HOW TO CREATE AUTONOMOUS LEARNERS

TEACHING METACOGNITIVE, SELF-REGULATORY AND STUDY SKILLS – A PRACTITIONER'S GUIDE

TARYN MOIR

ROUTLEDGE

'A welcome resource for practitioners that combines theory, practice and implementation or the why, how and what of how to develop autonomous learners. This book will help you identify your starting point, navigate implementation at a time of hyper change and know that you've had an impact.'

Sarah Philp, Psychologist, Coach and Educator

HOW TO CREATE AUTONOMOUS LEARNERS

To achieve their full potential, it is essential that children develop skills to become autonomous learners, yet this skill does not come naturally to many learners. This book is a practical teaching and planning guide to the theory, practice, and implementation of evidence-based approaches to develop essential metacognitive and self-study skills.

How to Create Autonomous Learners explains how to get students, parents, and partners on board and how to implement these ideas across a class, school, or consortium. Areas covered include:

- How to get children and young people ready to learn.
- Why it is important to teach learning strategies.
- Encouraging children to become more active in the process of learning while also nurturing the development of creativity.
- How to harness learner motivation as metacognition and motivation are highly linked.

Easily applicable in any classroom, this essential resource supports children's development of important metacognitive, self-regulatory, and self-study skills and provides teachers and school leaders with evidence-based approaches for implementing these ideas with the support of parents, students, and partners.

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Teaching metacognitive, self-regulatory and study skills – a practitioner's guide

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Dedicated to Drew. Without you I'd be lost.

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1 Introduction and orientation

In 2020, the Covid-19 crisis forced educators to reassess how we teach and educate our children and young people. For until this point, a classroom of 2019 could look very similar to one of 1919. With a teacher sitting at the front of the room with a white rather than black board and children in rows or grouped together facing the front. During the pandemic full-time schooling was not available to all. Parents gained a newfound understanding of the difficulties of teaching their children. Teachers struggled to connect with children and families via online platforms. We all struggled and with various degrees of success, learned to adapt to the strange situation.

While we hope this situation will never happen again, it has reinforced what we already thought – that children need to develop the skills necessary to become autonomous learners. When children reach high school, we often make assumptions that children know how to study, learn, and work independently. Yet, all too often, our expectations as teachers, parents, or educators fall short of the reality. For while it is possible for some children to learn how to develop these skills independently, the use of strategies does not come naturally to many young learners. Increasingly, there is a realisation within education that learning strategies and skills need to be explicitly taught and often our efforts to teach independent learning skills fall short of being effective.

The Covid crisis forced adults, children, and young people to be taught in online platforms. This trend is likely to stay, at least in part. Therefore, this book will show how we, as teachers and educators, can best prepare our children for the brave new world that education systems are gradually moving towards. We know that, for traditional learning settings, self-regulated learning strategies lead to academic achievement. We also now know that when learning online, it is even more important that our children have these self-regulatory, metacognitive, and self-study skills. This book will fully equip the reader to know how to teach metacognitive, cognitive, and study skills during your face-to-face time with learners, so that when they are studying online or at home, they have all the skills and strategies needed to become effective autonomous learners.

We will explore some questions that you may have regarding theory. Questions like, what does the evidence say regarding learning and teaching? What are evidence-based metacognitive, self-regulatory, and self-study skills? What is the research around strategy instruction? What is the difference between a cognitive strategy and a metacognitive strategy?

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You may also have questions about the practice. For instance, which metacognitive strategies need to be taught? What other skills need to be taught? How do I teach them? Children are told to use strategies, but that is not enough. We need to teach strategies through a gradual release of responsibility in which the teacher first introduces that strategy, explains how to use the strategy, and then gives students more and more ownership in practicing and applying the strategy over time. We will look at this process in detail.

Finally, you might also have questions about the implementation. How do I roll this out within my school or authority? How do I support parents and pupils? How do I get partners involved? Having information on what makes up effective instruction is not sufficient if we want to roll out an intervention to an entire school or local authority area. We also need to understand how to do this and we will use the lessons learnt in the study of implementation science in order to do so.

Key ideas and themes throughout the book that we will explore

- How do we create the optimum learning environment so children want to learn? We need to ensure that the learning environment feels safe for learning to take place, as the links between motivation and learning are very strong. A learner needs to have the desire to improve their work or comprehension before they are likely to employ any metacognitive repair strategy.
- Why is it important to teach strategies? While all children benefit from effective explicit instruction of a strategy and its use, this process has the potential to reduce the inequalities experienced by disadvantaged learners, raising attainment for all.
- It is not enough to teach subject content. Learners also need to understand the "how" or the process to enable them to successfully complete a task. Also, we need to give our learners a clear understanding of what a successful completed piece of work looks like. Take away the mystery and give them some guidelines and examples.
- When we teach a new strategy, it is not enough to describe it once. Effective instruction in strategies requires a series of steps. Each step moves towards the teacher having less and the learner having more responsibility for implementing their strategy use independently.
- The teacher's explicit teaching and modelling of the use of a strategy illustrates to learners how effective these approaches are and gives them confidence to use them independently. This makes children far more engaged in their own learning process.
- Giving children cognitive and metacognitive strategies is like offering them the learning tools they need for lifelong learning.
- As Shanahan et al. stated in 2010, "Strategies are not the same as the skills typically listed in core programs, nor are they teaching activities. A strategy is an intentional mental action during learning that improves understanding. It is deliberate efforts by learners to better understand or remember what is being learnt".
- Study skills are best taught in the context of real subject-specific tasks rather than as an abstract or discrete topic.
- Students learn best when they are encouraged to create their own notes and reminders. This makes them committed to their learning rather than encouraging

them to be sedentary when a teacher overscaffolds by producing additional materials. Materials the learner creates will be more personalised and therefore more meaningful.
- For these ideas to have an optimal impact, they need to be implemented successfully.
- Successful implementation requires the support of children, parents, and partners.

Book organisation

The book is divided into three parts with:

- Part 1 THEORY. This is concerned with the theory and evidence that supports the assertions and approaches outlined in the book.
- Part 2 PRACTICE. This is concerned with understanding strategies, which ones to teach and how to teach them.
- Part 3 IMPLEMENTATION. This is concerned with implementation and how to successfully embed these approaches at an entire school or authority level.

To get the most out of the book, I hope you will read through it in sequence. However, it can be read by going to the sections which you believe may fit best with your needs. Therefore, in order to help with this process, here are the chapter contents briefly outlined.

Part 1: Theory

Chapter 2: Theoretical models

Why is learning so complex? What do I, as a teacher, need to think about? This chapter aims to make links between theory into practice by introducing some prominent models which have been used to inform practices within the classroom. Reading is one of the first skills that is taught in schools. As we progress, we rely on these reading skills to where learning to read becomes reading to learn. Such a vital skill is ongoing throughout life. The aim of reading is to make sense of (or comprehend) what we read, which often in schools is a variety of different subject's textbooks and handouts. Recognising the importance of reading as an essential study skill, it will be the example used to help make the connections between theory and practice. We will discuss how metacognitive and sociocultural models provide clues that can enhance our understanding of what potentially supports learning within the classroom.

Chapter 3: Research into strategy instruction

This chapter looks at the theory around strategies and discusses the complexity of what makes up a strategy. We will learn about effect sizes to help understand efficacy of different approaches that have been studied in meta-analysis. As studies have recommended that we should take multiple methods to optimise learning, we compare some programmes which take this multiple approach. This favorably highlights the benefits of the approach and pedagogy taken in Chapter 4 and Part 2 of this book.

Chapter 4: UK research

Metacognition, self-regulated learning, and study skills are effective when used across the curriculum. This chapter will look at a piece of research which built upon existing studies mentioned in Chapter 3 and evidenced their effectiveness within the UK context. We will track the school's journeys as teachers attended training and implemented its ideas with the support of a coaching model. The chapter will discuss how the programme was evaluated with outcomes showing it as highly effective across all outcome measures. We will discuss how teachers felt about learning and using this approach. The chapter will discuss implications that other schools may wish to consider when rolling out a similar metacognitive, self-regulatory study skills approach as outlined in Part 2.

Part 2: Practice and pedagogy

Chapter 5: Metacognition and mindset

We will start by considering what metacognition is and discuss why metacognitive skills are important, especially when we want to encourage our children to work independently, either at home or within school. This includes a look at what mindset is, how it develops and how we can support children to develop a growth mindset where we are open to learning new ideas. We will also look at the metacognitive cycle of learning and define what metacognitive strategies are and why it is so important that they be taught explicitly. We also consider some of the subliminal messages that may reinforce or undermine the development of a growth mindset.

Chapter 6: Metacognition and motivation

This chapter considers how metacognition links with motivation and offers some practical ideas about how to get children in the right place to learn. We talk about attunement and the importance of positive and inclusive environments and relationship-based approaches in enabling learners to achieve. We consider how to ensure that the task is set at the right level for optimum learning and through the use of pre-topic self-assessment tasks, we ensure that all children have equal opportunities to access the new learning by ensuring that fundamental vocabulary is understood. When you read this chapter, it might be useful to reflect upon how the models outlined in Chapter 2 are seen in practice.

Chapter 7: How should I teach a strategy?

Within this chapter, we will discuss how to teach a strategy. Effective instruction in strategies includes a series of steps. Although there are several models, we will refer to a seven-step approach in detail. There will be some ideas around the pace of progression and also putting each of the stages into practice. We will discuss how a teacher should periodically review the purpose of any strategy and scaffold children's understanding until they can apply it independently. When a child knows and uses a strategy, we consider the importance of referring to these learnt approaches alongside new ones. It is much more important to learn one or two strategies well than many superficially, and therefore, the process should not be rushed.

Chapter 8: Metacognitive strategies and how to teach them

This chapter will drill deeper into the use of a few particularly useful metacognitive strategies. These are ones which were identified in the research in Chapters 3 and 4. This includes visualising, hearing a voice reading aloud in your head, retelling, summarising, linking, holding your thoughts as you read, questioning, what to do when you don't understand, thinking about the "crunch" points and wondering. Some strategies: "visualise", "link to the wider world", and "questioning" have extensive examples illustrating what teaching them could look like in practice. This will hopefully give you the practitioner ideas about how to implement the other strategies mentioned. We will discuss what these strategies are and how to teach them so that children will feel confident enough to use these strategies independently.

Chapter 9: What cognitive strategies should I teach?

There are lots of cognitive strategies we use. When we are learning a new strategy, there will be the conscious effort involved in employing it. This chapter will discuss how to select the best strategy to teach for your context and how we can do this within a busy curriculum with competing priorities. The pros and cons of structural aids will be discussed and examples will be given. We will discuss how integrating the learning of a new strategy should be done at the same time as teaching content and we will discuss the process and product of learning.

Chapter 10: Successful study skills

Exams form a passageway on to life beyond schools. This chapter explores how we can best prepare our children for all the exams that they will be facing. We will explore how to contextualise study skills so that they are most likely to be employed. This will be by offering concrete subject-specific examples rather than general or abstract advice. This chapter will consider how we can optimise the success of our learners. We will discuss the best ways to study and look in more detail at ways to support children and offer some ideas on how to motivate children.

Part 3: Implementation at the whole school or authority level

Chapter 11: Whole school implementation

This chapter will ask how school leaders can implement these ideas successfully so that we can take an entire school approach to ensuring consistency throughout a child's school years. The ideas in this book are grounded in theory and have been evidenced as being of high impact on raising attainment in schools. We learn that effective implementation is as important as having an evidenced-based approach. The chapter will discuss what good implementation should look like and offer a framework that supports successful implementation of this book's approach at a whole school/authority level, more likely to yield positive results. We will go through each stage of the framework to address the challenges in implementation and how to ensure effective planning and evaluation.