Data-Based Decision Making: What Our Numbers Are Telling Us

Game Over!!

Johns & Patrick
Definition

Data-based decision making:
An ongoing process of analyzing and evaluating information to inform important educational decisions and actions
Why Use Data?

The purpose of data-based decision making is to review:

• Systems
• Practices
• Tools
Data Analysis: Necessary Components

Collect high quality data:
- Standardized forms provide an efficient means to gather relevant information
…continued

* Input data into an efficient storage and manipulation system (Excel, SWIS, etc.)

* Create a standard process to review, analyze, and problem-solve data
Data Must be Collected Continuously

- Embed data into the school system
  - "It’s just how we do things around here"

- Summarize data within a team format
…continued

* Only present data when it will be used for decision making purposes

* Don’t drown in the data
When Should Data-Based Decisions be Made?

Select natural cycles

Based on the level of the system being addressed

- Individual: daily, weekly
- School-wide: monthly, quarterly
- District: three times/year
- State: annually
Use Data to Determine:

- The nature/definition of the problem
- The scope of the problem
- The areas and/or systems involved
- The most effective use of resources to address the defined problem
What Data Should be Collected?

- Always start with the questions you want answered
- Find data to answer those questions
- Balance between reliability and accessibility
- Consider logistics
Guidelines

- Use available data
- Make data collection easy
- Display data in efficient ways
- Develop a schedule for frequent data review
- Utilize multiple data types and sources
Steps to Data Analysis

- Compare data to the expected benchmarks/goals

- Analyze the factors contributing to the area of concern
  - health, curricular, instructional, high ability, emotional, skill gaps, etc.

- Define the problem

- Consider 2-3 options to address area of concern
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* Develop an action plan:
  Address factors hypothesized for the concern
* Determine the timeframe to evaluate effectiveness
* Implement the developed plan with consistency
* Evaluate the impact of the action plan:
  If necessary, develop a new plan
Types of Data to Analyze

🌟 Demographics
- Total number of students enrolled
- Ethnic percentages
- Percentage of students on free/reduced lunch
- Percentage of English learners

🌟 Academic Performance Index (API)

🌟 Academic Yearly Progress (AYP)

🌟 Average Daily Attendance: staff/student
Number of substitutes on campus

Office Referral data:
- Average per Day per Month
- By Problem Behavior
- By Location
- By Time
- By Staff
- By Student
- By Function (Motivation)
- By Environment
- By Ethnicity
• Suspensions:  
  • Total count: month/month, team/team, grade/grade  
  • By violation  
  • By student/staff  
  • By administrator  
  • By time of day
Expulsions:
- Total count: month/month, team/team, grade/grade
- By violation
- By student/staff

School Police Contacts:
- Total number of responses
- Type of request: proactive/reactive
- Outcome

...continued
Remember

Data is good…but only as good as the systems in place to:

- Collect
- Summarize
- Analyze
- Make decisions
- Make action plans
- Implement interventions
- Sustain implementation
**Data Analysis Through the Tiers**

Data-based decision making is the engine which drives a Response to Intervention (RTI) system. Without accurate data which is accessible in a timely manner, it will be impossible to build and maintain effective academic and discipline systems. As schools learn to "own their data," they will be able to implement relevant interventions to address the challenges identified through the systematic review of data. The following chart outlines the data which may be analyzed as schools build, modify, and maintain their academic and discipline systems.

**School-wide Data**
Tier One data (academic and discipline) will typically be shared by the PBS, administrative, and/or leadership team within a staff meeting setting. Review of Tier One data should occur at least a monthly basis in order to drive school-wide processes, instruction, and support planning.

**Group Data**
Tier Two data will typically be reviewed within a grade-level or team setting by an administrator, counselor, behavior interventionist, or team leaders. Review of Tier Two data should identify staff and/or students who require targeted skill development and/or additional monitoring and feedback.

**Individual Data**
Tier Three data will typically be reviewed within a team setting by an administrator or specialist (academic, behavioral). Review of Tier Three data should be used to evaluate and modify interventions designed for high-risk individuals.

### Academic
- **Standards-based**
  - State/federal proficiency data — California Standards Test
  - District benchmark data
  - District common assessment data — by grade (elementary), by subject (secondary)
- **Skills-based**
  - Diagnostic data — AIMSweb
  - Progress monitoring data (bi-monthly) — AIMSweb
  - Program-based assessments

### Discipline
- **Climate data**
  - Identified locations
- **Classroom Management data**
  - Selected team/staff — time of day, students, problem behaviors, environmental factors, functional factors
- **Suspension data**
  - Total count — year to year, month to month, team to team
  - Selected locations
  - Selected education code violations
  - Selected team/staff
  - Selected students

**Data-Based Decision Making**
Thank You!

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