

An Overview of the Instructional Data Team Process

A 3D red line graph with a large upward-pointing arrow at the end, set against a grid background. The graph shows a fluctuating line that ends in a large, bold arrow pointing upwards and to the right. The background is a light gray grid with perspective lines.

Dr. Suzy Cutbirth
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Today's Purpose

Facilitate an understanding:

- 1) Why Data Teams?**
- 2) What is an Instructional Data Team?**
- 3) What is the role of the Instructional Data Team in district and school improvement?**
- 4) What steps can be taken to implement Instructional Data Teams effectively?**



What You DO Is What You Get...

- **If you are saying “kids are not achieving, they are not engaged, and they are not succeeding, *then please don't continue the same practices and expect different results!*”**



GOAL 1: All Missouri students will graduate college and career ready.

- **OBJECTIVE 1: The percentage of students:**
 - **1% increase in NAEP proficiency**
 - **Proficiency and above on state assessment above 75%**
 - **At or above the mean of the top 10 states on college and career ready**
- **OBJECTIVE 2: By 2020, all students will qualify for entrance into post secondary education/training.**



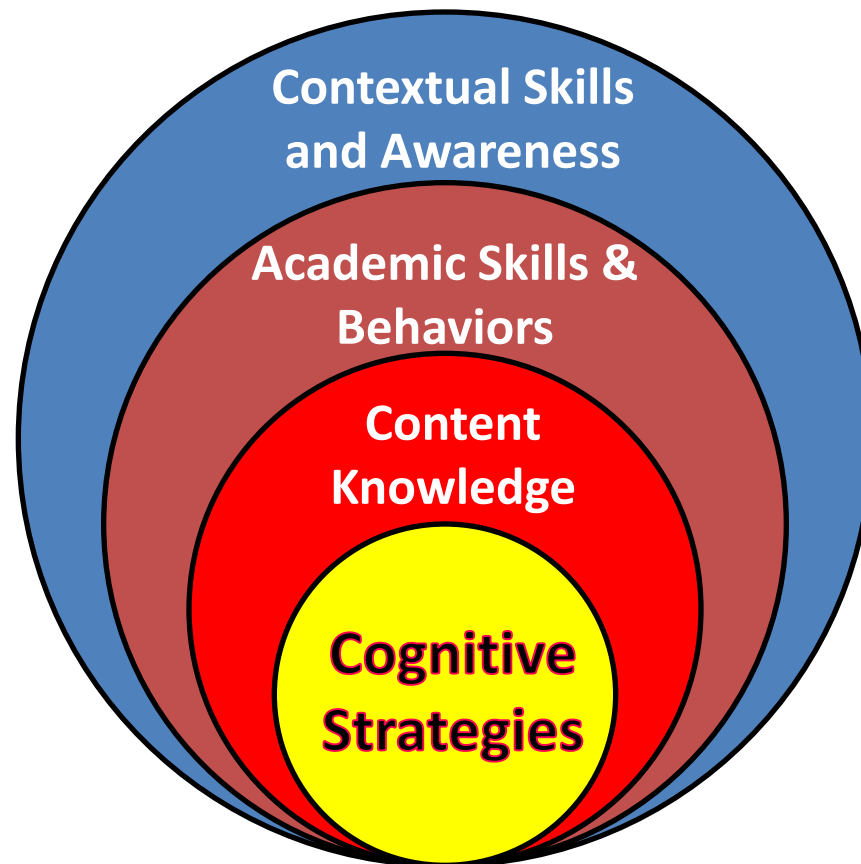
Definition of “Ready”

The definition of “ready” is

...a student who can succeed— without remediation—in credit-bearing general education courses or a two-year associates or certificate program that leads to a career



Four Dimensions of College and Career Readiness





Structural Elements

- **Learning Progressions**
- **Spiral Learning**

Contextual Elements

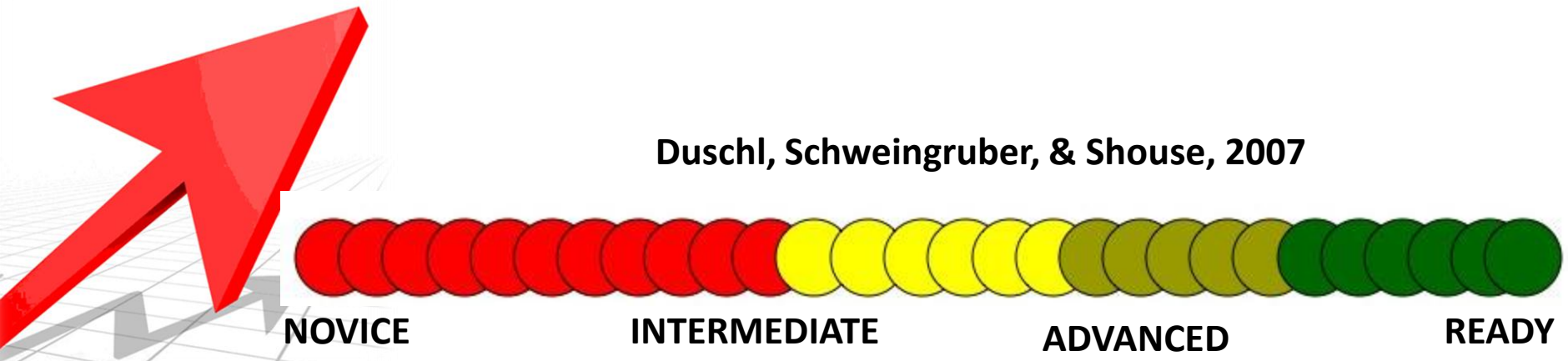
- **Rigor**
- **Application (relevance)**



Learning Progressions

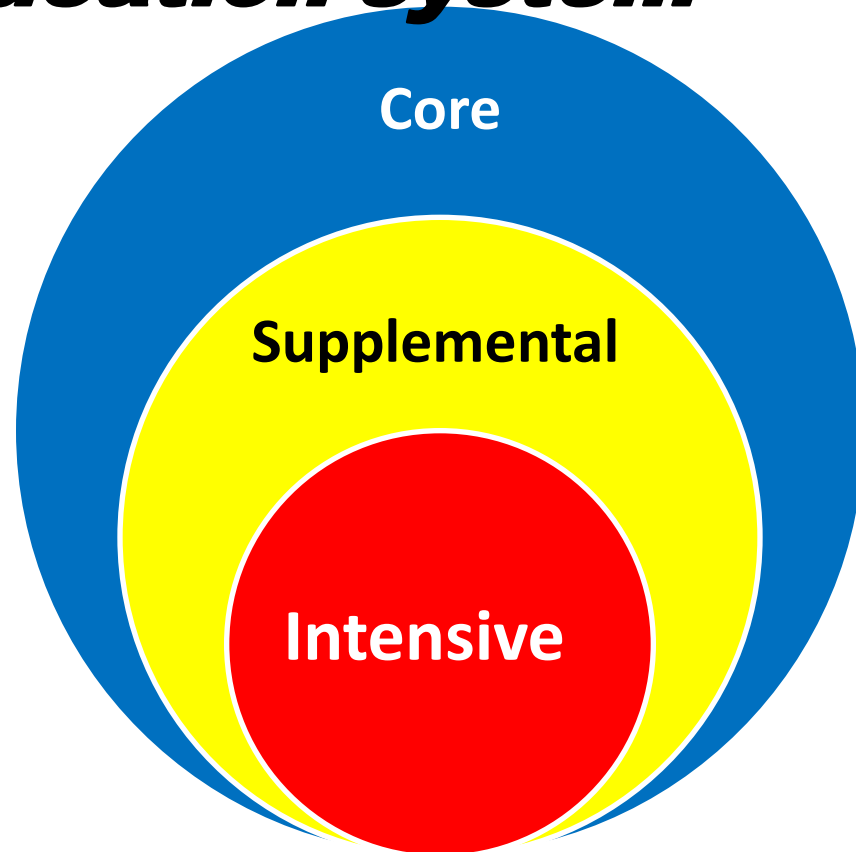
“...anchored on one end by what is known about the concepts and reasoning of students entering school...At the other end of the learning continuum are ‘societal expectations’ (values) about what society wants students to know and be able to do....”

Duschl, Schweingruber, & Shouse, 2007



Basic Premise of Differentiated Support

All students are part of the general education system



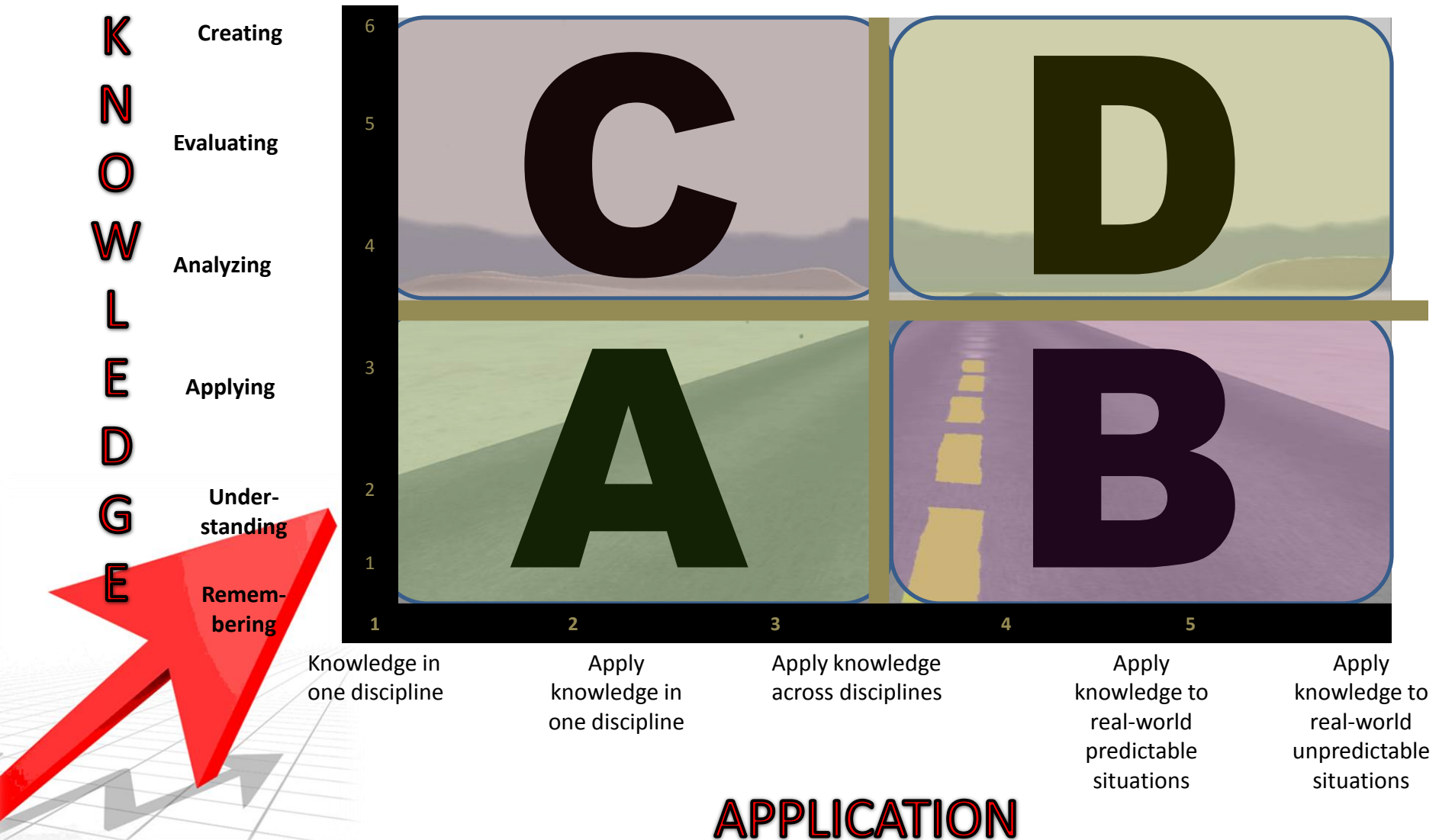


Spiral Learning

“With the spiral method of learning complex information, you see an overview of the field –

without being expected to remember anything, but simply to put a model in your mind that makes sense, and seems do-able, so that you feel excited about proceeding in your adventure.”

Rigor and Relevance Framework



% Proficient & Above

75%

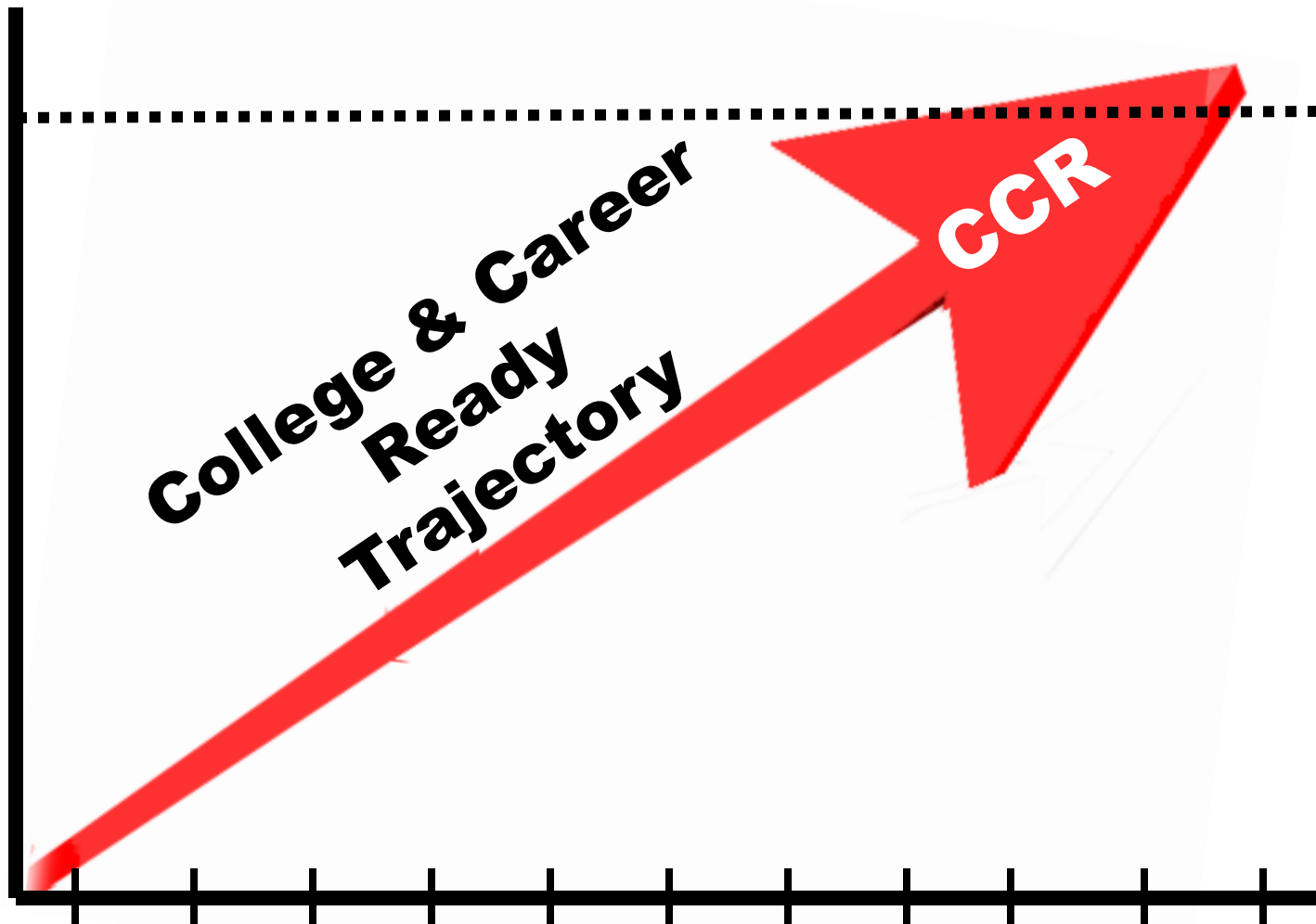
**College & Career
Ready
Trajectory**

CCR

2011

2015

2020



SYSTEMATIC DATA-DRIVEN DECISION MAKING REQUIRED



Principles of Data-Driven Decision Making

Antecedents

Accountability

Collaboration



Holistic Accountability

- 1) No child will be held more accountable than the adults in the system;
- 2) **Adult actions (cause data), must be as carefully monitored as student achievement outcomes (effect data); and**
- 3) **Adult cause and student effect data must be monitored on every level of the system through District Data Teams, School Data Teams, and Instructional Data Teams.**



COMPONENTS of EFFECTIVE DATA-DRIVEN SYSTEMS

- Focus on student achievement;**
- Prioritized standards-based curriculum;**
- Use of data to inform instruction;**
- Frequent assessment of student progress;**
- Use of research-based strategies;**
- Collaborative teams focused on student learning; and**
- All adults held accountable for student achievement.**



OPERATIONALIZING THE SYSTEM

Data Team Process

- District Data Team;**
- School Data Teams; and**
- Instructional Data Teams (grade level and/or content area teacher teams).**



Data Teams

- **Data Teams are groups of professional educators working collaboratively to analyze the effect of their actions on identified student outcomes.**
 - **“Data teams adhere to continuous improvement cycles, examine patterns and trends, and establish specific timelines, roles, and responsibilities to facilitate analysis that results in action.”**



White, S. (2005). *Beyond the numbers*. Englewood, CO: Advanced Learning Press.

**Administrators &
Teacher Leaders**

District Data Team

**School
Data
Team**

**School
Data
Team**

**School
Data
Team**

Instructional Data Team

Instructional

Instructional

Instructional

Instructional

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Instructional Data Team

**General Ed, Special Ed,
Art, Music P.E.
Teachers**



Suggested District Data Team (DDT) Composition

- **Superintendent**
- **Assistant Superintendent(s)**
- **Curriculum Director**
- **Content Area Directors/Supervisor.**
- **SPED Director**
- **ELL Director**
- **Principal Representation**
- **Teacher Representation**
- **Board of Education Representation**
- **Union Representation**
- **Parent Representation**



District Data Teams

Responsibilities:

- Meet every 4 to 8 weeks
- Develop District Improvement Plan (DIP)
- Approve School Improvement Plans (SIP) and monitor School Data Teams
- Monitor DIP implementation and effectiveness, and revise accordingly
- Report on district progress to all stakeholders



Suggested School Data Team (SDT) Composition

- **Grade level teacher representation**
- **Content area teacher representation**
- **Special education representation**
- **Guidance Counselor/Social Worker**
- **Parent representation**
- **Union representation**
- **Administration**



School Data Teams

- **Responsibilities:**
 - **Meet on at least on a monthly basis**
 - **Develop SIP**
 - **Monitor Instructional Data Teams**
 - **Monitor SIP implementation and effectiveness, and revise accordingly**
 - **Report on district progress to all stakeholders**



Instructional Data Teams (IDT)

- **Responsibilities:**

- **Meet on a least a bi-monthly basis**
- **Develop and review results from Common Formative Assessments**
- **Analyze student work**
- **Establish SMART goals**
- **Agree upon effective teaching strategies and interventions to implement before summative assessment is administered**



**** Some teams choose to collaboratively plan lessons***

Instructional Data Teams Composition

- **Grade level or content area teams that examine individual student work and data generated from common formative assessments.**
- **IDTs have collaborative, structured, scheduled meetings that focus on the effectiveness of teaching and learning.**



Instructional Data Team Steps

Collect and chart data



```
graph TD; A[Collect and chart data] --> B[Analyze strengths and obstacles]; B --> C[Establish goals: set, review, revise]; C --> D[Select instructional strategies]; D --> E[Determine results indicators];
```

Analyze strengths and obstacles

Establish goals: set, review, revise

Select instructional strategies

Determine results indicators

Instructional Data Team Actions

Collect and chart data

- Pretest
- Previous assessments covering same skill

Analyze strengths and obstacles

- Focus on factors you can influence
- Focus on concept/skill acquisition

Establish goals: set, review, revise

- SMART goals
- Start small and stay focused

Select instructional strategies

- Not status-quo practice
- Agree on what strategies to implement

Determine results indicators

- Are we actually implementing the strategy?
- Is it working?

Collect and chart data



Topic: *Adding & subtracting fractions with like & unlike denominators*

Pretest: 30% of students proficient

Baseline Student Performance 2/5/09

Proficient students

- A.
- M.
- C.

Close-to-proficient students

- None

Far-from-proficient students

- S.
- J.
- R.
- J.
- N.
- M.
- S.

Analyze strengths and obstacles



Strengths & Obstacles

Strengths

- Students are able to add and subtract fractions with like denominators
- Students understand how to find the Least Common Multiple

Obstacles

- Paying attention to whether the problem calls for addition or subtraction
- Lack of understanding of need for common denominators when adding/subtracting
- Difficulty converting fractions to a common denominator

Establish goals: set, review, revise



Generic format:

The percentage of students scoring proficient and

higher on Assessment name will increase from

Baseline %, % on Pre-test date to Goal %, % by

Assessment date as measured by Assessment description, .

Post-test date

*The percentage of students scoring proficient and higher on the **fraction addition/subtraction assessment** will increase from **30%** on **2/5/09** to **80%** by **2/27/09**, as measured by the **teacher-made fraction addition and subtraction assessment**.*

Select instructional strategies



Differentiated Support Strategies

Proficient
students

- extension work for students at mastery
- group work-problem or project-based

Close-to-
proficient
students

- Extra practice
- group work-problem or project-based (heterogeneous groups)

Far-from-
proficient
students

- additional direct instruction based on student needs
- group work

Determine results indicators



Grade 5 Mathematics Instructional Time Focus

- (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions);
- (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and
- (3) developing understanding of volume.

Determine results indicators



***Common Core Math Standard* 5.NO-F.1**

Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example

$$2/3 + 5/4 = 8/12 + 15/12 = 23/12.$$

$$\text{(In general } a/b + c/d = ad/bd + bc/bd = \frac{ad + bc}{bd} \text{)}$$

Determine results indicators



Students demonstrate **fluency** in adding and subtracting fractions with unlike denominators (including mixed numbers) by:

- **Determining the value of a common denominator of given fractions by multiplying given denominators**
- **Determining the value of given numerators aligned with the common denominator**
- **Replacing given fractions with equivalent fractions**
- **Producing an equivalent sum or difference of fractions with like denominators.**
- **provide correct answers using facts and computation strategies they know to efficiently determine answers that they do not know.**

Asking the Right Questions

- **What does student achievement look like?**
- **What variables that affect student achievement are within your control?**
- **What adult actions in the school are impacting achievement results?**
- **How do you currently explain your results in student achievement?**



Data Worth Collecting Have a Purpose

- **How do you use data to inform instruction and improve student achievement?**
- **How do you triangulate cause (adult action) and effect (student achievement) data?**
- ***In the absence of data, what is used as a basis for instructional decisions?***



Frequency and Length of Data Team Meetings

- **Varies: Weekly to once a month**
- **Shortest (45 minutes) to longest (120 minutes)**

Schools that realize the greatest shift to a data culture scheduled meetings once a week!



Data Team Leader and Principal Debriefs

- **IDT Leaders should be teachers, not administrators**
- **Meet at least monthly to discuss**
 - **Achievement gaps**
 - **Successes and challenges**
 - **Progress monitoring**
 - **Assessment schedules**
 - **Intervention needs**
 - **Resource needs**

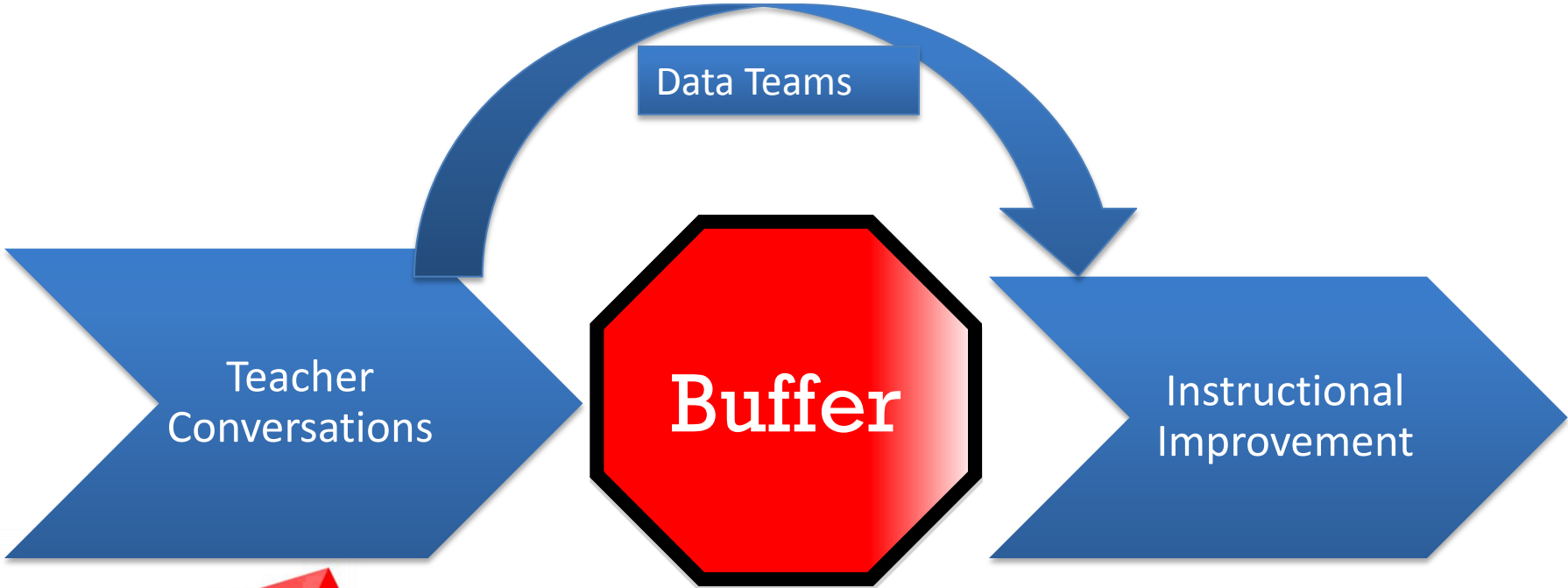


The Instructional Core

- **Too much Professional Learning is removed from teaching and learning**
- **Even when we do focus on the teacher-student-content relationship, we don't focus adequately on instruction**
 - **Teachers tend to avoid discussing instructional practice**



Data Teams & The Buffer



What Are the Barriers?

- **It's a different way of doing business for some.**
- **It requires an expanded set of skills.**
- **Interventions are integrated, not done by team members or special educators only**
- **Requires frequent data collection and analysis--different culture**
 - **Focus is on HOW and student is doing, not WHERE the student is going**



Four Recommendations for Getting Started with Data Teams

Start Small

- Provide a basic framework for data teams
- Get people started

Focus on the core

- Spend time actually talking about instruction and its effect on student performance

Zoom in

- Be as specific as possible
- Select a concept or skill that can realistically be taught and assessed over the course of a few weeks

Iterate and refine

- Complete multiple cycles
- Adjust process in response to feedback

Next Steps for Systems View

- **Regular meeting times**
- **Clear deadlines for when forms are due**
- **Regular reference to data team work in other forums**
- **Public posting/sharing of data**
- **Celebrating successes and addressing challenges**



***Thank You
For Your
Participation***



Dr. Suzy Cutbirth

scutbirth@missouristate.edu