Shifting From Planning for Teaching to Planning for Learning

Few topics spawn as much debate among teachers as lesson and unit plans. Some use them only reluctantly or sparingly, and some submit their lesson plans to principals simply for compliance sake without much further thought. However, many teachers swear by the power of planning out their lessons for a unit to elevate their teaching. Research supports this and shows that thoughtfully designed plans can lift all learners, especially when we shift how we think about and approach planning.

Consider for a moment how many of us were taught to plan: Set a teaching objective, identify materials, lay out steps for covering the material, and (if there's time) do a closing activity. We might call this approach *planning for teaching*. Here's the trouble with it: After the lesson or unit is over, it's easy to satisfy ourselves that we've *taught* it (i.e., covered the material) *even if little to no actual learning occurred* in our student's minds.

So, what if, instead, we engaged in *planning for learning*? That is, what if we shifted our thinking away from *what we need to do as teachers* to cover the material and instead focused on *what needs to happen in students' minds* to master the material?

This model also shifts our perspective from a single lesson to a wider sequence of learning that allows for more flexibility in our delivery while ensuring our students have the time and support to actually learn the material. We've seen that when teachers make this mental shift, they're able to design and deliver learning experiences that increase student engagement and learning outcomes.

Planning for learning starts with understanding the process of learning itself—how the human brain converts new information into long-term memory. Scientists know a great deal about how this works, reflected in a robust body of research called cognitive science (a.k.a. the *science of learning*). Unfortunately, the science of learning is rarely taught in teacher education programs. An analysis of the most frequently used textbooks in preservice programs found that none introduced teachers to it; as a result, few teachers know "the most fundamental information needed to make learning 'stick.'" [1]

To help more educators learn about and use this knowledge in their classrooms, McREL translated decades of research in the science of learning into this six-phase model of learning.

Phase of Learning	Description
1. Become interested	Our brains are constantly bombarded by external stimuli and, thus, are designed to ignore most of the stimuli in our environment. So, to learn anything, our students must become interested in it, finding it personally relevant, meaningful, and/or intellectually stimulating.
2. Commit to learning	Learning requires concerted and ongoing mental effort, so to master any new material, students must convince their brains to remain "switched on" during the entire process of learning.
3. Focus on new learning	Teachers can introduce new learning in small chunks to support how their students' short-term working memory functions. This is best accomplished when material is presented visually and verbally and students have time to translate ideas into concrete examples and academic vocabulary.
4. Make sense of learning	Our short-term working memories can actively focus on just a few bits of information at once, for about 5–20 minutes at a time. So, after brief episodes of learning, give students opportunities to pause and process their learning by connecting it to prior learning, thinking about it, and discussing it with others.
5. Practice and reflect	Repetition and reflection are key to long-term memory. To learn anything, students must reflect on what they've learned, practice it, attempt to recall it, and apply it multiple times in practice sessions spread over days and weeks that engage them in recalling a mix of new and prior learning.
6. Extend and apply	Ultimately, for new learning to stick, students must return to it in multiple ways—applying it, thinking about it, and using it in personally meaningful ways.

[1] Pomerance, L., Greenberg, J., & Walsh, K. (2016). Learning about learning: what every new teacher needs to know. *National Council on Teacher Quality*. https://eric.ed.gov/?id=ED570861

Some may notice these phases of learning echo other well-established instructional models, such as Madeline Hunter's mastery teaching model or Eric Gagné's nine episodes of instruction—but with an important twist. Instead of focusing on teacher actions and behaviors, these six phases focus on helping teachers use an understanding of brain processes to plan student learning experiences that support creation of deep, lasting, applicable knowledge.

In classrooms worldwide, we've seen that this simple shift in focus often leads to a breakthrough moment for many teachers, one that lifts them from competent to expert practitioners. That's likely because as teachers consider what's happening in students' minds while they're teaching, they become more intentional with their practice, understanding not just *what* to do and *how* to do it, but also *when* and *why* to do it.

The table below illustrates some of the crucial differences in teachers' thinking as they make this shift from planning for teaching to *planning for learning*.

Planning for Teaching	Planning for Learning
Tell students the topic of today's lesson.	Hook student interest and curiosity in the lesson and connect the learning to their own experiences (i.e., help them *become interested*).
Share my teaching objective.	Involve students in setting personal goals for their learning (i.e., help them *commit to learning*).
Teach the material.	Help students verbalize and visualize new learning by modeling processes and illustrating key concepts with diagrams, graphics, and concrete examples (i.e., help them *focus on new knowledge*).
Have students memorize vocabulary terms.	Help students use words as pegs to hang ideas on by simultaneously developing conceptual understanding and vocabulary knowledge while providing opportunities for students to use new words in writing and classroom discourse (i.e., help them *focus on new knowledge*).
Ask questions to see if students are learning and paying attention.	Pre-plan high-level questions that prompt students to think about their learning and make their thinking visible, thereby helping them to consolidate new learning (i.e., help them *make sense of learning*).
Give students some time to practice in class.	Observe students as they engage in their initial application of new learning and provide them with immediate, formative feedback (i.e., help them *make sense of learning*).
Occasionally engage students in small group work.	Regularly give students opportunities to pause and process their learning, making connections to prior learning, categorizing, and thinking about learning. Structure these activities to support individual and/or peer-assisted consolidation of learning (i.e., help them *make sense of learning*).
Assign homework.	Help students move new learning to long-term memory by ensuring they engage in multiple practice sessions distributed over days and weeks that prompt them to practice new skills and knowledge while rehearsing prior knowledge (i.e., help them to *practice and reflect*).
Give pop quizzes to keep students on their toes.	Help students build long-term memory by engaging them in retrieval practice—ungraded quizzes that prompt students to rack their brains to recall new knowledge and skills (i.e., help them *practice and reflect*).
Give a test and move onto the next unit.	Help students embed new learning into long-term memory by engaging them in challenging learning tasks that prompt them to use new knowledge and skills to engage in research, experiments, or investigations, extended writing tasks, or solving complex problems (i.e., help them *extend and apply*).

This shift toward planning for learning has several important benefits for students and teachers alike, including these:

- **It increases student engagement.** Focusing on helping students *become interested* and *commit to learning* (instead of just plunging into a lesson) unleashes their natural curiosity and intrinsic motivation to learn.

- **It's a more flexible approach to unit planning.** We've all had lessons fall flat when it became evident a particular teaching strategy wasn't working—or that students had unanticipated learning needs. Such moments can lead to frustration or panic if we've focused on planning for teaching ("Oh, no! My teaching isn't working . . . now what do I do?"). But if we focus our planning on what *students will learn* and paint in broader brushstrokes, it's easier to shift to a different teaching strategy—for example, taking extra time to unpack a difficult concept, walking students through solution steps, or connecting learning with their personal lives.

- **It makes differentiation possible.** Many teachers are under the misapprehension that differentiation requires them to teach a concept or skill in multiple ways to suit every learner's unique needs. That's difficult, if not impossible, to do on a regular basis. It's also unnecessary. Planning for learning helps teachers see that it's often most efficient and effective to help students focus on new learning by engaging them in targeted episodes of direct instruction (supported with visuals and examples) followed by opportunities to *make sense of new learning.* It's during these breaks from direct instruction that teachers can provide individual students with feedback and targeted supports, helping all students master new material.

- **It lifts all learners and closes achievement gaps.** Perhaps most important, planning for learning calls on us to focus on helping students become interested in learning, committed to learning, focused on new knowledge, and so on. Like guides on a mountain expedition, teachers can recognize when most of the class is ready to move on to the next camp. However, not all students learn at the same pace, so teachers can use what they know about individual students or small groups of students to scaffold their success in the next sequence of lessons. Research shows (including many of the studies that inform *The New Classroom Instruction That Works*) that when teachers engage students effectively in each phase of learning, they can dramatically improve all student outcomes and, in particular, lift previously low-performing and marginalized students.

Suggested Next Steps for Professional Conversation and Collaborative Learning

Shifting to *planning for learning* may seem simple but it's not easy. For many teachers, planning for learning is not just a different way to think about their teaching, but a wholesale shift in their teaching paradigm, one with numerous ripple effects in their professional practice. Here are a few suggested next steps for school leaders and teachers interested in navigating this shift in practice.

For School Leaders

To help initiate a conversation with your teachers about this shift, here are some reflective questions/prompts you can ask in individual meetings or in whole-group settings.

- When do we see students disengaged from the process of learning? When do we see them engaged?
- What would it take for us to replicate those engaging conditions in every lesson?
- What would you like to better understand about the process of learning so your students become more engaged and successful in their learning?
- Does your planning help you lift all learners? What aspects of planning are most helpful? Least helpful?
- What might be the benefits for our students and ourselves if we focused on planning for learning instead of planning for teaching?

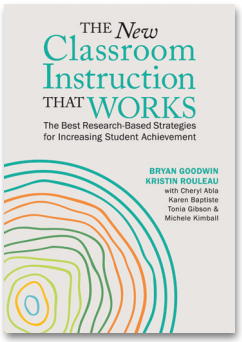
For Teachers

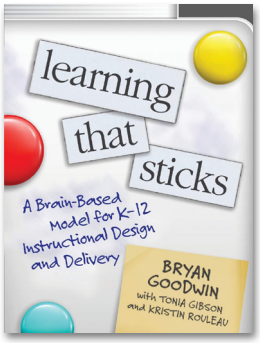
For individual classroom teachers and other instructional staff, here are some reflective questions/prompts you can ask yourself and your grade-level or subject area teams.

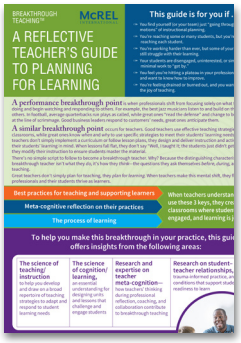
- How effective are my lesson and unit plans?
- To what extent are my plans focused on my teaching versus student learning?
- When students fail to master new material, where does it seem like the process of learning is breaking down (i.e., which of the six phases of learning is most difficult or problematic for my students)?
- Which phase of learning represents the biggest opportunity for me to help my students master new material?
- How clear am I about how the process of learning occurs in my students' minds?
- What questions do I have about the science of learning?

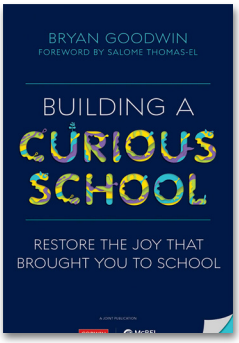
When we design and deliver learning experiences that better reflect how our students' brains really work, learning becomes not only more effective, but also easier and more joyful—for students and teachers alike. In short, by shifting our perspective from teaching to learning, we can create school and classroom environments in which both students and teachers can flourish.

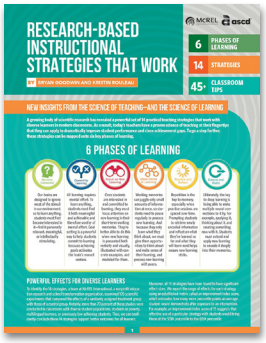
Additional Resources Available at store.mcrel.org











For professional learning support and resources to strengthen instructional planning at your school, contact McREL today at info@mcrel.org or 800.858.6830