking	Additional Guidelines & Strategies	Internet Resources & Digital Tools
Discovering Patterns and Relationships in the subject of study provides a clear structure and clarity for students.	● Use **graphic organizers** to allow students to see the relationships among the different components of the material. They are especially appealing to spatially minded, visual learners, but they help all learners gain a sense of the patterns or relationships in what they are studying. There is an extensive variety of these types of graphic organizers including, but not limited to: 　○ Venn Diagrams 　○ Cause and Effect Charts 　○ Flow Charts 　○ Spider Maps 　○ Sequence or Timeline Charts 　○ T-charts ● **Analogies and metaphors** link what students know to what they are learning. When we say, "Think of it as…" or "It's much like…" we are teaching with analogies and metaphors. Common comparisons of this sort include comparing the eye to a camera, the heart to a pump, the memory to a file cabinet, etc. In order to employ this strategy, 　○ Ask students to consider the comparative properties of two ideas by having them study the new concept and the familiar concept, delineating their differences and	Teacher Vision Graphic Organizers Teacher Vision Analogies and Metaphors Analogy Graphic Organizer A Guide for Teaching with Analogies Online graphic map creator Read, Write, Think Webbing Tool (Students have an option of creating any type of mind map) Simple Timeline Generator

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	similarities, and determining their categories of comparison. ○ Encourage students to use a graphic organizer to make their conclusions clear. ● When studying literature or history **creating a character bank** helps students keep organized track of the players. This can be an individual activity, a small group activity, or a class-generated bank. The list of characters and their traits from the story should be accessible to all students.	Time Toast Timeline Generator Online Interactive Venn Diagram Online Character Trading Card Creator
Note taking is a valuable skill that helps students to organize the information presented to them in class.	● Effective **note taking** doesn't necessarily come naturally for most students. Too often students try to record what is said verbatim, which is fruitless and frustrating and will discourage students from learning this valuable skill. There are several techniques for guiding note taking. ○ Model how to take notes effectively on a large board or other visual space accessible to all students. (**Cornell-style notes** provide great structure for this sort of modeling.) ○ Provide time for students to practice and evaluate their own note-taking skills and continually follow up with the students' progress until they are competent note-takers. ○ Consider providing **fill-in notes, Cloze passages, or outlines** for students to complete as notes. ○ Allow a bit of time during class for students to review their notes and ask clarifying questions. ○ Encourage students to use notes as study guides for quizzes and exams.	Note Taking Tips for Students from Glencoe Note Taking Lessons from Education World Teaching Note Taking Tutorial Directions for Cornell Notes Cornell Notes Graphic Cloze Procedure Online Outliner and Note

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		Taking Creator Classmint (Online tool for creating Cornell style notes and foldables)
Checking for Understanding provides teachers with critical information about students' needs and allows students to be more engaged, reflective and organized in their thinking.	● Most important to this process is that students are able to **reflect on their own learning** — what they do and do not understand — and teachers adjust their teaching accordingly. ● **Questioning**, if done well, guides students to think through what they have learned so far and helps them identify what they still lack. It ignites interest, develops critical thinking, and helps teachers assess what their students know and understand. 　○ Take time to prepare thoughtful questions, including *some* fact, closed, recall-type questions and *more* open-ended, interpretive, evaluative and synthesis-type questions. Consider preparing questions that address the components of Bloom's Taxonomy: 　　• Knowledge – recall data or information 　　• Comprehension – understand meaning 　　• Application – use a concept in a new situation 　　• Analysis – separate concepts into parts; distinguish between facts and inferences 　　• Evaluation – make judgments about the value of ideas or products 　　• Create – combine parts to form new meaning	Checking for Understanding Padlet (Use to generate reflection on student learning) Answer Garden (Pose a question for reflection or formative assessment) Bloom's Taxonomy Questions 3-2-1 Charts GIST Strategy

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	○ Remember to use sufficient **wait time** with questioning. The longer the wait, the lengthier, more thorough, and more thoughtful the students' responses will be. ● A **Triangular Prism** (red, yellow, green points on a triangular card) or some other visual response to the question, "How well do you understand this?" helps teachers gauge what students are learning. **Thumbs up**, **middle, or down** also achieves this same effect. ● Have students write a short response to a question on a white board or card and then hold it up for teachers to check. This allows teachers a quick assessment of their learning. There are also cards with QR codes that allow teachers to use a scanner application to determine students' levels of understanding. ● A **3-2-1 chart** is an excellent way to have students summarize what they have learned, what they found interesting and what they still have questions about. This chart can also be used to address some other sort of prompt about the day's lesson that requires students to reflect and summarize. ● A **GIST chart** encourages students to summarize expository or narrative texts asking them to consider the main idea. They identify the 5 W's and H (who, what, where, when, and how) and write a 20-word summary of what they have read.	