



Independent & Effective Revision

METACOGNITION – HOW TO REMEMBER AND APPLY KNOWLEDGE EFFECTIVELY

Key Questions

**HOW DO I KNOW WHAT
THEY ARE DOING?**

**HOW DO I KNOW IF
THEY ARE DOING IT
RIGHT?**

WHAT ARE THEY DOING?

**ARE THEY WORKING
PRODUCTIVELY?**

CAN I HELP?

WHAT SHOULD I DO?

Scenario Student

- ▶ Nathan knew that to revise properly he would need a technology 'black out'. With a little help from his father, Nathan made his bedroom more like an office than a games room during his GCSE revision.
- ▶ Each evening at seven o'clock, just after dinner, Nathan would switch off his phone and go upstairs to revise. First, he'd check his revision plan and get out what he needed before steeling himself to do some hard work.
- ▶ Strategy number one was always a quick flashcard challenge, mixing up his cards from his different subjects, before testing himself.
- ▶ Then Nathan would test himself on different topics, with past questions or simply seeing what he could recall with a blank piece of paper, before ticking them off his revision plan.
- ▶ Expecting his usual lull after forty-five minutes, Nathan would grab a drink and a biscuit (or three) before getting back to his revision. At the end of his revision session, he would end with the nightly ritual of returning to his revision plan to chalk up his victories and losses.

Metacognition:
intentional thinking about
how you think and learn

Cognition: your thinking
activities and processes

*I am figuring
out...*

*What are the steps
that I need to
follow here?*

I am wondering...

*What is the
assignment
asking me to do?*

*What do I already
know about this
topic?*

It reminds me of...

*Where did I get
stuck when trying
to solve this
problem?*



What is My Role As a
Parent?

Planning & Goal Setting

- ▶ Revision TT
- ▶ Revision Session
- ▶ The content that will be covered
- ▶ A 'To Do' list
- ▶ Plan family time to factor in learning time
- ▶ Set goals
 - ▶ Short term
 - ▶ Long term

Table 1: Effectiveness of ten learning techniques, from Dunlosky et al (2013) ³⁹

High utility	Practice testing	Self-testing or taking practice tests on material to be learned.
	Distributed ('spaced') practice	Implementing a schedule of practice that spreads out activities over time.
	Elaborative interrogation	Generating an explanation for why an explicitly stated fact or concept is true.
	Self-explanation	Explaining how new information is related to known information, or explaining steps taken during problem solving.
Moderate utility	Interleaved practice	Implementing a schedule of practice that mixes different kinds of problems, or a schedule of study that mixes different kinds of material, within a single study session.
	Summarization	Writing summaries (of various lengths) of to-be-learned texts.
	Highlighting	Marking potentially important portions of to-be-learned materials while reading.
	Keyword mnemonic	Using keywords and mental imagery to associate verbal materials.
Low utility	Imagery use for text learning	Attempting to form mental images of text materials while reading or listening.
	Rereading	Restudying text material again after an initial reading.

Cle
Stro

Monitoring Progress

- ▶ Where was your start point?
 - ▶ Previous test
 - ▶ Mock exam
 - ▶ Low stakes test e.g. 5/10
- ▶ Have you got better?
- ▶ Did it work?
- ▶ Is that the right learning technique for that subject?
- ▶ Is that the right learning strategy for you?

Restructure your physical and social context

- ▶ Where is your workspace?
- ▶ Is it clear of distractions?
 - ▶ Phone
 - ▶ TV
 - ▶ Music
 - ▶ Friends
 - ▶ Social media
 - ▶ Games
 - ▶ Family

Manage time effectively

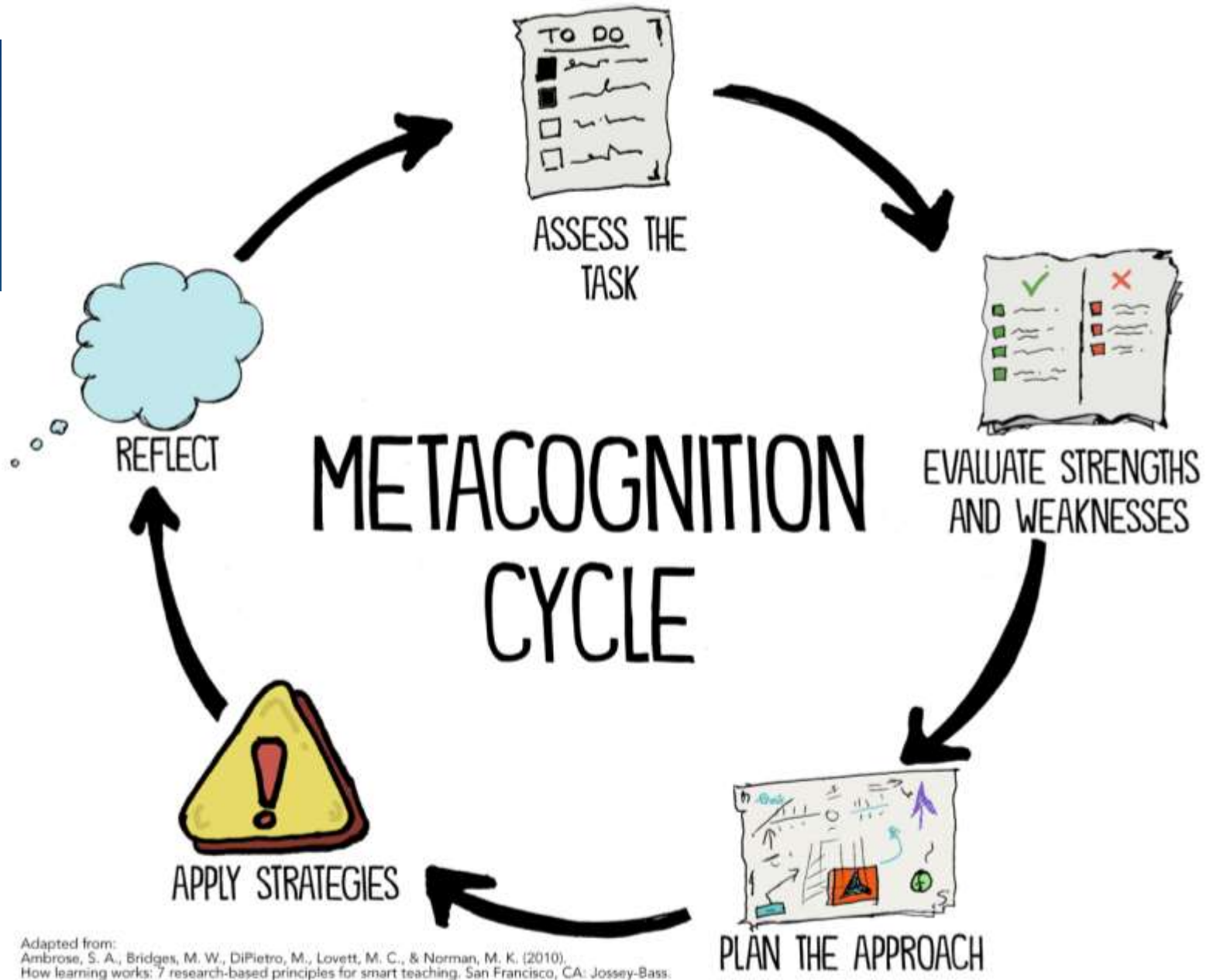
- ▶ 40-50min blocks
- ▶ reward/ break at the end

Self-evaluate

- ▶ Look back at your plan
- ▶ Did you do it?
- ▶ what needs to be different next time?
- ▶ Adapt your plan

Motivation

- ▶ Tricky choices to make
- ▶ Easy to be distracted
- ▶ Easy to procrastinate
- ▶ Easy to seek instant gratification elsewhere
- ▶ We would love them to be learning because they love it (long term) but sometimes they need some extrinsic motivators to get them over the line (short term)



Adapted from:
Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010).
How learning works: 7 research-based principles for smart teaching. San Francisco, CA: Jossey-Bass.

Scenario Student

- ▶ Nathan knew that to revise properly he would need a technology 'black out'. With a little help from his father, Nathan made his bedroom more like an office than a games room during his GCSE revision.
- ▶ Each evening at seven o'clock, just after dinner, Nathan would switch off his phone and go upstairs to revise. First, he'd check his revision plan and get out what he needed before steeling himself to do some hard work.
- ▶ Strategy number one was always a quick flashcard challenge, mixing up his cards from his different subjects, before testing himself.
- ▶ Then Nathan would test himself on different topics, with past questions or simply seeing what he could recall with a blank piece of paper, before ticking them off his revision plan.
- ▶ Expecting his usual lull after forty-five minutes, Nathan would grab a drink and a biscuit (or three) before getting back to his revision. At the end of his revision session, he would end with the nightly ritual of returning to his revision plan to chalk up his victories and losses.

Skill	No, never		Sometimes		Yes, definitely
Do you plan your revision time over the next few weeks	1	2	3	4	5
Do you plan your individual revision sessions and decide the content you are going to learn?					
Do you set yourself a goal for what you want to achieve in that session?					
Do you have goals of what you want to achieve overall at school or in individual subjects?					
Are you able to gauge your improvement and progress after a revision session?					
Do you remove distractions from your study space?					
Is your revision spaced/ chunked/ blocked into shorter blocks					
Do you review your plan? Did it work?					
Are you always motivated to work?					