**Metacognition – Recommendation 6**

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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. | | | |  |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | The aim of the skills and approaches discussed in the rest of these emails is to develop learners that are able to manage their learning independently.  The phrase ‘independent learning’, rather like metacognition, is commonly used in schools, but perhaps our understanding is not so commonly shared.  Put simply, independent learning is when pupils learn with a degree of autonomy, making active choices to manage and organise their learning, while deploying metacognitive strategies in the process.  The GCSE revision undertaken by Nathan is a typical example of independent learning. Supporting pupils like Nathan to self-regulate—providing them with timely feedback and helping them to plan, monitor, and evaluate their progress—forms the basis for successful, independent learning.  Research emphasises the need for guided practice, in which the teacher provides support, prompts, and scaffolding, particularly during the initial stages of practice. The pupil can assume more and more responsibility as they become more proficient.  To revise effectively, pupils like Nathan need revision approaches clearly modelled for them—vital cognitive strategies such as using self-testing flashcards—before they gain independent expertise.  Independent practice can play an important role in developing self-regulation and metacognition provided that tasks are sufficiently challenging, build on firm pupil subject knowledge, are realistic, and are suitably guided and supported by the teacher.   Effective learners use a number of strategies to help them learn well independently. According to Zimmerman, [1] these can include:   * setting specific short-term goals (for example, Nathan executing his revision plan); * adopting powerful strategies for attaining the goals (Nathan’s self-testing using flashcards); * monitoring performance for signs of progress (Nathan monitoring his progress by answering past questions); * restructuring one’s physical and social context to make it compatible with one’s goals (Nathan changing his bedroom so it was fit for revision and learning); * managing time-use efficiently (Nathan giving himself an appropriate break); * self-evaluating one’s methods (Nathan checking his revision plan at the end of his session); and * attributing causation to results and adapting future methods (Nathan checking his revision plan, ticking, or not, appropriately before adapting his revision plan). | | |  |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | **Motivation and independent study**  Pupils need to manage their motivation so that they are able to stick to learning, particularly when there is no teacher to guide independent study.  An obvious truth is that our pupils often have to make tricky choices when learning independently, such as doing their homework tasks over giving in to more immediate gratifications. Of course, this requires self-control, which is itself a metacognitive process.  Pupils therefore need to regulate their motivational investment in learning activities, not least in light of the fact that they are often confronted with a choice between immediately-rewarding activities and activities that may seem less so but that support longer term learning goals (thus the need to ‘delay gratification’ as discussed in the previous recommendation).  For example, Nathan, as he undertakes his revision, may likely have the urge to contact his friends by phone rather than revise!  Our pupils need to be able to balance short term—or proximal—goals, with longer term learning goals and rewards—their distal goals.  These are, again, not necessarily strategies that children spontaneously develop, so they will need to be taught. Whether this should happen through direct instruction or other methods, such as modelling, is debatable. | | |  |  | | --- | |  |  |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | **Further resources...**  If this has whetted your appetite to find out more about metacognition and self-regulation, you can:   1. Read Prof. John Dunlosky’s excellent short article on independent learning and study strategies, ‘Strengthening the student toolbox’. [Just click here](https://educationendowmentfoundation.us8.list-manage.com/track/click?u=cb569f99caaaedff117cdc74c&id=467dee8eb2&e=ab6bf9c839). 2. Watch this fantastic, short 30 second clip that captures how a young child learns independently. [Just click here](https://educationendowmentfoundation.us8.list-manage.com/track/click?u=cb569f99caaaedff117cdc74c&id=13f8366bbd&e=ab6bf9c839). 3. The example of Nathan in recommendation 6 describes effective independent revision. This TES article, from co-author of the guidance, Alex Quigley, on ‘Pupils are as good at revision as they think’, explores the tricky issue of ‘judgements of learning’, which informs independent learning and revision. [Just click here](https://educationendowmentfoundation.us8.list-manage.com/track/click?u=cb569f99caaaedff117cdc74c&id=ad3009b903&e=ab6bf9c839). | | |  |  | | --- | |  |  |  |  | | --- | --- | | |  | | --- | |  | |  |  | | --- | |  |  |  |  |  | | --- | --- | --- | | |  |  | | --- | --- | | |  | | --- | | **References** **[1]** Zimmerman, B. J. (2010) ‘Becoming a Self-Regulated Learner: An Overview’, Theory into Practice, 41 (2) | | |  |  |  | | --- | --- | | |  | | --- | |  | | |