DDI to Support CCLS in Odds-Beating NY Schools

DATAG. MARCH 11, 2016
KAREN GREGORY, JANET ANGELIS, & KRISTEN WILCOX (NYKIDS)
Identify the school practices and policies found in elementary and middle schools whose students exceeded performance expectations on the 2012-13 New York State assessments (as well as those prior).
Multiple Case Study

Interviews & Focus Groups

- Administrators
  - Superintendent, ASI, Principals,
  - Directors of Special Education, Assessment, PD, ESL/Bilingual Ed, Student Support Services
- Building Leadership Team
- Teachers & Specialists
  - Mainstream Content Teachers, ESL, Sped, Coaches, Psychologist, Social Workers, Guidance, Nurse
- Community Outreach Coordinator

Other Data Sources

- Interpretive Memos
- Classroom Observations (ELA & Math)
- Documents
- Surveys:
  - All Staff
  - ELA & Math Teachers
### Elementary

<table>
<thead>
<tr>
<th>School</th>
<th>Average Z Residual Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Creek</td>
<td>1.50-1.99</td>
</tr>
<tr>
<td>Eagle Bluff</td>
<td>1.00-1.50</td>
</tr>
<tr>
<td>Bay City</td>
<td>1.50-1.99</td>
</tr>
<tr>
<td>Starling Springs</td>
<td>1.50-1.99</td>
</tr>
<tr>
<td>Yellow Valley</td>
<td>1.50-1.99</td>
</tr>
<tr>
<td>Goliad</td>
<td>1.00-1.59</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>1.50-1.99</strong></td>
</tr>
<tr>
<td>Wolf Creek</td>
<td>-0.20-0.00</td>
</tr>
<tr>
<td>Paige City</td>
<td>0.00-0.20</td>
</tr>
<tr>
<td>Sun Hollow</td>
<td>0.00-0.20</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>-0.20-0.00</strong></td>
</tr>
</tbody>
</table>

### Middle

<table>
<thead>
<tr>
<th>School</th>
<th>Average Z Residual Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hutch Hill</td>
<td>&lt;1.00</td>
</tr>
<tr>
<td>Julesberg</td>
<td>1.00-1.50</td>
</tr>
<tr>
<td>Laribee</td>
<td>2.00&lt;</td>
</tr>
<tr>
<td>Roaring Gap</td>
<td>1.50-1.99</td>
</tr>
<tr>
<td>Ruby</td>
<td>2.00&lt;</td>
</tr>
<tr>
<td>Sage City</td>
<td>&lt;1.00</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>1.00-1.50</strong></td>
</tr>
<tr>
<td>Locus Glen</td>
<td>-0.20-0.00</td>
</tr>
<tr>
<td>Silver City</td>
<td>0.00-0.20</td>
</tr>
<tr>
<td>Tarelton</td>
<td>0.00-0.20</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>-0.20-0.00</strong></td>
</tr>
<tr>
<td>Odds Beaters</td>
<td>Pseudonym</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Suburban/Small/Med</td>
<td>Yellow Valley</td>
</tr>
<tr>
<td>Large Sub/Urban</td>
<td>Bay City</td>
</tr>
<tr>
<td>Large Sub/Urban</td>
<td>Goliad</td>
</tr>
<tr>
<td>Typical Performers</td>
<td>Pseudonym</td>
</tr>
<tr>
<td>Suburban/Small/Med</td>
<td>Sun Hollow</td>
</tr>
<tr>
<td>Large Sub/Urban</td>
<td>Paige City</td>
</tr>
<tr>
<td>New York State Average</td>
<td></td>
</tr>
</tbody>
</table>
Rates of Economic Disadvantage & Average 4th Grade ELA Score

Typical Performer

Odds Beater

Expected Score

Comparison to Expected Performance
- Neither as expected nor exceeding
- As Expected
- Exceeding > 1 std
- Exceeding Statistically
“Odds-Beating” Schools by County
Potential Sample, Including Alternatives

- Elementary Schools
- Middle Schools
Topics We Studied

- A Theory of Action for Policy Innovation
- Literacy Instruction
- The Role of Trust & Communication
- Rural Schools
- Technology Integration
- Adaptive Leadership
- Data-Driven Instruction
Research Questions

- How do educators approach data-driven instruction?
- What types of data are used, and for what purposes?
- What practices or processes support DDI?
**Findings**

**What are educators in OB Schools doing with data?**

<table>
<thead>
<tr>
<th>Setting goals</th>
<th>Focusing conversations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aligning instruction</td>
<td>Guiding curriculum &amp; instruction decision making</td>
</tr>
</tbody>
</table>

**How do they make this happen?**

- Strong organizational routines
- Formalized & structured DDI Processes
- Technology support systems
Using data to **Set Goals**

*Educators in odds-beating schools use student achievement data from common assessments to develop building-wide goals.*
Using data to **Set Goals**

From our district goals, we’ve set building targets, SMART targets—strategic, measurable, observable, and so on and so forth—that are directly related to achieving those goals. So we’re benchmarking ourselves along the way to make sure we’re moving in the right direction.

—Hutch Hill, MS principal
Using data to Set Goals

We spend a lot of time doing a lot of analysis of how our students are performing. And that starts at the state level with state testing, with our district testing, with those formative assessments, with that information that teachers give us. We have a lot of data on every single student and we look at that by grade level, by school, by district. And then we take that data to have conversations with administrators, with teachers, with parents. And we use that information to identify the areas that we need to improve upon in our program.

- Roaring Gap MS, AS C&I
Using Data to **Align Instruction**

In odds-beating schools:

- **Teachers conduct data analysis** to understand what worked and what didn’t.

- **Building leaders & teachers across teams or departments compare results** to determine the best scope and sequence for each grade level.
Using Data to **Align Instruction**

We really strive to figure out what it is kids need to be able to do and are required to know relative to that expectation for the world beyond 12th grade. What do kids need to be able to do to be successful? And to have opportunities? So we work backwards with that in mind. . . . We’re going to look for continuous improvement. We’re going to look at different sources of data to evaluate our progress, if we’re not seeing the results we expect to see, we’re going to do something different, figure out what we need to do differently.

- Eagle Bluff ES, assistant superintendent
We talk about . . . what do we need to change or what do we need to add, or what do we think we taught, but we really didn’t teach it because kids didn’t get it? When we look at assessment results, we have to ask ourselves . . . if we see big gaps, is it a curriculum issue? Did we not address it? I know the basic thing we ask is, Did we teach it? Did we teach it long enough? Sometimes you don’t teach it long enough. The third question is if we retaught it, did we teach it in the same way and kids still aren’t getting it? So we talk about what can we do with what’s here in order to . . . close those gaps.

–Sage City MS, principal
In odds-beating schools, leaders engage with teachers in data analysis and have conversations about instructional improvement that are informed by those data.

Qualitative Comparative Analysis (QCA)* of School Leaders Analyzing Data with Teachers

<table>
<thead>
<tr>
<th>Score</th>
<th>Odds-Beating Middle Schools</th>
<th>Typically Performing Middle Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>.5 low salience</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>1 high salience</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

*Ragin, 2014
We have common assessments that will analyze how our students performed, and we have itemized analysis. [For example], on question one, if one of the three teachers did extremely well, or extremely poorly, but different from the others, we raise the question: What went on? What did you do in your classroom that allowed your students to do better than the rest or where did you struggle, and tell me how you taught that concept and we’ll share how we’ll move going forward. So I don’t ever go in and tell people how they have to teach; we share. It’s a collaborative approach.

- Hutch Hill MS, principal
We just finished our first English benchmark assessments so I will be meeting with all the English teachers to talk about results of how their kids did.

- Sage City MA, principal
In odds-beating schools,

- Data inform interventions and RTI processes and guide differentiated instruction in the classroom.

- Educators consistently revisit the data, so groups are fluid, with students receiving the interventions or targeted instruction that they need.
Using Data to Differentiate Instruction

We... service any students that are below the 25th percentile. They automatically go into Tier 2. Anyone that is screened, the first time they fall below the 25th percentile, they are placed in... even if they are in the 0, they go into Tier 2... As they progress, there’s a mathematical formula that our data team looks at and we sit down and we progress monitor the Tier 2 students every 2 weeks. After so many weeks, 16 to be specific, we look at that data. We use a rate of improvement, national growth rates, and we compare... their individual rate of improvement to the national rate of improvement and we see if there’s any discrepancy.

– Bay City ES, teacher
In odds-beating schools, well established routines support teacher collaboration around necessary instructional modifications based on students needs.

- PLCs
- Data teams
- Grade-level teams
- Collaborative meeting times, used to discuss data
Supporting DDI with Organizational Routines

Survey data revealed that teachers in odds-beating schools were more likely than teachers in typically performing schools to report participating in looking at data at least once a week.

OB: 58% vs. TP: 35%
The process of analyzing data was found to be substantially different between odds-beating and typically performing schools.

The overall approach in the OBs is a developmental sequence:

1. Specific areas in need of improvement are identified, down to the unit;
2. New ways of approaching and crafting instruction in that area are designed, implemented, and tested; and
3. Student progress is continually assessed.

This sequence is a hallmark of the instructional processes in the odds beaters.
Supporting DDI with **Formalized & Structured Processes**

It’s about teaching teachers how to look at data in a very objective way, putting biases aside, and having roles in a group. That school-based inquiry process I believe has been instrumental because the teachers know: This isn't about me; this is truly looking at how the kids did and who is doing well and who needs help. What seem to be the patterns, what could the interventions be? OK, let's try these interventions for the next two weeks, now we're going to come back together.

- Hutch Hill MS, principal
In odds-beating schools, technology is used in innovative ways to support data collection, data analysis, and data-guided instruction.

- E-spark (Julesberg MS): Facilitates differentiated instruction
- Socrative Student (Laribee MS & Sage City MS): Instant assessment feedback
- I-ready (Goliad ES, Spring Creek ES): Progress Monitoring
- Naviance (Julesberg MS): College & Career Planning
And what’s nice is you can send the results to yourself in an email. So in the leisure of those after-school hours you can look at those Excel spreadsheets, you can look at the students by name. So even though you can hide students’ names when it’s on display [in class], you can look at those names and assess your data and say, “Okay who really understands this, and does it surprise me that she didn’t get that question right?” or “I’m noticing that all of these kids missed this,” or “My 2\textsuperscript{nd} period really didn’t understand this, but my 3\textsuperscript{rd} period did. What happened in 2\textsuperscript{nd} period that didn’t happen in 3\textsuperscript{rd} period?” It’s really a way to refine your instruction.

– Laribee MS, teacher
<table>
<thead>
<tr>
<th>Odds Beaters</th>
<th>Typical Performers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Careful analysis of data helps set goals and align instruction with a “backwards design” approach.</td>
<td>Data are available to administrators and teachers, but may or may not be a central focus in the goal-setting process.</td>
</tr>
<tr>
<td>Collaborative, data-focused conversations occur regularly among teachers &amp; administrators, supported by organizational routines.</td>
<td>Data are used in isolation by administrators and teachers, but not as part of a scheduled, collaborative conversation, or with a coach to improve instruction.</td>
</tr>
<tr>
<td>Technology is used for formative and summative assessment data, benchmarking, and interest inventories.</td>
<td>Schools have fewer data points and rely heavily on state assessment data.</td>
</tr>
</tbody>
</table>
Data-Driven Instruction (DDI) is a collaborative endeavor.

Data can provide a common language as colleagues work toward a common goal.
Educators in odds-beating schools use data to connect the dots and see the big picture.

Using data to discern program strengths and weaknesses can detect deficits in instruction, which informs curriculum, which informs school and district goal setting.
DDI requires structural support.

Collecting data, making data available to educators, and requiring data analysis is not enough. Organizational routines and formal structures need to be in place, via technology, coaching, PD, teaming, etc., for DDI to be valued and purposeful.
Thank you!

This presentation and other information about this study or those of NYKids can be downloaded from:

http://www.albany.edu/nykids/

Related materials are available in the back of the room.
Contact us at:  jangelis@albany.edu;  kgregory@albany.edu
NYKids

Welcome to a resource to support school improvement in New York State.

Announcements:

NY Kids researchers teamed up with other School of Education faculty to complete Common Core related research projects in 2014-2015. Click on the link to see findings from the Study of the Practices & Processes of Odds-Beating Schools.

The mission of NY Kids is to:

1. Inform schools about best practices. See our...
   - "Find Your School" and Survey Tools to help you look at your own school's practices
   - Collections on specific issues related to school improvement:
     - Response to Intervention (RTI)
     - English Language Learners

Know Your Schools - for NY Kids
School of Education BO
University at Albany
1400 Washington
Avenue
Albany, NY 12222
518-442-5171

facebook