

RTTT Deliverable #2: Data-Driven Instruction



**Training to implement the
school-based inquiry and
data-driven instruction teams**

- Data Culture Analysis
- Overview of DDI model
- Springsteen Case Study
- Digging Deeper
 - Assessment
 - Analysis

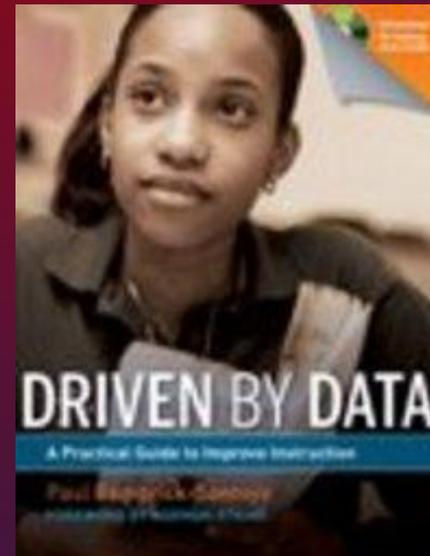


Goals for Today

Overview of DDI Model

4 Components

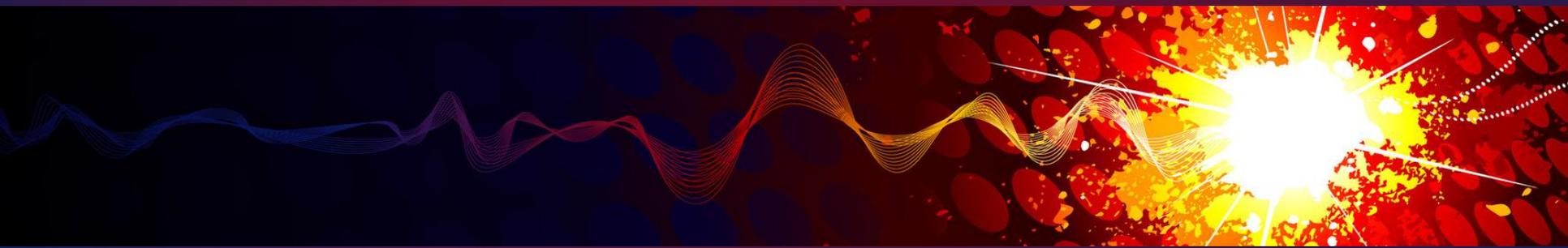
- Assessment
- Analysis
- Action
- Data-Driven Culture



Assessments

- Common interim assessments (6-8 weeks)
 - Standards-aligned
 - Re-assess previously taught standards
 - Comparable to state test (rigorous and challenging)
- Transparent starting point
 - Seen at start of cycle
 - Used as roadmap to guide instructional decisions

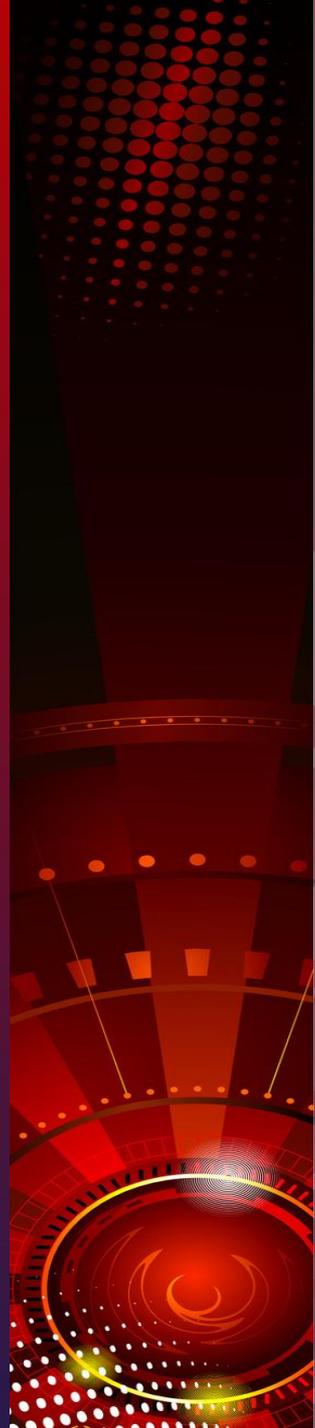
- Immediate data analysis
- User-friendly data reports
 - Item-level
 - Standards-level
 - Bottom-line
- Teacher-owned
 - Test-in-hand
- Deep thoughtful analysis



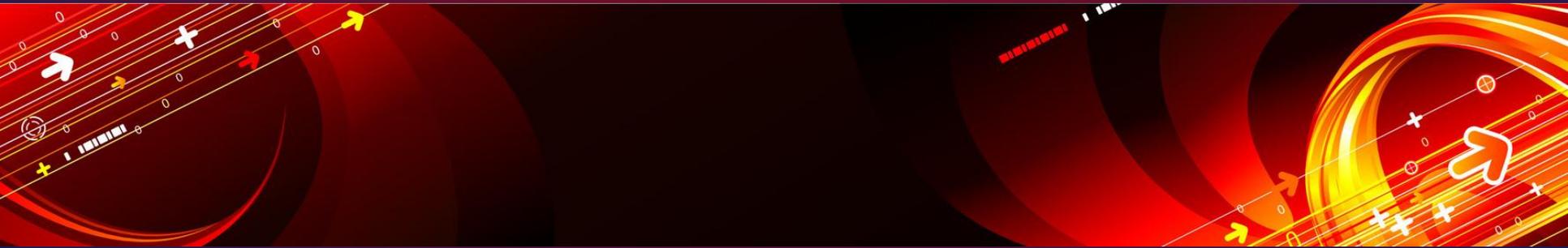
Data Analysis

Action Plans

- New lessons
- Action plans
- Ongoing assessment
- Engaged students
- Accountability



- Highly effective leadership team
- Introductory professional development
- Ongoing professional development
- Build by borrowing



Data – Driven Culture

Data-Driven Instruction

4 Components

- Assessments
- Data analysis
- Action plans
- Data-driven culture

- What did Jones do well in his attempt to improve mathematics achievement?
- What went wrong in his attempt to do data-driven decision making?
- As the principal at Springsteen, what would be your **FIRST STEPS** in the upcoming year to respond to this situation?



Case Study: Springsteen Charter School

Case Study: Springsteen Charter School

Mistakes that Matter

- Inferior assessments
- Secretive assessments
- Infrequent assessments
- Curriculum assessment disconnect
- Delayed results
- Separating teaching and analysis
- Ineffective follow-up
- Not making time for data

False Drivers

- Total buy-in
- Poorly-defined PLCs
- Year-end results analysis
- Analysis not tied to concrete action

Percent of Number

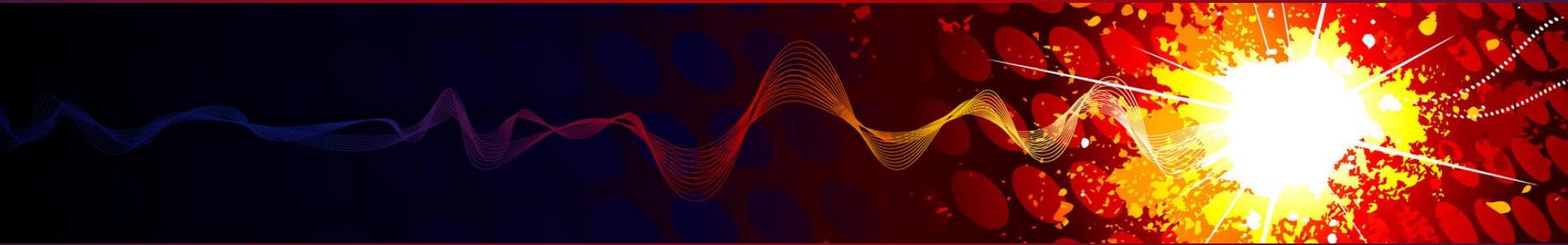
1. 50% of 20:
2. 67% of 81:
3. Shawn got 7 correct answers out of 10 possible answers on his science test. What percent of questions did he get correct?
4. J.J. Redick was on pace to set an NCAA record in career free throw percentage. Leading into the NCAA tournament in 2004, he made 97 of 104 free throw attempts. What percentage of free throws did he make?

5. J.J. Redick was on pace to set an NCAA record in career free throw percentage. Leading into the NCAA tournament in 2004, he made 97 of 104 free throw attempts. In the first tournament game, Redick missed his first five free throws. How far did his percentage drop from before the tournament game to right after missing those free throws?
6. J.J. Redick and Chris Paul were competing for the best free-throw shooting percentage. Redick made 94% of his first 103 shots, while Paul made 47 out of 51 shots.
 - Which one had a better shooting percentage?
 - In the next game, Redick made only 2 of 10 shots while Paul made 7 of 10 shots. What are their new overall shooting percentages? Who is the better shooter?
 - Jason argued that if Paul and J.J. each made the next ten shots, their shooting percentages would go up the same amount. Is this true? Why or why not?



Percent of Number

Big Ideas: Assessment



- Standards (and objectives) are meaningless until you define how to assess them.
- Because of this, assessments are the starting point for instruction, not the end.

Main Idea and Theme: Little Red Riding Hood

1. What is the main idea?

2. This story is mostly about:

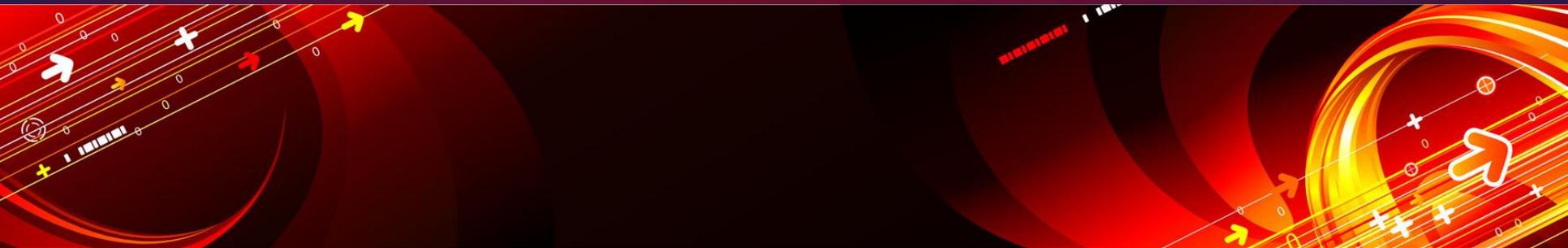
- A. Two boys fighting
- B. A girl playing in the woods
- C. Little Red Riding Hood's encounter with a wolf
- D. A wolf in the forest

3. This story is mostly about:

- A. Little Red Riding Hood's journey through the woods
- B. The pain of losing your grandmother
- C. Everything is not always what it seems
- D. Fear of wolves

- In an open-ended question, the rubric defines the rigor.
- In a multiple choice question, the options define the rigor.

NOTE: Quality assessments have a balance of both.



Big Ideas: Assessment

Power of the Question



- Common interim assessments (6-8 weeks)
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Assessments

Analysis of Assessment Results



Creasy and Pita





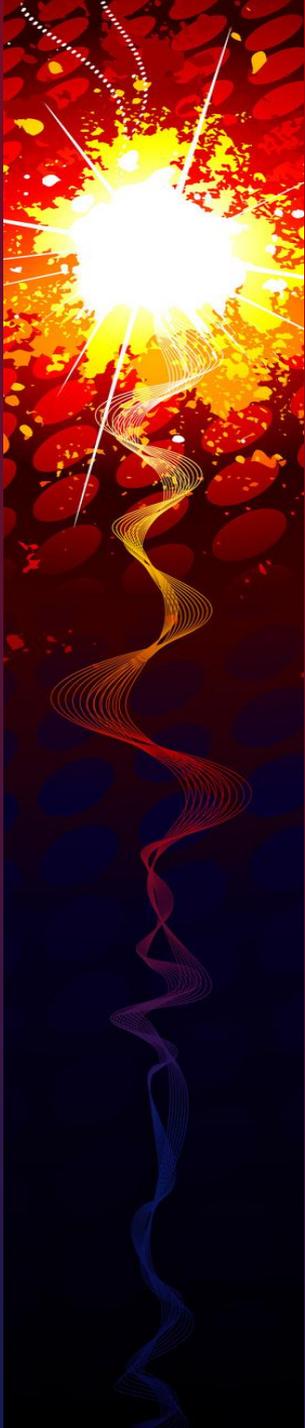
1. What were the key moments?

2. What made Creasy's analysis effective?



Creasy and Pita

Big Ideas: Analysis



- If you're not at the pool, you cannot do the analysis.
- The heart of the matter is presenting the data so clearly that the student or teacher can come to the right conclusion on their own.
- Relationships matter!

- Select an assessment (ELA or math).
- Find the accompanying data report.
- Analyze the data on two different levels.
 - Global Impressions
 - Dig In



Being at the Pool

Global Impressions



Global conclusions you can draw from the data:

- How well did the class do as a whole?
- What are the strengths and weaknesses in the standards: where do we need to work the most?
- How did the class do on old vs. new standards? Are they forgetting or improving on old material?
- How were the results in the different question types (multiple choice vs. open-ended, reading vs. writing)?
- Who are the strong/weak students?

“Squint” - deeper conclusions you can draw from the data:

- Bombed questions—did students all choose same wrong answer? Why or why not?
- Compare similar standards: Do results in one influence the other?
- Break down each standard: Did they do similarly on every question or were some questions harder? Why?
- Sort data by students' scores: Are there questions that separate proficient / non-proficient students?
- Look horizontally by student: Are there any anomalies occurring with certain students?



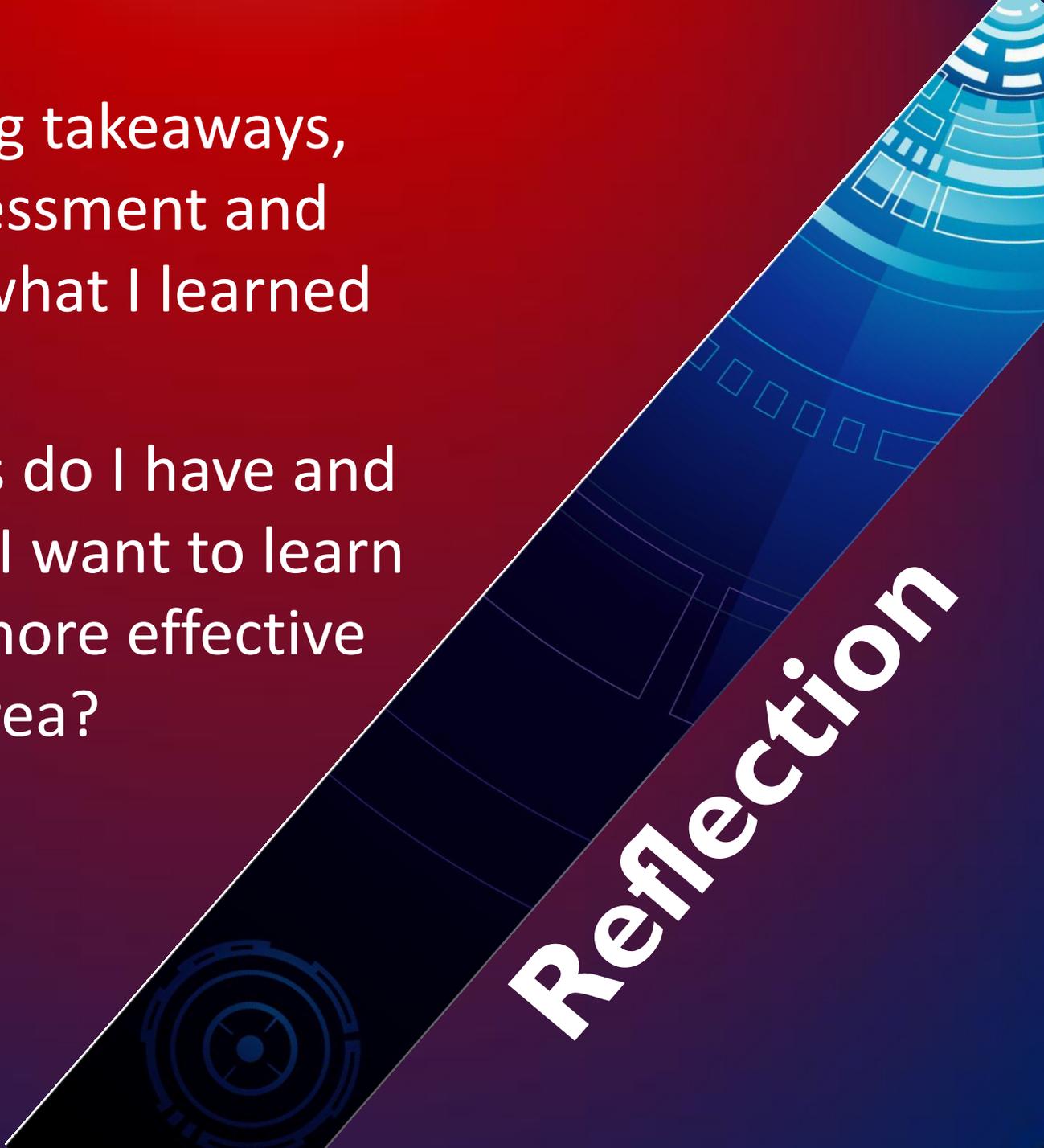
Dig In

Data Analysis

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Being at the pool!

- What are my big takeaways, in terms of assessment and analysis, from what I learned today?
- What questions do I have and what things do I want to learn to be an even more effective leader in this area?



Reflection

Data Analysis Meeting



- Let the data do the talking.
- Let the teacher do the talking.
- Always go back to the test and back to specific questions.
- Don't fight battles on ideological lines.
- You've got to know the data yourself to have an effective meeting.
- Make sure the analysis is connected to a concrete action plan.
- There is a difference between the 1st assessment and the 3rd.

- Any observations?
- Use videos for training purposes
- [VIDEO LINK](#)



Video of Data Analysis Meeting

Analysis to Action: Man on Fire

- What made Creasy's analysis effective?
- After a solid analysis, what made the action plan effective?



- What made the difference?
How did Lou Russ finally learn to play the drum?
- What changed Mr. Holland's attitude and actions?



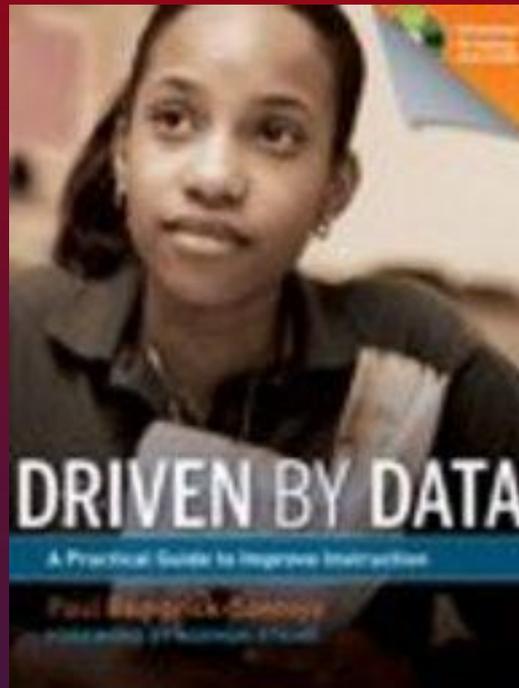
Analysis to Action: Mr. Holland's Opus

Key Principles of Action Plans

- **PLAN:** Develop new lessons
- **ACTION:** Implement what you plan (dates, times, standards, etc.)
- **ONGOING ASSESSMENT:** Conduct in-the-moment checks for understanding to ensure progress
- **ENGAGED STUDENTS:** Students know the end goal, how they did, and what actions they're taking to improve
- **ACCOUNTABILITY:** Observe changes in lesson plans, classroom observations, in-class assessments, etc.

4 Components

- Assessment
- Analysis
- Action
- Data-Driven Culture



Best Next Steps



- Determine 2012-2013 calendar for IT meetings
 - Monthly, every 2 months, etc.
- Determine a rollout of DDI for your entire building
 - 2-year phase, 5 year phase, etc.
 - Assessment creation, analysis meetings, etc.
 - Departments, grade levels, etc.
- After determining the building rollout, determine steps for phase I of rollout.

Reflection



- Questions?
- Comments?
- Concerns?