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Who should be on a Data Team?

- A teacher from each grade level
- A non-core teacher
- A special education teacher
- A member of the support staff (TA, Librarian, Psychologist, etc.)
- A building administrator
- A DO representative

A data team can be comprised of the same personnel as the BPT or a subset of the BPT. It can also be made up of people that do not serve on the BPT, but are interested in looking at Data.

A parent can be included, though this may cause issues when confidential, individual student or teacher information is shared.

A student can be included at the secondary levels.
What does a Data Team do?

- Helps to prepare BPT goals
- Steers building, department, or individual goals in a specific direction
- Examines data and interprets it
- Makes presentations to building staff, DO staff, BOE
- Identifies areas of weakness and strength
- Helps to focus classroom instruction
- Investigates ways to improve teaching and learning
- Provides information to teachers about students
- Provides information to administrators about program
- Raise important questions about student learning and achievement
What kinds of Data can a Data Team look at?

There is a lot of Data available, some from sources that may not be intuitive….

- Student Demographic Data
  - Enrollment
  - Grade Level (retentions)
  - Ethnicity
  - Gender
  - Language
  - Health
  - Socioeconomic status
  - Student Stability
  - Size of Household

- Marking Period Data (and Mid-Marking)
  - By Building
  - By Course
  - By Teacher
  - By Section
  - By Comments
    (hoping for Elementary Report Card Data soon)

- Student Attendance Data
  - By Day
  - By Class

- Teacher Demographic Data
  - Background
  - Interests
  - Qualifications
  - Gender
  - Ethnicity
  - Attendance

- Program Data
  - Program Descriptions
  - Course Outlines
  - Special Programs

- Resources and Materials
  - Technology
  - Textbooks
- Workbooks
- Supplies
- Musical Instruments
- Allocation of Rooms

- NY State Assessment Data
  - By student
    - Single or multi-year and multi-exam
  - By subgroup
  - By Level
  - By Score
  - By building
  - By Strand
  - By Performance Indicator
  - By question
  - Gap Analysis
  - Trend Data
  - Comparison to other districts
  - Comparison to similar schools
  - Comparison to state
  - Comparison to other states

- Benchmark Data

- Survey Data
  - Collected by teacher, building admin or DO
  - Parent surveys regarding perceptions, support and involvement

- Teacher in-class Assessment Data
  - DRA's
  - Fountas and Pinnell
  - Unit exams
  - Topical Assessments
  - GRADE
  - GMADE
  - Midterms
  - Final Exams
  - Questioning in class
  - Teacher-made Tests, Projects, Quizzes
  - Teacher Observations

- Graduation Data
  - Comparison to other districts
- Comparison to similar schools
- Comparison to state
- Comparison to other states

- SAT and PSAT Data
  - By Score
  - By Subgroup
  - PSAT Summary of Answers and Skills
  - Comparison to other NY Schools
  - Comparison to Total Schools

- AP Data
  - By Score
  - By Subgroup
When Should a Data Team Meet?

Monthly is best if it can be scheduled.

Data Teams around the district meet before school, after school or during release time.

Schools with high needs for Data Teams (i.e.: SINI status) usually meet more often and use funds provided for the purpose.
How does a Data Team set Goals?

The Data Team can be given a “charge” from the BPT, Building Administration, District Office administration or because of a need area (i.e.: SINI status).

Surveys can be given to building staff requesting input. Examples of Questions could be:

1. What training do you require regarding data to improve your classroom instruction? (it is always a good idea to ask at what level; beginner, intermediate, expert, that a teacher feels they are. In this manner, grouping can be accomplished prior to organizing training)

2. What data do you need that you don’t have access to in order to improve your classroom instruction?

3. What information would you like to share with your colleagues regarding data you have collected and used with success?
What process should the Data Team use to accomplish its goals?

Data Teams have found it useful to create a “Data Overview”. This is a very generalized, surface view of a building, team or departments data. It can help to jumpstart a conversation for further data needs.

Consider the following before creating a Data Overview:

- Cultural readiness for data
- Language to engage people in process
- Presentation of data
- Facilitation of data
- Assessment literacy
- Slow down to go fast
- Developing collaborative teams
- Time to collaborate
- Reflection and evaluation
Data Driven Dialogue

The district is encouraging the use of Data Driven Dialogue (Lipton and Wellman) to facilitate data meetings. The following steps should provide a guideline:

1. Identify the issue
2. Determine group members to include in discussion
3. Establish dialogue protocols with the group
4. Discuss preconceived assumptions with the initial group
5. Determine group members to add or remove from the team
6. Convene team
   a. Team members must include the appropriate director and building administrator
7. Discuss issue as whole team and set possible sub-groups
   a. Use appropriate dialogue strategies
8. Determine what other information and data elements are needed
9. Reconvene team and continue discussion
10. Develop plan
There are three phases that a Data Team moves through as it works with data. These are represented in the following diagram and can be studied further using Data Driven Dialogue (Wellman and Lipton).

1. Activating and Engaging
   (Surfacing Experiences and Expectations)

   • What are some predictions we are making?
   • With what assumptions are we entering?
   • What are some questions we are asking?
   • What are some possibilities for learning that this experience presents to us?
2. Exploring and Discovering  
   (Analyzing the Data)

- What important points seem to “pop-out”? 
- What are some emerging patterns, categories or trends? 
- What seems to be surprising or unexpected? 
- What are some things we have not yet explored?
3. Organizing and Integrating  
(Generating Theory)

- What inferences/explanations/conclusions might we draw?  
  (causation)

- What additional data sources might we explore to verify our  
  explanations?  
  (confirmation)

- What are some solutions we might explore as a result of our  
  conclusions?  
  (action)

- What data will we need to collect to guide implementation?  
  (calibration)
How should the Data Team display and distribute data?

- Keep it simple
- Go Visual
- Think of your audience
  - Be careful with confidential information
  - Broad range data works will with parents and community groups
  - Use more specific data for teachers and admins
- Limit the number of colors and how much information you put on a graph or table
  - If using multiple graphs or tables, keep the formatting consistent
- Highlight the information you want people to focus on
- Use Third Point
- Do not use e-mail to disseminate complicated information, face to face presentations work best
  - Allow time for questions
  - Parking lot when necessary
- Have agenda’s disseminated ahead of time and stick to them
- Consider protocols for discussion ahead of time
  - Pair-share
  - Jig-saw
  - Round robin
  - Post it’s and categorize
  - Gallery Walk notes from group
  - 3-2-1
Taken from *The Data Coach’s Guide*:

**Using Data Charts and Graphs**

<table>
<thead>
<tr>
<th>Average Number of Minutes Spent Teaching on Content Areas in Grades 3–5 at the Silver Lake Elementary School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
</tr>
<tr>
<td>74</td>
</tr>
</tbody>
</table>

**Bar Graph (Horizontal)**
- Illustrate comparison of performance
- Use for a series with long labels
- For example, displaying aggregated student achievement scores by content or (as in example) number of minutes subject is taught

<table>
<thead>
<tr>
<th>Average Number of Minutes Per Day Content Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>41</td>
</tr>
</tbody>
</table>

**Bar Graph (Vertical)**
- Illustrate comparisons between or among groups
| 1st-Grade Enrollment in 2000-2001 and 2005-2006 at Rittenhouse Elementary |

<table>
<thead>
<tr>
<th>Pictograph</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Display data as symbols, pictures, or illustrations related to the information being conveyed</td>
</tr>
<tr>
<td>- Provides added interest to data displays</td>
</tr>
<tr>
<td>- Makes abstract comparisons more concrete; can be useful in working with children</td>
</tr>
</tbody>
</table>
What are current Data Teams working on within the district?

Main Street
The Data Team at the North Syracuse Early Education Program has somewhat of a different focus than school age teams, due to the lack of formalized testing. Because of that, for the 2010-2011 school year, the team chose to focused on the following items:

- Improving the accuracy of student enrollment and placement for the PD System and State reporting.
  This was obtained by reviewing each child’s IEP and making necessary corrections prior to the final reporting date. Through a team effort by the accountants, secretaries and myself, we were able to reach 100% accuracy for the October Snapshot data.
- Correcting verification data for VR13 report
- Correcting data for the VR4 report
- Streamlining the referral and evaluation process to ensure we are in compliance with the State mandates and regulations
- Correcting the VR12 Compliance Issue for the 2008-2009 school year, resulting in the program being 100% in compliance
- Assessing student growth pertaining to NYS Prekindergarten Standards as building goals. Through a check list, completed by all teachers, we determined the percentage of students at mastery for both the 3 year old students who will have another year of preschool and the 4 year olds transitioning to kindergarten. Our results reflected that the majority of the indicators of success were achieved. This data will now become the baseline for next year’s building goals.

Allen Road Elementary School
Allen Road will continue to have the BPT act as the primary data analysis team, and this summer will be meeting to work on how to integrate data analysis efforts (integrating
Data Driven Dialogue content) with the new format and purpose of the BPT goal documents. In addition, a portion of each monthly grade level team meeting will focus on grade specific data collection and analysis.

**Bear Rd. Elementary**

We have used analysis of the ELA and Math assessments using Data Mentor and data reports from the RIC to target those performance indicators that we are weak in. These are the areas that we target in our goal writing. We also use the ELA IRS reports to help teachers identify weaknesses by student so that they may focus on those weaknesses in their classroom instruction. We continue to track the trends over time as well. Teachers also use the Math Benchmark Test results to guide their instruction.

**Cicero Elementary**

Our BPT, along with two additional staff members, has worked as the Data Team this year. We used some BPT meeting time, as well as two half days. We’ve looked specifically at the performance of our SWDs. We conducted an on-line staff survey to get input on how to improve student scores, with a focus on SWDs. That information was shared with staff, and we are interested to see how those students perform on this year’s assessments. We will continue to work next year on improving student performance through data analysis.

**Lakeshore Road Elementary School**

Our BPT Data team spent two half-days analyzing ELA and Math data. After finishing our gap analysis, defined goals for authors intent/purpose and math strategies developed. Additionally, our Data Team looked at performance for identified at-risk students to allow for individual student goals. Toward the end of winter, our 3rd and 4th grade teachers administered sample ELA and Math Test and analyzed the data. This then
allowed the teacher to sit one-on-one with every child to review their strengths and set plans for supporting their weaknesses.

**Roxboro Road Elementary School**

This year, the common thread that is woven throughout our school is D-A-T-A. Our newly formulated Data Team has been in the forefront of data analysis in the building. We had to ask ourselves these essential questions: 1. What are our students’ strengths? 2. What are our students’ weaknesses? And 3. What do we need to do instructionally to address our students’ weaknesses?

Additionally this year, our Data Team has thoroughly examined our 4th Grade NYS ELA data for 2010; shared the data with the entire school; and gave each grade-level the charge of revising their instruction to meet students’ needs at their own grade-level.

From our school-wide data-work, these are some of our outcomes:

- Each classroom has posted a list of “Essential Vocabulary Words” for ELA and Math – tailored for each grade-level
- Each classroom has posted a list of “20 Terms Every Test Taker Should Know”
- Each Classroom has posted the writing prompts and their definitions “WHO; WHAT; WHEN; WHERE; WHY; HOW and now, WHICH”
- Poetry understanding (figurative language) is becoming an integral part of each classroom’s instructional strategies
- Each classroom has posted a list of “7 Tips for Reading Tests”
Our Data Team “cheerleaders” have gotten the word out that, “Shared responsibility” is the key to our success—A BUILDING-WIDE FOCUS!

We royally thank Director Donna Marie Norton for her guidance throughout this data-work!

Smith Road Elementary School

Creating a “Student Data Profile” that includes assessment, demographic and observational data

This profile will be used to connect specific factors with student achievement and hopefully reveal which pieces of data have the most positive and negative impact on student learning.

We then plan to use this information to better predict student performance and allow for earlier and more targeted interventions.
**Gillette Road Middle School**

The data team created predictions of what the data would show. We then explored our predictions by doing an in-depth item analysis of all math and ELA state test data. We identified the areas where students were challenged and then what students were expected to know and be able to do to be successful. We reviewed those areas to pinpoint broad skills that our students need to concentrate on across all curricular areas. We identified the following:

- Predicting patterns
- Vocabulary – content and test taking
- Multiple step processing
- Decoding directions
- Identify relevant information vs. irrelevant information
- Verbal language experience
- Use context clues

After identifying these areas the group brainstormed strategies to help students:

- More verbal interaction among peers and adults
- How to approach questions
- Assessing learning styles
- Apply skill to real life
- Study and test taking skills
- Practice with concrete skills
- Hands on practice
- Students and teacher verbally explain how a they solved a problem

During the school year the entire staff was exploring and implementing instructional strategies in *Instruction for All Students* during one staff meeting we had teacher identified instructional strategies that would focus on the broad skills that were identified by the data team. In addition, a group met and generated ideas on how to incorporate study skills into content areas.

**Roxboro Road Middle School**

Roxboro Road Middle School is using the data from various sources including Performance Pathways and NYS Assessments to drive instruction in **ALL** core areas. We expect that student achievement
(students receiving a 3 or 4) on the NYS ELA and Math assessments will increase by 5% while the expectation for student achievement science and social studies district and local assessments is 3%. Furthermore, 100% of LOTE students will write a 30 word comprehensible paragraph in the target language with 85% accuracy. This will be accomplished by: Improving writing skills by expanding use of voice, using richer vocabulary, correct paragraphing to organize information, increased use of supporting details from text when addressing a specific question or topic, and improved editing skills; Incorporating critical thinking skills such as interpreting data, gathering meaning from text, identifying literary elements and use of proper grammar throughout all subject areas.

In LOTE, students will be taught to utilize writing steps and strategies for all chapter/unit writing assignments using the target language. In addition, student work will be analyzed by the BPT and departments to assess impact on student writing and self-evaluation.

**North Syracuse Junior High School**

Use of data has become part of the “norm” at the junior high. There are many on-going data analysis projects going on in every department.

**Counseling** – Student grades, test scores and attendance are compiled and organized to help counselors work with students and parents during annual review and schedule preparation. Counselors use attendance data and grades during the “Check and Connect” program to explain to students the connection between good attendance and better grades/learning.

**Social Studies** – Analysis of benchmark and regents data (individual and group scores) and item analysis to drive instruction and create tests.

**Special Education** – Collects data for: (1) Immersion program instruction; (2) Comparison of ELA 6 and ELA 8 state assessment scores as parallel tests; (3) Analysis of all state assessments for students with disabilities in levels 1-4; (4) Development of target areas to focus on for ELA testing which is based on NSCSD scores versus regional scores to find the highest student deficiencies for students with disabilities.

**All Departments** – Use data from teacher passing rates every 10 weeks, department passing rates, course passing rates, benchmark testing results (if applicable), midterm passing results, final exam results, Regents results for discussion on instructional analysis, change in instruction as needed, curriculum development, and student achievement.

**Committees (ELA Task Force, 8.5 Program)** – Analysis of student achievement and attendance in grade 8 and 9 with emphasis placed on how students have done not only in their current grade level but also since grade 4.

**Scheduling** - Student achievement breakdown drives student placement of a better heterogeneous mix of abilities in classes. Students who have done poorly (attendance, grades, homework, behavior, environmental factors) are grouped and re-grouped to help with
scheduling. Teachers in the next grade level review data on these “at-risk” students specifically to help them succeed.
AIS ELA/Math – There will be a focus on those students who take AIS and how they are doing in their classes.
Blended Students – Progress is monitored and grades are reviewed every 5 weeks.

The CNS data team is investigating which performance indicators are areas of weakness for our students (especially SWD). We look at historical performance on state assessments for multiple cohorts and link this data with classroom achievements. The team looks for trends, highlights and surprises-sharing this information with the English and Special Education teachers, and eventually the entire staff. The next focus will be to take results from January and June Regent’s examination and break down where student’s errors were made.
APPENDIX A
DATA SOURCES

1. Data Mentor [www.datamentor.org]
   a. Accounts available for teachers and administrators
   b. Apply directly on-line
   c. Has trend data, building data, grade data, question by question, by skill and regional comparison data

2. COGNOS
   a. Accounts available for administrators only
   b. Application through OCM BOCES
   c. Has State assessment data, 3-8, Regents, RCT, Marking Period, subgroup, individual student and multilayered comparison data

3. SIS Web
   a. Accounts available for administrators
   b. Apply through District Pupil Personnel Office
   c. Has all demographic, course, attendance, assessment and historical data for students in district

4. Performance Pathways
   a. Accounts available for teachers and administrators
   b. Apply through District Professional Development Office
   c. Has assessment and benchmark data, can select personalized groups of students
5. IEP Direct [www.iepdirect.com](http://www.iepdirect.com)
   a. Accounts available for administrators
   b. Apply through District Special Education Office
   c. Has data regarding special education program for individual students and personalized groups

APPENDIX B
SCREEN SHOTS FROM DATA SOURCES

1. Data Mentor building data

![Data Mentor building data](image)

2. Data Mentor trend charts

![Data Mentor trend charts](image)
3. COGNOS Scores Cube

4. COGNOS Item Map Cube
5. COGNOS Student Achievement Cube

6. SIS Web Download Menu
7. SIS Web Extracts

8. Performance Pathways
9. IEP Direct Snapshots

![IEP Direct Snapshots](image1)

10. IEP Direct Verification Reports

![IEP Direct Verification Reports](image2)
APPENDIX C
TEMPLATES

Each data team looks at unique data sets and should therefore arrange the data to suit their needs.

Attached are a few general templates that might be used to jump start a data conversation. Teams should feel free to add to, delete from and modify as needed.
<table>
<thead>
<tr>
<th>Action steps</th>
<th>Time frame</th>
<th>Lead person</th>
<th>Resource</th>
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APPENDIX D
BIBLIOGRAPHY


