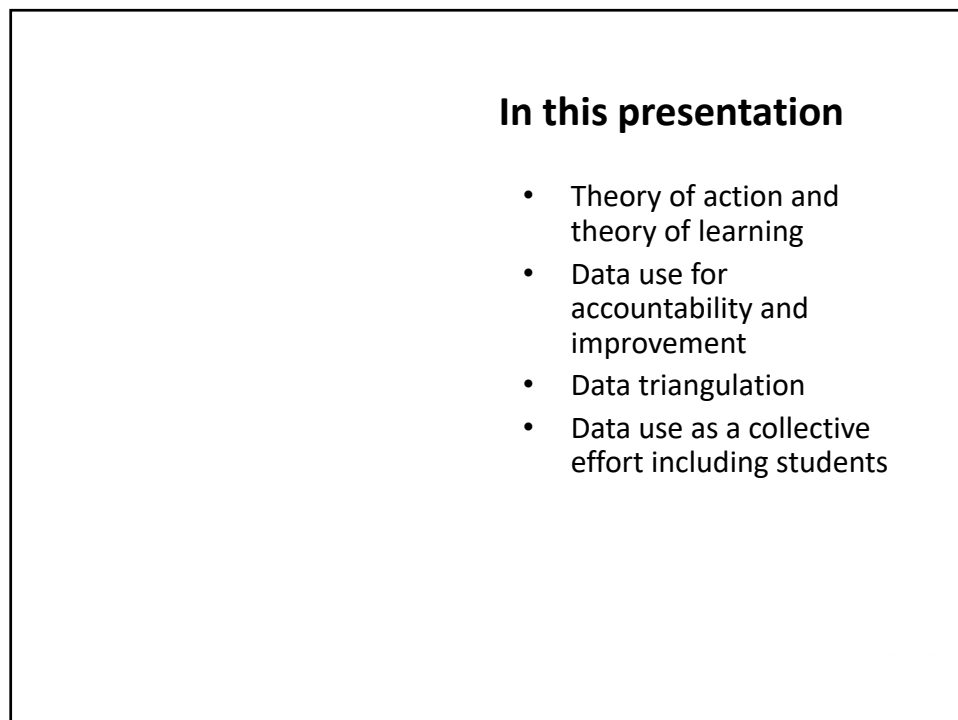


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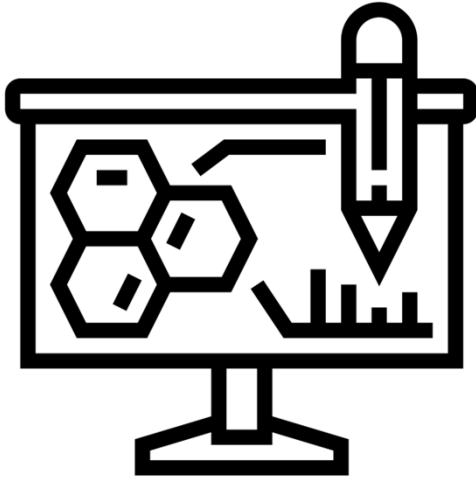
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## Introduction

- Enormous volumes of data
- New tools and applications
- How to use data to improve the quality of human decision making?

3

## Misconception 1: DBDM Interventions lack a theory of action

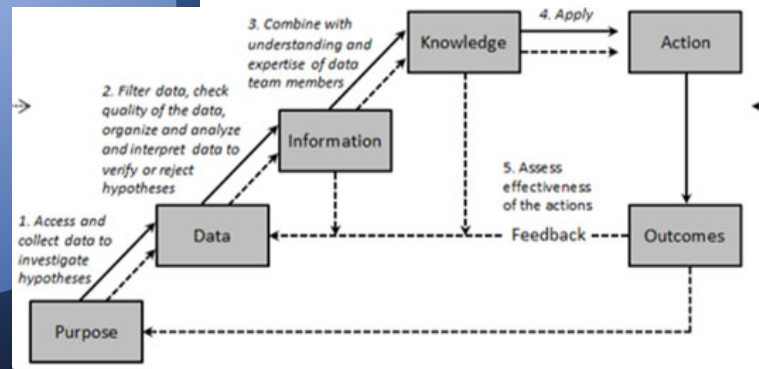


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### Misconception 1: DBDM Interventions lack a theory of action

- Several theories of action, frameworks, and models of inquiry
- From goals to data to information to knowledge to action to outcomes



Schildkamp & Poortman, 2015

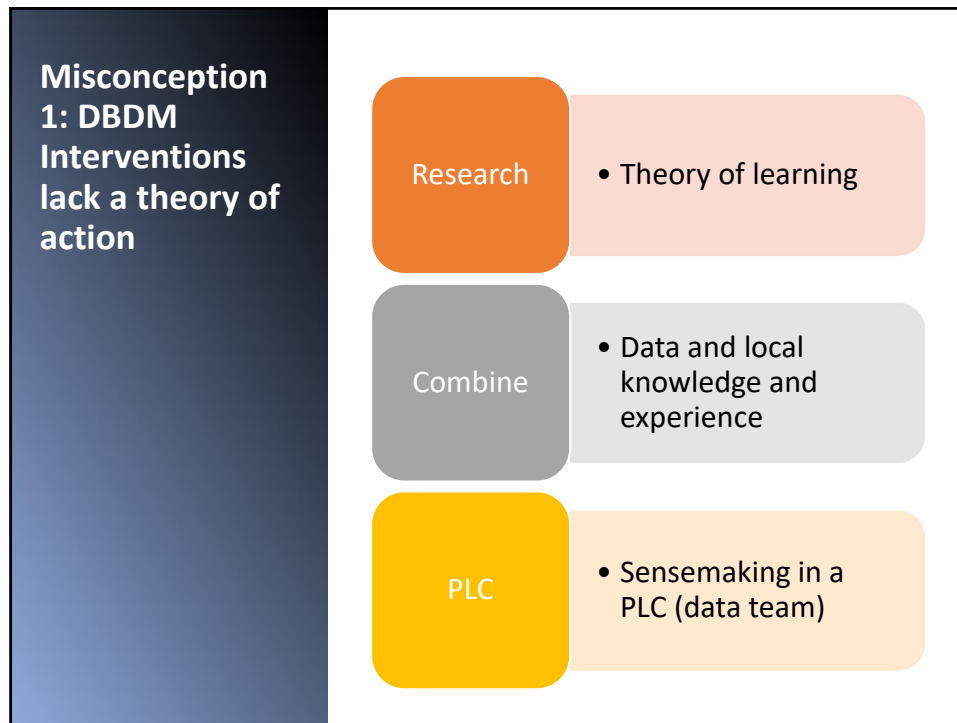
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### Misconception 1: DBDM Interventions lack a theory of action

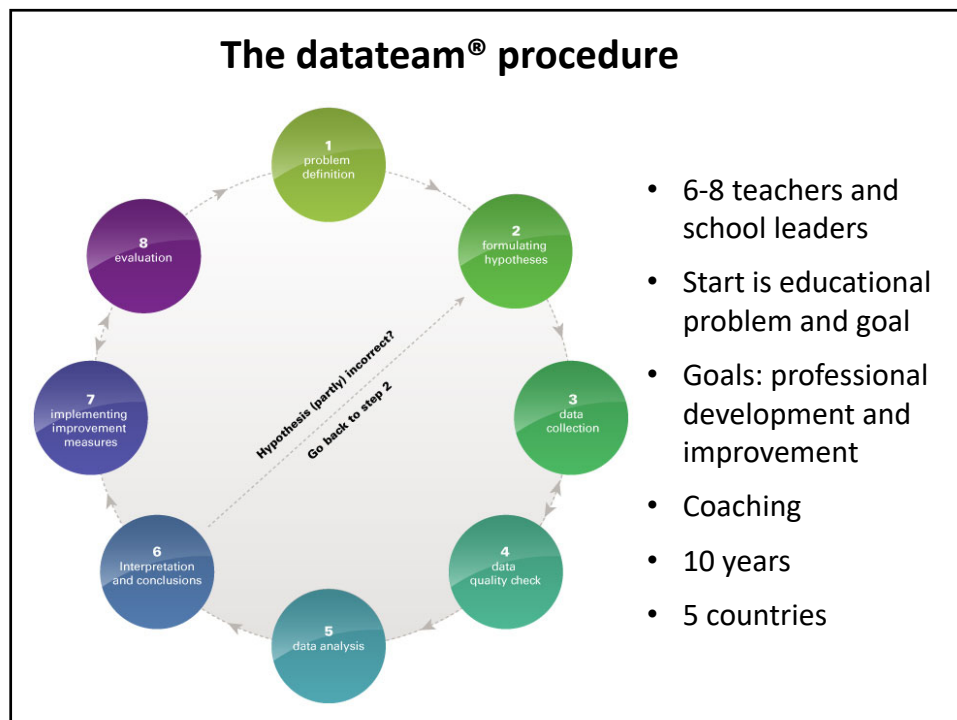
#### Challenges

- Data use is:
  - not straightforward and linear
  - iterative
  - involves sensemaking
- Focus on student learning but what about teacher learning?
- How do we combine data with local knowledge and experience?
- A theory of learning?

6



7



8

**Misconception  
2: Data use is  
mostly there for  
accountability  
purposes**



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9

9

**Misconception  
2: Data use is  
mostly there for  
accountability  
purposes**

**Challenges**

- Shaming and blaming, deficit mindsets
- Narrow curricula
- Short-term goals, bubble kids
- Focus on test scores not on whole child
- “Accountability without improvement is empty rhetoric, and improvement without accountability is whimsical action without direction”
- Data in an accountability system can reveal aspects that need improvement
- Different stakeholders - different goals
- Goals: Deliberation, negotiation, debate

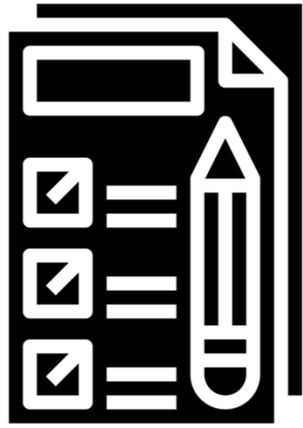
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**Misconception 2: Data use is mostly there for accountability purposes**

<b>Goals</b>	<ul style="list-style-type: none"> <li>• Start with goals not data</li> </ul>
<b>Diversity</b>	<ul style="list-style-type: none"> <li>• Achievement, equity, wellbeing, safety, health etc.</li> </ul>
<b>Research</b>	<ul style="list-style-type: none"> <li>• Balance accountability and improvement</li> </ul>

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**Misconception 3: The most important source of data are test results**



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**Misconception  
3: The most  
important  
source of data  
are test results**

**Data**

- Systematically collected
- Qualitative & quantitative
- Cognition, socio-emotional, attitudes, behavior etc.
- Socially constructed
- Goal displacement
- New goals require new data
- Triangulation
- Student voice data

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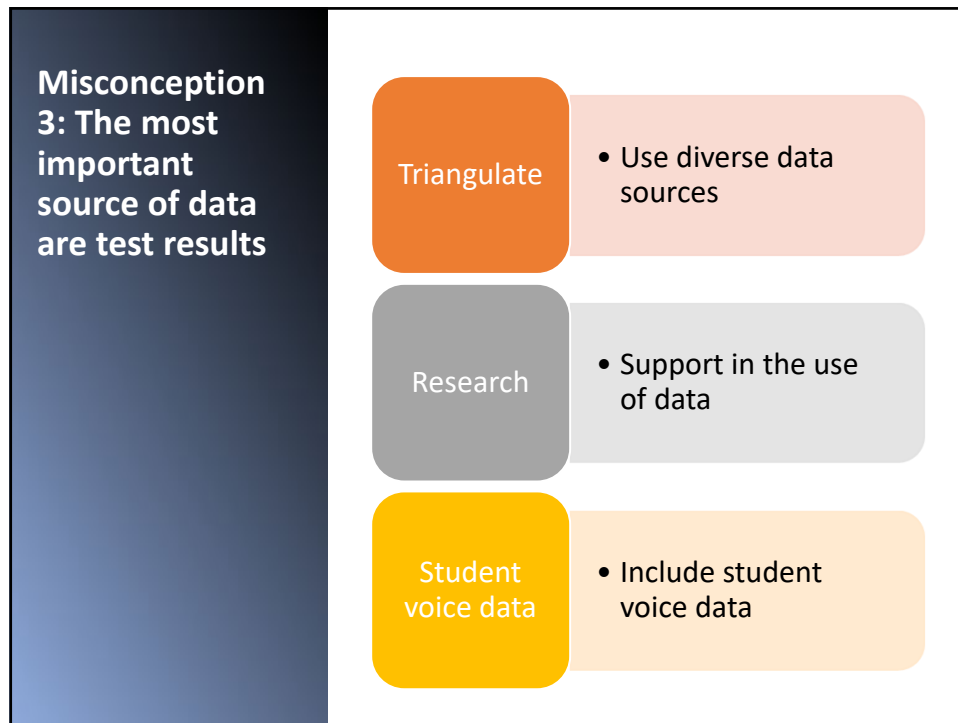
**Misconception  
3: The most  
important  
source of data  
are test results**

**Challenges**

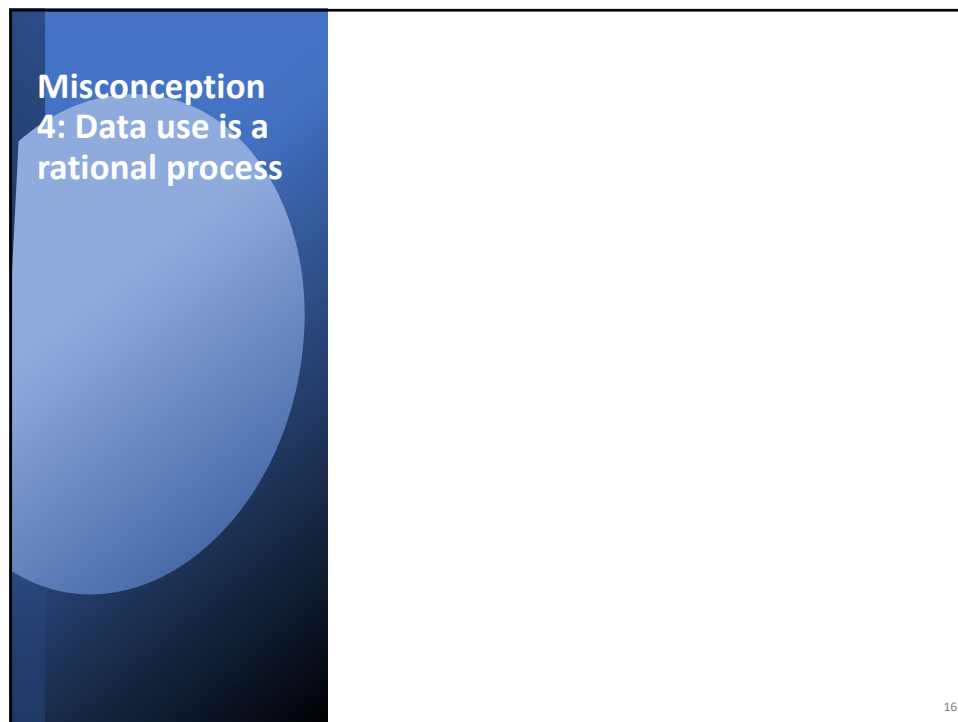
- Overreliance on assessment data and/or lack of access to other data
- Interim data show which students need help, understanding of misconceptions or next instructional steps is missing
- Look beyond traditional student performance indices
- Students are not numbers



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### Misconception 4: Data use is a rational process

#### Challenges

- Data use is not straightforward or exclusively rational
- People filter data through lenses, experiences, intuition
- Confirmation bias
- Collective engagement
- Sensemaking and dialogue is crucial
- Requires data literacy

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### Misconception 4: Data use is a rational process

PD

- Invest in data literacy

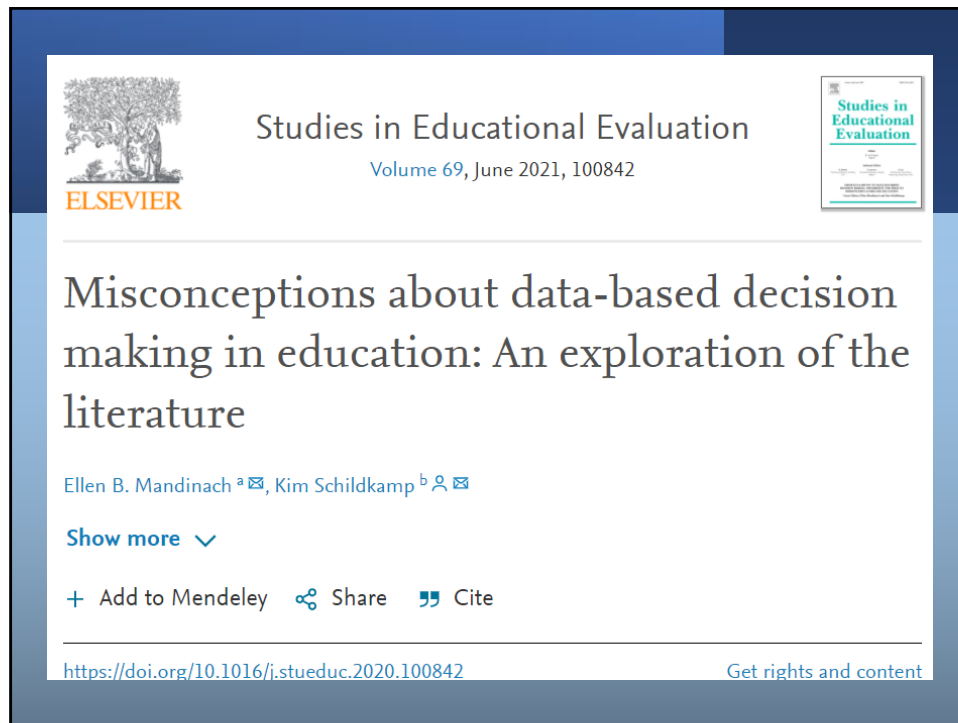
Dialogue

- With different stakeholders

Students

- Include students in the data use process

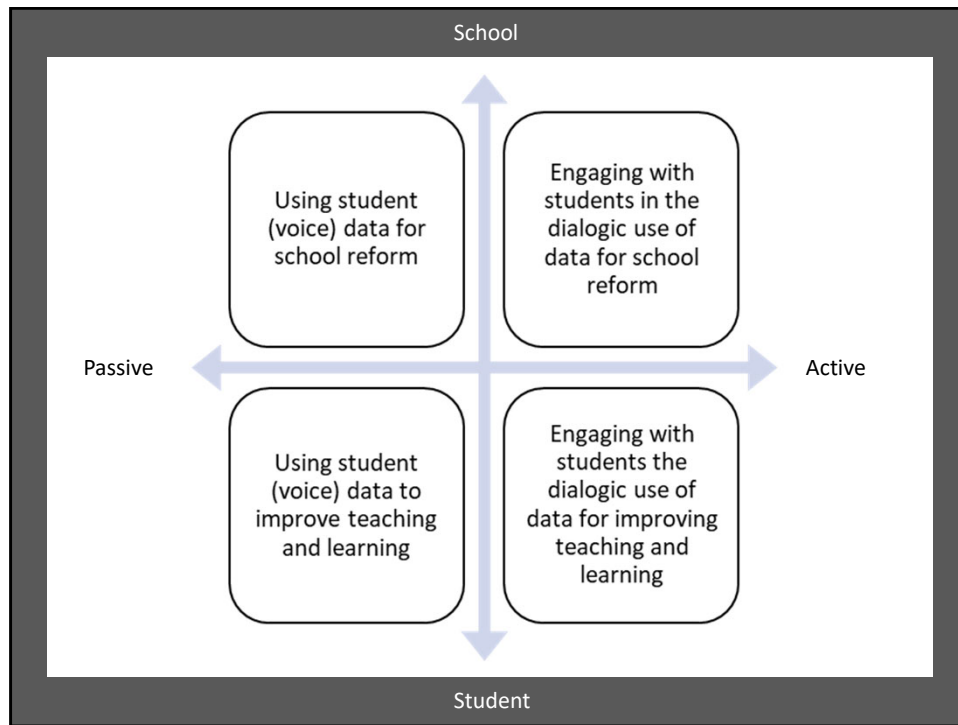
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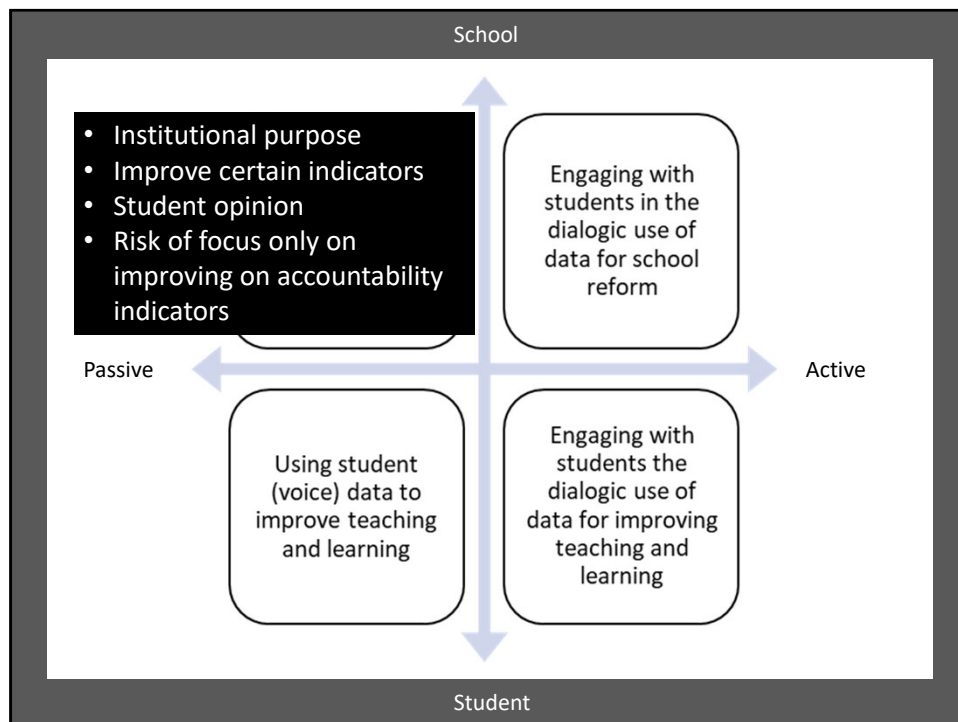
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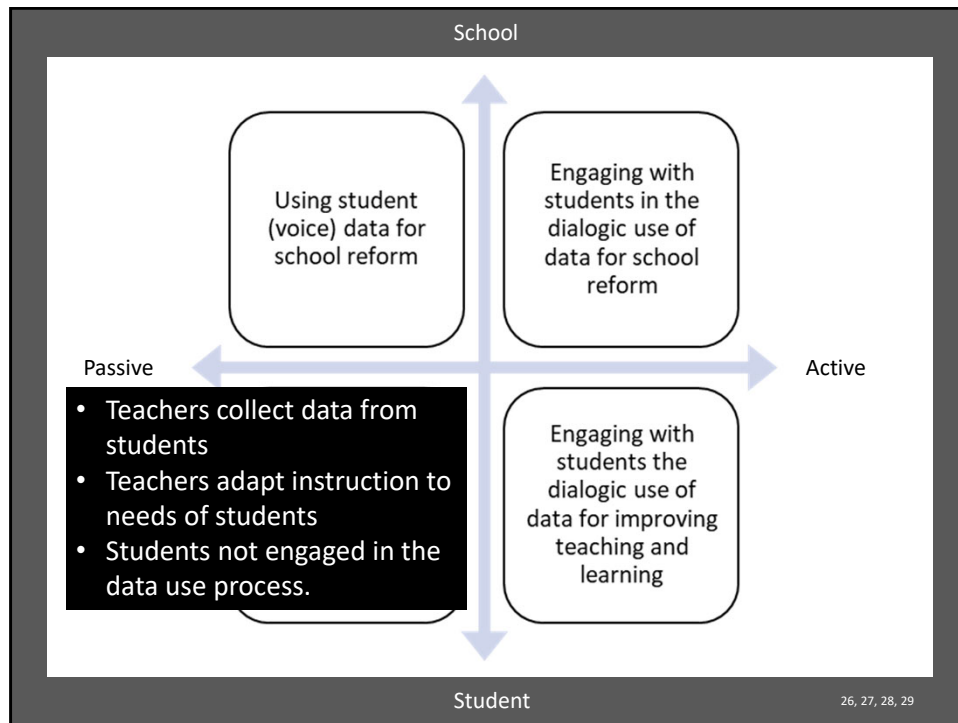
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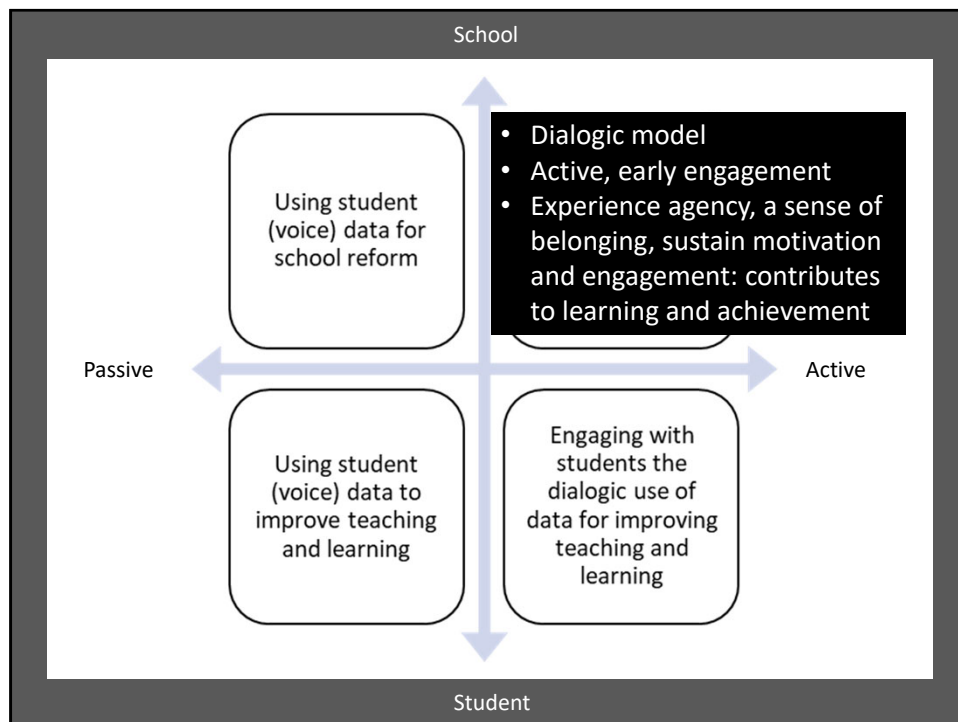
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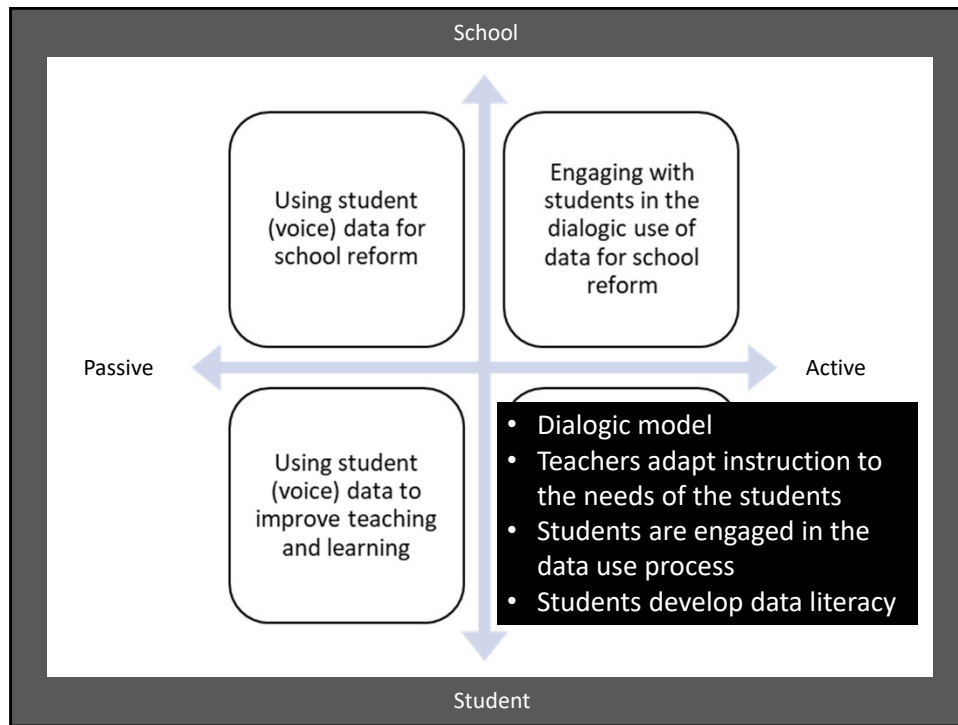
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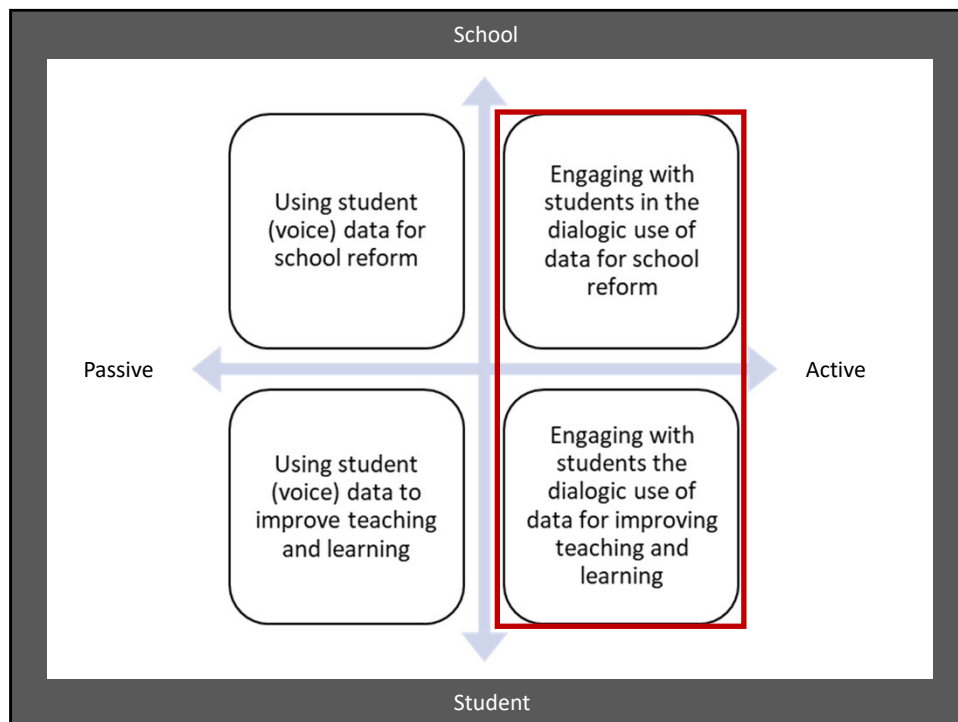
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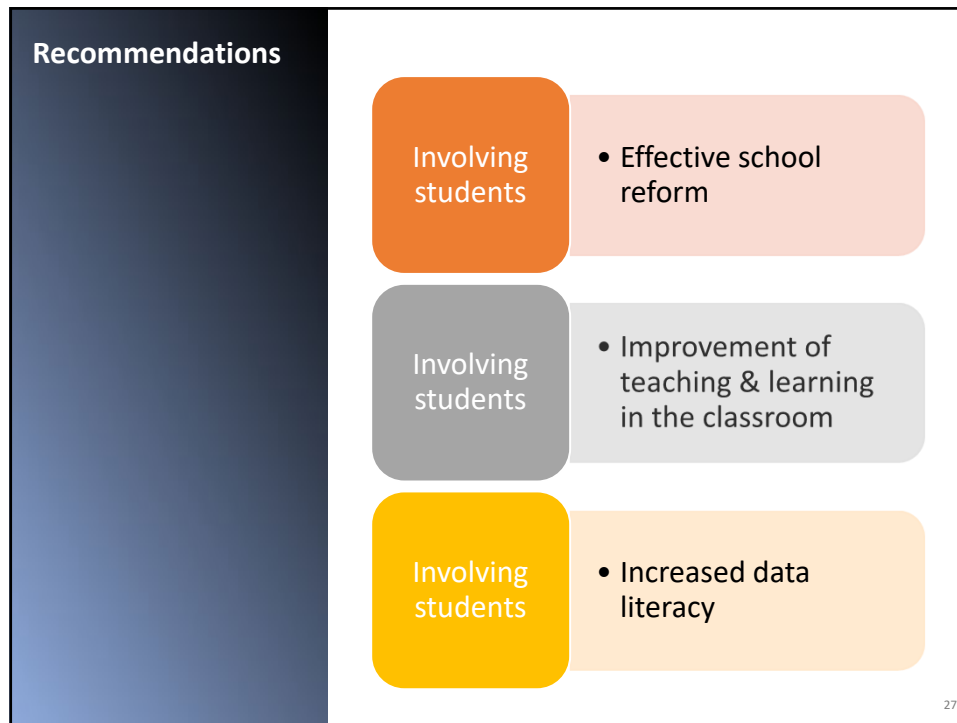
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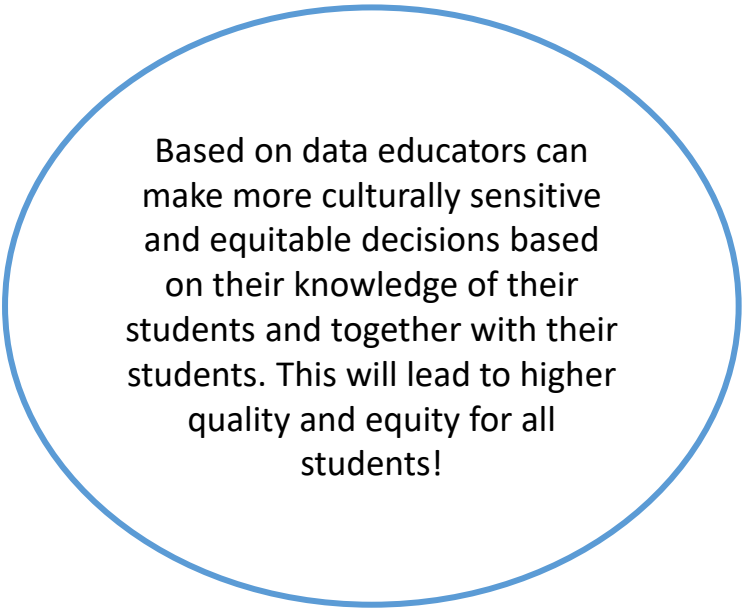


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**Conclusion**

- Data use not rational and technical, it involves human aspects
- For studying data use a theory of action and theory of learning is needed
- Data can be used for accountability and improvement
- Triangulate data
- Effective data use requires a collective effort including students

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Based on data educators can make more culturally sensitive and equitable decisions based on their knowledge of their students and together with their students. This will lead to higher quality and equity for all students!

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Thank you for your attention!

For questions or comments:  
[k.schildkamp@utwente.nl](mailto:k.schildkamp@utwente.nl)

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