

**A New Approach to District and School Improvement:
The Right Data, at the Right Time, and a Process to Understand and Apply the Data
Center on Innovation & Improvement**

In his book *The Information: A Theory, A History, A Flood*, James Gleick (2011) traces the evolution of “information” from ancient African drummers sending messages across the miles to the vast and retrievable storehouse of data in the internet’s cloud. While we now firmly reside in the Age of Information, we have not quite caught up with the enormous and rapidly changing opportunity that technology provides. We struggle with Information Overload. Finding, sorting, filtering, categorizing, understanding, and applying needed information remains a challenging proposition. Of course, this isn’t a new experience. Aristotle looked at the immense natural, social, and political world and sought to organize it into understandable categories and definitions. That has been the work of philosophers and scientists ever since. Linnaeus did the same thing two thousand years after Aristotle by establishing a system to categorize and define the species of animals and plants. Educators, charged with bringing a vast, varied, and often conflicting research base into practice, seek ways to streamline the inflow of information, make sense of it, and structure it in useful ways.

For more than a decade, the standard approach to district and school improvement has been to:

1. analyze student outcome data;
2. identify areas of relative weakness;
3. set goals to remediate the shortcomings; and
4. develop annual plans to achieve the goals.

This approach is simple enough, and seems to make sense. But it suffers from flaws in logic that have made it an anemic driver of improvement, including:

1. outcome data do not reveal the causes of the outcomes, so data on professional practice are necessary to complete the equation;
2. relative weaknesses (and strengths) fluctuate from time to time, making us chase after moving targets;
3. districts and schools are complex organizations, and the interplay of many factors across the district or school culture impact outcomes—basing goals on isolated, current weaknesses in student outcomes over-simplifies the cause-effect relationships;
4. reaching goals means changing practice, and knowing which practice to change and how to change them requires a clear grasp of the immense body of often conflicting research literature;
5. understanding effective practice and knowing the current level and extent of effective practice in the district or school still falls short of knowing how practice is changed;
6. changing practice in a district or school culture means changing the culture itself, expecting universal fidelity to sound practice rather than targeted intervention with the currently perceived areas of weakness determined only by outcome data.

Or, to put it more simply, what adults do determines how students perform. While we have developed sophisticated means for assessing student outcomes, our methods for assessing professional practice and continuously improving it fall short. The two data sources—what adults do and how students perform—go hand-in-hand, and basing improvement efforts only on one without the other will not drive significant improvement.

In the final analysis, the people closest to the student have the greatest impact on the student's performance. An effective improvement process places tools and resources in these people's hands. The process is not as simple as the development of a plan. The improvement process itself must be a "learning experience" for the people engaged in it so that they constantly grow in their understanding of the process itself and the professional practices that affect student performance. In *The Talent Code*, Daniel Coyle (2009) explains that learning is dramatically accelerated when conducted within the "sweet spot" where the challenge is sufficient to sustain engagement and the task is within reasonable reach. An improvement process must provide adequate structure and guidance while still leaving room for the people engaged in it to struggle a bit to gain understanding and skill.

The Indistar® system provides the structure, guidance, and resources for a continuous improvement process administered by a Leadership Team. **Indistar® is as much a professional development process as a planning process.** Engaged in the work with candor and diligence, the Leadership Team finds itself in the "sweet spot," gaining understanding and skill, solving problems, applying lessons to the immediate context, considering the human dimension of change relative to the people around them. By extension, the Leadership Team's work is carried out by everyone within the district or school community, enabling them also to gain understanding and skill.

Indistar® assumes that the district or school has access to student learning data, and if not then its indicators guide the Leadership Team in making the data available. Student learning data includes state assessments, other annual assessments, periodic (benchmark) assessments, and teachers' formative assessments. With these ample sources of information about what students know and can do, Indistar focuses on the other side of the equation—what the adults do that determines how students perform. In this arena, the Leadership Team and the rest of the district or school community engage in what Coyle calls "deep practice," not mere planning and reporting but candid and diligent immersion in the work.

In assessing the current level of implementation of an indicator of effective professional practice in the district or school, the goal is not to simply check off an item but to acquire a deeper understanding of the practice and achieve a high degree of consistent application of it. To provide evidence of full implementation, the Leadership Team must ask and answer several questions:

1. What is the straight-forward, literal meaning and intent of the indicator?
2. How would we know the extent to which the indicator is implemented?
3. What data must be analyzed to determine the level of implementation?
4. What instruments must be created to gather the data?
5. Who will make the data available?

6. What does it look like now?

By placing the requirement for determining the necessary data sources, gathering the data, and analyzing the data on the Leadership Team, the Leadership Team is engaged in “deep practice.” Not as simple as a checklist, but much more likely to yield greater understanding and skill and to drive the district or school’s improvement.

The planning and progress monitoring steps in Indistar® require the same amount of Leadership Team engagement as the assessment step. The plan is specific to the indicator of effective practice, now expressed as an objective. The team first determines “what it will look like” when the objective is met. The plan must make sense within the context of the district or school. The plan includes actionable tasks, persons responsible, and a timeline. The tasks are sequential, specific, the practical steps to build the understanding and capacity of people to demonstrate full implementation, and the data needed to know that the objective is met.

The plan for each objective must have a reasonable expectation of leading to full implementation, and when it does not, the plan is revised. In monitoring progress, the Leadership Team manages the completion of tasks for each objective and, when tasks are completed for an objective, the Leadership Team assesses the level of implementation. If the Leadership Team determines that the objective has been met, then the team addresses the questions listed above. If the Leadership Team determines that the plan has not resulted in a fully implemented objective, the plan is revised and more tasks added. This is not simple work, but “deep practice.” This is how people learn best and districts and schools are significantly improved.

To help the Leadership Team (and the district and school community) stay on track, sort through the research, and arrive at a clear understanding of effective professional practice, Indistar® provides support through:

1. The coaching feature that enables someone with expertise external to the district or school to follow the work of the Leadership Team, in real time, and offer guidance.
2. Wise Ways® briefs that provide a context for the indicator, research syntheses, examples, and references.
3. Indicators in Action™ tutorials with narrative and video demonstration of the indicators by administrators, teachers, and parents.

Working with indicators, each aligned with research, is an efficient way to cut through information overload and narrow the district or school’s focus to what matters most. Think of how a curriculum is developed for students. From all the vast information in the world, someone must decide what a student should know and do. In a standards-based system, order is created by establishing goals, standards, benchmarks, and grade-level or course-level performance objectives. This is done within broad subject areas like Reading/Language Arts, Mathematics, Science, Social Studies. By establishing these domains and structuring standards-aligned content within them, a manageable curriculum is built

from the vast and inchoate information in the world. Sounds like what Aristotle and Linnaeus attempted, doesn't it?

Indicators of effective practice are similarly organized to make sense of the vast information about professional practice. The typical structure is Domain (Category in Indistar), Effective Practice (Section in Indistar), Sub-section (where applicable), Sub-sub-section (where applicable), and Indicator. Each state determines its method of categorization and the indicators to place within it. Organizing effective professional practice in this way is akin to developing a standards-based curriculum. It creates order and reduces the effort necessary to extract meaning from the research.

In *The Social Animal*, David Brooks (2011) describes the psychology of attachment and the related concept of "reach and reciprocity". He quotes John Bowlby, the British psychologist, saying "All of us, from cradle to grave, are happiest when life is organized as a series of excursions, long or short, from the secure base provided by attachment figures" (p. 61). An example of this attachment phenomenon is seen in the behavior of a toddler in a room with her mother on one side and a stack of toys on the other. At first the toddler clings to her mother. She takes a few steps toward the toys, and then pauses to look back at her mother. In time, the toddler arrives at the stack of toys, plays, but keeps an eye on her mother. This tug and pull pattern continues through life, as we reach, then return to a secure place, and then reach again.

Brooks expands the idea of attachment by citing the work of Richard Ogle in *Smart World*. When we are engaged in learning, Ogle states, we begin from the base of what we know. Then we venture into a complex web of information beyond our current understanding, absorb some of it, and then return to our base to enhance what we know. Then we venture out again. Piaget would call this the process of assimilation and accommodation. We are motivated to change in a state of disequilibrium and strive to achieve equilibrium.

The world of education research is vast. We begin from what we know, venture out, absorb new understanding, and then return to our base to enhance it. Indistar® provides a roadmap in our venturing out and a secure base to which we can return. Engaged in "deep practice," we find the "sweet spot" where we learn best.

References

- Brooks, D. (2011). *The social animal*. New York: Random House.
Coyle, D. (2009). *The talent code*. New York: Bantam Dell.
Gleick, J. (2011). *The information: A theory, a history, a flood*. New York: Pantheon Books.