The Use of Data in Informing School Improvement

Department of Education & Early Development
Brittnay Bailey, School Recognition and Support Administrator
Susan Forbes, School Improvement Specialist
Agenda

› Establishing a Baseline
  – Collecting Quantitative and Qualitative Data

› Analyzing the Situation
  – Data Team Pointers
  – Triangulating to Understand
  – Uncovering Root Causes

› Acting on Data

› Setting Goals

› Monitoring Implementation and Impact
  – Documentation

› Systematizing Data Use

› Questions
The importance of establishing a baseline

“Decisions must be based on viewing schools as holistic systems comprised of many interconnected parts. Before a change is made or an initiative is undertaken, it is absolutely critical to first establish a baseline. Establishing a baseline involves taking a snapshot of the current state of teaching, learning, and assessment practices in an organization as well as the infrastructure that supports these practices. This must be done before any changes are implemented. It is critical to know where you are before you collectively determine where it is you want to go and how it is that you are going to get there.”
- Ian Jukes

›  https://infosavvy21.com/2021/03/01/the-committed-sardine/
Establishing a Baseline

Quantitative Data Sources

› Accountability indicators
  – ELA/Math
    › Strand data, subgroup
  – Growth
  – 3rd Grade Reading
  – EL Progress
  – Attendance
    › How are you counting?
  – Grad Rate

› In-house assessments
  – Averaging Averages Caution

› Staff
  – Qualifications
  – Retention, Absenteeism
  – Professional Development

› School Practices
  – Master schedule
  – Team structure
  – Budget

› Program
  – Alignment
  – Fidelity of Implementation
Establishing a Baseline

Qualitative Data Sources

› Interviews
  – Student
  – Parent
  – Community
  – Staff
  – Teacher
  – Admin

› Work Samples
  – Student
  – Teacher Lesson Plans

› Stakeholder Engagement

› Walkthrough Data
  – Environment
  – Student
  – Teacher
Establishing a Baseline

Blended Data Sources

› Leadership
  – Expectations documentation
    › On record
    › In practice
  – Team structures/protocols
    › On record
    › In practice
  – Communication records
    › On record
    › In practice

– Classroom walkthroughs, evidence-based feedback
  › On record
  › In practice

– Monitoring records
  › On record
  › In practice
Data Team Pointers

› Advantages and disadvantages of using percentages vs. counts
› Do not assume everyone is “data literate”
› Model “how to read data”
› Frontload vocabulary/define potentially challenging words in context
› Compare to district/state
Modeling “How To Read Data”

1. Title
2. Labels/Units
3. Shape/Trend
4. Same/different?
5. Observe/Infer
Data Analysis

Triangulation

› Are your data sources confirming the same “truth” or are your sources painting contrasting pictures?

Example – Low state test participation

Other data sources to consider:
- Parent survey results
- Student and teacher interviews
- Program alignment; fidelity
- Sample assignments/tasks vs. assessment design
- Attendance
Data Analysis

Root Cause Analysis

› If you continue to ask "Why?" what do you uncover?

Example – Low attendance
Problem: Low Attendance

Why is this happening?
Parents aren’t getting kids up for school

Why is that?
They are not motivated to do so

Why is that?
No consequence for not doing so

Why is that?
The school does not follow up

Why is that?
School -> Parent communication system is needed
Problem: Low State Test Participation for Student Subgroup

Why is this happening?
Parents don’t want their student tested  Why is that?

______________________________
Why is that?

______________________________
Why is that?

______________________________

Group Practice
Acting on Data – Planning Interventions and Activities

Guest speaker – Dr. Madeline Aguillard, Kuspuk School District

Topic: “Using teacher survey results to plan a school improvement initiative”

Problem: Teacher Retention

Impact Data:

<table>
<thead>
<tr>
<th>Year</th>
<th>Retention Rate</th>
<th>International New Hire Retention Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19</td>
<td>72%</td>
<td>-</td>
</tr>
<tr>
<td>2019-20</td>
<td>65%</td>
<td>-</td>
</tr>
<tr>
<td>2020-21</td>
<td>44%</td>
<td>67%</td>
</tr>
<tr>
<td>2021-22</td>
<td>79%</td>
<td>89%</td>
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</tbody>
</table>
During SY2021-2022, what did Kuspuk do to address persistently decreasing teacher retention rates?

› During October 2021, KSD solicited feedback through regionally issued, anonymous surveys. 66% response rate.
  – 4 Likert scale items; 4 short answer responses

› All responses were collected, coded, and then collectively analyzed for themes.

› KSD’s Leadership team reviewed the themes and developed action steps to address areas of need. Prioritized the areas where changes could be made quickly. Implemented changes the following week.
Question | Theme | KSD 2021-2022 Actions
--- | --- | ---
Greatest impact on teacher retention: | Internal personnel supports, External Community Factors, Living Conditions, Salary, Benefits | Promote AK RISE, In-person district trainings, In-person State conferences, Utilize student and adult counseling through DotCom Therapy, Purchase additional district housing, prioritize teacher & admin negotiated agreements

Status of housing: | [Varied by region]  
**Upriver:** Adequate, but reduce the rent  
**Aniak:** Too far from school, individuals living outside of district housing with no stipend “unfair”  
**Kalskag:** Needs updated/furnished | **Across district:** Form Housing Committee, Revise the Housing Agreement, Reduced rent as a result of Housing Committee agreement  
**Upriver:** Reduced rent as a result of Housing Committee agreement  
**Aniak:** Purchase additional district housing, Implement “Ride Share” utilizing a district vehicle  
**Kalskag:** Purchase furniture, Paint housing exteriors

Other areas impacting retention & recruitment: | Work on obtaining H1B Visas, Transportation, Contract adjustments, Retention of classified staff, Assist international hires more, More new teacher supports, Fidelity with curriculum | Implement “Ride Share” utilizing a district vehicle, Add a New Hire In-Service day in July (supports in Anchorage, SSK, bush shopping), In-person district trainings, In-person State conferences, Promote AK RISE, include new teachers on curriculum adoption committees
Setting Goals

› The 2023 School Improvement Planning model will be based on developing a three-year plan
  – The situational analysis that underlies this plan must be robust, grounded in data, and developed with stakeholders

› School improvement goals should be
  – Specific
  – Measurable
  – Attainable
  – Relevant
  – Timebound
SMART Goal

› Example: “Each student will meet his or her growth targets in Reading as determined EOY MAP scores.”

› Next year as we roll out the new school improvement process, we will learn how to support our goal statement by identifying:
  - Measures
  - Strategies
  - Milestones
  - Actions
Monitoring

Implementation

› Is the intervention, action, or activity you have planned being implemented?

Example – Curriculum purchase

› How valid are decisions about the effectiveness, or lack of effectiveness, of a curriculum without knowledge of implementation fidelity?
Monitoring

Direct Impact
› How, if any, have the adult (educators) behaviors changed?
- Example – PBIS program framework
› Examine staff implementation data

Indirect Impact
› How has the intervention impacted your targeted student attitudes, behaviors, academic achievement and outcomes?
- Example – PBIS program framework
› Examine changes in student engagement, achievement, school climate, discipline
Using Data to Monitor Achievement and Growth

› Guest speaker – Dave Herbert, Empowerment Specialist
› Topic: “Using student reading scores to plan intervention groupings and instruction”
Monitoring includes documentation of school improvement process

› The school will need to maintain records showing community involvement in the school improvement process.

› For ESEA monitoring this means for I-A 37 and I-A 38:
  – Providing meeting notices, agendas, minutes, sign-in sheets, and/or additional communication that show the CSI/TSI school developed and discussed school improvement planning with stakeholders (including principals, other school leaders, teachers, and parents).

› Suggestion: Talk about SIP at Title I meeting with stakeholders
OUR DATA JOURNEY

Guest speaker – Carla Marquand, Executive Director of Student Support Services, Fairbanks North Star Borough SD

Topic: “Taking Positive Action: A Commitment to Continuous Improvement”
Vision for Continuous Improvement:

› Assist schools in the Fairbanks North Star Borough School District achieve organizational effectiveness through:

› Proficiency in using data visualization and using systemic protocols to use analyze data to make informed decisions

› Common understanding of fiscally responsible evidenced-based practices

› A strong culture of engaging in a data-driven continual improvement cycles
District Assessment Plan:

- **Demographic Data**
  - Enrollment
  - Transiency Rates
  - Race/Ethnicity
  - Socio-Economic Status

- **Achievement Data**
  - Aimsweb
  - MAP
  - Math
  - ELA

- **Process Data**
  - Family & Community Engagement
  - AK STEPP
  - Students with specialized needs
  - Professional Learning

- **Perception Data**
  - School Climate Surveys
  - Family Engagement Evaluations
  - Title I Surveys
  - Custom Surveys
What Do We Do With The Data?

<table>
<thead>
<tr>
<th>Compile</th>
<th>Sort</th>
<th>Report</th>
<th>Analyze</th>
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| Collect data in ready to use format & disaggregate as necessary. | **Categorize Data**  
  - Demographic  
  - Process  
  - Achievement  
  - Perception | Information is shared using clear, concise narratives.  
  Charts & graphs are used to identify trends and red flags. | Most labor-intensive step and the most important!  
  The team should be in agreement before drawing conclusions and writing the plan. |
Activity One

Current Year Prioritized Needs Discussion & Evaluation- Note Taker Form

Form to capture our school’s discussion.

Suggested Discussion Prompts for Leaders:

- What are our identified needs for 2020-2021? Reading, Writing, Math for core instruction, SEL/Behavior, Family Engagement
  - See completed 2020-2021
    - AK STEPP Needs Assessment Form
    - See Needs Assessment Priorities
- How is our school addressing these needs?
- What is working well?
- What could we improve?
- How are we engaging parents at our school to address our prioritized Needs?
- How are we evaluating the effectiveness of our plan to address our prioritized Needs? (Assessment of Progress)

Suggested Discussion Notes Format:

Note: Please include a discussion about professional development for staff to address needs.

<table>
<thead>
<tr>
<th>Prioritized Need</th>
<th>How are we addressing this Need? Ex. instructional practices, SEL, PBIS</th>
<th>What are some positive outcomes?</th>
<th>What are the challenges?</th>
<th>How are we measuring the effectiveness of our plan for this need? (Data)</th>
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Activity Two: Data Review

Goal: Review data and information to inform and complete next year’s needs assessment (FY22).

School Data Analysis
January 2021

School Data Analysis
School Name:

Introduction
The School Data Analysis (SDA) is a diagnostic tool intended to facilitate rich and deep collaborative discussions among team members about school data. The SDA can serve as a guide to determine a school’s strengths and challenges as well as directions for improvement based on an analysis of data and responses to a series of data-related questions in content areas. This data collection and analysis process should include the identification of achievement gaps as well as reflections on possible causes for these gaps.

This diagnostic represents the various types of data that should be continuously collected, reviewed, analyzed, and evaluated.

Completion of the SDA is one piece of a school’s comprehensive needs assessment process.
Activity Three: Prioritized Needs & SMART Goals
ARCTIC LIGHT ELEMENTARY
FY18 & FY22 COMPARISON

Mission Statement for Arctic Light K-8
Arctic Light Elementary School, located in the center of a rich, distantly Alaskan environment, is the heart of a diverse military community and serves the children of America’s Arctic Warriors.

Our mission is to facilitate the growth of our students into knowledgeable, self-sufficient, caring citizens, capable of navigating in a global society.

Through discovery and exploration, students will participate in developmentally appropriate experiences in a safe environment of unconditional respect for others and uncompromising commitment to excellence and challenge.

Arctic Light K-8 Goals 2020-2021

Personalized Learning - staff use whole class, guided small group, and personalized instruction based on student data analysis. Students will learn their strengths and areas of need based on clear learning objectives within a safe and emotionally supportive classroom.

Clear Communication and Focus on Learning - staff will engage communication systems and structures to ensure effective school management. The TCEP survey system will aide in our continued growth.

Title I
We are a Title I school, which is determined by the percent of students who qualify for free and reduced lunch. We receive additional federal funds that provide supplemental academic support for our students, additional professional development for teachers, and increased parental involvement opportunities. If you would like to learn more about our Title I program and the resulting funds or give input, please contact the school office.

Specific Title I Goals

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Target</th>
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<tbody>
<tr>
<td>35% 6th-8th grade proficient in Math PEEKS</td>
<td>40% will be proficient</td>
</tr>
<tr>
<td>43% 6th-8th grade proficient in ELA PEEKS</td>
<td>50% will be proficient</td>
</tr>
<tr>
<td>40% 5-4th report easy to talk to teacher</td>
<td>50% will report</td>
</tr>
<tr>
<td>75% 5-4th report discipline in fair</td>
<td>100% will report</td>
</tr>
<tr>
<td>75% 4-4th happy to be at Arctic Light</td>
<td>100% will report</td>
</tr>
</tbody>
</table>
Barriers to Continual School Improvement

› System inefficiencies
› Outdated modalities of planning templates
› Compliance issues (data tracking)
› Planning is not comprehensive
› Planning is disjointed from available resources
Lessons Learned along the Journey

› Build a strong culture with key stakeholders to build the understanding about assessment is critical to success

› Audit your assessment activities

› Changes in practice take time and strategy - success happens with gradual shifts

› Embed assessment literacy wherever possible to provide multiple avenues to accomplish this work.
Questions
New Resource

› School Improvement FAQs

The FAQs provide information on:
  – School Designations
  – School Improvement Planning
  – 1003(a) Grants
Webinar Dates – Every Other Wednesday at 4 pm

› Our next webinars are
  – March 30, April 13 and 27, May 11 and 25, and June 8 and 22

› Link: School Improvement Webinar Series
  Meeting ID: 820 2485 0053
  Passcode: 545763

› Earlier webinars are available on education.alaska.gov
  – February 2 and 16, and March 2

› Today’s webinar will be posted later this week
Contact Information

Brittnay Bailey
School Recognition and Support Administrator
Brittnay.Bailey@alaska.gov
(907) 269-6754

Susan McKenzie
IEE Director
Susan.McKenzie@alaska.gov
(907) 500-8594

Susan Forbes
School Improvement Specialist
Susan.Forbes@alaska.gov
(907) 269-4553