Chapter 1: The Instructional Core

- In its simplest terms, the instructional core is composed of the teacher and the student in the presence of content. It is the relationship between the teacher, the student, and the content – not the qualities of any one of them by themselves – that determines the nature of instructional practice, and each corner of the instructional core has its own particular role and resources to bring to the instructional process. Simply stated, the instructional task is the actual work that students are asked to do in the process of instruction – not what teachers think they are asking students to do, or what the official curriculum says that the students are asked to do, but what they are actually asked to do (pp. 22-23).

FIRST PRINCIPLE: Increases in student learning occur only as a consequence of improvements in the level of content, teachers’ knowledge and skill, and student engagement.

- There are only three ways to improve student learning at scale. The first is to increase the level of knowledge and skill that the teacher brings to the instructional process. The second is to increase the level and complexity of the content that students are asked to learn. And the third is to change the role of the student in the instructional process. That’s it. If you are not doing one of these three things, you are not improving instruction and learning.

- When educators think about “changing” instruction, they typically focus not on the instructional core, but on various structures and processes that surround the core. They might choose, for example, to group students in a particular way because of a theory about how grouping will affect the relationship of the student and the teacher in the presence of content. But it is not the grouping practice that produces student learning. Rather, it is the change in the knowledge and skill that the teachers bring to the practice, the type of content to which students gain access, and the role that students play in their own learning that determine what students will know and be able to do. If changes in grouping practices don’t alter the core, then the likelihood they will affect student learning is remote (p. 24).

SECOND PRINCIPLE: If you change any single element of the instructional core, you have to change the other two to affect student learning.

- …if your improvement strategy begins with a curriculum solution … then you have to invest in the new knowledge and skill required of teachers to teach that curriculum if you expect it to contribute to new student learning. A failure to address teachers’ knowledge and skill as part of a curriculum-based improvement strategy typically produces low-level teaching of high-level content, a situation we see with considerable frequency in American classrooms.

- If you raise the level of content and the knowledge and skill of teachers without changing the role of the student in the instructional process, you get another common situation in the American classrooms: Teachers are doing all, or most, of the work, exercising considerable flair and control in the classroom, and students are sitting passively, watching the teacher perform.
• We frequently hear educators talk about how well the lessons went, without reference to what students were actually doing and the visible evidence of what students actually knew as a consequence of the teaching. Mostly, the lesson has “gone well” when it has gone according to plan, without any specific reference to what students do or don’t know as a consequence of the teaching.
• We tend to focus more on what the teacher is doing in front of the classroom than we do on the work that is actually on top of the student’s desk.
• ...for any real improvement in student learning, one must ask:
  o How will this affect teachers’ knowledge and skills?
  o How will this affect the level of content in classrooms?
  o How will this affect the role of the student in the instructional process?
  o How will this affect the relationship between the teacher, the student, and content?
(pp. 25-27)

THIRD PRINCIPLE: If you can’t see it in the core, it’s not there.

The third principle is, in general, a good rule for the design of large-scale improvement strategies. It doesn’t matter how much money you’ve spent. Nor does it even really matter whether everyone thinks it’s a fantastic idea (since many people like best the changes that are the least disruptive). And, above all, it doesn’t matter whether everyone else is doing it. What matters is whether you can see it in the core. If you can’t, it’s not there.

The instructional core also helps us predict what we would expect to see happening to student learning over time. Here the central idea is the academic task. As an example, one of our superintendents’ networks was visiting a school in a network member’s district. This particularly thoughtful and active host superintendent had managed to make quite a lot happen instructionally in his district in a relatively short period. In our visit, we broke into groups of three or four and did a series of rotations through classrooms, with two groups seeing each of four classrooms at a given grade level for a period of time. We then observed the team meeting of the teachers in the grade level whose classrooms we had observed. So, essentially, we saw the instruction in each classroom and then we saw the teachers talking about the instruction in their team meeting. Because the district and the school had worked hard on curriculum alignment, the teachers were able to talk about a common lesson sequence they were teaching and about the work that students were producing in that sequence, according to a common assessment that all the teachers were using. This is a rather sophisticated system.

In the team meeting, a problem emerged. The student work was obviously quite variable from classroom to classroom. In one classroom in particular, there were a number of students whose assessment results suggested that they apparently did not understand the content. The team leader asked the teachers what they thought explained the differences among the classrooms. Each teacher offered an explanation. The explanations had mainly to do with the teachers’ interpretations of the students’ skill levels at the beginning of the unit. That is, the teachers felt that students who were struggling with the content had weak prior learning. So the discussion quickly shifted to what kind of remedial strategies one might use to bring those students up to the desired level.

What the teachers didn’t know – because they had never observed each other teaching – was that the actual work that we observed students doing, within a nominally common curriculum framework, was quite different in each of the four classrooms. And the level of the student work that was presented at the
grade-level meeting was quite close to the actual work that students were being asked to do in each classroom. In other words, the variability in student performance was a result of the teaching that was going on and the actual tasks that students were asked to do, not, as the teachers hypothesized, a result of the students’ prior knowledge. This was yet more evidence for a simple, but powerful lesson – hold on to your hats – teaching causes learning. In the absence of direct evidence on what her colleagues were doing, the team leader, whose students produced the most consistently high-level work, was projecting her own practice onto the practice of the other teachers on the team. This led her to suggest that the variability couldn’t be the result of differences in teaching, since “we’re all teaching the same thing.” In fact, they weren’t.

What was different in the four classrooms was what exactly the students were being asked to do an the degree to which the teacher engaged students in the work by scaffolding their learning up to the complexity of the task. The curriculum was the same; the tasks were different.

In one classroom, the teacher took twenty minutes of the fifty-five minute period explaining the task and directing students through a detailed procedural drill on what to do. The instructions were so complex that most students (and observers) couldn’t repeat them when the children were released to do work on their own. In another classroom, the teacher focused very little time on setting up the task, passed out the materials, and asked students to work individually on the task and to consult other students in their group if they got stuck. In yet another classroom, the teacher passed out the task, assigned roles to students at tables, and then circulated through the room answering individual students’ questions.

In the team leader’s classroom, the teacher spent less than five minutes reminding the students of how the task they were about to do was connected to the previous day’s work, asked the students what they had learned from that work, and then spent about five minutes walking students through a discussion of a model task that was similar to the one they were being asked to do. She then put students in groups, assigned roles, and circulated through the room. When we asked students in the first three classrooms what they were working on, none of them could reliably describe the task. When we asked students in the fourth classroom, they could reliably tell us what they were expected to do and tell us how it was connected to what they had done earlier.

It is important to add here that students in all four classrooms were “engaged,” by conventional definitions – that is, they were attentive, nondisruptive, and compliant. If you were doing a windshield survey of classroom climate in this school, with the typical supervisory checklist, you would see, without exception, classrooms that were quiet and orderly and in which the teachers had done everything that the external environment expected of them. The “Do Now” was in the upper left hand corner of the whiteboard; the specific objective of the day was prominently displayed, referenced to the appropriate state standard; the “Students Will Be Able to Do” was adjacent to the standard. If you stayed at the surface-level characteristics of the classroom, you would predict that students were all getting access to the same work.

But in reality, students were engaged in very different levels of work in different classrooms around a common curriculum unit. In the classroom where students were explicitly drawing on prior knowledge about how to address the task and where they had experience working individually and in groups, not surprisingly, they were relatively competent at doing what the teacher expected them to do, and they did it at a relatively high level. The teacher was free to work with individual students who were struggling with the task. Not surprisingly, things were different when the teacher was the main source of information on the task and the teacher’s practice at setting up the task was disconnected from the students’ understanding of it. Students were confused about the task and variable in their engagement.
with it. In our experience, the latter situation is much more common than the former in American schools. One of our favorite questions to ask students during an observation is “What’s going on here?” The most frequent response is, “I don’t know,” or “Ask the teacher – she knows.”

FOURTH PRINCIPLE: The task predicts performance.

- What predicts performance is what students are actually doing. The single biggest observation discipline we have to teach people in our networks is to look on top of the students’ desks rather than at the teacher in front of the room.
- Accountability drives the task system in the classroom. As a result, students are especially sensitive to cues that signal accountability or define how tasks are to be accomplished. In addition, students tend to take seriously only that work for which they are held accountable.
- But to do what they are expected to do, they must know not only what they are expected to do but also how they are expected to do it, and what knowledge and skill they need to learn how. When we put teachers and students in situations where the task is vague and unspecified, but the expectations for performance are specific and high, we are expecting them to do the right thing without knowing the right thing to do (pp. 30-31).

FIFTH PRINCIPLE: The real accountability system is in the tasks that students are asked to do.

- …people tend to be much more specific about what they expect by way of student performance than they are about what in classrooms would lead to the performance they desire. Trying to move performance in a system with a weak instructional culture is like pushing on a string. It doesn’t do any good to know that there is an instructional core and that the tasks that students are asked to do within that core actually drive student learning, if the core itself differs from one classroom to another and if people aren’t used to thinking about instruction as a collective practice.
- In most instances, principals, lead teachers, and system-level administrators are trying to improve the performance of their schools without knowing what the actual practice would have to look like to get the results they want at the classroom and school level. (p. 32)

SIXTH PRINCIPLE: We learn to do the work by doing the work, not by telling other people to do the work, not by having done the work at some time in the past, and not by hiring experts who can act as proxies for our knowledge about how to do the work.

- The genius of the medical rounds model is that the profession reproduces its practice and the surrounding culture through direct, face-to-face interactions around the work. The education sector, which is no less knowledge-intensive than medicine at its core, has no such culture-building practice. Education is essentially an occupation trying to be a profession without a professional practice (p.33).
SEVENTH PRINCIPLE: *Description before analysis, analysis before prediction, prediction before evaluation.*

- You build a common culture of instruction by focusing on the language that people use to describe what they see and by essentially forcing people to develop a common language over time. In the absence of such a language, what you mean by some key term – *student engagement*, for example – might be completely different from what your colleague means by it, and you end up agreeing to disagree because it’s too hard to figure out how to negotiate your differences.

- *Analysis* is getting people to work at grouping what they see into mutually agreed-upon categories and to start to make some judgments about how the categories are related to each other. *Prediction* is learning to use the evidence of observation and the analysis to make casual arguments about what kind of student learning we would expect to see as a consequence of the instruction we have observed.

- The escalating demands of teaching practice are such that the knowledge and skill required to do the work is beyond the experience and practical knowledge of the people charged with supervision.

- Our most common advice to principals entering teacher grade-level meetings is, “Turn off your walkie-talkie, sit down, be quiet, and listen for at least ten minutes. Then, the first words out of your mouth should be a question to which you do not know the answer.”

- …when people ask us, “What more can we do at the system level to foster improvement in schools and classrooms?” our answer is, “Don’t broaden the work with new initiatives; deepen the work with greater focus on building a strong culture of instructional practice.” They need a more powerful, coherent culture of instructional practice.

- The schools that are failing to respond to the best ideas about school improvement essentially have no capacity to mount a coherent response to the external pressure, because they have no common instructional culture to start with. These are organizations for the private practice of teaching. The schools that are staying the same typically have figured out how to meet the requirements of the system without changing the default culture. The schools that are getting better typically have managed to create, by their own devices, a more powerful instructional culture within their walls (pp. 34-37).