Rethinking Data: How to Create a Holistic View of Students

Taken from a posting on MindShift
The excerpt below is from "Hacking Education: 10 Quick Fixes For Every School," by Mark Barnes and Jennifer Gonzalez.

Collect a Different Kind of Student Data
For at least a decade now, the driving force behind education reform has been data. We talk about collecting data, analyzing data, and making data-driven decisions. All this data can certainly be useful, helping us notice patterns we might not have seen without aggregating our numbers in some way, looking for gaps and dips and spikes, allowing us to figure out where we are strong and where we need help. In terms of certain academic behaviors, we can quantify student learning to some extent and improve our practice as a result.

And yet, we know this is not enough. We know our students bring with them so many other kinds of data. So many other factors contribute to academic success: the atmosphere in their homes, the demands of their out-of-school school schedule, the physical concerns that distract them, the passions and obsessions that consume them. These things are much harder to measure, so we don’t even try, focusing instead on the things we can convert to numbers.

Collect Data on the Whole Child
Most teachers make an effort to get to know their students, and many regularly distribute surveys at the start of each school year to speed up that process. The problem is, most teachers read these surveys once, then file them away. Sure, they might have every intention of returning to the surveys and reviewing them later, but far too often, that time never comes. We rely on our day-to-day interactions for relationship building, and although we get to know some students quite well this way, others just fade into the background.

A 360 Spreadsheet is a place for teachers to store and access the “other” data we collect on our students, giving us a more complete, 360-degree view of each student. It’s a single chart that organizes it all and lets us see, at a glance, things we might otherwise forget.

Many teachers already keep track of students’ birthdays. Think of this as a birthday chart on steroids. Here is one example:

<table>
<thead>
<tr>
<th>Name</th>
<th>Passions</th>
<th>Family</th>
<th>Activities</th>
<th>Academics</th>
<th>Food and Drink</th>
<th>Physical</th>
<th>Skills</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams, Toby</td>
<td>Chicago Cubs</td>
<td>Lives with mom and dad</td>
<td>Baseball, Chess, Drawing</td>
<td>Loves Percy Jackson books, Hates cursive</td>
<td>+ Peanut, MBMs, - Oysters</td>
<td>Asthma, Broke arm last year</td>
<td>Knows a little coding</td>
<td>New to the area, moved from Chicago, Scared of dogs</td>
</tr>
<tr>
<td>Carter, Jaylen</td>
<td>Fortnite, Martial Arts</td>
<td>Lives with mom, sister Kayla (3) and dog Reggie</td>
<td>Taekwondo, Do</td>
<td>Started to like math last year</td>
<td>+ BBQ, - Canoloupe</td>
<td>Left handed, Cooking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fong, Jenny</td>
<td>Earrings</td>
<td>Lives with mom, dad, sister Lucy (15) and brother Michael (7)</td>
<td>Soccer, Gymnastics</td>
<td>Loves to read, but doesn’t want to be seen carrying big books</td>
<td>+ Peaches, grapes, cherries, - Sour cream and onion potato chips</td>
<td>Occasional eczema, + Hair braiding, - Hats, Hair braiding, + Great with special needs kids, - Wants to be a pediatrician</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Favorite ELA Websites for Elementary Teachers

The following are just a few of the websites that offer teachers with classroom resources to assist with implementation of the ELA standards. 

**Goodreads:** Goodreads can organize shelves of books that have been read or they can be rated so others can check them out. Reviews can be written as well as the ability to share favorite quotes. The site can generate recommendations based on things that have been liked in the past and this site can be a place to send students in need of a good book.

**Character Scrapbook:** This website provides a creative way for students analyze characters. Students begin with ten things they know about the characters, using words to describe the character, appearance, personality, challenges, and accomplishments. Students can create up to six scrapbook pages for their character, with one page/category or topic. An illustration can be created and all pages can be printed.

**Reading Rockets:** This website brings the best research-based strategies to teachers, and anyone else involved in helping a young child become a strong, confident reader. Their goal is to bring the reading research to life — to spread the word about reading instruction and to present "what works" in a way that educators can understand and use.

**FCRR Student Activities:** The Florida Center for Reading Research offers a variety of ready-made activities aligned to the ELA standards that can be used as literacy centers, take-home activities, or for use with small groups. Click on a grade level and a hyperlinked chart with numerous activities can be accessed and printed.

**Into the Book:** Into the Book is a multimedia package designed to improve elementary students’ reading comprehension, as well as their ability to think and learn across the curriculum. Based on current research, the project focuses on eight learning strategies: using prior knowledge, making connections, questioning, visualizing, inferring, summarizing, evaluating and synthesizing. Into the Book was developed by Wisconsin Media Lab, with the Wisconsin Department of Public Instruction and a team of experienced educators.

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**Guidance for Literacy Task Design**

Illinois Literacy in Action is a website that highlights resources designed to assist teachers with some of the biggest challenges when implementing the ELA standards.

One resource that assists teachers is a guidance document for designing literacy tasks. These tasks have the standards at heart and also support the integration of reading and writing. These tasks also assist teachers in preparing students for state assessments.

The title of this resource is “Guidance for Literacy Task Design”. These grade specific, multi-step resources are available by clicking on the homepage, clicking on a grade level and then selecting “Guidance for Designing Literacy Tasks” under “The Essentials” heading.
#ShiftTheLift

Research shows American students are getting by too easily in most math classes. It is still common for the teacher to do most of the talking while the student remains a passive receptacle of information. Most educators know that the cognitive demand needs to shift to the student—where they are choosing the mathematical reasoning to apply and justifying the choices, but struggle with understanding how to accomplish this feat. Student Achievement Partners suggest four strategies to shift away from direct instruction toward learning environments in which the students are doing the work.

- Provide structures (such as collaborative groups, think-pair-share, shoulder partner talk, etc.) to provide safe ways for students to share their developing mathematical thinking.
- Resources: www.itreachandtalk.org/, Never Say Anything a Kid Can Say! article, Questions to Encourage Problem Solving
- Intentionally sequence sharing of student work to show the development of a mathematical idea.
- Resource: Selecting and Sequencing Students’ Solution Strategies
- Utilize incomplete and/or partially correct student work to honor and celebrate mistakes as learning opportunities.
- Resources: Mistakes Grow Your Brain
- Provide feedback and create the expectation that students revise their work.
- Resource: Feedback in the Mathematics Classroom

This conversation will continue during our upcoming #ILMathCom on Thursday, May 16 from 3:30 -4:30. Joanie Funderburk, Director of IM Certified Facilitators at Illustrative Mathematics, will discuss how math educators should stop working harder than their students and "Shift the Cognitive Lift" in math class. In this session, learn about tools for identifying when and how you might be doing this, and resources you can use to shift the cognitive lift back to your students. Register here.

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Free Professional Learning


Also, be sure to join us at one of our upcoming free, virtual #ILMathCom events. Check out www.mathteachersinaction.org/ilmathcom.html to access the complete listing of upcoming events, register for #ILMathCom events, or to watch the recordings of past events.

The Opportunity Myth: Thursday, May 2, from 3:30-4:30 PM CST
Mary Pittman, Project Director for TNTP, will share the results of TNTP’s newest national report, The Opportunity Myth, and we will discuss what commitments can we make as a profession to unravel the "Opportunity Myth"?

“When I was in front of the class demonstrating and explaining, I was learning a great deal, but many of my students were not! Eventually, I concluded that if my students were to ever really learn mathematics, they would have to do the explaining, and I, the listening.”

~Steven C. Reinhart, “Never Say Anything a Kid Can Say!”
Find Phenomena

Phenomena play an important role in science instruction. A phenomena is anything interesting that your students can use the science concepts and skills they develop to explain. The summer is a great time to look for phenomena that will engage your students as well as lead them on the path to figure out some science! The Impact on Science Education project at the University of Illinois has created a website called Phenomena Finder (https://bit.ly/2DrljoO) to help teachers find phenomena for the topics they teach. The website not only provides educators with the ability to search for phenomena using DCI’s, but it also provides sample questions and possible paths to take to explain the phenomenon.

Get to Know Your Standards

The Next Generation Science Standards are three dimensional. In order for a student to be proficient in a performance expectation, he/she has to have a solid grasp of the disciplinary core idea, cross cutting concept, and science and engineering practice. Time invested in digging in and unpacking the performance expectations for a grade level would be well spent. NGSS has developed evidence statements, found here https://bit.ly/2qlXE33, for each performance expectation to give teachers a detailed picture of what students will be able to do when the expectation has been achieved. These are the gray descriptors found under the Performance Expectation.

Look Over High Quality Examples Units

There are several sample units posted on the NGSS website (https://bit.ly/2r2o7Dn) that have been identified as “Quality Examples.” This is a great opportunity to see how a quality unit is structured and to get a feel for creating a sequence that will help students to figure out the science concepts. Consider looking at the second grade unit, “Why is our Corn Changing” from Next Generation Storylines.
Children’s Literature That Connects to the Social Science Standards

A grade level packet has been created that connects children’s literature to the Illinois Social Science Learning Standards: Each children’s literature grade level packet provides a list of potential children’s books that may assist teachers with connections to the Illinois Social Science Standards. These books can be used to reinforce the learning standard they are connected to in one or more of the following ways:

- Introduce a lesson, unit or concept
- Supplement a lesson or unit
- Provide additional information for specific topics/standards

Each grade level packet (K-5) includes:

1. Social Science Standards
2. Books to assist with the Inquiry Standard of taking informed action.
3. Books to assist with the Civics Standards
4. Books to assist with the Geography Standards
5. Books to assist with the Economics Standards
6. Books to assist with the History Standards

Click here and scroll to access this resource.

Resources for the Elementary Social Science Teacher

The Right Question Institute - This organization has worked with and learned from educators to develop a teaching strategy that provides a simple, yet powerful way to get students asking their own questions and building off their peers’ questions.

St. Louis Fed - Econ Ed - Offers free economics and personal finance lessons, activities, and readings provide flexibility and real-world connections, making it easier to prepare students with 21st century skills for college and career readiness. Check out their FREE EconLowdown portal, Kiddynamics for young learners, and many other award winning lessons/programs.

The National Geographic Resource Library: This resource offers a number of resources to assist elementary teachers. Teachers can choose a grade level, content type and subject to narrow down the resources appropriate for their classroom.

Keep It, Tweak It, Delete It: This resource was created to assist social science educators in analyzing the alignment of current social science curricular units with the new Illinois Social Science Learning Standards. Each grade level handout allows teachers to reflect upon the true alignment of current curriculum as well as highlight opportunities for growth in order to guide future implementation and alignment.

Inquiry Process Tool: (Scroll down to find each grade level) This tool communicates the inquiry process and provides a suggested process for incorporating the Illinois Learning Standards for Social Science, particularly the Inquiry Skills portion of the standards. The statements contained within the graphic are suggested steps for each stage of the process. The intention is to support teachers with the goal of engaging students in the inquiry process.

“...It is books that are the key to the wide world; if you can’t do anything else, read all that you can.”

Jane Hamilton
Teaching Resiliency

“Resilience does not mean that children ‘get over it.’ It does mean that the caring adults in their lives have a lot of power to buffer, rather than cement, the effects of toxic stress.”
Amanda J Moreno, Ph.D., Erikson Institute

Teaching Stress Management

Listening is an essential skill within the learning environment that enhances relationships and learning. Many who feel increased stress (including around weekends and holidays), reach out to friends and peers to share. Teachers may even feel overwhelmed with requests from students to listen to experiences and/or needs, adding to their own stress levels.

Dialogue Circles Create Connections

One school shares through videos and materials how ‘dialogue circles’ (based on restorative circle design) has helped students feel connected to each other and to appropriately share and listen to peers to lower stress.

Raising Awareness for Youth Mental Health

Bookmarks available at:

Kids want to know... Emotions and the Brain

https://youtu.be/3bKuoH8CkFc

Ways to Cultivate Resilience

Free resources and videos from Sesame Street
Marilyn Price-Mitchell, PhD

Teachers and Students, Got Stress?

- Lack of resiliency?
- Physical, then emotional exhaustion?
- Difficulty being organized?
- Lack of Humor?
- Frequent Absences?
- Frequent Illness?

ISBE SEL GOALS

1 Develop self-awareness and self-management skills to achieve school and life success.
2 Use social-awareness and interpersonal skills to establish and maintain positive relationships.
3 Demonstrate decision-making skills and responsible behaviors in personal, school, and community contexts.

SEL Family Supports
Children’s Mental Health at Home Supports

Check us out on the web under Climate and Culture:
Illinois Classrooms in Action

Additional SEL resources can be found on www.ilclassroomsinaction.org/sel