Root Cause Analysis: School Level Teams

Assessment, Accountability, Research, and School Improvement Division
AARSI TEAM:

Lisa Biesinger
Brett Campbell
Sue Daellenbach
Krista Donnelly
Sue Egloff
Ramona Esparza
Jeff Halsell
Laura Love
Greg Manzi

Kim Mauk
Becca Meyer
Stacie Nelson
Deb Roberson
Wayne Roberson
Nathan Trenholm
Lakeisha Young
Tim Zeidler
Talk a Mile a Minute

- Find a partner
- One person is designated the “Talker” and the other the “Receiver”
- The “Talker” will give clues to each of the words on the list without saying the word
- The “Receiver” tries to guess the words on the list by the clues
Things associated with the Growth Model

- Student Growth Percentile
- Catch up
- Academic Peer Group
- Move Up
- Median Growth Percentile
- N-count
- Keep Up
Things associated with the School Performance Framework

Academic Growth
Median Growth Percentile
Academic Achievement (Status)
Median Adequate Growth Percentile
Academic Growth Gaps
Disaggregated Groups
The most powerful use of root cause analysis in schools occurs within a systemic process of school improvement.

(Preuss, 2003)
Session Outcomes – pg. 3

* Complete the 7 steps of Root Cause Analysis:
  * Review identified performance concerns
  * Write ALL possible explanations
  * Categorize and sort explanations based on 4 levels of RCA
  * Decide if it is really a cause
  * Narrow the focus
  * Complete Why/Because
  * Validate root causes

* Time to complete Inquiry Process and Plan Next Steps
Norms for Today

- Be present, participate, and engage fully.
- Listen to learn, limit sidebars.
- Monitor personal technology.
- Pay attention to hand signals.
- Provide feedback in the “Parking Lot.”
- Response Cards at your table.
- Keep an open mind.
At your table, share:

Your current level of comfort in facilitating crucial conversations at the school level (select one):

* A discussion with a colleague about his/her individual classroom data results within a grade level meeting.
* Data walls are displayed in the hallway by grade level. How does a site create a culture for focusing on student learning versus staff placing blame upon others for lack of progress?
* A discussion with site administration about a lack of school process or structure (e.g. criteria for students to be placed into Tier II interventions).
Agenda

Identify and Focus on concerns from Trends

- Consider External Data and factors that cause performance challenges
- Brainstorm possible causes for the concern
- Group like causes together
- Narrow explanations
- “Why ....Because” Process
- Validate Root Cause with other Data Sources
Completed the Performance Data Inventory (pg. 6-7).

Utilized additional performance data that was used to finalize your trend analysis.

Completed performance trend analysis (Section III of SIP Inquiry Process).

Finalized prioritization of concerns (chose 2-4 areas on which to focus improvement efforts).
Data Trends Review (pg. 5)

- Review written trends:
  - Content area from School Performance Framework (SPF) and data support from Green & Whites, 3 Year Trend Report, or site-based data
  - Identify measures/metrics
  - Which students (grade and disaggregated group)
  - Direction of trend (increasing, decreasing, or stable)
  - Amount of increase, decrease, etc.
  - Time period (at least 3 years)
  - Performance indicator: Academic Growth & Academic Achievement
Data Trends Checklist

Completed

* Use Quality Criteria (pg. 8) to evaluate Performance Trends.
* Indicate that your team is ready for a facilitator to provide feedback about your positive and negative performance trend statements.

In Progress

* Finalize Data Analysis.
* Use Performance Data Inventory (pg. 6-7) to write positive/negative trend statements.
* Identify 2-4 priority concerns.
Priority Concerns Review

Priority Concerns ARE ... 
- Specific statements about performance 
- Strategic focus for the improvement efforts 
- About the students

Priority Concerns are NOT... 
- What caused or why we have the performance challenge 
- Action steps that need to be taken 
- Concerns about budget, staffing, curriculum, or instruction 
- About the adults
Apply Quality Criteria: Performance Trends and Priority Concerns Discussion

- Use the Quality Criteria for Performance Trends and Priority Concerns (pg. 8-9).
- Consider:
  - How are the trends and priority concerns similar and/or different from that reflected in quality criteria?
  - How could these sections be improved upon?
Agenda

1. Identify and Focus on concerns from Trends
2. Consider External Data and factors that cause performance challenges
3. Brainstorm possible causes for the concern
4. Group like causes together
5. Narrow explanations
6. “Why ....Because” Process
7. Validate Root Cause with other Data Sources
Why Root Cause Analysis?

- Eliminates unfounded opinion, prejudice, and organizational myth
- Reduces false starts, patching of symptoms, and waste of scarce resources
- Converts data to information, knowledge, understanding, and wisdom
- Improves data-based decision making

(Preuss, 2003)
Root Causes

* Professional Read (pg. 10-13) and highlight central ideas

* Review root cause analysis terminology (pg. 22-24)
  * ✓ = “I got it”
  * ? = Could use further clarification
  * * = New term or new definition for a familiar term
**Reading Key Ideas**

* Identify deepest and most basic concern & barriers to increasing student performance
* Determine if they are within the school’s control and evidence based
* Treat the cause, not the symptom
* Focus on the adult actions of the leaders and teachers
* Consider climate/culture, organization, structures, processes, curriculum & instruction
In 1996, Utica’s Proctor High School was under New York State’s list of “Schools Under Regents Review” due to the high dropout rate - in 1993 (14.7%) and in 1994 (14.6%). These rates were the third highest in the state. The school would need to reduce dropout rates or face state sanctions or closure.
<table>
<thead>
<tr>
<th>Red Flags</th>
<th>Red Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Failure to dropout record keeping.</td>
<td>* Ninth graders were added with no advanced planning.</td>
</tr>
<tr>
<td>* Students feared for their safety.</td>
<td>* Fights were common occurrences on campus.</td>
</tr>
<tr>
<td>* School climate/culture was lacking.</td>
<td>* Discipline was inconsistent across classrooms.</td>
</tr>
<tr>
<td>* Discord between school and BOE, and parents.</td>
<td></td>
</tr>
</tbody>
</table>
Low attendance was a concern.

Students who were falling behind in their freshman year had difficulty catching-up to graduate.

Some students opted to work instead of completing high school career.

Some students had extenuating family situations that prompted them to drop out.
Utica HS – RCA Process

Solutions/Strategic Improvement Strategies

* Night School implemented to accommodate work schedules/family situations
* Partnership with Community College for dual credits incentive program
* Academic Plans were created prior to ninth grade
* Mentoring Program and caring culture established for students to feel safe and successful
* Alternative Route for non-proficient students implemented for GED/technical vocational programs
In 1996, Utica’s Proctor High School had decreased the drop out rates to (8.1%), in 1997 to (4.2%), and in 1998 to (4.3%).
Sorting Levels of RCA

* Incident or Procedural
* Programmatic
* Systemic
* External
Multiple Measures – pg. 26

- Demographics
- School Processes
- Perceptions
- Student Learning
Qualitative School Process Evidence

Evidence:
- Lesson Plans
- Meeting Minutes
  - Team
  - Dept.
- FOSL Data
# School Process Evidence – 2 yrs.

## FOSL Comparison Chart

<table>
<thead>
<tr>
<th>Activity</th>
<th>2011-12</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening/Watching</td>
<td>42</td>
<td>53</td>
</tr>
<tr>
<td>Seatwork</td>
<td>27</td>
<td>52</td>
</tr>
<tr>
<td>Reading</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Writing/Math Calculations</td>
<td>34</td>
<td>23</td>
</tr>
<tr>
<td>Student to Student Discussion</td>
<td>14</td>
<td>30</td>
</tr>
<tr>
<td>Performance/Presentation</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Transition</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Non-Instructional</td>
<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>

A variety of learning activities are observed during classroom walkthroughs.
School Process/Perception

Evidence:
• Block Schedule Plan
• Teacher Survey
• Survey Results
• Block Schedule
• Staff Development Activities
# Perception Evidence

## Teacher Perception of Block Schedule Effectiveness

<table>
<thead>
<tr>
<th></th>
<th>Effective</th>
<th>Not Effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2011 Survey</td>
<td>97%</td>
<td>3%</td>
</tr>
<tr>
<td>December 2011 Survey</td>
<td>72%</td>
<td>28%</td>
</tr>
</tbody>
</table>

Teacher’s December response:
“I feel like I have enough time to get the students engaged in the lesson. I feel like in class we have time to teach and time for the students to practice what has been taught.”
### School Process Observation Evidence

<table>
<thead>
<tr>
<th>HQSI</th>
<th>Last Year’s Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review/Assessment</td>
<td>27%</td>
</tr>
<tr>
<td>Lesson Delivery</td>
<td>32%</td>
</tr>
<tr>
<td>Practice/Application</td>
<td>53%</td>
</tr>
<tr>
<td>Interaction</td>
<td>46%</td>
</tr>
<tr>
<td>Strategies</td>
<td>28%</td>
</tr>
<tr>
<td>Comprehensible Input</td>
<td>23%</td>
</tr>
<tr>
<td>Building Background</td>
<td>61%</td>
</tr>
<tr>
<td>Lesson Preparation</td>
<td>27%</td>
</tr>
</tbody>
</table>

#### HQSI Strategies

- None Observed: 34%
- Building Background Knowledge: 35%
- Note-Taking: 21%
- Cues, Questions, & Advanced Organizers: 11%
- Generating and Testing Hypotheses: 0%
- Setting Curriculum Objectives: 4%
- Cooperative Learning: 22%
- Non-Linguistic Representation: 7%
- Summarizing: 7%
- Similarities and Differences: 6%
### School Process Evidence

#### Middle School 2011-2012

**Proficiency and Intervention Data**

<table>
<thead>
<tr>
<th></th>
<th>2010-2011 ELA CRT N Count</th>
<th>2010-2011 Math CRT N Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Students ELA Proficient</strong></td>
<td>406</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Total Students ELA Nonproficient</strong></td>
<td>687</td>
<td>63%</td>
</tr>
<tr>
<td><strong>Total Students Math Proficient</strong></td>
<td>585</td>
<td>54%</td>
</tr>
<tr>
<td><strong>Total Students Math Nonproficient</strong></td>
<td>508</td>
<td>46%</td>
</tr>
</tbody>
</table>

**GRADES 6-8 TOTAL Intervention Program Data**

<table>
<thead>
<tr>
<th></th>
<th>2011-2012 Grades 6-8 Total N Count</th>
<th>2011-2012 Grades 6-8 Total N Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Students Identified for ELA Intervention</strong></td>
<td>691</td>
<td>57%</td>
</tr>
<tr>
<td><strong>Total Students Identified for Math Intervention</strong></td>
<td>660</td>
<td>55%</td>
</tr>
<tr>
<td><strong>ELA Intervention Programs</strong></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Response to Instruction (RTI)</td>
<td>67</td>
<td>6%</td>
</tr>
<tr>
<td>PASS GenEd</td>
<td>383</td>
<td>32%</td>
</tr>
<tr>
<td>ELLP Tutoring</td>
<td>139</td>
<td>12%</td>
</tr>
<tr>
<td>Mentoring Program*</td>
<td>67</td>
<td>6%</td>
</tr>
<tr>
<td>HSGI Program*</td>
<td>35</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Math Intervention Programs</strong></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Response to Instruction (RTI)</td>
<td>67</td>
<td>6%</td>
</tr>
<tr>
<td>PASS GenEd</td>
<td>383</td>
<td>32%</td>
</tr>
<tr>
<td>Compass Learning</td>
<td>18</td>
<td>1%</td>
</tr>
<tr>
<td>HSGI Program</td>
<td>25</td>
<td>2%</td>
</tr>
<tr>
<td>Honors Algebra Tutoring</td>
<td>25</td>
<td>2%</td>
</tr>
</tbody>
</table>

*Mentoring & HSGI Programs do not provide direct academic instruction, but focus on overall behavior, attendance, and general academic intervention.
Reflective Activity

• Discuss what other measures of data you should collect in the 2012-13 school year.
RCA Process

1. Identify and Focus on concerns from Trends
2. Consider External Data and factors that cause performance challenges
3. Brainstorm possible causes for the concern
4. Group like causes together
5. Narrow explanations
6. "Why ....Because" Process
7. Validate Root Cause with other Data Sources
Step 3: Identify Root Cause Activity

- Draw a circle map and write your main performance challenge.
- Use sticky notes to write down ALL possible explanations related to student learning, demographics, school processes, and perceptions.
RCA Process

1. Identify and Focus on concerns from Trends
2. Consider External Data and factors that cause performance challenges
3. Brainstorm possible causes for the concern
4. Group like causes together
5. Narrow explanations
6. “Why ....Because” Process
7. Validate Root Cause with other Data Sources
Step 4: When is a Cause a Root Cause?

1. Would the problem have occurred if the cause had not been present?
   - If no... then root cause
   - If yes... then contributing cause

2. Will the problem reoccur as the result of the same cause if the cause is corrected or dissolved?

3. Will correction or dissolution of the cause lead to similar events?
   - Other indicators: dead end, all agree, controlled, dissolved, logical and makes sense.
Step 4: When Do We Stop Seeking a Cause?

- A professional judgment call is made.
- Sufficient data is available.
- A solid effort has been made to arrive at a reasonable root cause.
Step 4: Sort & Categorize Explanations

* Sort and group similar explanations into the 4 levels of RCA – see pg. 14.
**Agenda**

1. Identify and Focus on concerns from Trends
2. Consider External Data and factors that cause performance challenges
3. Brainstorm possible causes for the concern
4. Group like causes together
5. Narrow explanations
6. "Why ....Because" Process
7. Validate Root Cause with other Data Sources
Step 5: Narrow Focus Activity

Use RCA pg. 17 to narrow root cause focus

* 1. Eliminate explanations that are not within our control.
* 2. Evaluate the quality of your explanations (reach consensus on which ones to keep).
* 3. Clarify the language used in your explanations.
Step 6: Why... Because Activity - pg. 19

Getting to Root Causes


Possible Root Causes derive from “Because”

Priority Performance Concern

Agenda

Identify and Focus on concerns from Trends

Consider External Data and factors that cause performance challenges

Brainstorm possible causes for the concern

Group like causes together

Narrow explanations

“Why ....Because” Process

Validate Root Cause with other Data Sources
Step 7: Validating Root Cause – pg. 20

1. What is the proof that this cause exists?
2. What is the proof that this cause could lead to the stated effect?
3. What proof is there that this cause actually contributed to the problem?
4. Is anything else needed, along with this cause, for the stated effect to occur? EX: Are the special education student schedules the only factor that prevents them from grade level curriculum exposure, or is there another key factor?
5. Can anything else, besides this cause, lead to the stated effect?
Step 7: Validating Root Cause Activity

* Use Validating Root Cause to determine that this is the root cause (pg. 21).
Inquiry Process in SIP Template

* Time to work with your site team to complete the inquiry process, Section III of SIP template
* Facilitators will assist with clarification of questions
* Collaborate with feeder schools
* Title I Overview Meeting (if applicable)
Root Cause Analysis Homework

* What data sources are still needed for Root Cause Analysis validation?
* What school processes/structures need to be analyzed further?
Taking it back to the school

Next steps:

* Complete the Inquiry Process
* Finalize Data Trends-Positive/Negative
* Determine Key Strengths & Priority Concerns
* Identify Root Cause(s)