Addendum/hand-out for Executive Functioning Presentation by Philippe Ernewein, Director of Education, Denver Academy (all resources posted at www.rememberit.org)

Notes:
● This inventory/survey is adapted from the work of Schraw & Dennison cited in the footer. ● It is designed here to be incorporated into a lesson that introduces executive functioning to MS/HS and/or college students. ● The survey should be distributed after an introduction and delivery of the what, how, and why of executive functioning. ● Follow-up sessions with students should include individual meetings that have them reflect on strengths and weaknesses, and develop strategies. ● This survey can also add a valuable self-awareness dimension for any presentation and/or projects students complete about how they learn best and what supports they need and/or need to advocate for.
Adapted from Schraw, G. & Dennison, R.S. (1994). Assessing metacognitive awareness. Contemporary Educational Psychology, 19, 460-475.

<u>Knowledge About Cognition</u>

Declarative Knowledge

- The factual knowledge the learner needs before being able to process or use critical thinking related to the topic
- Knowing about, what, or that
- Knowledge of one's skills, intellectual resources, and abilities as a learner
- Students can obtain knowledge through presentations, demonstrations, discussions

Procedural Knowledge

- The application of knowledge for the purposes of completing a procedure or process
- Knowledge about how to implement learning procedures (e.g. strategies)
- Requires students to know the process as well as when to apply the process in various situations
- Students can obtain knowledge through discovery, cooperative learning, and problem-solving

Adapted from Schraw, G. & Dennison, R.S. (1994). Assessing metacognitive awareness. Contemporary Educational Psychology, 19, 460-475.

Conditional Knowledge

- The determination under what circumstances specific processes or skills should transfer
- Knowledge about when and why to use learning procedures
- Application of declarative and procedural knowledge with certain conditions presented
- Students can obtain knowledge through simulation

Metacognitive Awareness Inventory (MAI) Scoring Guide

Directions: For each True on the MAI give yourself 1 point on the following charts. For each False, give yourself 0 points in the Score column. In the box, total the score of each category.

Declarative Knowledge		Score
1.	I understand my intellectual strengths and weaknesses.	
2.	I know what kind of information is most important to learn.	
3.	I am good at organizing information.	
4.	I know what the teacher expects me to learn.	
5.	I am good at remembering information.	
6.	I have control over how well I learn.	
7.	I am a good judge of how well I understand something.	
8.	I learn more when I am interested in the topic.	
	Total	/8

Adapted from Schraw, G. & Dennison, R.S. (1994). Assessing metacognitive awareness. Contemporary Educational Psychology, 19, 460-475.

Procedural Knowledge		Score
1.	I try to use strategies that have worked in the past.	
2.	I have a specific purpose for each strategy I use.	
3.	I am aware of what strategies I use when I study.	
4.	I find myself using helpful learning strategies automatically.	
Total		/4

Conditional Knowledge		Score
1.	I learn best when I know something about the topic.	
2.	I use different learning strategies depending on the situation.	
3.	I can motivate myself to learn when I need to.	
4.	I use my intellectual strengths to compensate for my weaknesses.	
5.	I know when each strategy I use will be most effective.	
Total		/5

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Regulation of Cognition

Planning

- Planning, goal setting, and allocating resources prior to learning

Information Management Strategies

- Skills and strategy sequences used to process information more efficiently (e.g., organizing, elaborating, summarizing, selective focusing)

Comprehension Monitoring

- Assessment of one's learning or strategy use

Debugging Strategies

- Strategies used to correct comprehension and performance errors

Evaluation

- Analysis of performance and strategy effectiveness after a learning episode

Planning		Score
1.	I pace myself while learning in order to have enough time.	
2.	I think about what I really need to learn before I begin a task.	
3.	I set specific goals before I begin a task.	
4.	I ask myself questions about the material before I begin.	
5.	I think of several ways to solve a problem and choose the best one.	
6.	I read instructions carefully before I begin a task.	
7.	I organize my time to best accomplish my goals.	
	Total	/7

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Information Management Strategies		Score
1.	I slow down when I encounter important information.	
2.	I consciously focus my attention on important information.	
3.	I focus on the meaning and significance of new information.	
4.	I create my own examples to make information more meaningful.	
5.	I draw pictures or diagrams to help me understand while learning.	
6.	I try to translate new information into my own words.	
8.	I use the organizational structure of the text to help me learn	
9.	I ask myself if what I'm reading is related to what I already know.	
10.	I try to break studying down into smaller steps.	
11.	I focus on overall meaning rather than specifics.	
	Total	/11

Comprehension Monitoring		Score
1.	I ask myself periodically if I am meeting my goals.	
2.	I consider several alternatives to a problem before I answer.	
3.	I ask myself if I have considered all options when solving a problem.	
4.	I periodically review to help me understand important relationships.	
5.	I find myself analyzing the usefulness of strategies while I study.	
6.	I find myself pausing regularly to check my comprehension.	
7.	I ask myself questions about how well I am doing while learning something new.	
	Total	/7

Adapted from Schraw, G. & Dennison, R.S. (1994). Assessing metacognitive awareness. Contemporary Educational Psychology, 19, 460-475.

Debugging Strategies		Score
1.	I ask others for help when I don't understand something.	
2.	I change strategies when I fail to understand.	
3.	I re-evaluate my assumptions when I get confused.	
4.	I stop and go back over new information that is not clear.	
5.	I stop and reread when I get confused.	
Total		/5

Evaluation		Score
1.	I know how well I did once I finished a test.	
2.	I asked myself if there was an easier way to do things after I finished a task.	
3.	I summarize what I've learned after I finish.	
4.	I ask myself how well I accomplish my goals once I'm finished.	
5.	I ask myself if I have considered all options after I solve a problem.	
6.	I ask myself if I learned as much as I could have once I finished a task.	
Total		/6

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