



# PART 1

## Big Ideas About Getting Better

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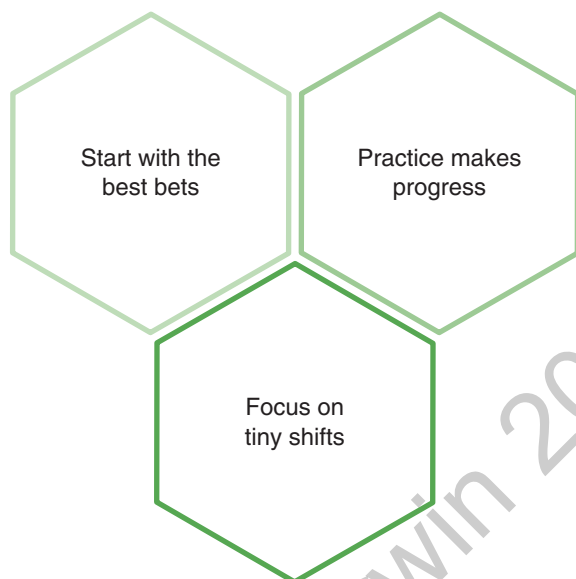
In Part 1, we unpack three big ideas about practice improvement in teaching.

- 1.1 Big Idea 1: Start With the Best Bets
- 1.2 Big Idea 2: Practice Makes Progress
- 1.3 Big Idea 3: Focus on Tiny Shifts

Over years of exploring and thinking about teacher learning, we've encountered an ocean of models and a mountain of literature. Putting ourselves back in the shoes of the practising teacher or leader, we've pondered: Which big ideas emerging from the evidence base are most useful for most teachers to know about? What would be immediately helpful for leaders who may be looking for ways to improve the way they do embedded teacher learning?

After a few heated debates and a bit of to-ing and fro-ing, we've settled on three big ideas. While this is clearly not an exhaustive collection of concepts, we hope that together these ideas offer a useful lens through which to review (and improve) job-embedded teacher learning in schools. We certainly hope they are helpful to you.

**Figure 1.1** The 3 Big Ideas



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### 1.1 BIG IDEA 1: START WITH THE BEST BETS

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Teachers can only give narrow windows of time to focus on practice improvement; funds and resources for professional learning are critically limited. So how can we make best use of the little time we have? Research evidence plays a central role here.

Because effective teaching is deeply complex (Cohen, 2011), research evidence can never tell teachers exactly what to do at any given moment in the classroom – but it can certainly point us towards the “best bets” (Coe & Kime, 2019; Coe et al., 2020, p. 5). These are the teaching strategies and practices that we know have worked best, on average, in the past and in other places. Teachers need time to learn from experience, but they also need time to learn from those who have formally researched the effectiveness of particular pedagogical approaches (Bell et al., 2010; Cordingley, 2015). Given scant resources and finite time, our view is that teachers should learn about (and become fluent in) only those practices that the evidence suggests have a high likelihood of working with most students, most of the time.

## Evidence-Informed Ideas, Not All Ideas

In the positive push to have educators collaborate, there has been a growing tendency to encourage the open sharing of teachers' ideas and practices. While we love the focus on collegial learning, there is an evident danger here. In coming together to talk about what they do, teachers may inadvertently share strategies that are not (or no longer) supported by the most robust evidence from the field. In the absence of research-based inputs, it's entirely possible that we could expend energy working on strategies that are less effective than those we already use, or less effective than the best-known available approaches.

Engaging with quality research evidence helps to avoid this potential pitfall of collaborative teacher learning.

## The Emergence of Translational Research

Regrettably, academics in education do not have a good reputation for communicating the findings of their research in digestible or usable formats for teachers. Many researchers do not use relatable terminology; too frequently they do not “speak the language” of teachers. Access also remains a huge issue; important research findings hide behind paywalls. Indeed, much of the most important work of universities – the generation of critical information that could help us progress in solving real-world problems – is not packaged or disseminated in a way that influences teachers' decision-making in practice (Nelson & Walker, 2019; Sharples, 2013).

In light of this, we're fortunate that over the last five years there has been an explosion in both relevant and robust research summaries, translated well for practice, and written with a teacher audience in mind.

In the United Kingdom (UK), for instance, the Sutton Trust and the Education Endowment Foundation (EEF) identify, synthesise and disseminate actionable recommendations in ranging areas of interest for educators. The EEF's guidance reports summarise global findings on various aspects of instruction and school leadership (EEF, 2020), while the Sutton Trust freely publishes research syntheses on everything from teacher testing to local school transport issues (Sutton Trust, 2020). In Australia, Social Ventures Australia has launched Evidence for Learning, a partner of the UK's EEF, which plays an important role in producing localised

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Australian summaries and reports. In New Zealand, the Education Hub provides useful teacher-focused summaries of robust research (Education Hub, 2020).

Practising teachers, grassroots groups, allied health professionals and state education systems have also made an impact. Educators can now engage with emerging evidence bases in many ways – at practitioner-led conferences (e.g. ResearchEd, n.d.), via teacher/researcher blogs, and through high-quality and freely downloadable research papers, often commissioned by not-for-profit organisations and departments of education.

The landscape of educational research continues to evolve in the right direction; we think it's easier than ever before to find and make sense of quality evidence.

### Evidence Doesn't Replace the Need for Expertise

Research evidence can provide us with good bets for enhancing our impact, but it cannot equip us with the skills to manage the complexity of our own classrooms. The kind of expertise teachers must develop is not simplistic or procedural – it is *adaptive* (Hatano & Inagaki, 1986; Le Fevre & Timperley, 2016).

Experts in teaching are defined as being deeply knowledgeable – not just about what they teach, but how they teach it (Berliner, 1986, 2004; Hattie, 2003; Shulman, 1987). Those with higher levels of adaptive expertise can adjust specific elements of instruction in real time, based on a deep and evidence-informed understanding of both their subject content and how young people learn. They can also think critically about when and why certain teaching strategies tend to work, for whom, and under what conditions. As Professor Rob Coe and colleagues explain, “great teachers need to understand the principles of how and why certain techniques are effective, and when to deploy them” (Coe et al., 2020, p. 15).

So teachers must be given opportunities to learn about effective techniques, but they also need time to consider the principles and theories that underpin them. When teachers understand *why* certain strategies work as they do, they are better placed to judge how and when to use them in context – and perhaps even when to adapt them on the run.

Sometimes in the provision of professional learning, we overlook the importance of underpinning theory; for instance, we might encourage

teachers to “use worked examples”, without building their understanding of Cognitive Load Theory or the limits of working memory (see Kirschner & Hendrick, 2020, pp. 14–21). Similarly, we might instruct teachers to “use low-stakes quizzes”, without exploring important insights from cognitive science that support the use of retrieval practice (for a helpful introduction, see Jones, 2020).

The best bets from the research help teachers to select a focus for their collective improvement efforts – but effective engagement with evidence also requires hard thinking about underlying principles *and* dialogue to tease out what it means for teaching in a unique context. Exploring robust research evidence should also prompt practical action – trying things out in the real world – which leads us to Big Idea 2.

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## 1.2 BIG IDEA 2: PRACTICE MAKES PROGRESS

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Engaging with evidence is critical to enhancing expertise, but we mustn’t make the common mistake of reducing teacher learning to an intellectual knowledge-building exercise. Acquiring new knowledge is never enough to build expertise; rather, research engagement must kick-start a conscious move into some type of practice. We suspect the role of practising has for too long been overlooked in the organisation and provision of professional learning for teachers, so we view it as indispensable to any model for practice improvement.

We all know and recognise the value of practising. Many of us have lived through the frustration of paying for our kids to go to music lessons, only to find that they won’t practise. The music teacher becomes frustrated, your child stagnates in their progress, and you keep paying for the lessons! To progress in any area of human expertise – musical, sporting, culinary, surgical or pedagogical – we must commit not only to acquiring knowledge, but also to intentionally practising for improvement (Colvin, 2019; Deans for Impact, 2016; Ericsson, 2016; Lemov et al., 2018).

### Practising as Professional Learning

In workshops with teachers, we often ask them to share a mental image that they associate with the term “professional learning”. More often than

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not, teachers offer up a common vision: they're sitting in a crowded room (usually off-site), listening to someone speak to a long deck of slides. Teachers rarely associate "professional learning" with the act of teaching in their own classrooms. This is hardly surprising, given that the vast majority of formal professional development activity happens outside the classroom and in the absence of students.

We think expecting teachers to improve outside the classroom is a bit like expecting a chef to perfect a new recipe without a kitchen to cook in. A chef may well benefit from reading a recipe, or talking to another chef, but we would expect the real improvement to take place in the kitchen; this is where a chef can trial, adapt and make sense of the techniques required not just to cook a meal well, but to enhance it over time.

Time for teachers to expand their knowledge in the absence of students is of course necessary, but we mustn't lose sight of the fact that what teachers actually do in classrooms plays a huge role in their professional learning.

### The Literature on Effective Practice

Swedish psychologist and professor K. Anders Ericsson was renowned for his work in the field of effective practice; he extensively studied the ways in which experts acquire superior levels of performance in various domains (Ericsson & Harwell, 2019). He concluded that "deliberate practice" plays an essential role, determining that it involves:

- moving beyond one's comfort zone,
- working on highly-specific improvement goals,
- engaging in intensive practice activities, and
- receiving (and acting on) high-quality feedback (Deans for Impact, 2016; Ericsson et al., 1993; Ericsson, 2008).

There is broad consensus in the literature that deliberate practice seems to account for a substantial part of the variation in performance between people across a broad range of skill domains (Ericsson et al., 2018), but engaging in deliberate practice isn't clear-cut for teachers. Teachers cannot be guaranteed regular and ongoing access to high-quality expert

feedback, and the unpredictable nature of the work also presents a challenge.

### What Can Practising Look Like for Educators?

Teachers cannot practise like musicians or athletes; they do not set aside time to train on a practice field, nor can they run drills under the watchful eye of a coach. Though the conditions are obviously different, teachers can still be intentional about parts of their practice in the context of their work. Through *intentional practice*, educators can isolate and develop with precision small aspects of their practice, while teaching at the same time. The important distinction here is that in order to improve, teachers must simultaneously perform their craft *and* intentionally practise a small slice of it.

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Thoughtful provision of time for intentional practice provides teachers with the opportunity to really make sense of theoretical learning. By applying knowledge in practice, teachers can enhance instructional decision-making where it matters most – in the classroom and with the students they teach.

### Practising Is Important, but What's Realistically Possible?

We want to elevate the role of practising in teacher learning, but we're also mindful of what's realistic. What kind of intentional practice can teachers prioritise among the competing demands of their working week? We think it's critical to keep practice activities focused and manageable, which brings us to Big Idea 3.

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## 1.3 BIG IDEA 3: FOCUS ON TINY SHIFTS

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Almost every teacher we've ever worked with has been very open to improving their classroom practice; many have ambitious goals. But the demands

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of everyday school life can make it impossible (or make it *seem* impossible) to commit to and sustain big changes. At times, we might ride a wave of motivation that leads to action, but a few days (or weeks) later we can easily slip back into the well-worn grooves of our default practices. So how might teachers make sustainable improvements to their expertise over time?

### One Thing at a Time

When we struggle to initiate or sustain a behaviour change, sometimes the best approach is not to try to increase motivation or generate willpower, but rather to shrink the size of the intended change. Applied to teaching, this means embracing a willingness to work on one small and manageable component of your practice at a time. Once you've built proficiency (and fluency), you can always move to the next most important aspect to develop – but it's important that you start small. Of course, developing expertise involves more than gathering isolated teaching techniques, but you can't improve all of your teaching at once; by focusing your energies on specific practices, you can meaningfully develop parts of practice, and then integrate these into your teaching more broadly.

### The Cumulative Power of Small Changes

A range of authors (e.g. Clear, 2018; Duhigg, 2014; Fogg, 2020) have recently explored the benefits of making small changes to habits.

In his book *Atomic Habits* (2018), James Clear explores the science of habit formation and change, drawing on the analogy of the cumulative benefits of compound interest in a savings account. Clear explains that dollar amounts deposited from individual paychecks may – in isolation – seem insignificant; but over time, that total compounds to deliver a decent savings sum. Applied to habit formation, Clear proposes, even the most modest of behaviour changes add up significantly over time.

This analogy of “compound interest” resonates with us and we think it's helpful for thinking about improvement work in teaching. One-off engagement with research evidence, or doing one short spurt of practising a new questioning technique might not, in isolation, radically enhance your practice. But if every teacher, in every term of school, systematically develops and sustains one small element of practice, over



years the “compounding” effect can be significant (particularly if those small elements are thoughtfully sequenced and are built across teams of teachers).

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BJ Fogg, the director of the Stanford Behavioural Design Lab, takes a similar perspective in his book *Tiny Habits* (Fogg, 2020). Fogg argues that human behaviour change is usually either a response to a life-changing epiphany (which is rare) *or* a result of incremental changes supported by environmental shifts. Used by a reported 60,000 people, his popular Tiny Habits approach aims to support people to engage in simple, sustainable change by harnessing small steps and environmental triggers.

### Examples of “Tiny Shifts” Approaches

You’ll find countless examples of this approach in the Fitness section of the App Store. *Couch to 5K*, for instance, is an app designed to take you from “couch potato” to running five kilometres in a couple of months. Programs like this help users to take micro-actions towards an end goal. In the beginning, *Couch to 5K* guides the user through short jogs of just a few hundred metres. Tightly timed periods of jogging are punctuated with walking, and generous warm-up and cool-down periods are included. Off the back of early wins, the user builds and sustains momentum over weeks, always heading out for a run knowing that the app will only ever *incrementally* increase the difficulty of the run. Over just a few weeks, you can enjoy fairly dramatic progress in both your fitness level and your enjoyment of running, while avoiding the false hope of becoming a long-distance runner overnight.

Obviously, the analogy is not an exact fit; lifting the effectiveness of your teaching is far more complex than extending the length of your run. But our intent is to highlight one fundamental truth of human behaviour change: it’s tough. Desperately wanting to be a runner isn’t enough to make you one. It’s the small shifts, the commitment to little bursts of improvement, that get you there.

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Once you know the destination (e.g. “I want to improve the way I provide student feedback in mathematics”), it’s helpful to recognise that it is not *ambition* that will get you there, but the thoughtful mapping of small evidence-informed improvements, worked on over time, in a way that is sustainable and perhaps even pleasurable. It’s important to remember that motivation often emerges *as an outcome* of making progress, not the other way around. It is commonly not the end goal, but rather those rewarding visible steps we take along the way, that spur us on in our efforts.

Establishing challenging goals for your professional improvement is important, but go after modest changes; choose them wisely, put them in the right sequence, and rely on the rewards of progress to take you forward.

### SUMMARY OF PART I Big Ideas About Getting Better

#### **Big Idea 1:** *Start With the Best Bets*

We have critically limited time and cognitive bandwidth for teacher learning, so we shouldn’t waste it on ideas that probably aren’t powerful enough to improve student learning. The research base can point us to the best bets for improving practice.

#### **Big Idea 2:** *Practice Makes Progress*

To bridge learning to practice, teachers must have the opportunity to apply new learning through intentional practice. To enhance their expertise, teachers must move beyond acquiring new knowledge and into periods of trialling, adapting and refining in the classroom.

#### **Big Idea 3:** *Focus on Tiny Shifts*

Working on small shifts to practice allows you to manage the human limits of improvement work. Planned and enacted in the right sequence, incremental changes can add up to appreciable improvements over time.

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## FURTHER READING

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In Part 1, we've explored three core ideas about getting better. If you'd like to do further reading, we recommend these open-source articles about teacher learning and teacher expertise:

*Practice With Purpose: The Emerging Science of Teacher Expertise* (Deans for Impact, 2016)

*Expert Teaching: What Is It, and How Might We Develop It?* (Mccrea, 2018)

*Teacher Professional Learning and Development* (Timperley, 2008)

*How Does Professional Development Improve Teaching?* (Kennedy, 2016)

You can download these readings at [www.teachingsprints.com/teacher-learning](http://www.teachingsprints.com/teacher-learning)

## Reflection Activity 3 Big Ideas About Getting Better

### Reflecting on Big Idea 1: *Start With the Best Bets*

On what research evidence do you currently base your professional learning? How might your team (or school) better engage with robust research evidence as part of your practice improvement work?

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### Reflecting on Big Idea 2: *Practice Makes Progress*

To build expertise, we need opportunities to apply our learning in classrooms, but this step is often missed in traditional professional learning activities. How might we move from learning about effective practices to intentionally practising them in classrooms?

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### Reflecting on Big Idea 3: *Focus on Tiny Shifts*

Identify one professional learning goal you have. How might taking a “tiny changes” approach support you to work on improving this area of your teaching?

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