# Disrupting Barriers to Strong Instructional Scaffolding

## A Toolkit for advancing mindsets, principles, practices & conditions

September 2021



#### Introduction

As schools work to help students recover unfinished learning this year, they have an opportunity to address several instructional practices that were exacerbating inequities long before the COVID-19 pandemic.

We've come to better understand the extent to which **remediation** prevents many students from accessing grade-level work— especially students of color, students with disabilities, students whose home language is not English, and students from

low-income families or rural communities<sup>1</sup>. Instead of waiting until students master all concepts from previous grades before moving on, schools should accelerate access to grade-level work while providing targeted support on foundational concepts.

A closely related challenge is the prevalence of **ineffective scaffolding** (see definition on page 4), which also affects historically marginalized students the most.

We know that teachers will-and shouldmake changes to the intended curriculum. But these changes too often take the form of instructional scaffolds that compromise the cognitive complexity of grade-level learning goals. This is particularly true when students are perceived as not ready to engage with grade-level tasks and textsthe same mindset that can push teachers toward remediation instead of acceleration. While ineffective scaffolding is usually an attempt to make challenging content more accessible, it serves as a systematic barrier holding students back. Schools need to prioritize a better approach, and help educators make necessary adjustments to the curriculum without losing its grade-level focus.

This toolkit provides educators with imperative skills and knowledge for interrogating their approach to strong instructional scaffolding for all.

Pause Points are embedded to encourage noticing, seeing, and naming our current conceptions and practices, as a foundation for interrogating our approach to strong instruction for all.

You'll see them beneath this icon:

<sup>&</sup>lt;sup>1</sup> TNTP, in partnership with Z. (2021). (rep.). <u>Accelerate Don't Remediate: New Evidence from Elementary Math Classrooms.</u>

<sup>&</sup>lt;sup>2</sup> For the purposes of this toolkit, "**educators**" includes (but is not limited to) teachers, tutors, coaches, school/systems leaders, academic consultants, etc.

<sup>&</sup>lt;sup>3</sup> The **Four Resources** from TNTP's <u>Opportunity Myth</u> include (1) grade-appropriate assignments, (2) strong instruction, (3) deep engagement, and (4) educators who hold high expectations for all students and truly believe they can meet grade-level standards.

A better approach to instructional scaffolding requires more than just isolated examples and best practices. It needs to be rooted in the critical role that context plays in strong instruction especially content knowledge, and an understanding of students' identities. We and others in the field haven't always prioritized these factors in our past teacher development work, which is why our evolving <u>perspective on Teaching</u> and Learning explicitly acknowledges the critical role context plays in strong instruction. This toolkit rests on the idea that equipping

educators<sup>2</sup> with the skills and mindsets to create effective, student-responsive scaffolds can help systems avoid fostering the lowered expectations and remedial instruction that prevent too many students from getting what they need from their school experience.<sup>3</sup>



Think back to when you first began learning about instructional scaffolding — what was your motivation?

What are your reasons for engaging with this toolkit now?

#### How to use this toolkit

This toolkit is designed to help you interrogate your practice—whether you are a classroom teacher, an instructional specialist or support staff, an instructional leader, or a designer/facilitator of educator development experiences.

Use the definitions, guiding questions, principles, and respective guidance (i.e., what to disrupt vs. prioritize) for personal reflections and learning, or as content to design educator development experiences. This approach supports changed mindsets, practices, or conditions that advance equitable student outcomes.

## What Do We Mean by "Strong Instructional Scaffolding"

Language matters, so our exploration of strong instructional scaffolding begins by recognizing instructional scaffolding as both a **NOUN** (the scaffolding as an observable *thing*) and a **VERB** (scaffolding as an intentional *action* in the planning process and implementation). The table below offers a simple definition and an explanation of the critical features of the noun form.

#### **Instructional Scaffolding**

Noun

A temporary, student-specific support structure designed to maximize access to grade-level concepts and tasks.

Critical Feature	Unpacking Critical Features		
structure	<ul> <li>The support structure may take one of many forms:</li> <li>Tools – graphic organizers, sentence frames, bookmarks, concept maps, realia, visuals, etc.</li> <li>Peer interactions – pair share, peer tutoring/feedback, etc.</li> <li>Teacher interactions – assessing and advancing questions, wise feedback, etc.</li> <li>Exercises – routines, self-evaluation or reflection, visualization, etc.</li> </ul>		
student- specific	Scaffolds <b>respond to evidence (not assumptions) of individualized needs and</b> <b>assets</b> to clear the path to learning. If there is evidence to support an entire class needing a scaffold, then it may be applied whole-group while still meeting the criteria of being student-specific. <sup>4</sup>		
temporary	Scaffolds function as temporary supports that are strategically removed over the course of the lesson, unit, or year to <b>foster independent learning</b> .		
grade-level	Scaffolds provide students with a pathway to experiences that <b>build competence</b> and confidence with grade-level content. <sup>5</sup>		
maximize access	The purpose of an instructional scaffold is for students to <b>maximize their time</b> <b>grappling productively with complex grade-level content</b> , which means the scaffold must minimize anticipated, student-specific barriers to learning, such as interference from non-essential content or other cognitive distractions.		



How does this definition of instructional scaffolding compare to yours?

<sup>&</sup>lt;sup>4</sup> If, however, a whole group strategy merely reflects the guidelines of <u>universal design for learning</u>, it is more accurate to refer to it as universal design, rather than whole-group scaffolding.

<sup>&</sup>lt;sup>5</sup> While grade-level work is a critical resource for student success, research continues to show that remediation focused on mastering belowgrade level content before providing access to grade-level content is ineffective as a strategy for academic growth and achievement.

Educators often stop here at the noun level when thinking about scaffolding—as evidenced and fostered by the exhaustive "<u>banks</u>" of scaffolding strategies in the field today.

Yet we continue to hear educators say they struggle implementing these strategies effectively – or that the strategies just don't work.

We also continue to hear requests for more banks and examples of strategies specific to a particular curriculum or particular groups of students. While undoubtedly helpful in the scaffolding design process, banks are, by definition, limited in what they can offer for improving our practice. For example, while a sentence frame strategy may be implemented in one context, for one particular student, to maximize access to grade level content, we understand that the same sentence stem could create barriers to learning for a different student who needs more opportunity to write independently. This brings us to our expanded definition of scaffolding in its verb form, as an intentional practice that takes into consideration three key factors: the content, the student, and the context.

This action-oriented definition necessitates a level of critical planning and reflection often lost when limiting our concept of instructional scaffolding to its noun form.



As you read the guidance on the following pages, consider the current state of the intellectual prep process and/or resources in your setting, and ask yourself:

Where do we / I have strengths in attending to content/ students/ other context?



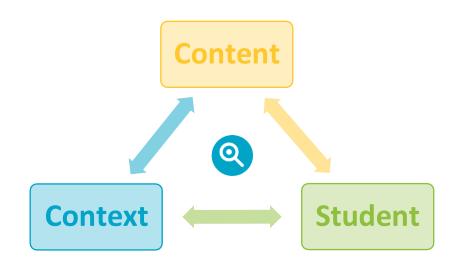
When we see a scaffolding practice in action, **what else do we need to know** to determine whether it's a strong instructional scaffold? Which aspects of attending to content/ students/ other context are there gaps?

What do we / I need in order to address these gaps, while building on what is already in place?.

## **Instructional Scaffolding**

Verb

The intentional practice of attending to **content**, **students**, and other **contextual factors** in the design or implementation of temporary, student-specific instructional supports that maximize access to grade-level concepts and tasks.



Rather than asking "what is a good scaffold for this lesson", or "how do I scaffold this curriculum", we need to be asking ourselves more targeted questions that get at the nuance of what we need to consider about our **content**, our **students**, and our **context**.

This expanded definition of instructional scaffolding requires pedagogical content knowledge, a deep understanding of students, and reflective practice that attends to the interplay of these and other contextual factors. The following guidance highlights the sequence of critical questions (aligned to core principles from TNTP's Teaching and Learning

Framework<sup>6</sup>) that reflective practitioners ask themselves when planning strong instructional scaffolding. Guiding questions are paired with behaviors that illustrate how reflective practitioners disrupt problematic practices that inhibit strong instructional scaffolding.

<sup>&</sup>lt;sup>6</sup> TNTP's Principles of Teaching and Learning are derived from the research base that underpins our <u>Framework for Teaching & Learning</u>

#### **Attending to Content Reflective Practitioners** Reflective Practitioners identify the **Reflective Practitioners continuously** leverage resources to Principle<sup>1</sup> appropriate amount and quality of develop deep content knowledge. enhance instructional cognitive work. practice. • What are the grade-level How does the lesson and learning goal expectations of this standard, How do my instructional connect to the knowledge/skills built complex text, and/or task? materials help me over time? • What prerequisite knowledge/skills Guiding (including those related to language) optimize planning grade-Questions are needed in order to access the How does the science of learning. level learning new learning? thinking, and acquiring language inform experiences? • Which prerequisites require just-inmy planning? time instruction vs. scaffolds? • Starting with student data... Jumping into planning lesson Planning day to day... • Using valuable • • Rather activities... Relying on just the curriculum and planning time to design than... standards to understand the lessons from scratch... · Thinking of prerequisites as a checklist of skills that require mastery content prior to accessing the learning... Start with grade-level content. Look beyond the lesson. Rely on high quality Start by understanding grade-level Seek to understand how a lesson instructional materials (HQIM). expectations of the standard(s), the prepares students for learning gradecomplex text, and/or the task. Use this level content by reviewing the lesson at Leveraging resources frame of reference as the north star hand, contextualizing it within its unit of means using time wisely, while planning. study, and noting how it and other so implement HQIM with lessons cohere and reinforce prior integrity before designing Clarify the cognitive learning. or looking elsewhere for demand of the lesson. supplemental materials. Internalize the content learning goal and Study how learning works. Seek to understand the associated linguistic demands to break Engage in professional learning focused rationale underpinning down what students will be expected to on the research that explains how lesson components, and know and do at the lesson level. Analyze students learn, and the research-based be a critical consumer of Reflective what makes the learning complex in and practices that promote effective and the strategies and Practitioners of itself (vs. difficult) and justify what it is long-lasting learning. This study should scaffolds that are often that makes it worthy of learning. include a baseline understanding of how provided and embedded do this the networks of the brain drive student to support MLLs and **Evaluate prerequisites** motivation and information processing, students with disabilities. for access. and the respective inclusive practices Consider whether they When preparing for a lesson, identify the that attend to these networks (e.g., are truly an effective specific knowledge and skills needed to Universal Design for Learning, or UDL) support based on the access the learning, then delineate but also extend to content-specific learning target and what which are barriers that require some research (e.g., the science of reading) you know about the degree of instruction (during the lesson, and language acquisition pedagogy, learning target and the within the context of the grade-level specifically the relationship between individual students. content) versus which can be eliminated simultaneously building knowledge and or dampened via instructional scaffolds language development (including (based on an understanding of the proficiency label descriptors2 and learning goal and progression). academic language demands).

<sup>1</sup> TNTP's Principles of Teaching and Learning are derived from the research base that underpins our Framework for Teaching & Learning

<sup>2</sup> This is only one example of how language proficiency is described. It is important to refer to what each state follows to determine English Language Proficiency.

Attending to Students					
Principle	Guiding Questions	Rather than	Reflective Practitioners do this		
Reflective Practitioners create responsive classroom cultures where students feel emotionally, intellectually, culturally, and physically safe.	How will I universally design experiences that support <b>all learners</b> in building confidence & competence with the learning goal? How will I position <b>all</b> <b>learners</b> to be seen and heard as valued members of the learning community?	Teaching to the <u>mythical average</u> learner	Acknowledge learner variability. Set the minimum bar for strong instruction as that which includes inclusive practices (e.g., aligned to UDI guidelines). Inclusive practices benefit all learners <sup>1</sup> , but the one in five students with learning and thinking differences <sup>2</sup> depend on them in order to access the learning. Classrooms that acknowledge learner variability invite all students to engage in the learning.		
		Thinking of instructional practice as an objective set of moves for producing knowledge	Recognize that learning is a socio-cultural experience. Culture is central to and essential to learning. It plays a role in how individuals communicat and receive information, and in how groups and individuals process the information that they receive. Instructional methods that acknowledge, respond to, and celebrate this fact offer full, equitable access to education for students from all cultures and backgrounds.		
		Expecting instructional materials to attend to the role culture plays in learning	Understand and effectively utilize the body of research surrounding culturally responsive teaching and instruction. Use this body of knowledge and tools like <u>scorecards, frameworks,</u> and <u>reflection guides</u> to desig and evaluate the relevance of the content and		
Reflective	Which specific students	Focusing on what	resources being covered. Build on what students know.		
Practitioners understand the assets & needs of their students.	do I perceive as needing more targeted support to access and engage with grade-level concepts and tasks in this lesson, and what evidence supports this perception? What do I know about their	students haven't mastered	Use an asset-based lens when analyzing curriculum- embedded formative <b>assessments</b> and diagnostics to uncover – with specificity - what students do know. Use what students do know as an entry point or building block for bridging to new learning. Reach out to caregivers, learning specialists, and other educators to gain insights into what students know and how they learn best.		

identity, experiences,	Conceptualizing	Go beyond labels.
interests, preferences, assets, needs, <sup>3</sup> etc.? What does an analysis of their work and other data specifically tell me about what they know or don't know yet?	learners as a monolith	Deeply understanding (and ultimately anticipating) how students will individually experience the learning first requires resisting the urge to make assumptions about student limitations based on identity labels. Avoid the pitfall of applying the same scaffolds to every student with an IEP or 504 plan, or <u>every multilingual learner</u> (irrespective of their language proficiency levels and other unique assets) by doing the work to confront implicit biases and learning about <u>myths versus facts</u> <u>related to student learning</u> .

<sup>&</sup>lt;sup>1</sup> Galiatsos, S., Kruse, L., & Whittaker, M. (2019). Forward Together: Helping Educators Unlock the Power of Students Who Learn Differently. National Center for Learning Disabilities. Retrieved from: <u>https://ncld.org/research/forward-together/</u>

<sup>&</sup>lt;sup>2</sup> Horowitz, S. H., Rawe, J., & Whittaker, M. C. (2017). *The State of Learning Disabilities: Understanding the 1 in 5*. New York: National Center for Learning Disabilities. <sup>3</sup> Identify other known **needs**, as directed by their IEP (e.g., accommodations), most recent language proficiency data, or other learning and/or socialemotional support plans, et

Attending to Context					
Principle	Guiding Questions	Rather than	Reflective Practitioners do this		
Reflective Practitioners leverage resources to enhance instructional practice.	How can <b>resources in</b> <b>the learning</b> <b>environment</b> (e.g., tools, technology, adult support staff, other students, routines, etc.) be leveraged to support the learning? What do I need from my <b>community</b> in order to sustain the level of planning my students deserve?	Overlooking the environment	Notice assets in the learning environment. Every learning environment contains some combination of tools, technology, realia, visual supports, adult support staff, students who can offer peer support, and other resources. When educators make a habit of noticing their assets, they expand their toolbox for designing instructional scaffolds, which is critical when planning to offer different ways for students to engage with, make sense of, and show what they know about the learning. The routines and norms familiar to students as part of their learning community also serve as assets in the environment. Leverage strong instructional routines to free up the cognitive space needed for grappling with new learning.		
		Working in a silo	Know when and how to ask for support. Teaching takes a village, so build relationships with other teachers, learning specialists, instructional leaders, and other members of the staff and community who can offer thought- partnership or emotional support when the creative resilience needed for continuously designing student-responsive learning experiences wanes.		
Reflective Practitioners create responsive classroom cultures where students feel emotionally, intellectually, culturally, and physically safe.	How can I <b>disrupt the</b> <b>narratives</b> our culture has used to socialize people into or out of learning based on identity? What <b>other barriers to</b> <b>learning</b> may be at play, and how can I plan to mitigate their interference?	Neglecting the impact of society on the classroom	Acknowledge the impact of the sociocultural environment. Noncognitive factors can impact student performance and outcomes, so the choices educators make have the potential to foster or impede student potential. Seek to understand the sociocultural context for how student identity plays a role in the way students are perceived by others and how they perceive themselves as learners. This work includes deep reflection to appreciate how a teacher's own experience as a learner informs their beliefs about teaching and learning and how those beliefs send messages about what and who has value in the classroom.		
		Taking a reactive approach to planning	Anticipate other barriers to learning. Within the context of planning for instructional scaffolds, pause to consider other relevant factors that may pose barriers to student learning – then plan to mitigate their potential impact. Barriers that could threaten the emotional, intellectual, or physical safety of students may include aspects of the school environment, curriculum, time constraints, the dynamics of teacher and peer relationships, etc.		

#### **Developing Enveloping Reflective Practitioners**

Instructional leaders demonstrate a commitment to expanding access to grade level content when they; (1) recognize that effective instructional scaffolding is an essential component of strong instruction, and (2) they persist in removing barriers that prevent educators from deeply attending to their content, students, and other factors unique to their context. Educators are eager to invest in the why behind instructional scaffolding, but the key to successfully influencing them to continuously improve this skill lies in a leader's ability to make it feel manageable, while avoiding oversimplifying its inherent complexity.

The most common example of this unintended oversimplification often shows up in the form of a heavy reliance on isolated examples of instructional scaffolding to drive professional development. Given the importance of context in designing instructional scaffolds, we acknowledge that there are no examples of instructional scaffolds for which one could successfully argue, "this is a strong instructional scaffold in *any context*, no matter the student, the

content, or any other factors." Even with the most research-based banks of scaffolding strategies, we could always find a student for whom that strategy would not make sense, or for whom the strategy would even do harm (i.e., creating misconceptions, causing disengagement, engendering learned helplessness, positioning students as not competent in the community, etc.). Consequently, professional development that hinges strictly on isolated examples – even if it offers guided practice - often misses opportunities to provide educators guidance and space to vulnerably reflect on the strengths and gaps in their planning habits.

Following through on the commitment to expand access to grade level content calls for providing transformational teacher development experiences that lead to sustainable shifts in mindsets and practices.

The considerations in the table on the following page are intended to support instructional leaders in developing reflective practioners of strong instructional scaffolding.

Rather than	Develop Reflective Practitioners by doing this
Providing isolated	Reinforce the importance of context.
<b>examples</b> of scaffolding strategies (e.g. demo's of cooperative structures, discourse activities, graphic organizers)	Provide examples of instructional scaffolds within the fleshed-out context of the content, the students, and other factors in order to appropriately illustrate how scaffolding may be potentially promising or problematic. Whether the scenario is fictionalized or grounded in a real-life example, contextualizing examples emphasizes the intentional nature of planning strong instructional scaffolds. Use the guiding questions from this toolkit to create professional learning experiences for grappling with the effectiveness of the examples to further reinforce an understanding of the rationale behind strong scaffolding.
Expecting a classroom	Pair observations with conversations.
observation to suffice in evaluating the quality of instructional scaffolds	Whether via communication prior to instruction, or during a debrief conversation, seek to understand the extent to which the teacher has considered the interplay between what they know about their content, their students, and other contextual factors. Use the guiding questions from this toolkit to drive these conversations so that teachers internalize the questions they should be asking themselves as they develop sustainable habits for intentional, student-centered planning.
Positioning scaffolding	Embed planning for instructional scaffolding in the planning process.
as an after-thought to the planning process	Interrogate current planning expectations and tools to ensure that instructional scaffolding is a critical component of lesson internalization and planning. Use the guiding questions from this toolkit to enhance planning protocols in order to make visible the process of attending to the content, students, and other context. Avoid postponing development opportunities that focus on scaffolding due to a perceived sense of urgency to focus on a limited definition of instructional planning that stops short of including instructional scaffolds.
Positioning scaffolding as an isolated topic among educator development priorities	Design educator development experiences that <b>explicitly connect instructional</b> <b>scaffolding to other instructional skillsets and topics</b> (e.g., differentiation, IEP accommodations, just-in- time instruction, intervention, etc.) by engaging practitioners in grappling with similarities, differences, and other relationships that brighten the lines to clarify strong instructional scaffolding. Lean on the Principles of Reflective Practitioners, and other fundamental components of research-based frameworks that are meaningful in your context as a schema for making impactful connections.
Perpetuating the idea that	Manage expectations to foster resilient practitioners.
instructional <b>scaffolding</b> is a binary skill (you either have it or you don't)	Even the most advanced reflective practitioners will sometimes design instructional scaffolds that fall short of their intended impact. What qualifies practitioners as reflective is their resilience in iterating towards their intended impact of maximizing access to grade-level learning experiences for all. Fostering such resilience requires leaders who prioritize building a learning culture among educators where mistakes are embraced as opportunities, the process (planning habits) is valued just as much as the product (evaluations and outcomes), and there is a shared responsibility for the success of all learners.



What will I prioritize, repurpose, or stop doing to disrupt harmful mindsets, practices, and conditions that inhibit strong instructional scaffolding?

### **KEY QUESTIONS**

When pulling content from this toolkit to design tools or learning experiences for educator development, consider using these key questions to drive learning targets and reflection discussions:

- 1. How does strong instructional scaffolding play a role in advancing equitable outcomes for all students?
- 2. What are the key **mindsets** required for attending to strong instructional scaffolding?
- 3. What are the research-based **principles** and key **practices** that lead to strong instructional scaffolding?
- 4. What are the key **conditions** needed for strong instructional scaffolding?
- 5. How can we **disrupt** harmful mindsets, practices, and conditions that inhibit strong instructional scaffolding and serve as barriers to the four resources?

## **APPENDIX**

TNTP'S TEACHING AND LEARNING FRAMEWORK

The **Principles of Teaching and Learning** found throughout this toolkit are derived from the research base that underpins TNTP's Teaching and Learning Framework. This framework illustrates the relationship between our work as education consultants, the strong instruction that teachers provide, and the student outcomes that we most desire.

Our framework describes the aspects and characteristics of our work (coaching and development) that we hypothesize will have the greatest impact on teacher practice, specifically strong instruction. Finally, this framework describes what we currently know to be true about the critical elements of strong instruction and their relationship to student academic outcomes and learning mindsets. All of this

stems from our more than two decades of experience as an organization, the knowledge and expertise of our staff, and evidence-based research from the field.

By providing educators with development experiences in strong instruction, we hope to equip them with tools to dismantle educational inequity and the systemic barriers that hold students back.



Our 2018 study, *The Opportunity Myth*, further highlighted the importance of strong instruction as a critical tool in providing equitable school experiences for students.

In that study, we found four key resources that influence a student's school experience and outcomes:

- 1. Grade-appropriate assignments
- 2. Strong instruction
- 3. Deep engagement
- 4. Educators who hold high expectations for all students and truly believe they can meet grade-level standards.

Essentially, we defined the most basic tenants of strong instruction—the minimum threshold that a system should meet to ensure a student's college- and career-readiness.

Since 2018, we've worked to expand our understanding of strong instruction. Specifically, we sought to understand the relationship between the four resources and the impact that each of these resources has on student success and outcomes. We've also worked to better understand how our organization can influence each resource. We've grown to appreciate that strong instruction is the anchor or principal term: to say that you observed or that students are experiencing strong instruction is to reveal that you've encountered educators and students engaging in instruction that is:

- Being led and supported by reflective practitioners that leverage their knowledge of their context (their school and community), their content (the standards, shifts, content pedagogy, materials), and their students (the assets and needs of all learners) to enhance their instructional practice and provide meaningful, focused supports where and when necessary.
- Situated within a responsive classroom culture where students can meaningfully engage in rigorous academic content in a way that is emotionally, intellectually, culturally, and physically safe.

Rich with opportunities for students to meaningfully engage in rigorous academic content, aligned to **grade-level** appropriate expectations and work.

4. Includes an appropriate amount of quality, cognitive work that provides students with the opportunity to demonstrate their competence and confidence with what they are learning, and speaks to and embodies the **high expectations** that educators and their school community have for all students and learners.

When these four critical elements of strong instruction are at play, we believe that educators foster learning institutions and environments that encourage deep engagement and learning mindsets that nurture long-term, sustained learning and outcomes for students.

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