

#### MDE/NCA School Improvement Conference Lansing, Michigan

*"It is about focusing on building a culture of quality data through professional development and web based dynamic inquiries for school improvement."* 

#### **Beyond Achievement Data**

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## 1. Standardized test data

- 1. achievement data
- 2. achievement related data
- 3. process data
- 4. perception data



# 2. Completion with a "C" or better of College Prep Course Requirements

- 1. achievement data
- 2. achievement related data
- 3. perception data
- 4. process data



#### 3. Discipline Referrals

- 1. achievement data
- 2. perception data
- 3. achievement related data



#### 4. Grade Point Average

- 1. achievement data
- 2. process data
- 3. achievement related data



#### 5. Suspension Rate

- 1. perception data
- achievement data
- 3. achievement related data



# 6. Number of students received individual tutorial assistant

- 1. achievement data
- 2. process data
- 3. perception data
- 4. results data
- 5. achievement related data



#### 7. Attendance Rate

- 1. achievement data
- 2. process data
- 3. achievement related data



8. "What others think, know or demonstrate" as a result of instruction is considered what kind of data?

Process
2. Perception
3. Results



9. "What you did for whom" or evidence that the event occurred is considered what kind of data?

/1. Process2. Perception3. Results



10. "So What" data or proof your program has impacted student ability is considered what kind of data?

Process
Perception
Results



# 11. I am excited about using data to effect change

- 1. Strongly agree
  - 2. Agree
  - 3. Neutral
  - 4. Disagree
  - 5. Strongly Disagree



# 12. My understanding of achievement related data

- 1. Extremely high
- 2. High
- 3. Neutral
- 4. Low
- 5. Extremely low



## The Data Wheel



#### **Process Data**

- Process Data
  - What did you do and for whom?
  - Who, what, when, where, how long
    - Ex. Evidence that an event occurred Family Science Night, Non-traditional career fair
    - Bullying Prevention Presentation



## **Perception Data**

#### Perception Data

- What do students think they know, believe or can do
- What others perceive and believe
- Attitudes and beliefs held by constituents
  - Ex. Pre –survey lesson about advance placement courses and then post survey. Went from 47% knowing that students who take AP courses are better prepared for post secondary education and perform better on standardized assessment increase to 92%



#### **Perception Data - Examples**

- <u>Attitudes or Beliefs</u>
  - 74% of students believe fighting is wrong
  - 29% of students feel safe at school
  - 32% believe they will succeed in college
  - 95% believe that good ELA skills are essential for college and career readiness
- <u>Competency Achievement (Skills)</u>
  - Every student in grades 9-12 completed a 4 year plan
  - Every 10<sup>th</sup> grade student completed an interest inventory
  - Use writing, speaking, and visual expression for personal growth to create powerful and critical messages
  - Use good public speaking/presentation skills
  - Figure out new vocabulary using contextual clues, roots, etc
- Knowledge Gained
  - 89% of students demonstrate knowledge of promotion/ retention criteria
  - 92% can identify Early Warning Signs of violence

70% understand how language variety reflects and shapes experiences
Hatch, T. (2008)
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# **CTE** Survey



#### **Results Data**

#### Results Data

- Achievement Data

- State Test data, SAT/ACT, GPA etc.
  - Been focusing on the same data, doing the same thing, getting the same results – now we need to look at other data and do other things to get different results.



# What is Achievement Related Data?



# Types of Results Data: Achievement-Related Data

- Achievement-related data address factors that contribute to students ability to achieve:
- Social skills/Soft skills
- Mental health support and referral
- Parent involvement
- School climate and safety
- Student self-efficacy beliefs



Achievement-related data measures those fields the literature has shown to be correlated to academic achievement. These data fields include:

- Course enrollment patterns
- Discipline referrals
- Suspension rates
- Alcohol, tobacco and other drug violations
- Attendance rates
- Parent or guardian participation
- Homework completion rates
- Participation in extra-curricular activities

#### **Conceptual Diagram of Data**

Process Data	Perception Data		Results Data	Results Data
	Competency Attainment data	1	Achievement	Achievement data
Guidance	Attainment data Attitudes		Related data Attendance	State test
lessons, group		Behavior	Discipline	SAT/ACT
counseling etc	Skills>	Change	Referrals	scores
	1		Parent	PS enrollment
	Knowledge		Involvement	GPA
			Homework	Four year
			Course	academic plans
			enrollment	EDP
Who	Skills			Think about
What				Achievement Data
When				in your school
Where				
How long				

Guidance Curriculum

Intentional Guidance Intervention

Hatch, T. (2008)

#### CONCEPTUAL DIAGRAM Lesson of Achievement Related Data: Promotion Retention

#### Competence attainment data Achievement Achievement Attitudes Activity: Guidance lesson related data Believe that doing homework matters Data Believe that using study strategies will help Skills Who? All 6, 7,8th graders What? Promotion /Retention Homework Accurately fill out an assignment planner Homework Improve GPA Calculate a GPA Completions Improved GPA When? Language Arts Class Completion How long? 2 lessons Standards addressed? A:A1; A;A3 knowledge

Know the best places, times, ways to study Know the promotion retention criteria Know where to seek help (tutoring) Identify three study strategies



Hatch, T. (2008)

#### When educators focus on Achievement Related Data it:

- Impact student achievement
- Improve student course-taking patters that increase access to rigorous academic work
- Raise student aspiration and motivation
- Manage and access school and community-based resources
- Motivate students to assume responsibility for their educational and career planning



#### New routes open when one type of data crosses another"



"It is not until we intersect all four measures, at the school level and over time, that we are able to answer questions that will predict if the actions, processes, and programs that we are establishing will meet the needs of **all students.**"



Victoria L. Bernhardt Journal of Staff Development, Winter 2000 (Vol. 21, No. 1)

#### **Jigsaw Activity Objective**

 The objective of this activity is to deepen your understanding of different types of data and how analyzing different types of data impact each other.



#### **Jigsaw Activity**

Intersections Article by Victoria Bernhardt

Discussion as a table

#### Four A's Text protocol

- What assumptions does the author of the text hold?
- What do you agree with in the text?
- What would you like to argue with in the text?
- What does this text aspire you to?



## Mental Models

- Mental Models are deeply held internal images of how the work works, images that limit us to familiar ways of thinking and acting. Very often we are not consciously aware of our mental models or the effects they have on our behavior
- Mental models are powerful, because they determine what we play attention to, and therefore what we do. Mental models are strongly conservative: If left unchallenged, they will cause us to see what we have always seen: the same needs, the same opportunities, the same results—and because we see what our mental models permit us to see, we do what our mental models permit us to do.



# Video of Mental Model

Terie Dreussi Smith - mental model of teacher and classroom mov.mpg



## **Mental Models**

#### Show Example



# Mental Model Activity Objective

- The objective of this activity is to organize the achievement related data in your school.
- Connect achievement related data to a mental model about how you use the data in your school.
- Present your mental model to the group. Give a brief description of your school and explain achievement related data as it pertains to your school.



#### **Achievement Related Data**

Action Plan Template



# **Action Plan**

Achievement related data	What is your data source	Who is on your data team	Analyzing the data	Student Input	What is your intervention	What is your timeline	How do you know you have achieved results



#### Bibliography

*Course enrollment* patters. Students who take more rigorous course work do better on standardized test (e.g., Smith & Niemi, 2001).

*Discipline referrals.* Students who behave better achieve better achieve better (e.g., Van Horn, 2003).

Suspension rates. Student who are suspended are less likely to be high academic achievers (e.g., Williams & McGee, 1994).

Alcohol, tobacco, and other drug use. Students who use drugs or alcohol perform at a lower rate academically than those who do not(e.g.,Jeynes, 2002).

Attendance rates. Students who attend school perform better than those who do not (e.g., easton & engelhard, 1982).

*Parent involvement* Students whose parents are involved in meaningful ways in the school outperform those whose parents are not (e.g., Merchant, Paulson, & Rothlisberg, 2001).

Extracurricular activities. Students who feel connected to school participate in extracurricular activities and perform better than those who do not (e.g., Mahoney, Cairns, & Farmer, 2003.

Homework completion rates. Students who complete and turn in homework do better in school (e.g., Cooper, Lindsay, Nye, & Greathouse, 1998).



# **Closing Reflection**

- What possibilities have opened up for you today?
- How will you take what you have learned in this session and share with colleagues to begin the initial stages of creating a culture of assessing achievement related data?



#### What Questions Do You Have ?

