

Think of triangulation as the step in which new clues are gathered to help explain more thoroughly what is happening around the issues raised by the Exploratory Question. If PLCs spend adequate time sifting through these artifacts, processing what they're seeing, and noting learning and instructional gaps, then the next tasks of the Data Action Model should follow seamlessly.

## Do First: Identify Learning Gaps

Student learning gaps get recorded on the Artifact Tracking Sheet during the triangulation step (see Figure 6, p. 42). Some gaps recorded will be relatively insignificant. For example, in pursuing artifacts related to an Exploratory Question about why students struggle in writing evidence-based persuasive essays, a learning gap on appropriate citation of Internet sources may be relatively insignificant in the bigger scheme of things. It's not that knowing how to cite Internet sources is *not* important, but taking action to correct this gap does little to address the Exploratory Question on writing evidence-based persuasive essays; therefore, this gap is a distraction to the team's main focus. Other gaps recorded on the Artifact Tracking Sheet will be representative of only a handful of students and not prominent throughout the class.

Continuing with the previous ELA example, in reviewing a particular sample of student work, teachers may notice students' misuse of argument by appeal to authority. Although the gap pertains to the team's Exploratory Question and should be noted on the Artifact Tracking Sheet, it may be an issue with only a small group of students. That is, the gap, although *significant*, may not be *prominent*. Again, as mentioned in Data Meeting 2, it is useful to record a numerical rating of each gap's significance and prominence. Although both of these ratings are subjective, they help the teacher teams focus on the most important and widespread gaps they are observing. This is not to say that the other gaps are unimportant; it is the team members who must decide whether and to what extent they will address these gaps.

Many learning gaps uncovered and recorded from sifting through the artifacts will be both significant and prominent. These are the gaps that significantly affect the answer to the Exploratory Question and that are widespread throughout the population of students. Moreover, these gaps are likely to be noted independently by several members of the PLC as they examine artifacts. In fact, one of the defining characteristics of a prominent gap is that it is noted by more than one teacher; this is a testament to its prominence. All of these indicators make for a relatively easy decision to target these learning gaps for further exploration and action for improvement.

## Do Second: Identify Instructional Gaps

Identifying instructional gaps may *seem* like the logical next step, but it has been my experience in working with teacher teams that they all too often skip this essential step. PLCs are often comfortable identifying gaps in their students' learning and then moving swiftly to a plan of action for their students. The problem with this approach lies in teachers' failure to connect the observed student gaps with what it is they themselves are (or are not) doing in the classroom. Without connecting observed gaps in students' learning to teachers' behaviors, we become hard-pressed as educators to create plausible plans of action that will remediate those learning gaps. We must look at our instruction if we are to make changes that affect student learning. Otherwise, the conversation becomes centered on what the students aren't doing, on what the students can't do, on what the students don't know, on what the students didn't learn last year, and so forth. All of these factors are related and important, but their existence most often follows corollarily from what it is that *we* are or are not doing. In my experience, the teacher teams that make the greatest strides in instructional improvement are those that are comfortable looking regularly at their practice and with sufficient scrutiny so as to make meaningful changes.

## Linking Learning Gaps to Instructional Gaps

There often comes a point during data discussions about learning gaps in which team members spend an inordinate amount of time talking about things over which they have little or no control. Undoubtedly, comments such as "Ten of the 27 students in my class have IEPs," "More than half of the 8th grade students in Applied Science are reading at a 4th grade level," or "My English language learners are illiterate in their own native language" reflect genuine impediments to student learning. Sadly, they are also matters over which teachers have little control. Teachers often wind up making statements like these not because they are reluctant to accept responsibility for their students' learning; my experience points to the contrary. Rather, making such observations seems to be a natural tendency when overworked, underpaid, and well-intentioned teachers come together and discuss possible reasons why their students are underperforming in certain areas. Understandable though this behavior may be, it can also lead teacher teams down a path of helplessness and squandered time, and the result is a general lack of productivity.

When this common but potentially derailing phenomenon occurs, PLC facilitators are often at their wit's end to bring the conversation back to a more productive exchange. The challenge in doing this often lies in the fact that the problems teachers identify, while out of their control, are real obstacles that *do* inhibit classroom instruction and student learning. To dismiss such concerns or treat them as invalid would be unfair to teachers. So, to help reel in teachers when the conversation turns to external forces, I refer to the graphic in Figure 7, which

I often sketch on chart paper or a whiteboard during data meetings. I use it to call the team's attention to the fact that some of the obstacles being discussed, while valid and significant, hover in the outer region of "no direct or indirect influence." We stand to make the biggest difference for our students when we focus on the obstacles in those areas where we have at least some influence. Of course, the graphic is not a panacea to address wayward discussions, and it clearly does not address the real external forces that teachers may have mentioned, but it does remind teachers that some obstacles *are* subject to our direct or indirect influence. When more pessimistic teachers claim that they have influence over very few obstacles, I generally retort that it should be easy in that case to list them—and so we do.

## Listing the Gaps

After teacher team members have discussed the student learning gaps of greatest prominence and significance, using their Artifact Tracking Sheets as a guide, they list these in the left column of a two-column Google document or on a whiteboard or chart paper. In the right column, they list any instructional gaps they cited that are connected to the recorded student learning gaps. For example, a team may list "trouble solving equations when the variable is on the right side of the equation" under "Student Learning Gaps," and then write "insufficient practice with equations whose variable is on the right side" under the "Instructional Gaps" column. This example may seem simplistic, especially since it has an obvious solution: providing more practice to the students. However, it is not uncommon for both learning gaps and instructional gaps to be remedied just that simply, and therefore they should be noted in the document so that their fix does indeed wind up in the Data Action Plan (see Data Meeting 4). Once the PLC has spent 30 minutes or so discussing instructional gaps and aligning them to the identified learning gaps, it's time for the team to articulate a goal.

## Do Third: Set a Target Learning Goal

As is the case with many steps in the Data Action Model, if the team does a good job with any one step, the next step generally follows with little effort. Setting a Target Learning Goal is an obvious extension of identifying student learning gaps. At this point in the model, the teachers in the PLC are not concerning themselves with how the goal may best be achieved but only with setting the goal. The goal set by the teacher team may or may not be a *SMART goal*. The SMART acronym refers to a goal that is specific, measurable, attainable, relevant, and time-bound (Doran, Miller, & Cunningham, 1981). Consider each of these SMART attributes in the context of the Data Action Model as presented in Figure 8.

Here are some examples of SMART Target Learning Goals:

- The percentage of 7th grade students meeting or exceeding the standard in operations with fractions will increase by 30 percent.
- At least 80 percent of 4th grade students will score a 3 or 4 on the Writing Rubric dimension “Citing Evidence from Text.”
- At least 60 percent of Algebra 2 students will be able to solve problems involving exponential functions in nonroutine contexts with at least 75 percent accuracy in final answers and 90 percent accuracy in their approach.
- By the end of the first quarter, 100 percent of 1st grade students will be able to use their student dictionaries to look up new and unfamiliar words.

## Do Fourth: Decide on an Evaluation Metric

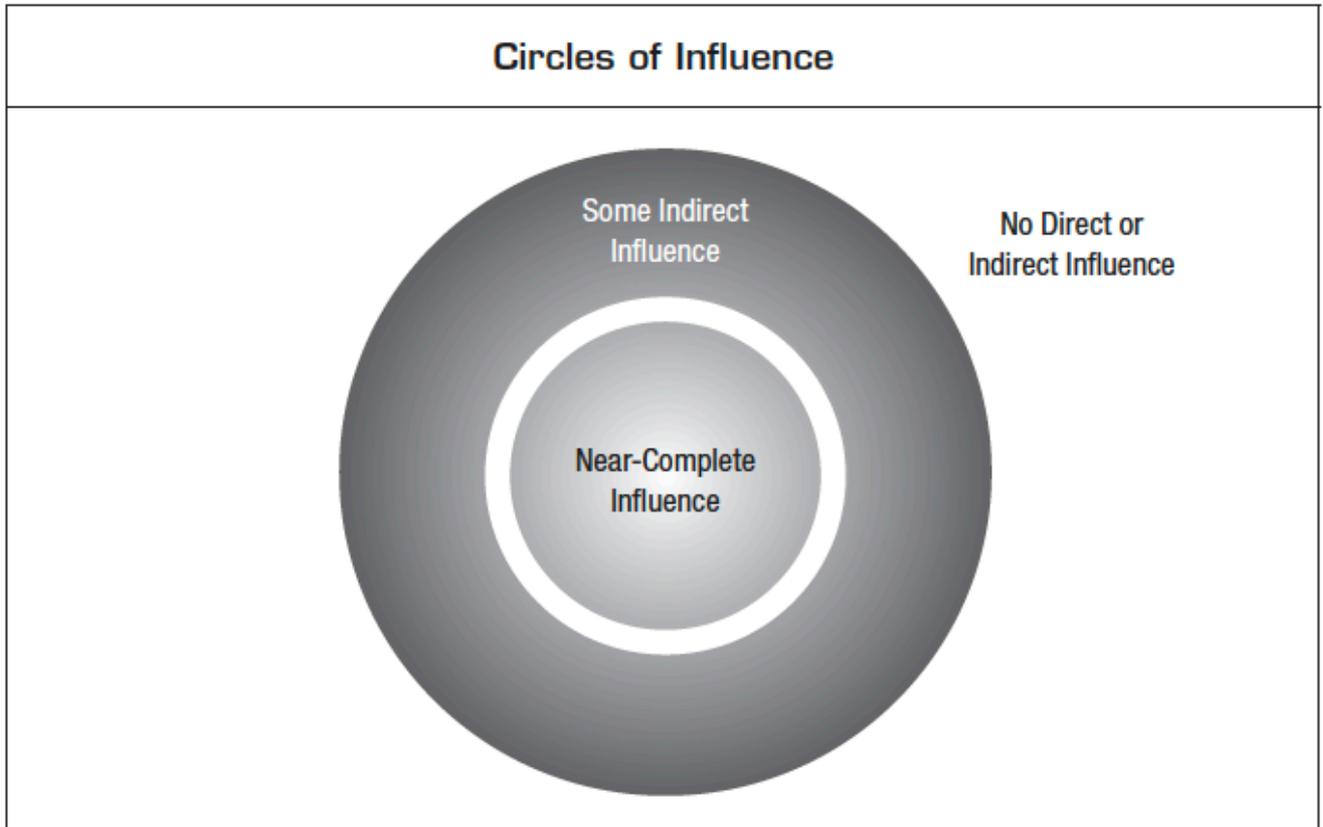
The final task for the teacher team to complete during Data Meeting 3 is to decide how it will know whether it has achieved its goal. This next step may seem obvious, but I have witnessed many instances of teams setting a goal and then immediately pursuing the goal with no clear sense of how they will know whether and when they have reached their goal. In these cases, teams proceed with a vague sense of the stopping point of the data cycle and with an equally vague aim at their Target Learning Goal. Therefore, it is important for teams to decide on an evaluation metric for their goal before they begin pursuing it. This recommendation is akin to teachers writing assessments on an upcoming unit before instruction begins. Writing assessments ahead of instruction keeps instruction focused on the goal.

In nearly all cases, the evaluation metric most commonly used is some type of student assessment. After all, if we are trying to decide whether the goal set for students has been reached, some form of assessment of our students’ learning is the most logical way to do so. This assessment may be a teacher-designed test, a textbook post-test, a portion of a standardized test, or a quiz covering the content described in the learning goal. It may be relatively short, like a 10-question quiz, or it may be a culminating project or presentation or virtually any performance-based assessment. It may be written, oral, or digital in format. It may be given to the class as a whole or administered to students individually or in small groups. The point is that the assessment should measure whether or not the Target Learning Goal has been achieved. Precisely how this evaluation is done is less important than the fact that it is done.

As teachers who have worked with me know, I am a big advocate of “less is more” in most educational realms, especially when it comes to assessments. If a 10-question quiz can adequately assess student mastery and provide reliable evidence that a goal was or was not reached, I’m all for that. Teachers are too busy to burden themselves with writing long and elaborate assessments to measure their learning goals. If the job can be done simply, briefly, and reliably, then that is how they ought to do it. Teachers who use a pre-test before they begin instruction (often provided by the publisher of whatever materials they are using) can modify the pre- test to use later as an evaluation metric.

Once the team has set the goal and chosen the mechanism to assess how well the goal was reached, it is time to design an action plan that will be carried out where it matters most: in the classroom. This is the subject of the next chapter.

— Figure 7 —



— Figure 8 —

SMART Goals in Context	
SMART Characteristic	Application to Data Action Model
<b>Specific</b>	The goal is appropriately sized. Avoid goals that are too granular or too general.
<b>Measurable</b>	The goal is measurable, at least subjectively. If a goal is not measurable, there is no clear way to determine whether it has been reached.
<b>Attainable</b>	The goal is reachable. For example, stating that 100 percent of students will read on grade level by a certain date may sound appealing but may not be realistic, depending on factors like students' current reading level, the number of English language learners, and so forth.
<b>Relevant</b>	The goal directly addresses identified learning gaps.
<b>Time-bound</b>	There is a target completion date for the goal. (Details of the time line will be addressed in the Data Action Plan during Data Meeting 4.)

