Making Decision Support Systems Useful in the Classroom

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The School Improvement Planning Process and local decision support

• Much of our work has been working with district technology and research staff as well as with schools on SIP projects.

• School Improvement Plans have been the justification for our efforts, but rarely seem to play an important role in improvement.

• Is it possible to get inside the improvement process and see why this is failing?
Human Information Seeking Model:
How the search application process works
Sense making, knowledge creation, and decision making

Signals from the environment

Sensemaking

Knowledge Creating
- External Knowledge
- Knowledge and purpose

Decision Making
- Shared meanings and purpose
- New capabilities and innovations
- Goal-directed adaptive behavior

External Knowledge

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Supporting information model and decision making model

• Understanding these two models can help district and state administrators craft better school improvement planning processes.

• Recognize that the various roles of administrators differ and that sensemaking is at least as important as decision making.

• Support professional development efforts that encourage building of analytical skills and local data collection efforts.
What steps can one take to improve the school improvement process?

- Data at finer levels of temporal resolution are key to understanding and addressing instructional problems. Local documentation of practice may help.
- Needs assessment is a skill that seems to be lacking in most educational training. Rubric-type surveys could serve to provide feedback.
## Capacity Assessment Tools

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Using rubrics to guide the process

The school acquires both district (attendance, test score, etc.) and local data by downloading data from a district information system, buying it from a test vendor, or by collecting the data internally.

1. The school can access neither district or local data

2. The school can successfully access district data, but often has to hand key in data from written reports.

3. The school can access district and local data electronically, but data aggregated.

4. The school is very successful at attaining individual student data (both local and district sources) in electronic format.

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Improvements to data access and manipulation

- **District Level**
  - Program identifiers for tracking program impact across schools
  - Embedding historical models into centrally-held information
  - Providing ongoing training for teachers and administrators on data collection and analysis

- **School Level**
  - Ongoing dialogue about what constitutes relevant evidence about student performance towards larger goals
  - Strategic collection of classroom-level data that supports core goals, not data for data’s sake
For more information

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