



## How Will We Respond When Some Students Don't Learn?

Marty Mathers, principal of the Puff Daddy Middle School (nickname: the Rappers), knew that his eighth-grade algebra teachers were his most challenging team on the faculty. The team was comprised of four people with very strong personalities who had difficulty finding common ground.

Peter Pilate was the most problematic teacher on the team from Principal Mather's perspective. The failure rate in his classes was three times higher than the other members of the team, and parents routinely demanded that their students be assigned to a different teacher. Ironically, many of the students who failed Mr. Pilate's class demonstrated proficiency on the state math test. Principal Mathers had raised these issues with Peter, but found Peter to be unreceptive to the possibility of changing any of his practices. Peter insisted that the primary reason students failed was because they did not complete their daily homework assignments in a timely manner. He refused to accept late work, and he explained that the accumulation of zeros on missed assignments led to the high failure rate. He felt strongly that the school had to teach students to be responsible, and he made it clear that he expected the principal to support him in his effort to teach responsibility for getting work done on time.

Alan Sandler was known by the students as the "cool" teacher. He had excellent rapport with his students and a great sense of humor that made his classroom and entertaining environment. Most of his students earned As and Bs in his course; however, each spring, almost half of them would fail to meet the proficiency standard on the state exam.

Principal Mathers was aware of yet another trend in Charlotte Darwin's math classes. He knew they could start out with a large number of students in her algebra sections each year because by early October she would recommend that many of them be transferred to the pre-algebra program. She felt it was unfair to keep students in a program where they lacked the skills for success. The students who remained in her algebra class usually scored slightly above the state average on their proficiency examination.

Henrietta Higgins was a true joy to have on the faculty. She was relentless in holding students accountable but perfectly willing to sacrifice her personal time to help students be successful. She monitored their achievement constantly, and if a student began to fall behind, she required the student to meet with her before or after school for intensive tutoring. Her students always met or exceeded the proficiency standard on the state assessment.

Principal Mathers was increasingly uncomfortable knowing that students' experiences in the eighth grade math program varied so greatly depending on which teacher they had, but he was uncertain of how to address the situation. Two parent phone calls in late September convinced him he could no longer ignore the disparities in the program.

DuFour, R, Dufour, R & Eaker, R. (2010). *Learning by doing: A handbook for professional learning communities at work*. Bloomington, IN: Solution Tree

The first phone call came from a parent who objected to Charlotte Darwin's recommendation to move her student to pre-algebra. The parent was familiar with the math program at the high school and recognized that if her son did not complete algebra in the eighth grade, he would never have access to the honors math program there. She was certain her son could be successful if he was given some extra time and support to master content in which he was experiencing some initial difficulty. She had asked Ms. Darwin to tutor her son after school, and Ms. Darwin had flatly refused to do so. The parent was aware that Ms. Higgins routinely tutored students after school, and she demanded that Principal Mathers either direct Ms. Darwin to provide the same service for her son or transfer her son to Ms. Higgins' class.

Principal Mathers knew he could not demand that Ms. Darwin extend her contractual day to tutor students after school. He also realized that she was a single parent who constantly struggled to find quality day care for her pre-school-aged child. He felt the only solution was to transfer the student to Ms. Higgins class.

Before he could make the transfer, he received a second parent complaint, but this time Ms. Higgins was the target. The parent objected to the fact that Ms. Higgins was demanding her son stay after school to get extra help in math. She needed her son to come home immediately after school because he was responsible for caring for his younger sister until his mother came home from work. She did not want her daughter left unsupervised. Her son could not come in before school either because he walked his sister to school. She argued that none of the other math teachers required students to stay after school, and she felt it was unfair for Ms. Higgins to do so.

Principal Mathers certainly did not want to undermine Ms. Higgins. His initial thought was to pursue the easy solution: transfer the two students into the other teacher's class. He recognized, however, that his strategy offered only a temporary solution and left the real problem unresolved. He was uneasy about a program that was, in his mind inherently unfair in its treatment of students. It was as if the school was playing an educational lottery with the lives of children—rolling the dice to see which students would receive an excellent opportunity to learn algebra and which would not. He was determined to address this inequity, but he was not sure how.

### *Reflection*

*Consider the dilemma presented in this case study; it is a dilemma that is played out in schools throughout North America each day. What are the problems and what steps should the principal take to begin addressing the issues?*

## **Six Characteristics of the Professional Learning Community Model**

### **A Focus on Learning**

The very essence of a learning community is a focus on and a commitment to the learning of each student. When a school or district functions as a PLC, educators within the organization embrace high levels of learning for all students as both the reason the organization exists and the fundamental responsibility of those who work within it. In order to achieve this purpose, the members of a PLC create and are guided by a clear and compelling vision of what the organization must become in order to help all students learn. They make collective commitments clarifying what each member will do to create such an organization, and they use results-oriented goals to mark their progress. Members work together to clarify exactly what each student must learn, monitor each student's learning on a timely basis, provide systematic interventions that ensure students receive additional time and support for learning when they struggle, and extend and enrich learning when students have already mastered the intended outcomes.

A corollary assumption is that if the organization is to become more effective in helping all students learn, the adults in the organization must also be continually learning. Therefore, structures are created to ensure staff members engage in job-embedded learning as part of their routine work practices.

There is no ambiguity or hedging regarding this commitment to learning. Whereas many schools operate as if their primary purpose is to ensure that children are taught, PLCs are dedicated to the idea that their organization exists to ensure that all students learn essential knowledge, skills, and dispositions. All the other characteristics of a PLC flow directly from this epic shift in assumptions about the purpose of the school.

### **A Collaborative Culture With a Focus on Learning for All**

A PLC is composed of collaborative teams whose members work interdependently to achieve common goals linked to the purpose of learning for all. The team is the engine that drives the PLC effort and the fundamental building block of the organization. It is difficult to overstate the importance of collaborative teams in the improvement process. It is equally important, however, to emphasize that collaboration does not lead to improved results unless people are focused on the right issues. Collaboration is a means to an end, not the end itself. In many schools, staff members are willing to collaborate on a variety of topics as long as the focus of the conversation stops at their classroom door. In a PLC, collaboration represents a systematic process in which teachers work together interdependently in order to impact their classroom practice in ways that will lead to better results for their students, for their team, and for their school.

### **Collective Inquiry into Best Practice and Current Reality**

The teams in a PLC engage in collective inquiry into both best practices in teaching and best practices in learning. They also inquire about their current reality—including their present practices and the levels of achievement of their students. They attempt to arrive at consensus on vital questions by building shared knowledge rather than pooling opinions. They have an acute sense of curiosity and openness to new possibilities.

Collective inquiry enables team members to develop new skills and capabilities that in turn lead to new experiences and awareness. Gradually, this heightened awareness transforms into fundamental shifts in attitudes, beliefs, and habits which, over time, transform the culture of the school.

Working together to build shared knowledge on the best way to achieve goals and meet the needs of clients is exactly what professionals in any field are expected to do, whether it is curing the patient, winning the lawsuit,

or helping all students learn. Members of a professional learning community are expected to work and learn together.

### **Action Orientation: Learning by Doing**

Members of PLCs are action oriented: They move quickly to turn aspirations into action and visions into reality. They understand that the most powerful learning always occurs in a context of taking action, and they value engagement and experience as the most effective teachers. In fact, the very reason that teachers work together in teams and engage in collective inquiry is to serve as catalysts for action.

Members of PLCs recognize that learning by doing develops a deeper and more profound knowledge and greater commitment than learning by reading, listening, planning, or thinking. Traditional schools have developed a variety of strategies to resist taking meaningful action, preferring the comfort of the familiar. Professional learning communities recognize that until members of the organization “do” differently, there is no reason to anticipate different results. They avoid paralysis by analysis and overcome inertia with action.

### **A Commitment to Continuous Improvement**

Inherent to a PLC are a persistent disquiet with the status quo and a constant search for a better way to achieve goals and accomplish the purpose of the organization. Systematic processes engage each member of the organization in an ongoing cycle of:

- Gathering evidence of current levels of student learning
- Developing strategies and ideas to build on strengths and address weaknesses in that learning
- Implementing those strategies and ideas
- Analyzing the impact of the changes to discover what was effective and what was not
- Applying new knowledge in the next cycle of continuous improvement

The goal is not simply to learn a new strategy, but instead to create conditions for perpetual learning—an environment in which innovation and experimentation are viewed not as tasks to be accomplished or projects to be completed but as ways of conducting day-to-day business, forever. Furthermore, participation in this process is not reserved for those designated as leaders; rather, it is a responsibility of every member of the organization.

### **Results Orientation**

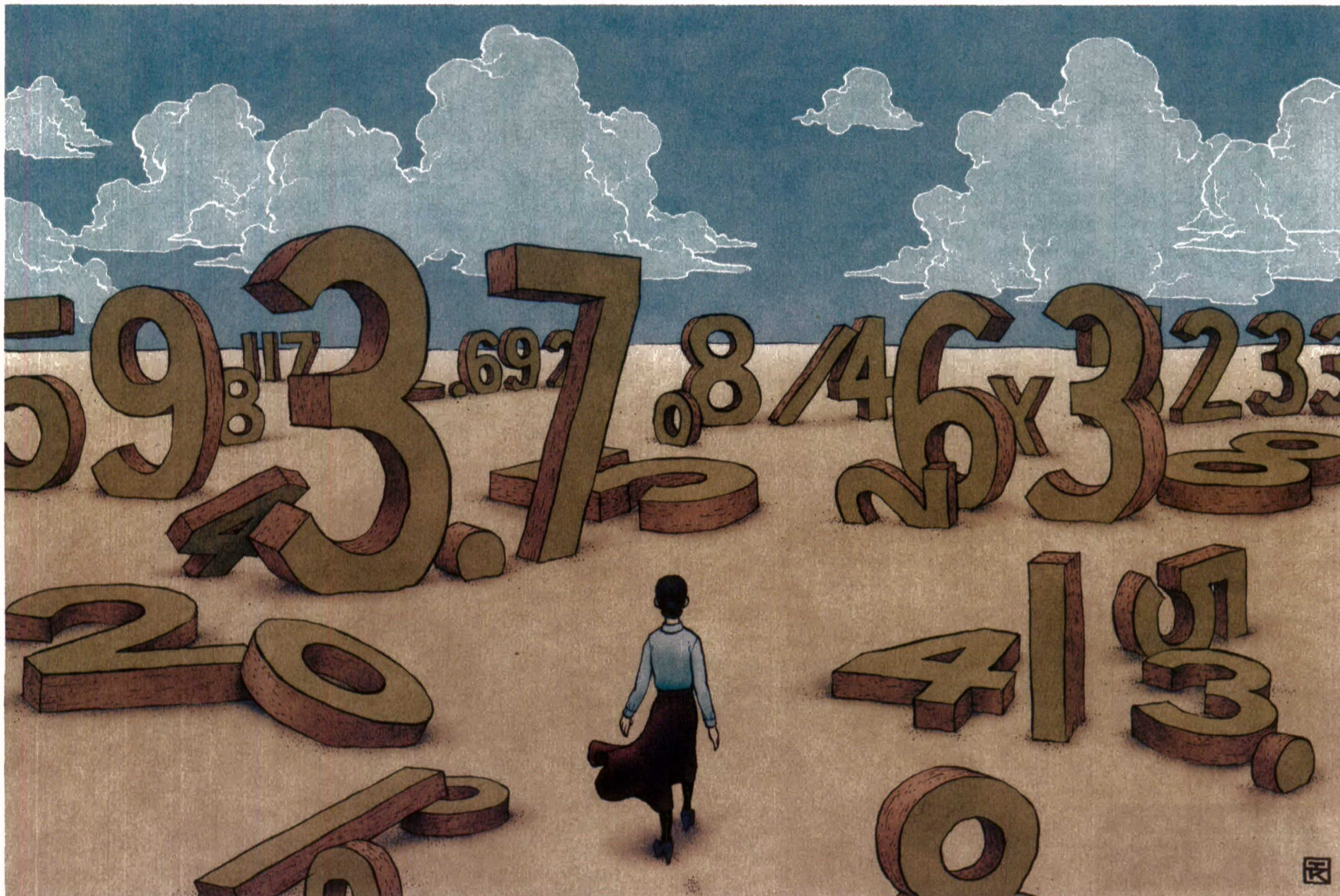
Finally, members of a PLC realize that all of their efforts in these areas—a focus on learning, collaborative teams, collective inquiry, action orientation, and continuous improvement—must be assessed on the basis of results rather than intentions. Unless initiatives are subjected to ongoing assessment on the basis of tangible results, they represent random groping in the dark rather than purposeful improvement.

This focus on results leads each team to develop and pursue measurable improvement goals that are aligned to school and district goals for learning. It also drives teams to create a series of common formative assessments that are administered to students multiple times throughout the year to gather ongoing evidence of student learning. Team members review the results from these assessments in an effort to identify and address program concerns (areas of learning where many students are experiencing difficulty). They also examine the results to discover strengths and weaknesses in their individual teaching in order to learn from one another. Most importantly, the assessments are used to identify students who need additional time and support for learning. Frequent common formative assessments represent one of the most powerful tools in the PLC arsenal.

## COMMENTARY

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Ian Kim

# My Nine 'Truths' of Data Analysis

By **Ronald S. Thomas**

**F**or over 20 years, I've been a data coach for hundreds of teachers, first as a top-level official in two Maryland school districts and now on the faculty of a university leadership center. I've had mountain-top experiences with school teams whose members really get what it means to use data to inform their instruction, and I've led sessions that were disasters.

Over the years, I have accumulated a set of what I first called "My Ten Commandments of Data Analysis." Then, I reconsidered one, and "nine commandments" just didn't sound right. So I now call them "My Nine Truths of Data Analysis." They are not necessarily *the* truths, but they are definitely *my* truths. I would be interested in how they compare with the thoughts and experiences of others.

**My first truth.** We don't need "data driven" schools. We desperately need "knowledge driven" schools. There is a big difference. Data are ways of expressing ideas, such as in numbers, sounds, and images, and they

“Data are ways of expressing ideas, such as in numbers, sounds, and images, and they have very little value and usefulness in and of themselves.”

have very little value and usefulness in and of themselves. Data are merely the building blocks of the information age.

Data are useless unless they are first organized into meaningful patterns called information. This transformation is, largely, a technical process of summarizing and putting the numbers into usable forms like charts and graphs. Schools are acquiring some skill at this, and commercially developed instructional-management systems (or data warehouses) are facilitating this process. But many schools are still drowning in data and information.

The real breakthrough in increasing student achievement is to transform informa-

tion into knowledge. Knowledge is applying information appropriately and productively in a contextual situation. In his classic text *Leading in a Culture of Change*, Michael Fullan maintains that generating knowledge is primarily a social process. This means that, in a school setting, knowledge emerges through a collaborative process as teachers and administrators engage in conversation, primarily in school teams. When knowledge is used sensitively and humanely to enable the school to continually improve, schools are becoming—as business guru Peter Senge envisioned—true learning organizations.

**My second truth.** Data analysis is not about numbers. It is all about improving instruction. All educators can be involved, whether they are number wonks or number phobics. I am a former middle school social studies teacher. If I can "do" data, *anybody* can "do" data.

**My third truth.** Data are not best analyzed alone, while you are sitting in front of a computer screen staring at Excel spreadsheets or colorful graphs. Data analyses are most effective when they are performed with other teachers who share the same standards and assessments, and who can discuss concretely and specifically, based on

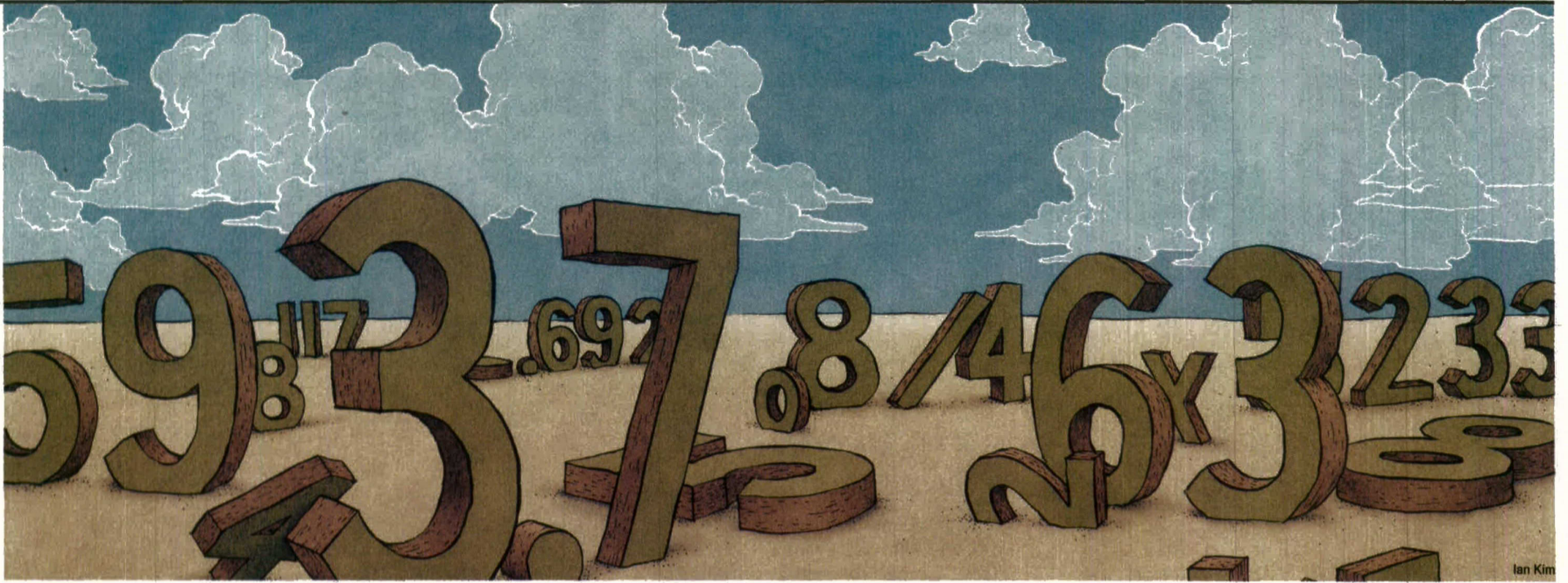
student results, what is working and what is not working to increase student learning in their context.

**My fourth truth.** Teacher teams need to be able to meet in "data dialogues" during the school day for 45 minutes to an hour at least once every two weeks, and more often, if possible. This time must be held sacred for data dialogues and not used for other purposes.

**My fifth truth.** The most productive data-driven teams follow established analysis protocols and enforce clear procedural and relationship norms. The Center for Leadership in Education at Maryland's Towson University, where I work, has developed the Classroom-Focused Improvement Process, an inquiry-based protocol for classroom teachers to use to analyze the results of district benchmarks and ongoing classroom assessments. These collaborative dialogues result in identifying

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## My Nine 'Truths' of Data Analysis

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classwide patterns of strengths and weaknesses for possible reteaching, students ready for enrichment and those needing interventions and what the focus of those interventions should be, and plans for improving instruction in the next unit. The protocol is being used successfully by teams throughout Maryland.

**My sixth truth.** The most important questions in data analyses are not "What did the students score?" and "How many passed?" The most important questions are: "What do the students know?" "What do they not know?" and "What are we going to do about it?" These questions are the focus of the Classroom-Focused Improvement Process.

**My seventh truth.** If educators are going to have a significant, long-term impact on student achievement, we must change the nature of the ongoing work of the adults

in a school. We have achieved maximum impact from using student interventions as the primary improvement strategy. There is just no more time left in the school day, and no more energy left in the children. For accelerated progress, we need to center faculty members on strengthening the alignment of their curricula, instruction, and assessment around the standards—be they the current state standards or the common-core national standards on the horizon.

**My eighth truth.** We need to build the capacity of teacher teams to reflect on their work and to make ongoing instructional adjustments based on their analysis of what does and does not work for their students. Professional development alone is not enough to build this capacity. We will need greater program coherence, often called "increased focus," and the cultivation of educator learning communities dedicated to practicing collaborative inquiry.

**My ninth truth.** None of these steps is going to have any

impact unless, as educational leaders, we clearly articulate compelling reasons why teachers should invest time and effort in data analysis. The message to teachers must be that their work is not about abstract concepts of state accountability or school improvement. We did not get into this business to increase state test scores or to implement federal mandates. We are here to help children learn.

So, let's end the talk of AYP and Race to the Top. Let's talk instead about our moral purpose, which is, as Fullan reminds us, twofold: to increase the achievement of all students and to eliminate learning gaps.

Daniel Pink's recent research in *Drive: The Surprising Truth About What Motivates Us* confirms that each of us yearns to be of service to something larger than ourselves. What better moral purpose can there be than increasing achievement and reducing gaps? After all is said and done, isn't that why we are here? ■

## Against the Whole-Class Novel

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read longer, stronger, and faster.

Consider how carefully children and teenagers curate their interests. Think about how much they want to be recognized for what they like. This is especially true now: On Facebook, you broadcast what you like, because you know that what you like is part of who you are. Even the youngest child "curates" his shelf of toys or his stack of Lego creations. Now, more than ever, thanks in large part to technology, the act of reading can be a deeply personalized experience. A great and current example of this is the new iPad app called "Flipboard," which allows us to pull from many different sources to create our own, online personalized magazine.

Now is the time to teach our students to empower their own reading lives and power them forward, rather than passively waiting for us to select what will move them. When a child curates his own reading life, he willingly and independently connects his writing life to it. His Facebook status message, texts, and conversation will reflect the experience of reading.

Of course, you will have books that you feel truly belong in a canon. Perhaps you are hungering for your students' exposure to them. If so, consider reading them aloud, especially if a good number of students in your class are not reading independently at those levels. Or you could provide crucial beautiful excerpts from a beloved text that you then pair with a similarly themed selection from another book. Have your students respond and discuss the reading by text message, on a whole-class blog, or on a great website built just for these kinds of collaborations, such as voicethread.com.

Let's motivate our students to become curators of their reading lives. With our guidance, they will discover the texts they want to stay up late to read. And they will come to school the next day wanting to read more. They will ingest not just hundreds, but thousands of words each day, to fortify and empower themselves for this radiant new era that is upon us. ■

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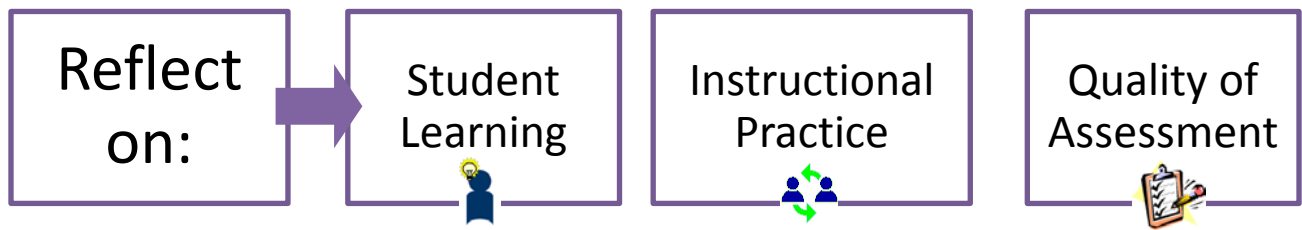
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# Data Analysis Protocol



## Phase 1: Active & Engage – Predictions & Assumptions – before looking at data

- What are some predictions we are making?
- What are some assumptions we are making?
- What are some questions we are asking?

### (Phase 1b: Go Visual)

## Phase 2: Explore & Discover – Analyze Data & Focus on Facts

- What important points seem to “pop out?”
- What are some patterns, trends, or categories that are emerging?
- What surprises you?

## Phase 3: Organize & Integrate – What Do We Do?

- What inferences, explanations, or conclusions might we draw?
- What additional data sources might we explore to verify our explanations?
- What are some solutions we might explore as a result of our conclusions?
- What data do we need to collect to guide implementation?

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