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Highly effective teachers engage in deliberate decision making, resulting from the specific ways they think about teaching and learning.



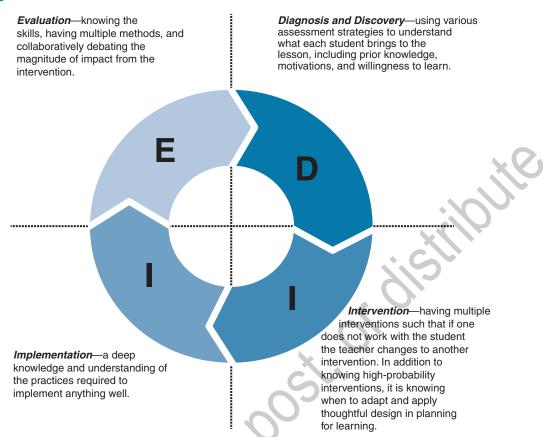
CHAPTER 1

IMPLEMENTING WHAT WORKS BEST

Mr. Salvador is a fourth-grade teacher entering his third year at Maggie Walker Elementary School. His classroom is always active with students engaged in authentic tasks and academic discourse about their learning. His colleagues often comment on his ability to connect with students, motivating them to take on challenging tasks in every content area. Mr. Salvador's learners have demonstrated incredible growth in reading, writing, and mathematics. When asked about his learners' incredible success, he quickly points out that, "my students teach me at the same time I am teaching them." This is evident in the way constructive criticism, reflective questioning, and collaboration are part of the daily learning environment. Mr. Salvador sees learning through the eyes of his students, and his students see themselves as active participants in their own learning. This dynamic between each member of this learning community both informs and guides how to implement what works best in moving learning forward for each learner, regardless of his or her unique characteristics, dispositions about learning, or motivations to learn. Mr. Salvador is an educator who understands how to implement what works best for students.

We implement what works best by explicitly uncovering where our learners are in their learning journey, drawing what works best in teaching and learning from the researched evidence of what works best, and continuously evaluating the impact of our decisions on student learning. This process lends itself to an intentional, deliberate, and purposeful approach to implementation that we refer to as the DIIE model (see Figure 1.1). This model is composed of four components that leverage evaluative thinking in teaching and learning. *Diagnosing* or *discovering* where students are in the learning journey directly leads to decisions about what learning intervention has the best potential for moving learning forward.

Figure 1.1 The DIIE model



The DIIE model is a framework that provides a shared language of teaching and learning for all of us to capitalize on the collective teacher efficacy in all learning environments, the belief that we have an impact on our students' learning and we have the evidence to support that belief. Whether operating in a brick and mortar classroom or through a remote learning environment, this framework supports the implementation of what works best.

From there, we must *implement* that intervention through engaging and rigorous learning experiences. And then, we must *evaluate* the impact our decisions had in moving learning forward. The results of that evaluation of impact take us right back to our understanding of where learners are *now* in their learning journey.

The DIIE Model as Shared Language for Implementation

The DIIE model is a framework that provides a shared language of teaching and learning; it allows all of us to capitalize on the collective teacher efficacy in all learning environments, with the belief that we have an impact on our students' learning and evidence to support that belief. The four stages of the DIIE model (diagnosis/discovery, intervention, implementation and evaluation) provide guidance as we engage in turning good ideas into high-impact learning experiences that move student learning forward.

Diagnosis/Discovery. Think back to those first few weeks of school. They seem to fly by with culture-building activities,

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assemblies, protocol meetings, establishing routines and procedures, and so forth. In those weeks, how are teachers taking time to learn about the dispositions that students bring into the class? It is so easy to get bogged down in the *what of teaching*, frantically planning lessons that link to essential curricular objectives and making sure we have our lesson plans in order. Evaluative thinking strategies challenge teachers to not think of the *what* but of the *who*. Our students: they are the most important determinants in our teaching.

While many teachers spend their time figuring out what to teach, teachers who apply evaluative thinking skills are busy learning about who they will be teaching and what each student brings into the classroom or learning environment. The first component of evaluative thinking ensures that teachers are critically thinking about where their learners are in their learning journey and where to go next in that journey. Where students are in their learning journey represents their learning potential and our teaching potential. This is the focus of the *diagnosis/discovery* component of the DIIE model. When teachers take measures to determine what dispositions, unique characteristics, experiences, and learning opportunities students bring to the learning environment, their teaching practices have the potential to make a greater impact.

Although the DIIE model uses the term "diagnosis" as a descriptor, it should be noted that we do not imply medical diagnoses. Instead, we suggest that teachers take measures to discover (diagnose) more about their learners *before* they attempt to teach content, skills, and understandings. For example, assume you were having a staff dinner party to celebrate the end of a school year. A logical step before cooking would be to ask the staff about any food-related allergies or dietary requirements. Discovering those will allow for a more personalized and inclusive menu for all eaters, and will naturally lead to a better experience for all attendees. By using various assessment strategies to determine what students bring to class, we can be more impactful with our teaching to cater to the specific dispositions of our students.

Intervention. When teachers take appropriate measures to discover who their learners are, they can then move onto the second component of the DIIE model, intervention. Understanding the usefulness of interventions when coupled with appropriate knowledge of who our students are as learners is fundamental to ensuring maximum impact on student learning. When the first component in the DIIE model is overlooked, interventions may generate a positive response with students but still may not have the greatest impact. In other words, we do not maximize the potential we have with our learners. Because there are so many learning

interventions available to us, it becomes increasingly difficult to sift through the list and determine which have the greatest potential to impact students' learning at this particular moment in their learning progression. Remember, almost everything works but your task is to identify what works best. We should be planning, designing, and implementing learning experiences based on the specific context of our learning environment and learners. This context absolutely includes whether we are in a face-to-face classroom or a remote learning environment. This planning must focus on the intentional selection of an intervention or approach to teaching and learning.

Although the key to successful intervention lies in thorough discovery of student dispositions, unique characteristics, previous experiences, and learning opportunities, there is also a thoughtful process needed to incorporate specific interventions in your teaching and learning. Teachers must not only seek out high-impact approaches, they should also understand there is a time and a place for using these approaches (Hattie & Donoghue, 2016). In order to successfully select interventions, teachers should consider:

- 1. Do we have multiple interventions available to us? (in case, with some students, the first does not work)
- 2. Do we know when to apply these interventions?
- 3. Do we know when to adapt or make changes to the intervention based on what we know about our learners?

Implementation. The third component of the DIIE model, *implementation*, is just as significant as having access to high-impact interventions. When we seek out evidence-based approaches to teaching and learning we can support our learners as they move forward in their learning journey—but only if we implement those approaches in an effective way.

Due to the abundance of strategies and interventions available, we tend to experience information overload about which strategy or intervention to use and when. Think of a time a professional resource was passed along for your consideration and use by colleagues. Often, these resources were recommended to you because your colleague experienced some level of success in implementing this resource with his or her own learners. While it is fantastic your colleague has found ways to implement this approach, strategy, or idea in way that yields a positive impact on student learning, you must consider two things: (1) the local context of your own learning environment (faceto-face, hybrid, or virtual), and (2) the adaptations necessary

to make this approach, strategy, or idea successful within your local context.

The implementation process must ensure that evidence-based approaches (i.e., interventions) are clear to all stakeholders (e.g., students, teachers, parents) and vary in both applicability and task. These interventions would not only need to be identified but also implemented with fidelity to ensure our students make progress in their learning journey. Teachers should thus use a critical or evaluative lens when considering this stage. Implementation means knowing when to use certain interventions at certain times of the learning process.

Evaluation. We will never really be able to "know thy impact" on student learning without the evaluation of our practice. This must be done in collaboration with our colleagues or our learners. The final component in the DIIE model, *evaluation* tasks us with looking at the implementation of teaching strategies to determine the impact our decisions around interventions and implementation had on student growth and progress. As we evaluate our impact, we should note there is a distinct difference between student progress and student achievement. To truly implement teaching strategies equitably, students must be aware of their own growth and progress, as well as the overall expectations of their learning outcomes. These outcomes include academic, behavioral, and social-emotional outcomes.

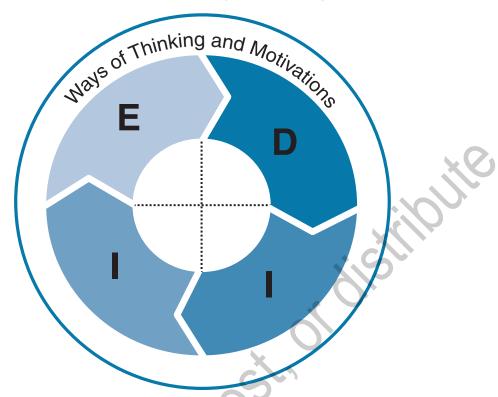
Successful evaluation of impact requires us to think back to the beginning of the DIIE model and really consider our initial decision making. While this may sound like a large philosophical consideration, we must keep the impact on our students' learning as the central focus. During the evaluation component of the DIIE model, we have to reflect on our previous decisions and determine where we are going next in our teaching and students' learning. As we reflect, we should know the expected impact of these learning experiences on our learners.

However, the DIIE model is much more complex than a step-bystep list or prescription that teachers can check off or administer. The decisions each component of the model prompts are situated in ways of thinking and motivations (see Figure 1.2).

There are two sayings that come to mind here: how we feel is real; it is the link to how we think and where the mind goes the person follows. Although a bit cliché, these sayings highlight to role of beliefs, or ways of thinking, and motivations in our decision making. Our beliefs about teaching and learning drive our decisions about implementation. Our motivation for deciding to pursue a career in teaching influences our decisions about implementation. Implementing what works best cannot be discussed in the absence

Implementing what works best cannot be discussed in the absence of beliefs and motivations.

Figure 1.2 DIIE is situated in our ways of thinking and motivations



of beliefs and motivations. Let's look at what we know about how beliefs and motivations are highly predictive of implementing what works best.

Ways of Thinking and Motivations

Justin Booth is a middle school science teacher who by most any measure (e.g., student growth, student-teacher relationships, content knowledge, pedagogical content knowledge, etc.) would be identified as a highly effective teacher. He greets learners as they enter the classroom, eager to get started on their entrance tickets. "I want to make sure we are ready to go with the day's learning. The entrance ticket helps students pull together their prior knowledge and, at the same time, gives me insight into what they already know about today's topic."

As learners complete their entrance tickets, Mr. Booth moves through the room checking in on learners with questions about their entrance tickets as well as personal questions. Savannah, a student in Mr. Booth's classroom, shares that "Mr. Booth always asks me about soccer practice, and then, will give me feedback on my work in the same sentence. He really cares and makes me feel like I matter."

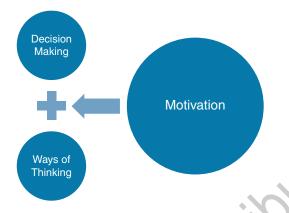
After a very specific amount of time, Mr. Booth stops his learners and asks them to take a look at the day's learning intention and success criteria. "Folks, based on your responses on the entrance ticket, I believe we will need to spend a little more time on describing the differences between independent and dependent variables. No problem! We will take care of it, for sure." Without any hesitation, he then jumps right into the day's learning. There are several things that stand out in this classroom. In addition to the above snapshot, Mr. Booth brings the characteristics of an expert teacher to life with the following:

- Providing a cohesive and caring learning community that includes collaboration among and between peers
- Maximizing instructional time through engaging learning experiences or tasks
- Recognizing that classroom management is a process for establishing an effective learning environment
- Aligning his planning, instruction, and assessment to what learners are expected to know, understand, and be able to do in his eighth-grade science classroom
- Establishing clarity for learning through learning intentions, success criteria, and sharing that information with his learners
- Presenting content, weaving in skills, and bringing understanding through a clear structure and connections
- Implementing academic discourse through planned questioning to elicit and conceptualize student learning
- Offering opportunities for deliberate practice that is supported by feedback
- Scaffolding learning to ensure equity in access and opportunity to learning
- Monitoring student learning through a variety of checks for understanding (adapted from Brophy, 1998)

To gain insight into how teachers like Mr. Booth take good ideas and turn them into successful implementation, we have to look inside the face-to-face classrooms or remote learning environments of teachers who do this on a regular basis. Highly effective teachers engage in deliberate decision making, resulting from the specific ways they think about teaching and learning.

Highly effective teachers engage in deliberate decision making, resulting from the specific ways they think about teaching and learning (see Figure 1.3).

Figure 1.3 What makes an effective teacher?



This decision making and ways of thinking are fueled by teachers' motivation for student growth and achievement.

Teacher Decision Making

If great teaching requires great decision making, what goes into a teacher like Mr. Booth's decision making? Understanding the decision-making process has long been an interest to researchers (e.g., Kahneman & Tversky, 2000). According to those who study decision making in human beings, this process includes: (1) recognizing that a decision is necessary, (2) gathering evidence to weigh and consider options, (3) taking action on one or more of those options, and (4) reviewing the impact of the decision.

Mr. Booth's internal dialogue leads him to make the decisions based on several steps. "First, I recognize that it is really up to me to make the right decisions about what happens in my classroom. After all, I am the teacher." This kind of comment shows that good ideas can stop at the classroom door, or at logging into the remote environment, unless the teacher has intentions and plans to implement these ideas. Teachers are great filters (of good and bad ideas). Also, we cannot overstate the importance of the relationship between Mr. Booth's teaching and his students' learning. He recognizes the power in his decisions and the influence this has on the learning outcomes of his students. If you take two students, comparing them side-by-side, it matters less which school they attend and more on the teacher in the classroom (Hattie & Zierer, 2019).

Recognizing that there is value, potential, and therefore power in our decisions, the next step in the decision-making process is the gathering of information. "This is where I spend most of my time. I have to not only know what I want students to learn, but I have to know what they already know. I have to get them to show me what

they come through the door already knowing about motion, forces, electricity, or whatever we are learning that day." As educators gather information, or evidence, about students' prior knowledge or background knowledge, they can identify the possible pathways or routes through learning progressions. Teachers must weigh the evidence carefully to consider all of the possible options for moving learning forward, and then they must choose the options they believe are best in light of that evidence.

Mr. Booth points out, "After I have a plan on what to do in class, the fun part is setting it up. If I decide to use a jigsaw, I have to plan the selections and groups. If I decide to do a lab, I have to set it up." Making a decision about how to move learning forward leads directly to taking action. However, taking action must be accompanied by a means for later reviewing that decision. "As I start setting things up, I begin to think about how I am going to check in on my students to make sure they are with me. I mean, if we are going to do a jigsaw or complete a lab, I have to make sure they actually learned something. Looking through a microscope at cells is fun, but I have to ask myself, did it do anything for them?"

As we noted in the Introduction, highly effective teachers have the ability to make the right decisions, at the right time, for the right experience with their learners. When done well, teachers' decision-making processes are the result of a deliberate internal dialogue that presents as high impact teaching and learning. Internal dialogue and the subsequent decisions are part of a larger way of thinking. John Hattie calls them *mindframes* (Hattie & Zierer, 2018).

Ways of Thinking and Decision Making

"How we think about the impact of what we do is more important than what we do" (Hattie & Zierer, 2018, p. ix). This thinking is evident in educator's decision making, and not just in their second-by-second decision making. Specific mindframes drive ways of thinking, ways of supporting our colleagues and students, and the enthusiasm and passion individuals have for teaching and learning. Mr. Booth's mindframes around his role as a middle school science teacher move well beyond a singular set of decisions around microscopes, cells, and entrance tickets. It really is all about how Mr. Booth and the rest of us think about the work we do in our learning environments. There is empirical evidence that correlates the decision making of teachers with their mindframes (Hattie & Zierer, 2018).

There are 10 mindframes that manifest themselves in the decisions that teachers make. These mindframes have a pronounced impact on how teachers teach and students learn. The first three

mindframes relate to how educators think about their impact on student learning:

- 1. I am an evaluator of my impact on student learning.
- 2. I see assessment as informing my impact and next steps.
- 3. I collaborate with my peers and my students about conceptions of progress and my impact.

Let's step away from Mr. Booth's classroom for a moment and visit Katy Campbell's fourth-grade class. She is planning for her upcoming literacy block and has started by reviewing her learners' responses to an online reading comprehension task from the previous day. "I always spend time looking at their work from the day before. Their responses, whether it is what I am looking for or not, let me see how I am doing in my own teaching." Ms. Campbell then uses this information to decide where to go next with her learners. In her words, "This is important for me in deciding where to go next with them and what strategies or interventions I might use to move their learning forward. In some cases, I set up remote conferences with them to plan the next steps based on their own individual reading goals."

Ms. Campbell clearly sees herself as an evaluator of her own impact on student learning. She uses this information to inform the next steps in her teaching and their learning and not simply for a grade. Her mindframes around her impact on student learning directly inform her decision making. As part of her own decision making, Ms. Campbell regularly asks herself how she knows her teaching is working, how one approach compares with another, what is the merit of her using one particular approach over another, and what evidence she needs to evaluate the impact of her teaching on her students' learning. "At first, this was a challenge using remote learning. However, I soon realized that there are tools out there that allow me to see how they are progressing in their learning."

The next two mindframes relate to how educators think about change and challenge in their face-to-face classrooms or remote learning environments.

- 1. I am a change agent and believe all students can improve.
- 2. I strive for challenge and not merely "doing your best."

For example, who is the change agent in your learning environment? While primarily the teacher can be, this does not imply that learners are not involved in the learning process. Instead, these mindframes acknowledge that we, as teachers, have the potential to have the greatest impact on student learning. To do this, we must accept the challenge and prepare learners to engage

in the challenge of learning. The art of teaching is knowing what is appropriately challenging for one child and what level of challenge is appropriate for another.

We must see ourselves as change agents who embrace challenges in the learning process. For example, let's look into the thinking of another teacher, high school physics teacher Thomas O'Neill. He approaches his role from a change-agent mindframe. "For my students, they walk into this class with prior experiences and conceptions about how the world works. I take it as my personal responsibility to ensure that my teaching engages them in a way that prompts conceptual change." Mr. O'Neill recognizes that the ways in which he plans, designs, and implements his instruction can serve as the activator for student learning. In science, this is referred to as conceptual change, but this idea is generalizable across all disciplines.

Learning is hard and takes time. This does not stop Mr. O'Neill from embracing that challenge and then supporting his students as they wrestle with the difficulty and complexity of knowledge and skills demanded in his discipline. In English language arts there is a process of editing and revising, in mathematics we must verify our solutions and approach to problem solving, in social studies we have to triangulate data to support our historical inferences, and, finally, in science, there is the nature of science and refuting hypotheses. Regardless of the discipline or content area, educators and their students must recognize that the learning will be, and should be, challenging.

But, we also have to support our learners in their approach and progress through these challenges. Do we help learners see the value of concentration, persistence, and deliberate practice? "I do not take the standpoint that physics is hard, but that the learning experience should challenge learners thinking. I have to get them to lean into that challenge. This compels me to look at learners as individuals and then support each one as they engage in the learning. At the end of the day, they have to feel supported and secure in my class if I am going to expect them to take a risk and dive into a challenging problem, scenario, or task."

This last comment by Mr. O'Neill leads directly to the remaining five mindframes, which focus on learning. How do we talk about our role as a teacher?

- 1. I give and help students understand feedback, and I interpret and act on feedback given to me.
- 2. I engage as much in dialogue as monologue.
- 3. I explicitly inform students what successful impact looks like from the outset.

- 4. I build relationships and trust so that learning can occur in a place where it is safe to make mistakes and learn from others.
- 5. I focus on learning and the language of learning.

Specifically, do we reference our teaching or our students' learning? These five mindframes place student learning at the forefront of decision making and our work. Now, to be clear, the implication is not that teaching does not matter—teaching matters a lot. However, one separator between those who have a high impact on student learning and those that do not (yet), is the focus on learning rather than teaching.

Let's explore this idea and these five mindframes a bit more. Here is a nonexample. In the teacher's workroom, a conversation was overheard between two mathematics teachers. "Well, I taught them congruent triangles and gave them a lot of opportunities to practice. I even explained to them how they could remember the relationships: S-S-S, S-A-S, A-A-S, A-S-A." This comment was followed by a response, "I don't know what else we can do." When we look at this brief exchange, let's first acknowledge that we have all been in this position. And, naturally, we can easily slip into a list of things we did. However, a different way of thinking is required if we want to have an impact. Consider this alternative: "I need to better understand my students' learning by getting them to dialogue with me. What are their ideas, questions, struggles, and views about this content?" What are they stuck on, what do they not know that would then help them understand? This includes, but is not limited to, engaging in dialogue with learners; seeking their feedback, including expectations for success; and acknowledging the role of mistakes as opportunities to learn.

These 10 mindframes drive the teacher's decision making about teaching. These mindframes influence the decisions teachers make, including the daily choices made during a literacy block or in afternoon geometry class. So, what is the root of these mindframes and how can we nurture them in all of us and our colleagues? As you might suspect, the fuel that drives this process is motivation.

Motivation and Decision Making

Think back to when you were a student in school. Remember the common question you were asked: What do you want to be when you grow up? If you answered teacher, what were the reasons? And, have those reasons changed since you made the decision to enter the field? One of the authors of this book, John Almarode, knew he wanted to be a teacher from the time he stepped out of

his kindergarten year. Over the years, he became more focused on becoming a science teacher and then a teacher educator. His initial motivation to teach was sparked in elementary school by his own teachers. It was then Ms. Cross, his sixth-grade science teacher, who really fanned the flame. All of this occurred early in his education. On the other hand, it is possible that some of us entered the profession as a second or third career move. For those of us in that situation, the reasons for becoming a teacher may differ. The truth is, some of us did not plan to be a teacher when we were children. For example, Vince did not decide to go into teaching until a professor at his university suggested he try it as a career option. Although he had to change his major, he decided to pursue teaching and has not looked back since. Nancy started teaching her stuffed animals long before setting up classes for her neighbors and then earning her credentials. One of the commonalities amongst these stories is the modeling or, or at the very least, goading of someone already in the profession. For them, teaching was a passion and it was contagious. Like Mr. Booth, Ms. Cross, or Vince's university professor, teaching is less of a career and more of a lifestyle they have embraced as their identity.

This passion, lifestyle, and identity are not shared by everyone. You likely have heard the saying: those who can't do, teach? Yes, the hair on the back of our necks stands up no matter how many times we hear that statement. Although this may change in the future, the reality is that we are living in a time when education struggles for legitimacy in the eyes of the public. There are many reasons for this disconnect between our view of teaching and learning and the public's view of what goes on in our schools. One possible reason might be the fact that nearly every member of the public went to school and has occupied the role of a student. Given that they have been students at some point in their lives, they have years of experience in schools. These experiences lead to the strongly held belief that what worked for them in school should work for everyone. After all, "that is what we had to do when I was in school."

The relationship between motivation and decision making to become a teacher often plays out in front of our eyes. For all of us, the initial understanding of teaching and learning came from our direct experiences as students and learners in the many classrooms we occupied while growing up. As teachers, the experiences we had in school play a direct role in how we see ourselves as teachers. For example, what motivated Mr. Booth to become a teacher was another teacher. Thus, Mr. Booth's model for what goes into teaching and learning is derived from that influential individual. Likewise, John Almarode's classroom is modeled after Ms. Cross's sixth-grade science classroom. The imitation of our favorite or most

influential teacher will likely limit our impact on student learning. Although an essential part of each teacher's professional and personal story, this approach replicates what our most influential teachers did, but not the thinking that led to the doing. The message we hope to convey in this book is that the thinking behind our teaching best drives our decision making.

There are other motivating factors that need to be considered and, in most every situation, influence our decision making. Understanding what encompasses teacher motivation can, in turn, guide us to keep the very best of us in the field and can create the potential for long-lasting, high-quality teaching.

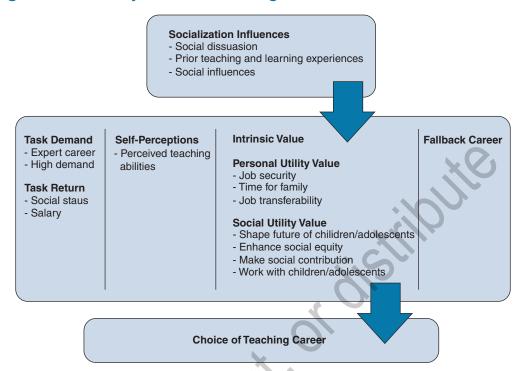
Teacher Motivation

When looking at what motivates someone to become a teacher, the general public tends to think of extrinsic motivations that drive people to pursue education as a career (e.g., stable job, decent wage, summers off, or great holidays). These tend to be the reasons for the discontent toward the education system from certain sectors of the public. The misunderstanding and lack of clarity between what people think teachers do and what teachers actually do can lead to misconceptions surrounding why teachers decide to enter this field. Watt and Richardson (2007) examined the concept of teacher motivation across multiple contexts. While both authors are based out of Australia, the creation of the FIT-Choice (Factors Influencing Teacher Choice) framework has been used to examine teacher motivation across the world (see Figure 1.4). The FIT-Choice model was developed "to assess the primary motivations of teachers to teach" (Watt, Richardson, & Smith, 2017, p. 6). This model was created to standardize the research on motivation that, in the past, relied on locally created questionnaires and scales. In other words, we did not have an agreed-upon method to study why some individuals chose teaching as a profession, while others did not. This created a problem in that we could not compare, synthesize, or generalize findings on teacher motivation. Understanding teacher motivation is important: Just as our own awareness about what motivates learners (e.g., autonomy, efficacy, connectedness, etc.) helps us design and implement experiences that enhance their learning, if we have a better idea about motivation there is a greater chance that we can do the same for future and current teachers.

The FIT-Choice model has been applied around the globe as a means to provide a common language around what motivates individuals to enter into the teaching profession.

When looking at the key elements of the model (i.e., socialization and intrinsic value), the framework assesses factors that can encourage or discourage teachers from entering teaching. It is

Figure 1.4 A way to understanding teacher motivation



Source: Watt, H. M. G., Richardson, P. W., & Smith, K. (2017). Why teach? How teachers' motivations matter around the world. In H. M. G. Watt, P. W. Richardson & K. Smith (Eds.), *Global perspectives on teacher motivation* (p. 1 - 21). Cambridge: Cambridge University Press.

through this model that Watt et al. (2017) engaged in a global analysis of teacher motivations. Let's unpack the model here and look at how this shapes our ultimate decision making.

For Vince and John Almarode, their initial influence came from socialization—their prior teaching and learning experiences as well as the influence of a university professor and sixth-grade science teacher. From there, Watt et al. (2017) found that "people who choose teaching as a career are motivated by a complex interaction of factors embedded within communities and cultural expectations but seem generally to embrace a desire to undertake meaningful work that makes for a better, more equitable society" (p. 5). This may be surprising to some of you reading this book, especially considering that teachers are often accused of entering the profession for extrinsic reasons (e.g., "summers off"). That's right, teachers like Mr. Vasquez, Ms. Meyer, Mr. Booth, and Ms. Cross were most likely motivated to enter the teaching profession because of intrinsic and altruistic reasons. In Figure 1.4, we see this under the category of Social Utility Value. For Mr. Booth specifically, he feels a sense of personal responsibility to engage with middle school students in a positive and supportive way. In the end, this will make a social contribution to the community and, if done well,

enhance social equity. Many teachers feel personally responsible for the success of their students, as well as the level of teaching that they are providing them. If you need direct and tangible evidence of this motivation, ask yourself this question: how much of your own money do you spend on your students and supplies every year? Or, if not money, how many hours outside of the traditional school day do you spend on planning, instruction, and assessment?

These actions are not unique. As a matter of fact, they are more commonplace than not, and much of this has to do with the intrinsic motivations that drive teachers to feel personally responsible for their students (often referred to as "my kids"). This notion is supported by the work of Lauermann, Karabenick, Carpenter, and Kuusinen (2017), who used the FIT-Choice framework in their analysis of teacher motivation and teacher efficacy. In their study they "confirmed positive relations between intrinsic and social motivations for teaching" and "all three indicators of professional commitment (personal time investment, interest in professional development and commitment to teaching as a career)" (p. 335). Butler (2017) highlighted the following conclusion after examining teacher motivations across the globe:

On average, teachers from different social backgrounds in different countries and educational settings perceive teaching in rather similar ways and choose to teach for very similar and, in motivational terms, very positive kinds of reasons. (p. 379)

Most enter teaching because they can have an impact on students.

Motivation and Implementation

Leslie Blair, a veteran teacher of over 20 years, describes teaching as the best thing that has ever happened to her. She can often be overheard talking about the students as her own children alongside remarks that being a teacher has never felt like hard work because she loves being in the classroom with her students. This pure joy that Ms. Blair has for her students has made her one of the favorites around Riverside Middle School, and it is not just because she is always smiling. Ms. Blair actively seeks out strategies and resources that provide ways to improve her craft. She can be found reading professional learning books, attending professional development workshops, and often talking to younger teachers about their teaching strategies. Ms. Blair is a consummate professional. She is often tapped by her administration team to lead staff through professional development based on the strategies she has been learning and applying in her practice. Ms. Blair loves to share her knowledge and her thinking with all staff and proves time and time

again that age and experience are not a reason to stop learning and evaluating your practice. When asked why she doesn't intend to slow down, her answer is always the same, "To be the best teacher for my students, I need to be a student myself!"

Down the hallway, Mr. Sharp is currently in his fourth-year teaching, his first at Riverside Middle. He is a hardworking, passionate teacher who loves his students but often considers leaving the profession. When you spend a day in Mr. Sharp's classroom, you can tell he is a teacher who loves being with his students. His lessons are often engaging, and very much aligned with the curriculum. His students love having him as their teacher; he is kind, smart, and willing to interact with students on multiple levels. He listens, he cares, he teaches. They often remark about how relatable he is to them as individuals and learners. Although engaging and relatable to students, Mr. Sharp is considering leaving the profession to pursue other career opportunities. When talking about the consideration to leave, Mr. Sharp talks about loving being around students but does not love all the other aspects that accompany teaching (meetings, professional development, marking, and planning). He acknowledges that he does not enjoy engaging in professional development as he does not see the point of learning more. He views his current practice as good enough for students and remarks they are learning. It is worth noting that he continues to apply the same strategies he applied in his first year. He mentions that during his first year, he applied all he learned in his pre-service program and tied everything back to the curriculum. He even mentions that his teaching works, so why try something new that might backfire. Mr. Sharp is doing enough to get by and does not have the desire to learn something new or to continue in the profession.

Based on their decision making and thinking, one of these teachers at Riverside Middle could be classified as expert (Ms. Blair) and the other as a novice (Mr. Sharp). Again, this is based on their thinking about their teaching and not for the seniority they hold. A common misconception is that expert teachers are the most veteran in the room. This is not always true as on many occasions we can find veterans who have adopted the "if it ain't broke, don't fix it" mentality which can manifest itself in stagnant teaching practice and the lessening of their impact on student learning. They can become reluctant learners to improve the impact of their teaching. We are not saying that all teachers who hold seniority have that mentality; we just want to make it clear that experience does not equal expertise. In the case of Ms. Blair, she is of both categories, expert and experienced. The reason being is that she has made deliberate choices to evaluate her impact and to stay current with valuable teaching strategies that positively impact her students in her classroom. This is the result of how she thinks about her role as

a teacher, driven by her motivation to enter the profession. So, what do we do to influence the beliefs, or ways of thinking, and increase the motivation for teaching and learning?

A Shared Language for Great Teaching

That we can find two teachers who work in the same school, teaching the same subject, and yet have very different motivations when it comes to teaching is amazing. We can assume that there is more intrinsic motivation with Ms. Blair as it seems she has fully committed herself to being the best possible teacher for her students. It is also important to note that while Mr. Sharp is intending on leaving the profession, he is a well-respected teacher in the school and the students love him. What is important to notice about Ms. Blair and Mr. Sharp is the notion that our motivations can deeply impact our thinking, which, in turn, impacts our decision making. However, we need every teacher in the building to maximize his or her impact on every student in the building. Therefore, we cannot focus on Ms. Blair and wish Mr. Sharp the best in his next career. On the other hand, we cannot ignore Ms. Blair and overwhelm Mr. Sharp with instructional coaching, professional development, and endless plans of improvement. We need to find ways of making the difference together. The greatest impact on student learning comes from leveraging the individual efficacy, or expectations of success, into a collective whole. This approach not only recognizes that together we have a greater impact on student learning, but also recognizes that we must work to foster and nurture that collective effort.

Collective teacher efficacy is the belief of a teacher group in the collective ability to promote student success in their school. With an average effect size of 1.39 (Hattie & Zierer, 2019), this particular influence carries a greater potential in accelerating the learning in our schools than having clear learning intentions, student engagement, formative evaluation, and feedback. The effect size for collective teacher efficacy is greater than the effect size for socioeconomic status, immigrant status, and gender. Although each of these influences is important and cannot be ignored, the very idea that the collective beliefs teachers have such incredible potential means that we can, if you will allow the use of this phrase, "leave no teacher behind" in our efforts to engage in better teaching by design. To be blunt, we need Ms. Blair and Mr. Sharp to be great teachers, not by chance, but by design. We need Mr. Booth, Ms. Campbell, Mr. O'Neill, and all of our colleagues to engage in great teaching, by design.

To achieve this collective goal, we have to ensure that each of these teachers, as well as our colleagues and ourselves, have a shared

language of teaching and learning. If we are to affect the motivation of colleagues that see their role differently from Ms. Blair, we must have a shared language of learning so that we can communicate about our thinking. If we are to affect the thinking of colleagues that do not have the mindframes associated with greater impact, we need a shared language of learning so that we can talk about decision making. And finally, if we are to channel our knowledge about what works best in teaching and learning into effective implementation, actualized potential, and informed decisions, we have to have a shared language for implementation. That is exactly what the DIIE model sets out to do!

Now, let's get started with an in-depth look at each component of the model and how we implement and evaluate what works best.