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Instructional Models

Doing the Right Things Right

By Elizabeth Ross Hubbell and Bryan Goodwin

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Hubbell, E. R., & Goodwin, B. (2019). *Instructional models: Doing the right things right.* Denver, CO: McREL International.

20190508

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Contrary to what too many politicians might have us believe, it's pretty hard to find a thoroughly bad school. Most teachers in most schools do, in fact, know how to teach. Most school leaders do, in fact, know how to keep a campus running. Most schools are, in fact, doing the right things for students.

What they might not be doing as consistently, however, is doing the right things *right*. The missing ingredient may be something that on its face seems basic, but that in practice can be daunting to implement and deliver on consistently: an instructional design model.

An instructional model can unite school leaders, teachers, and students with shared goals, a shared understanding of how to reach the goals, and a shared vocabulary for discussing progress. A poorly planned implementation process, however, can cause rifts that take years to heal. In this paper, we present an introduction to instructional models and a leadership primer focused on helping school teams cohere around an initiative that has a high likelihood of benefiting students.

Consistency works consistently

Variety may be the spice of life, but when it comes to instructional quality, variety within a school unfortunately means some children are having a worse classroom experience than others. In the U.S. and abroad, researchers have found that consistency of instructional quality is what distinguishes higher- from lower-performing school systems (Barber & Mourshed, 2007; Chenoweth, 2007, 2009; Hattie, 2011; Jackson & Makarin, 2018; Kulik, Kulik, Bangert-Drowns, & Slavin, 1990; Pianta, Belsky, Houts, & Morrison, 2007; Reynolds, Stringfield, & Schaffer, 2001).

Before going into further detail on what instructional models are and why we think they work, let us draw a distinction with another common tool used in education: the instructional *framework*. Instructional frameworks list and categorize the many activities and responsibilities we want teachers to perform (e.g., design lessons, participate in professional learning, engage with parents). An instructional *model*, on the other hand, helps teachers understand how to design and deliver effective learning opportunities for students.

In our opinion, harping constantly on the *what* without providing a robust *why* is a recipe for boredom, frustration, and confusion, for teachers and students alike.

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So, how to get started?

In the spirit of democracy, our first suggestion is to assemble a team of teachers and leaders to spearhead the project. They should represent your school's or district's diversity but be homogeneous in one regard: the belief that your students can and will learn at high levels. We call it an R&I Team, for research and innovation (Goodwin, Rouleau, & Lewis, 2018).

Second, be certain that an instructional model is actually what you're looking for; don't let this become a solution in search of a problem. Document the current state of instruction in your school or district using two or more of these data sources:

- formative and summative assessment data from teachers
- classroom observations, walkthroughs, or instructional rounds

- interviews or focus groups with students, teachers, and parents
- surveys with students, teachers, and parents
- standardized achievement data

As data becomes available, ask yourselves:

- Do you see consistent, high-quality instruction being delivered in every classroom . . . or are you seeing more of a "box of chocolates" (you never know what you're gonna get from one classroom to the next)?
- What great practices (or "bright spots") do you see that you might want to be sure to include in your instructional model? What "best practices" are already in place?
- Do teachers already appear to be following a consistent instructional model?
- Can teachers articulate *why* they're doing *what* they're doing in their classrooms? That is, can they articulate a "theory of action" or "mental model" that guides how they design and deliver learning experiences for students?
- What do *students* say about their learning experiences? Do they find their assignments, activities, and projects to be challenging? Engaging?
- What patterns do you see in student achievement data? Is there classroom-level variance in achievement—are students performing significantly better in some classrooms than others?
- Can you attribute those differences to what you've observed in classrooms?

You might be pleasantly surprised to discover that most teachers are already using an instructional model and you can spare everybody from over-correcting a problem that's mostly solved. But more likely, you'll find a mix of excellent practices and practices that fall a bit flat. Focus on the former, because these could be the practices that form the heart of a new instructional model that you can spread schoolwide (or even districtwide). "We're doing lots of things right, so let's capture them in a new instructional model" is a way more palatable message than "We're doing a lot of things wrong, please stop." Importantly, you'll want to categorize and characterize the types of instruction you observe going on. If, for example, you observe what you consider to be excessive whole-group instruction, this could lead you in the direction of a model that emphasizes students working in collaborative groups.

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With your instructional survey in hand, a logical next step would be to poll teachers on their current knowledge of, and comfort with, instructional models. How many teachers are already using a model, and to what degree of intentionality?

If, after this process of introspection, your R&I Team remains united in wanting to at least explore instructional models further, the time has finally come to consider some models themselves. The purpose of this paper is not to promote any particular model (proud as we are of our own) but to get educators thinking about the processes they'll need to follow in order to choose and implement one.

In many regards, the various models we're familiar with are more alike than different, particularly in their approach to sequencing learning. Some even inhabit a sort of family tree, with one author or organization building upon the work of another, rather like a martial-arts master is known by the lineage of masters who came before. The nuances among the models tend to be matters of degree relating to teacher-led learning versus student-centered learning, and you'll want to be alert to these nuances to help you make the right match for your school's pedagogical outlook. A synthesized list of instructional models (see table on pp. 4–5) provides the key points on some of the best-known instructional models.

Of course, there's no need to be limited to these options. Exhibiting the self-sufficiency for which Texans are famed, the Fort Worth Independent School District developed their own instructional model. Learn more about it at https://www.fwisd.org/page/14281. If the existing models are an inexact fit for your local needs, there's no rule against creating your own! It'll be a slower, more resource-intensive process, and there is some risk that you'll devise an overly complicated model due to our natural inclination to include ideas pitched by everyone involved. But whatever you come up with will have a head start in terms of staff buy-in.

Start thinking now about implementation and professional learning supports

The right time to start thinking about professional learning to support implementation of the new model is *before* you've actually settled on the model. Rather like a movie director who decides to shoot the climactic scene first, peeking ahead at the culmination of your journey will help you navigate the journey itself.

We see a number of valid ways your R&I Team can plan and deliver professional learning around instructional models, each with its own set of advantages and challenges:

- **Hire a consultant.** This might be a good way to kick off the school year, especially if you are *adopting* a model and feel having an "outside voice" will have more impact. The consultant should be steeped in the content and able to deliver an engaging, informative session along with support materials to assist in later implementation. However, consultants can be expensive, especially if your school has high staff turnover and thus will need lots of "refresher" training. Also, some external consultants may insist on fidelity to their particular model and would thus be unwilling to consider customizations for your local contexts, so this may be a less viable option if you plan to *adapt* a model.
- **Train in-school trainers**. Sending instructional leaders to a training-of-trainers (ToT) course has its advantages. First, it can help you to develop your own in-school or in-district capacity and sustainability. Second, it can allow your team to *adapt* a particular model with terminology more familiar to your teachers and/or enhancements that reflect your own shared agreements about your ideal approach to student learning. Third, teachers may respond better to "one of their own" sharing new ideas with them than they do when listening to an outside consultant whom they just met. Such ToT training can still be costly, though. Ideal candidates for becoming in-school trainers include influential teachers who don't necessarily have job title authority but are respected and trusted by their colleagues.
- **Collaborative inquiry**. This option engages professional learning communities in diving into externally or internally produced resources to learn about the model, apply it in classrooms, seek peer feedback, and coach one another to deliver the model with increasing precision. Often, a do-it-yourself approach is the most cost-effective option to implementing a new model. However, it can sometimes lack the insights or motivational qualities that a highly trained outsider or internal team can provide. In short, you may get what you pay for. Nonetheless, this may be the most viable approach if you've developed your own model or you already have well-established collegial learning communities.
- **Focus on "early adopters."** A final approach that you can apply with any of the previous options is to focus your initial professional learning efforts on a small subset of teachers who have shown themselves most willing to learn (who lean in rather than sit with arms folded during professional learning sessions) and share the model with them, challenging them to serve as trailblazers in your school or district community. The benefit of creating this "coalition of the willing" is that they're apt to move more quickly in embracing and incorporating the model into their classrooms, providing inspiration and guidance to later adopters.

Synthesized list of instructional models

Stage or phase	5E Instructional Model *BSCS*	Direct Instruction *Engelmann*	Experiential Learning *Kolb*	Explicit Direct Instruction *Hollingsworth & Ybarra*	
Engage interest	Engage	Introduce new concept/review prior learning		Activate prior knowledge	
Set goals for learning				Learning objective	
Guide new learning	Explore Explain	Present concept with examples/ non-examples	Concrete experience	Concept development Skill development	
Consolidate and reflect on learning	Elaborate	Student response Teacher feedback	Reflective observation Abstract conceptualization	Guided practice Relevance	
Apply new learning	Evaluate	Independent practice	Active experimentation	Closure	

	Five Episodes of Instruction *Silver & Strong*	Gradual Release of Responsibility *Fisher & Frey*	Mastery Teaching *Hunter*	New Events of Instruction *Gagné*	New Teacher's Companion *Cunningham*	Student Learning That Works *McREL*
	Preparing students for new learning		Anticipatory set	Gaining attention	Introduction	Become interested
		Focus lesson	Objective and purpose	Informing the learner of the objective	Foundation	Commit to learning
	Presenting new learning	Guided instruction ("I do")	Input Modeling	Stimulating recall of prerequisite learning Presenting the stimulus material Providing learning guidance	Brain activation Body of new information	Focus on new learning
	Deepening and reinforcing learning	Productive group work ("We do")	Checking for understanding Guided practice	Eliciting the performance Providing feedback Assessing the performance	Clarification Practice and review	Make sense of learning Rehearse and reflect
	Applying learning Reflecting on and celebrating learning	Independent learning ("You do")	Independent practice Closure	Enhancing retention and transfer	Independent practice Closure	Extend and apply

Don't skimp on peer coaching

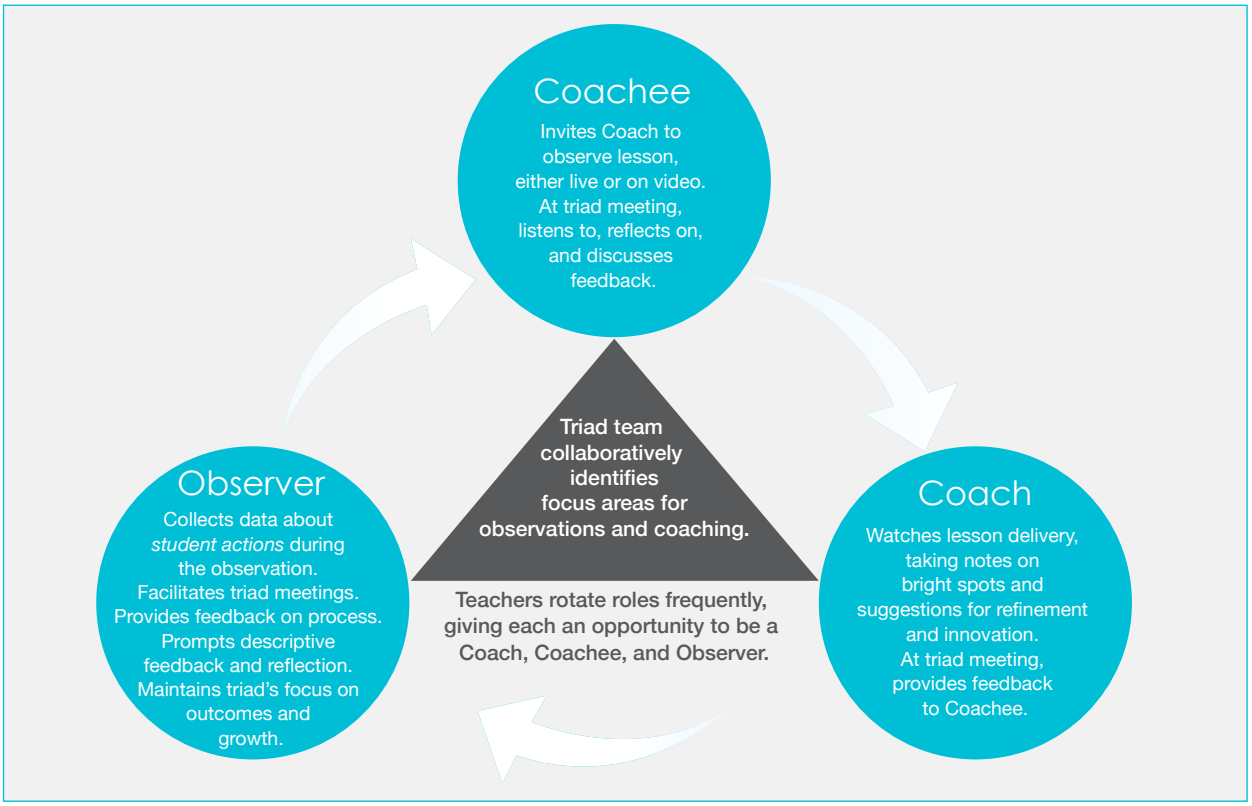
Whichever route you go, don't skimp on peer coaching, which can take two forms. Vertical coaching (an expert advising a protégé) is good, but lateral coaching (colleagues coaching one another) is superior for ensuring that professional learning sticks and translates into improved classroom practices. We are particularly enthusiastic about peer coaching triads (see figure).

Leadership 101: How to identify and combat the impediments to change

There's no way around it: Whenever there is significant change, there is also resistance to change. When the change under discussion is something as central to a school's functioning as the introduction of an instructional model, some teachers may be overjoyed that the needs and challenges they've long wrung their hands about are finally being addressed. Others may dispute that there was ever a problem in the first place, or they may quibble with the solution. You may find some faculty struggling to apply the model in their classroom and complaining that it's unworkable or impractical. Some dissident voices may object to the model on more intellectual grounds, calling out flaws in the chosen model or attempting to discredit the research. Others may be nervous at the prospect of peers observing their lessons or accuse you of undermining their professional autonomy. Still others may sniff that your chosen model is "only for the bad kids" or is an affront to their deeply held beliefs about the "right way" to teach kids.

Leadership would sure be fun and easy if it were as simple as downloading a persuasive white paper, sharing it with your team, and instantly reaching agreement on every aspect of the task at hand. Of course, life rarely works that way. While the benefits of an instructional model may seem incontrovertible to you and your R&I Team, you are not the only people in the school who care deeply about quality; everyone else deserves their say, and all of you together owe it to your students to participate in a deliberate, inclusive process. Following are tips and observations gleaned from decades of work with school leaders that will ensure your entire team feels more confident they're creating the best possible instructional environment for all students.

Peer Coaching Triad



This is your brain on change. The interplay of physiological and emotional factors is so intricate (Hermann, 1998; Kahneman, 2011) that no two people will *perceive* the same change identically. Loosely speaking, frameworks put forward by leading thinkers of the last century reflect dichotomies in how different people *perceive* information (e.g., concrete/verbal/rational analysis vs. holistic/intuitive/visual intuition) and how they *process* information (application-oriented/impulsive *doing* vs. meaning-making/contemplative *reflecting*). When seated around a conference table or across from a would-be ally at a coffee shop, you may need to moderate your message to suit the other person's ability to grasp it.

Analytical, logical *thinkers* are (or at least view themselves as) clear-headed and objective. Like Sergeant Friday of the old *Dragnet* TV series, they insist on hearing "just the facts" before being ready to move forward with a change initiative. The downside to being cautious, objective, and analytical is a risk of "paralysis by analysis." These folks may also seem a little overly eager to poke holes in others' ideas.

Sequential, action-oriented *doers* are said to be pragmatic and action-focused. Others may view them as hasty, judgmental, or overly compliance-oriented. While they can be the first to act when the way forward is clear, they may be reluctant when doing so entails relearning comfortable routines.

Imaginative, big-picture *energizers* are comfortable with changing their own mental paradigms, and persuading others to see and buy into their vision. At times, though, they can annoy others by skipping over details or bouncing from one idea to the next. And if the big picture grows fuzzy, they may lose direction.

Interpersonal, social-oriented *connectors*, sensitive to undercurrents in group dynamics, are often adept with building camaraderie. At times, though, their desire to preserve group cohesion may come across as unwillingness to rock the boat even when the status quo clearly is not adequate.

The reason all of this matters *to students* is that competent leadership has been shown to influence student performance—usually positively (Marzano, Waters, & McNulty, 2005) but also sometimes, perplexingly, negatively (Goodwin, Cameron, & Hein, 2015). The confounding factor seems to be that on occasion, staff members feel so distressed by change that they go out of their way to impede a leader, even a good one. When the going gets tough, researchers found, people often resist change for one of four reasons:

1. They view the change as an unnecessary **break from the past**—they don't comprehend the **logic** for it or remain unconvinced of its necessity.
2. They **lack the skills or knowledge** they need to carry out the change—they are unclear exactly what to do or need more **details** before they're ready to move forward.
3. They feel the change conflicts with their **ideals and beliefs**—they don't understand or share the **big picture** vision or moral purpose for the change.
4. They sense the change conflicts with **group norms**—they feel the change is disrupting social harmony or upending their own social status.

In schools experiencing tumultuous changes, teachers and support staff felt like their leaders were falling short in these areas:

1. **Input**—people felt excluded from important decisions about the change effort.
2. **Order**—people felt the school lacked standard operating procedures or routines.
3. **Communication**—people required greater clarity and more dialogue with leaders.
4. **Culture**—people felt a diminished sense of group cohesion and personal well-being.

All you wanted to do was find an instructional model to help your school, and now you have to manage all these complex psychosocial relationships? Well, yes. None of the above is meant to suggest that people are trapped into these thinking and reacting styles and never change; we probably all move among them (Willingham, Hughes, & Dobolyi, 2015). The important takeaway for now is that leadership of the sort required to boost the consistency of instructional excellence in a school is a lot more complicated than "This model makes sense to me, so let's do that."

Understanding and overcoming resistance to change

Concerns (you hear phrases like . . .)	Underlying issue	Leadership response
"I don't know why we're doing this." *"What problem are we trying to solve?"* *"Why did we choose this model?"* *"Are we sure it's the right one?"*	People tend to resist change when they don't understand the **logic** or rationale for the change. As a result, the change feels like an unwarranted—if not illogical—**break from the past**. In short, people want to know a) what's the problem and b) how do we know this is the right solution?	These stakeholders are apt to complain of lack of **input** on the logic of your decision-making. So, start by helping others see how the lack of an instructional model is a problem by sharing data, observations, and research, and then soliciting their input as you select the model. In short, engage others to help them understand the **purpose** of what you're doing.
"This will suck the spontaneity and joy out of learning." *"It's too sage-on-the-stage."* *"It's prescriptive and mechanical."* *"What about teacher creativity and teachable moments?"*	People tend to resist change if they feel it conflicts with deeply held **ideals and beliefs**. Some may voice a vague gut feeling that something is "off" about the change. Others may be explicit, even calling into question your moral purpose and whether you share their concern for students.	These stakeholders are apt to complain about lack of **communication** even when you feel you've been clear and even repetitious with messaging. Often, what's really happening is people need *dialogue* to feel heard as well as hear your ideals and beliefs and how the change aligns with them. In short, through two-way dialogue, create a positive **picture** of where you're going.
"Everybody feels second-guessed and professionally demeaned." *"All this teamwork is inefficient."* *"These observations are disrupting my class."* *"Honestly, I don't have much to learn from my peers."*	People tend to resist change that disrupts **group norms**—which are often *implicit*, including teacher autonomy, not sharing lesson plans, or working only with a preferred group of colleagues. Thus, a seemingly simple change like peer coaching can be incredibly disruptive and, if not framed carefully, sow distrust.	These stakeholders are apt to complain about the new **culture** (and/or vanishing old culture) in the school. Thus, you may need to make explicit your *new norms*, including that teachers will work together, share lessons, and observe each other in order to *enhance* (not *erode*) professionalism via collegial sharing and dialogue. In doing so, you'll show everyone their **part** in the change.
"This new model is no better than what I was doing before." *"I still don't know what I'm supposed to be doing."* *"We haven't gotten enough PD."* *"There's no way you can expect me to do all of this well right now."*	People tend to resist change if they feel they **lack the skills or knowledge** to successfully carry out the change. They may complain that their old way of teaching was better, they don't have enough clarity about what's expected, need more PD, or that expectations for "ideal use" of the model are unrealistic.	These stakeholders are apt to complain that leaders are failing to provide a proper sense of **order** or routines in the school, or that new routines (e.g., lesson plan templates) are unworkable. Here, you'll need to help others adopt new routines with clear examples of what's expected as well as plenty of opportunities for learning and developing new skills.

Decision-making tools

A particularly important decision-making tool—not just for choosing and using an instructional model but for any major decision your R&I Team is tackling—is the *logic model*, which plainly states what you expect to achieve as a result of the change process, and how you expect to achieve it.

The elements of the logic model are:

- **Outcomes**. We encourage you to start with these by considering what, ultimately, you want to see happen as a result of all your efforts. As these are your *desired* outcomes, you may find it helpful to start these with the sentence stem, "We want to . . ."
- **Outputs**. Once you've identified your desired outcomes, you can identify what conditions must be in place to create them. For example, if student engagement is the *outcome*, what condition (e.g., inquiry-driven learning) are you hoping to create to make this happen? Here, you may find it helpful to start with the sentence stem, "We need to see . . ."
- **Inputs.** Once you know your outcomes and outputs, you can make explicit what exactly you'll *do* to create the outputs (and outcomes). For example, if engagement is your *outcome* and inquiry-driven learning your *output*, your input may be to support teacher professional learning in classroom questions. Here, you may find it helpful to start with the sentence stem, "We will . . ."

To translate these elements into the context of instituting an instructional model, your R&I Team might decide that your most pressing *outcome* is to *develop meaningful goals*. This is, in fact, one of the most important things that the leader of a high-performing school can do (Public Impact, 2007). As an *output*—that is, a change to classroom conditions that will lead to the outcomes you've identified—you may choose to *identify leading indicators*. Why leading indicators? Because it can take a year or more to see significant changes on standardized achievement tests, so it's important to consider what changes might be observable quicker than that. And finally (or firstly, because we're working

backwards here) your desired *input* may be to *identify focused activities.* What, precisely, will you do to start the chain of events that will lead to your desired outcomes? What supports will you provide to teachers to encourage classroom conditions to change?

Herein lies the power of logic models. By making our assumptions explicit at each step along the way, we can see when our assumptions don't add up—when, in effect, we're hoping two and two will add up to five. When we detect this happening, we must better focus our activities (*inputs*) to create the conditions (*outputs*) necessary to achieve our goals. Conversely, we may see that our desired outcomes (*goals*) are simply too ambitious and should be scaled back to avoid setting ourselves up for failure and disappointment.

Adopt, adapt, enhance

Even after adopting and falling in love with an instructional model, don't get *too* attached. If improvement is a continuous process, then any school's or district's relationship to an instructional model should be too. Instead of setting it and forgetting it, you're more likely to follow one of these paths forward:

- **Adapting your model.** You may find you need to make tweaks to your instructional model to support your students or capture new understandings about teaching and learning, creating in effect, a "version 2.0" of your model.
- **Enhancing your model.** Similar to adapting your model, you may find ways to leave the model essentially unchanged, but integrate new ideas, methods, and approaches into it.

- **Developing expertise with your model.** Ideally, your model should serve as a springboard for developing teaching expertise and unleashing innovation.
- **Replacing your model**. In rare circumstances, you may find that your chosen model is simply unworkable or not helping to address student learning needs, so you need to select a different one.

Yes, you want teachers to follow the model, but more importantly, you want them to understand why it works and then to develop and bring a robust repertoire of teaching strategies to each phase of the model, continually considering which strategies work best in which situations.

A common objection to instructional models is that they can become limiting or stifle teacher creativity and development. This is a risk especially if leaders insist that teachers follow the model in a scripted, didactic, or superficial way. Following a model is often an important first phase to developing talent and expertise. Thus, when it comes to teachers developing their talents, a model is a means to an end, not an end in itself. Yes, you want teachers to follow the model, but more importantly, you want them to understand why it works and then to develop and bring a robust repertoire of teaching strategies to each phase of the model, continually considering which strategies work best in which situations.

Madeline Hunter, creator of a prominent instructional model that many educators are familiar with, herself noted that what's most important is not that anyone blindly follow her model, but that they develop "propositional knowledge," or knowing what "affects student learning" so they can make sound professional decisions when designing and delivering lessons (Hunter, 1985, p. 57). Thus, she insisted that an instructional model shouldn't stifle creativity or professionalism, but rather, "provide the launching pad from which [teacher] creativity can soar" (p. 58).

One of the most important outcomes of applying an instructional model ought to be teachers developing increasing understanding of why they are applying particular strategies during particular phases of learning.

With this in mind, she cautioned against administrators applying rigid interpretations of the model. That means not using it as an evaluation tool, insisting that every lesson include every element, or most egregiously, judging teachers' use of the model without first asking them for their rationale in using a particular strategy. Indeed, one of the most important outcomes of applying an instructional model ought to be teachers developing increasing understanding of why they are applying particular strategies during particular phases of learning.

We couldn't agree more. We applaud any school or district that is considering an instructional model. The end of the implementation process, however, is only the beginning of your recommitment to greater consistency in classroom practices.

Reach the authors and other experts at McREL who are exploring effective instructional models:

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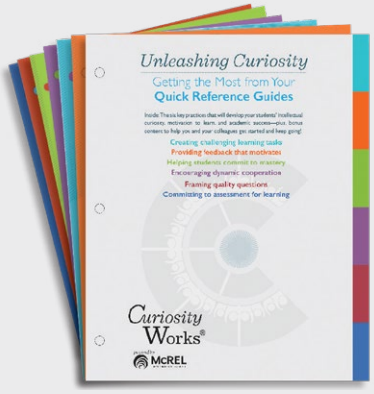

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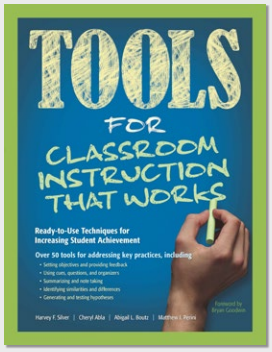
A series of brief guides with tips, suggestions, and ideas for professional reflection and collaboration on six common problems of practice. Where you start is less important than where you finish: in a *student-owned and teacher-guided* learning environment.



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