The HIGHLY EFFECTIVE TEACHER

7 Classroom-Tested Practices That Foster Student Success
Acknowledgments ................................................................. vii
Preface ................................................................................... ix
Introduction ............................................................................. 1
Needs Assessment: What Do You Need Most? ...................... 7
TIP 1: Coherent, Connected Learning Progression .................. 15
TIP 2: Strategies, Resources, and Technologies That Enhance Learning .................................................. 27
TIP 3: Safe, Respectful, Well-Organized Learning Environment . 42
TIP 4: Challenging, Rigorous Learning Experiences .................. 54
TIP 5: Interactive, Thoughtful Learning ...................................... 68
TIP 6: Creative, Problem-Solving Culture ................................. 81
TIP 7: Monitoring, Assessment, and Feedback That Guide and Inform Instruction and Learning ......................... 93
Conclusion: Moving Forward .................................................. 107
Appendix A: Teacher Intentionality of Practice Scale (TIPS) ...... 109
Appendix B: Resources and Bibliography ................................. 118
References ................................................................................ 123
Index ....................................................................................... 126
About the Author ..................................................................... 131
Acknowledgments

My desire to improve teaching and learning has existed for several decades. My wife, Wendy, and my children, Anna and Ben, are among my greatest inspirations. My children’s curiosity about how the world works is fun to witness and is something that I desire to inspire in all. Further, my students continue to invigorate my thirst to know and understand how to best improve teaching and learning for all.

Additionally, I am deeply appreciative of the input and time contributed by Julie Smart and Danny Alston. Their research assistance in developing, testing, and validating TIPS has been immensely helpful in moving this book forward. Their questions posed and conversations engaged in helped make this book a better overall product for teachers and leaders.

Over the course of my professional career, many individuals have helped to influence my writing and insights. Dr. Ena Shelley, Dean of the College of Education at Butler University; Bob Horton and Mike Padilla, former colleagues at Clemson University; Doug Llewellyn, author and scholar; Chris White and Greg Lineweaver, classroom teachers; and scores of preservice and inservice teachers who continue to teach me something new about teaching and learning every day. This book would not have been possible without the willingness of hundreds of K–12 classroom teachers who welcomed me into their classrooms and engaged with me in conversations regarding their practice.

vii
Finally, material in the work is based upon work supported by the National Science Foundation under Grant #DRL-0952160. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the National Science Foundation.
Educators are in a war that must be won. It rages in our schools every day, but we often forget what's at stake. Our opponents in this war include failure, hopelessness, disengagement, apathy, and despair. In addition to ourselves, the key players include our students, some of whose lives seem complicated beyond comprehension, characterized by daily struggles that are—to continue the analogy—like being in a war.

For those who consider these statements to be a bit melodramatic, I remind you that education is the key to future success, and if students fail, the possibilities that education affords them vanish. We shower accolades upon a select few in our schools, but what about the least, the lost, the failing, and the disengaged?

In all probability, if you are reading this book you are seeking solutions to these challenges but don’t know how to best proceed. Although we as educators lack control over every element affecting a child’s educational success, we do have tremendous influence over what transpires in our classrooms as we work with each child. My goal, both in my career and in this book, is to help teachers and educational leaders find opportunities to develop their abilities to help all students grow, achieve, and excel in ways that more appropriately align with each student’s individual potential.

The book begins by acknowledging that we cannot solve everything that ails our students, their families, or the educational system as a whole.
It does, however, provide suggestions and strategies for dramatically improving student achievement and success. I begin with the premise that we can vastly improve the learning in our classrooms when we maximize our performance through intentional, effective instructional improvements. My work has consistently demonstrated that this is possible.

Simply put, this book provides a systematic way to study and analyze teacher effectiveness that is directly tied to student success. Specifically, it focuses on intentional, transformative actions that, when proficiently implemented, can move teachers from delivering learning experiences that are frequently perfunctory and ineffective to experiences that are highly engaging, fundamentally purposeful, and deeply thoughtful. Improving the intentionality of teaching can result in higher achievement and increased growth for all students.

My hope is that this book will inspire important conversations that can help you, your department, your school, or your district make significant strides toward improving intentionality of practice, with the goal of fostering greater student success. Effective teaching is neither simple nor easy, but when achieved, it is extremely rewarding for teacher and students alike.
Introduction

Let me begin by stating what this book is not. This book is not about adding another initiative to your already full platter; nor does it offer an untested gimmick or a quick fix that promises to solve everything that’s wrong in your classroom.

Rather, it focuses on essential research-based, field-tested teacher actions that increase the likelihood of student success. These teacher actions are presented in the form of a teacher effectiveness measure—the Teacher Intentionality of Practice Scale, or TIPS—that can help guide you in your own transformations toward attaining proficiency and beyond. In addition, the book suggests professional development resources to help guide self-studies, building-level support, or district-level growth.

Perhaps you are already proficient in one or more of the seven essential aspects of teacher effectiveness highlighted in this book. If so, it is important to identify and celebrate these areas—and to continue to refine them. The primary goal then becomes to tackle one or more of the other aspects in which you currently lack proficiency. Every teacher—from novice to veteran—has something to gain from this book.

Many states are reworking the metrics used to assess teacher effectiveness because the vast majority of teachers, frequently nearly 100 percent of teachers, received “proficient” ratings or higher. The need to
rework teacher effectiveness measures is exacerbated by the fact that learning and achievement are not where we want them to be. These claims are based on data released by individual state departments of education 2012–2014 that include Colorado, Pennsylvania, Massachusetts, and New York. The only logical conclusion is that these metrics are missing something substantial because we know that teacher effectiveness is a critical component of student achievement. More specifically, we know that when low performing students are placed with highly proficient teachers, the achievement gap can be substantially reduced while raising the success for all students.

Most teacher evaluation tools focus primarily on the foundational aspects of teaching and learning (e.g., planning, classroom management, instructional strategies) when determining teacher proficiency. Although straightforward, and perhaps easier to evaluate, the presence or absence of basic teaching skills (e.g., a standard or essential question clearly posted in the room) should not be our sole measure of effectiveness. Much more difficult to measure are things such as the effective use of scaffolding or the facilitation of meaningful discourse, but it is these aspects of instruction that are linked to critical differences among teachers in fostering student success, and they account for much of the difference between highly effective teachers and the rest (Marshall, Smart, & Alston, 2016).

The TIPS Framework

The Teacher Intentionality of Practice Scale incorporates basic factors of teaching and learning, but it goes beyond them by emphasizing transformative instructional practices (e.g., high expectations for all, increased creativity in the learning environment and in the instruction, higher quantity and quality of formative assessments, improved classroom interactions) that yield increased student success. The TIPS framework provides a reliable and valid measure of skills that distinguish proficient or exemplary teachers from less effective, developing teachers. Specifically, it comprises seven actionable areas that are linked to improved student outcomes:

- TIP 1: Coherent, Connected Learning Progression
- TIP 2: Strategies, Resources, and Technologies That Enhance Learning
- TIP 3: Safe, Respectful, Well-Organized Learning Environment
• TIP 4: Challenging, Rigorous Learning Experiences
• TIP 5: Interactive, Thoughtful Learning
• TIP 6: Creative, Problem-Solving Culture
• TIP 7: Monitoring, Assessment, and Feedback That Guide and Inform Instruction and Learning

TIPS 1 through 3 cover the foundational aspects of instructional effectiveness; 4 through 7 address the more challenging, though absolutely critical, factors.

Each TIP indicator includes a rubric to help guide teacher transformation, with descriptors provided for Level 1 (Needs Improvement), 3 (Proficient), and 5 (Exemplary). Levels 2 and 4 indicate the presence of components from both the levels above and below. All the rubric items are written and standardized so that Level 3 (Proficient) is the minimum target that all teachers should strive to achieve. Although some teachers are much closer to this goal than others, all teachers can attain proficiency and beyond with proper support and sufficient professional development.

How This Book Is Organized

The TIPS framework provides the core of this book. The chapter titled Needs Assessment helps readers identify their individual strengths and weaknesses and provides a professional development plan to help guide the desired transformations. The subsequent chapters explain a specific TIP and use a similar structure: (1) a TIP and its subcomponents, along with classroom examples, are discussed; (2) questions are included to prompt self-reflection, guide discussions, and promote deeper exploration and conversation around what proficiency looks like for each indicator (and subindicator) of the highlighted TIP. These questions are set in italic throughout the book as a reminder to pause, reflect, and discuss the ideas—and so that you can find them quickly when you want to refer to them again.

The goal is simple: improve teacher intentionality; something that is applicable to all grades and all disciplines of study. Each individual’s journey will vary, but this book provides common themes, guiding questions, and proposed solutions to frequent challenges that teachers experience. Although difficult to achieve, attaining a level of proficiency or beyond in intentional teaching practices is well worth it when student success becomes evident.
Although some may choose to read this book from start to finish, I recommend a different approach, one in which individuals, teams, schools, or districts decide on specific areas (TIPs) they would like—or need—to target, and then commit to focusing deeply on those areas, moving on only after proficiency or above becomes the norm rather than the exception for that aspect of instructional practice. For most readers, the Needs Assessment chapter will help identify logical starting points. TIPs 1 through 3 may provide a good entry point for newer teachers or for districts or teachers that are reexamining their standards or curriculum. If proficient management is lacking (TIP 3), then achieving proficiency in other aspects, such as fostering rigorous, creative, problem-solving learning environments where high expectations are the norm, will be exceptionally difficult (TIPs 4 through 7).

Making a Difference with Intentional Teaching

As educators, we are bombarded with a vast list of things, the what, that we hope to accomplish by the end of the day or week. Perhaps focusing on the day-to-day minutiae without reminding ourselves of the why causes us to lose focus—straying from what is truly important to our students and us. Being intentional (in our time and effort) regarding our teaching practice goes beyond a myopic focus on such things as grading papers, answering e-mail messages, and calling parents. When we focus more on the why and thus the intentionality of our teaching, we begin to ask richer questions that guide our instruction, such as: How can I better engage the learners who appear to mentally check out? How can I make sure that my lessons are aligned so that the learning matches my goals/objectives? How can I create a learning environment that challenges all while providing scaffolding for those who need it?

Excellent teaching is not an inherited skill. It demands intentional and persistent effort. The seven TIPs central to this book provide a realistic, nuanced framework to help move educators to the next level in their teaching. The TIPS framework scaffolds teacher improvement, and its descriptive rubrics articulate what teachers need to do to reach proficiency in each aspect of teaching and learning. Sustained reflection and study of individual practice begin to make a difference when teachers can back up their claims of performance with evidence (e.g., “I scaffolded learning by ____”; “High expectations were evident when ____”; “The following questions stimulated participation ____”).
Each journey will be unique. The goal, however, is the same: devoting energy to research-based and classroom-tested action that make a difference in every classroom.
NEEDS ASSESSMENT

What Do You Need Most?

Just as we need to differentiate instruction to accommodate varying student needs, we need to personalize professional development to address varying teacher needs. This chapter provides an individual needs assessment along with recommendations to help guide the professional development of each teacher, department, school, or district.

I recommend that you take time to determine where your greatest needs are relative to the seven research-based, classroom-tested teacher actions highlighted in the following chapters. Collectively, all seven core indicators addressed by the TIPS (Teacher Intentionality of Practice Scale) framework provide a guide to significantly enhance the teaching and subsequent learning that occurs in your classroom. TIPS comprehensively and cohesively pulls together what we know regarding the intentional decisions that teachers make that result in improved student success. Using the framework may even provide the opportunity to let go of many nonessential components that your school or district has previously required.

The needs assessment found in this chapter is composed of 28 statements. You are asked to respond to four aspects associated with each of these statements: (1) the frequency of occurrence in your classroom, (2) your confidence relative to the statement, (3) the amount of evidence that you have to support your frequency and confidence claims, and (4) whether or not you believe that your students would support your claim. The scores are weighted as follows: frequency (50 percent), confidence (20 percent), evidence (20 percent), and student perspective
(10 percent). After you have completed the needs assessment, rank your total scores for each indicator (category) from 1 to 7, with 1 being your lowest score and 7 being your highest score.

The goal is to help you clarify your strengths and weaknesses, recognizing that we all have some of each. Specifically, the intent is for you to honestly and accurately report your perception for each statement. The column that asks you to reflect on the degree of evidence available is an attempt to align your perception with your actual, observable practice. Each statement is linked to a specific research-based, classroom-tested TIPS indicator.

Instead of recording your needs assessment responses directly in the book, I suggest downloading the free spreadsheet from http://tinyurl.com/TIPSNeedsAssessment. The passcode to gain access is TIPS2015. The spreadsheet automatically tallies your results for each category. After completing the questionnaire, all you need to do is rank the items. You can then save, print, and share your answers. I recommend that you work with another teacher and have weekly discussions about your needs, your plans, and your growth. Or, if you prefer to work on your own, this chapter can help you establish professional goals for the next year or two.

On a broader scale, a department or a school can use the collective responses to spend professional development funds on the actual needs of the department or school, rather than acting on hunches or responding to sales pitches of unjustified needs. The results may lead a school to focus on one of the topics that most teachers agree is a weakness, or the school might focus on several topics, with each teacher targeting one or two areas of greatest need. We have known for years that just attending a one- or two-day professional development workshop or a single conference session will not improve teacher performance or student achievement—unless these experiences are situated in a sustained professional development effort that actively engages teachers in goals specific to their content or grade level (Banilower, Heck, & Weiss, 2007; Darling-Hammond, Chung Wei, Andree, Richardson, & Orphanos, 2009; Desimone, Porter, Garet, Yoon, & Birman, 2002; Marshall & Alston, 2014; Penuel, Fishman, Yamaguchi, & Gallagher, 2007). However, once the core needs are known and identified, then purposeful, sustained, and well-supported professional development can be created to move teachers, departments, and schools further along.
Using the TIPS Needs Assessment Instrument

The TIPS Needs Assessment appears on pages 10–12. Use the following key to score each item in the assessment:

**Key for TIPS Needs Assessment**

<table>
<thead>
<tr>
<th>Frequency Score</th>
<th>Evidence Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = Never or very rarely</td>
<td>0 = No evidence to support frequency and confidence claim</td>
</tr>
<tr>
<td>1 = Monthly</td>
<td>1 = Some evidence to support frequency and confidence claim</td>
</tr>
<tr>
<td>2 = Weekly</td>
<td>2 = Multiple sources of evidence to support frequency and confidence claim</td>
</tr>
<tr>
<td>3 = Multiple times per week</td>
<td></td>
</tr>
<tr>
<td>4 = Daily or almost daily</td>
<td></td>
</tr>
<tr>
<td>5 = Multiple times per class or throughout class</td>
<td>3 = Multiple times per class or throughout class</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Confidence Score</th>
<th>Student Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = Low confidence or not confident on topic</td>
<td>0 = Students would not support my frequency and confidence claim</td>
</tr>
<tr>
<td>1 = Moderately confident on topic</td>
<td>1 = Students would support my frequency and confidence claim</td>
</tr>
<tr>
<td>2 = Highly confident on topic</td>
<td></td>
</tr>
</tbody>
</table>

**Rank**

After completing the self-assessment, rank all of the total scores from 1 to 7, with 1 being the lowest and 7 being the highest.

After you have completed your rankings, identify which two TIPS indicators ranked lowest. These are the most appropriate areas to target first. The seven needs assessment clusters correspond to the following TIPs:

- TIP 1: Coherent, Connected Learning Progression
- TIP 2: Strategies, Resources, and Technologies That Enhance Learning
- TIP 3: Safe, Respectful, Well-Organized Learning Environment
- TIP 4: Challenging, Rigorous Learning Experiences
- TIP 5: Interactive, Thoughtful Learning
- TIP 6: Creative, Problem-Solving Culture
- TIP 7: Monitoring, Assessment, and Feedback That Guide and Inform Instruction and Learning
# Needs Assessment Instrument

<table>
<thead>
<tr>
<th>Questions</th>
<th>Frequency Score 0–5</th>
<th>Confidence Score 0–2</th>
<th>Evidence Score 0–2</th>
<th>Student Support Score 0–1</th>
<th>Total</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a  My lessons are well aligned (standards, objectives, lesson/activities, and assessments are all clear, aligned, and well sequenced).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1b  My lessons require students to engage with both process skills and content.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1c  My lessons connect to other disciplines and within my discipline.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1d  My lessons make connections to students’ lives and the real world.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2a  My students are actively engaged during instruction, and abstract ideas are tied to concrete experiences.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2b  My instructional strategies are student centered (requiring more than mimicking or confirmation of what was modeled).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2c  My materials and resources make abstract ideas concrete and visual.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2d  My materials, resources, and strategies are purposeful, and technologies are transformative (allow student to do something not otherwise possible).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3a  My pacing and transitions are efficient and smooth, and students respond promptly to cues.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3b  Routines flow smoothly; my classroom almost appears to “run itself.”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3c  I convey a solid presence, positive affect, and patience with my students, and my students also engage in positive, respectful interactions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3d  I am approachable, supportive, and respectful during all interactions with students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Needs Assessment Instrument—(continued)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Frequency Score 0-5</th>
<th>Confidence Score 0-2</th>
<th>Evidence Score 0-2</th>
<th>Student Support Score 0-1</th>
<th>Total</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>4a I establish and communicate high, appropriate expectations for all students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4b I model, and students demonstrate, persistence, perseverance, and self-monitoring.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4c I ensure that all students are appropriately challenged (regardless of ability).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4d I differentiate and scaffold learning for all learners based on varied levels of readiness.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total 4:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5a I stimulate participation and involvement of all students throughout the lesson.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5b I facilitate conversational, engaging, and motivating interactions throughout the lesson.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5c My assignments and classroom interactions are purposeful and personal.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5d My students are challenged to explain, reason, justify, and critique responses of others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total 5:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6a I model creative approaches, and students are expected to find novel ways to communicate, share, present, and discuss ideas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6b I create a culture of curiosity and questioning in my classroom.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6c My students are fairly self-directed and actively seek solutions to open-ended problems.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6d My students are expected to consider multiple perspectives or alternative solutions/ explanations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total 6:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Needs Assessment Instrument—(continued)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Frequency Score 0–5</th>
<th>Confidence Score 0–2</th>
<th>Evidence Score 0–2</th>
<th>Student Support Score 0–1</th>
<th>Total</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>7a I provide specific, focused feedback (not just confirmatory responses like “yes/no” or “correct”).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7b I provide frequent feedback to scaffold learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7c I use formative assessments to inform instruction and learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7d I continually probe all students to determine prior knowledge and misconceptions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total 7:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


---

### Recommended Next Steps

Although they are not absolutes, the following recommendations may help guide your next steps. If TIP 1, 2, or 3 is among your lowest rankings, then you should address these more fundamental pedagogical issues before moving to the other TIPS indicators. You are ready to move forward to another TIP only after you have consistently demonstrated and achieved proficiency. This accomplishment could take several months to a year or more, depending on whether you are seeking significant, sustained change and on the complexity associated with the intended change.

In districts or schools that have adopted new standards, new textbooks, or a new curriculum, it is imperative to spend sufficient time on TIP 1. Neglecting to support the transition to new standards or curriculum (including through the provision of targeted professional development) will result in teachers simply continuing to achieve the same teaching performance as in the past.

Proficient or exemplary performance in TIPS 4 through 7 is frequently what distinguishes good teachers from great teachers. Although every individual and every school has differing needs, preliminary
trends from observational data from TIPS indicate that teachers’ lowest areas of proficiency are found in TIP 7, TIP 6, and TIP 4, respectively. TIP 3, TIP 1, and TIP 5 are the areas of highest noted proficiency respectively. Remember that even though TIPS has been standardized so that the descriptive rubric for Level 3 details the expectation for a Proficient level of performance, teachers will vary in their proficiency among the various TIPS indicators. Don’t feel the need to align with these more general findings from a sampling of K–12 teachers. However, the findings do provide a default context if you must work on your district’s professional development needs with minimal input—and they may serve to confirm or refute what administrators and instructional coaches observe in their own buildings. Using a default is not my first recommendation because it does not allow for targeting actual needs identified or personalizing professional development.

The following chapters can begin to guide the analysis, the conversations, and the critical questions relative to each TIP. Please don’t look at the ranking of TIPS indicators from the needs assessment in a dogmatic fashion. If scores are close, and if many individuals in the department or school have a similar need, then it may make sense to go with the group need over an individual need. The fact is that we all can probably grow further in each of the seven indicators, so you need to focus on where you can get the greatest return on your investment of time, energy, and school funds.

A few final suggestions may be helpful. First, proficiency in TIP 3 is a necessity. If you lack a safe, respectful, well-organized learning environment, then you will struggle to succeed with every other indicator. Second, TIP 7, which focuses heavily on formative assessments, is an area where fairly immediate changes can quickly result in improved student success. Third, TIP 6, which focuses on facilitating a creative, problem-solving culture, will be more challenging in some disciplines than others, but proficiency in this TIP is essential for living, working, and learning in the high-tech, modern world where students must learn how to do something purposeful with the information they have gathered, not just memorize and restate it. Finally, because many programs will want to delve deeper in their study of a given TIP, a list of resources is presented in Appendix B to guide further development toward proficiency and above for each TIPS indicator.
TIP 1

Coherent, Connected Learning Progression

Although it appears simple—teach a coherent lesson that flows logically—proficiency in this first TIP remains elusive to many teachers in their daily instructional practice. Yet effectiveness with this TIP is crucial to help build and support success with the other TIPs.

Far too often our schools and classrooms fall into patterns that can be described by an expression used by computer programmers and technology designers: “garbage in, garbage out” ("GIGO" for short). For computer programs or apps with poorly written code (garbage in), the outcome becomes a product that is unpredictable, that crashes, or that fails to achieve the desired goals (garbage out).

For educators, a lack of clear and focused intentionality about what we do and why we do it likewise results in poor and unpredictable outcomes that often fall far from our initial goals and targets. This chapter focuses on how to establish a framework for instruction and learning that is intentional—going well beyond a mentality that is limited to simply covering topics.

Have you ever noticed how two people may hold radically different perspectives even though the conditions appear virtually the same? Nowhere is this clearer than in the variety of perspectives that teachers and leaders have about the content standards adopted by their state. In a comparative study of exemplary versus experienced teachers, exemplary teachers tended to view standards as a framework to help guide their instructional decisions (Marshall, 2008). Experienced teachers,
CONCLUSION

Moving Forward

Yes, we have mandates that have to be addressed. Yes, we are limited in controlling what happens to our students beyond the school walls. But we still have enormous control over the teacher factors that influence student success. These factors are strong enough that, when executed well, they can provide a culture that encourages all students to thrive, succeed, and learn.

Middle and high school teachers have about 180 hours during the school year to achieve significant learning among all their students; elementary teachers have more hours but also have more disciplines to address. Students will forget most of the facts and small details that were presented in a given year, so what endures? What will students take with them after they leave?

Will the enduring elements be recalling multiplication tables, reciting of a Shakespearean sonnet, drawing an accurate representation of the water cycle, or listing five facts from the Neolithic Period? Or will students know how to solve complex problems, be able to discuss what makes literature great, convey the importance of water in sustainable environments, or explain how one culture learns from another? The latter examples do not exclude the importance of knowing facts. Rather, the facts become secondary, instead of primary, drivers of the learning.

This book has sought to challenge you and teachers at your school to think more deeply about what makes teaching and learning effective. The first three TIPs are more foundational yet crucial to success (TIP 1: Coherent, Connected Learning Progression; TIP 2: Strategies, Resources,
and Technologies That Enhance Learning; and TIP 3: Safe, Respectful, Well-Organized Learning Environment). The final four TIPs challenge you to improve your interactions, to deepen rigor, and to increase creativity (TIP 4: Challenging, Rigorous Learning Experiences; TIP 5: Interactive, Thoughtful Learning; TIP 6: Creative, Problem-Solving Culture; and TIP 7: Monitoring, Assessment, and Feedback That Guide and Inform Instruction and Learning).

All seven TIPs collectively encourage you to improve the intentionality of your teaching and, ultimately, student success. Highly effective teaching doesn’t just happen. It is the result of continual growth, in which tomorrow is a bit better than today—even if today was already pretty good. The degree to which you grow and continue to grow as a teacher is largely up to you.

This book, although it is not intended to be the full solution, provides a major step in helping all teachers move forward if they are receptive to exploring and critiquing their own practice. We should all strive for excellence in the classroom, but the TIPS framework provides clearly targeted steps that all teachers and schools should strive toward as they move toward proficiency and above. TIPS provides more than a checklist; it provides a descriptive rubric that can help guide conversations, encourage the gathering of evidence, and promote a higher standard for what teaching in the 21st century needs to look and feel like.
References

Antonetti, J. V., & Garver, J. R. (2015). *17,000 classroom visits can’t be wrong: Strategies that engage students, promote active learning, and boost achievement*. Alexandria, VA: ASCD.


Jeff C. Marshall is a professor in the Eugene T. Moore School of Education at Clemson University and is the director of the Inquiry in Motion Institute with the mission of facilitating teacher transformation in K–12 mathematics and science classrooms through rigorous and authentic inquiry-based learning experiences.

Among his accomplishments, Marshall received the Presidential Award for Excellence in Mathematics and Science Teaching; he has published 4 books, more than 60 articles, and given over 130 presentations in the last 10 years. Further, he serves as a consultant for numerous school districts, universities, and grant projects across the United States.

Marshall received a bachelor of science degree from University of Central Oklahoma and his Master’s degree and doctor of education degree from Indiana University in curriculum and instruction. Marshall can be contacted at 404-A Tillman Hall, Clemson, SC 29634. Phone: 864.656.2059. E-mail: marsha9@clemson.edu.