D.A.R. METHOD

What is DAR and how can it help my students?
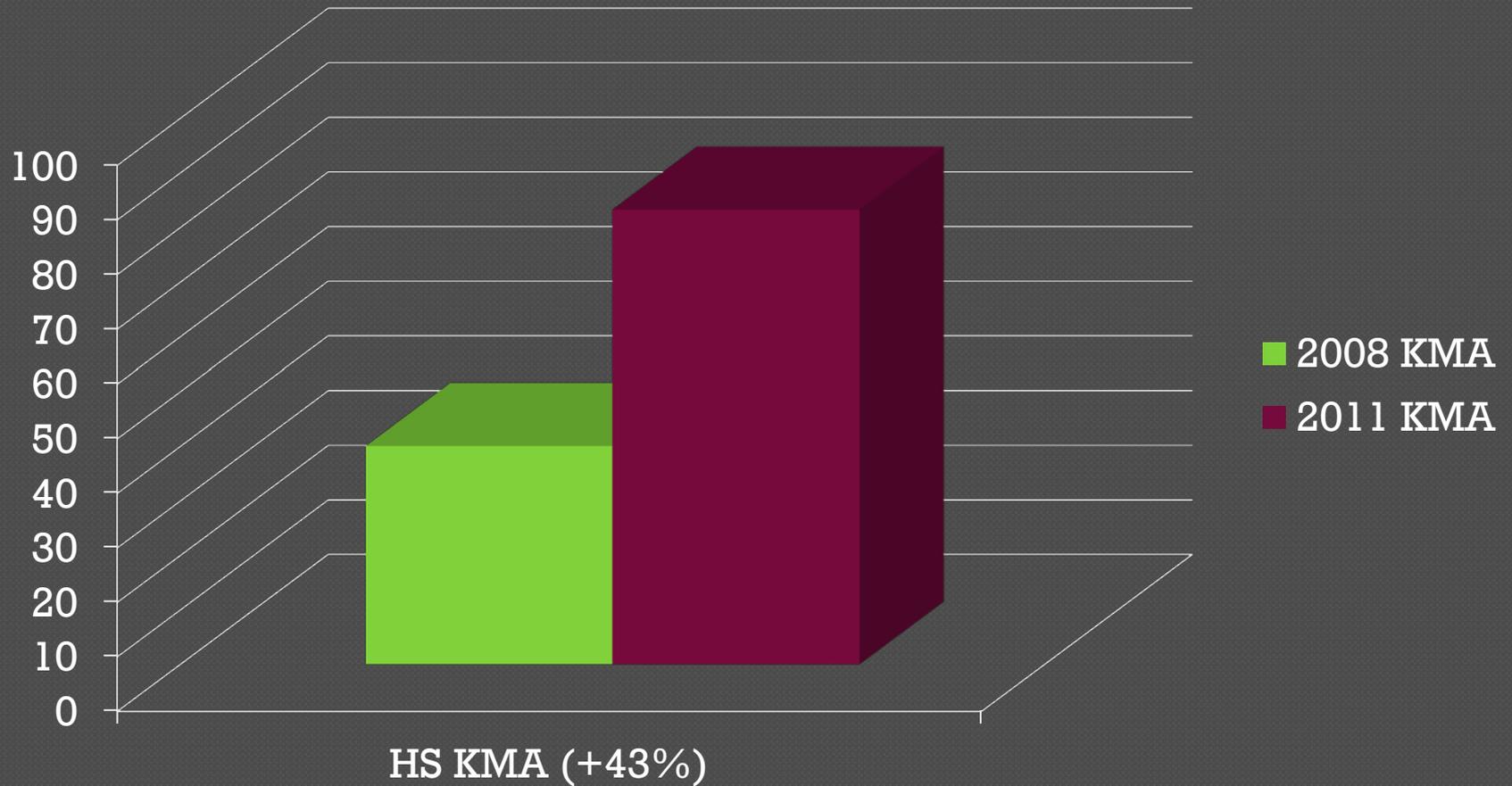
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OVERVIEW

- Stands for Data Assessment Recording.
- A method for making and recording formative assessment data in relation to educational standards.
- Makes predictions about proficiency.
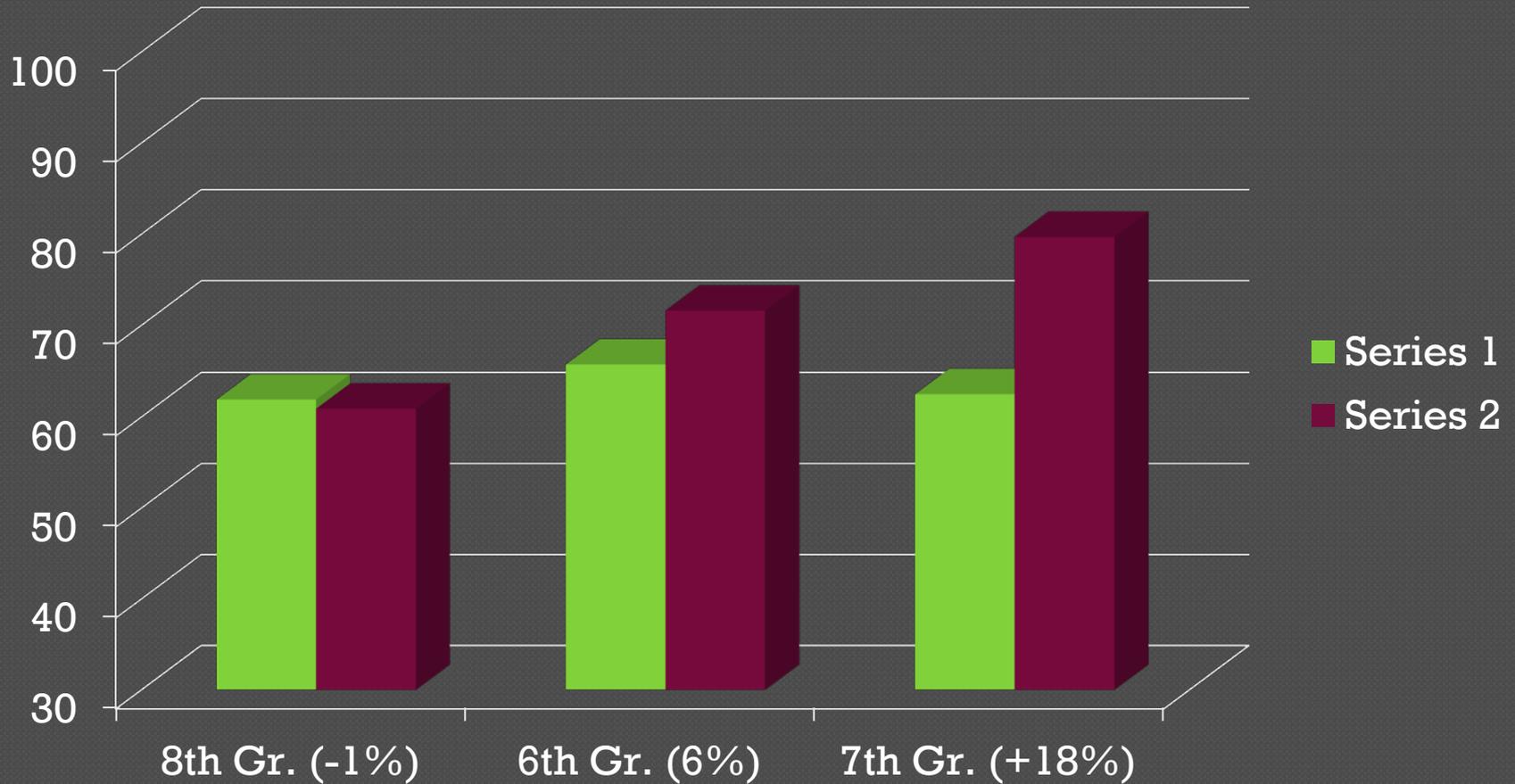- Not content specific.

Fredonia High School Math Data
Fredonia, KS

Legend:
- 2008 KMA
- 2011 KMA

HS KMA (+43%)

Eisenhower Middle School Math Data
Topeka, KS

Process

- Must be designed to be completed and graded quickly.
- 70% or better is the target.
- When grading don't give benefit of the doubt.
- Eliminate the chance of cheating.
- Do not quiz a topic that has been reviewed in the previous 24 hours.
- Generate new quiz questions for each quiz.
- Questions should be similar to summative assessment questions.

Process
Quick Quizzes

- Minimum amount of questions per quiz per indicator is 4.
- Do not use multiple choice or true/false questions for quizzes.
- Quizzes can be used to create intervention groups.
- Quizzes that are 70% or better will be recorded on the DAR data document.

How to Track Collected Data

DAR Method Data Document

- The DAR Method Data Document looks like an excel spreadsheet
- Names are listed down the left hand side.
- Tracked indicators are listed across the top (These are usually tested standards and sub-standards).

Student's Name	Add/Subt Integers (1.4.K2A)	Mult/Div Integers (1.4.K2A)	Order of Operation (1.4.K2A)	Create a Graph (4.2.K1)	Read a Graph (4.2.A3)	Nth Term (2.1.K4)	Scale Factor (3.3 A3)	Triangles/Quadrilaterals (3.1.K3)	Compl/Suppl Angles (3.1.K3)	Area/Perimeter (3.2.A1)	Proportions (2.2.K7)	Proportions w/ Percents (1.4.K5)	Unit Rate (3.3.A3)	Percents of Numbers (1.4.k5)	S.A. of Rec. Prism (3.2.K6)	S.A. of Tri. Prism (3.2.K6)	S.A. of Cyl. (3.2.K6)	Volume of Rec. Prism (3.2.K6)	Volume of Tri. Prism (3.2.K6)	Volume of Cylders (3.2.K6)	Stem & Leaf (4.2.K1)	Scatter Plot (4.2.K1)	Box and Whisker (4.2.K1)	Add Fraction (1.4.K2)	Subtract Fraction (1.4.K2)	Multiply Fraction (1.4.K2)	Divide Fraction (1.4.K2)	Write Equations (2.2.A1)	Composite Figures (3.2.A1)	Variable Expressions (2.2.K8)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Jakota																														
Brandon																														
Blake																														
Jaleel																														
Hannah																														
Trinity																														
Derick																														
Shyann																														
Baileah																														
Tearra																														
Breanna																														
Devin																														
Naudia																														
Lazrua'																														
Eli																														
Jamel																														
Jameco																														
Erin																														
William																														
Ja'Onte'																														
Jordan																														

How to Track Collected Data
DAR Method Data Document

- Document Notation
  - Blanks = Beginning Level
  - X = Developing Level
  - O = Mastery Level

- After a quiz is given, sort quizzes into 2 piles, those that are above 70% and those that are below.

How to Track Collected Data
DAR Method Data Document

- Take all of the quizzes that are above 70% and record them on the data document.
  - If the student has a blank, record an X.
  - If the student has an X, record a O.
  - Only one mark can be made per day (Cannot go from a blank to a circle in one day).
  - If a student has an X or O and does not pass a quiz, they never lose a mark already gained.
  - If a student already has a O and passes another quiz, there are no marks made.
  - Follow these steps for every quiz given.

After 1 quiz

(c) DAR Method - David Richard

After 2ⁿᵈ Quiz

(c) DAR Method - David Richard

Yearly Data

(c) DAR Method - David Richard

If you could have data about whether or not your students will pass a summative assessment weeks BEFORE they took it, how valuable would that be?

4/6/2012 Student's Name	DAR Prediction	Actual	State Test Proficiency	DAR Correct
Jakota	N/A	0.64	X	N/A
Brandon	0.638	0.65	X	X
Blake	0.517	0.82	X	*
Jaleel	0.767	0.77	X	X
Hannah	0.617	0.73	X	X
Trinity	0.667	0.57	X	X
Derick	0.596	0.73	X	X
Shyann	0.617	0.6	X	X
Baileah	0.417	36.00%		X
Tearra	0.85	0.93	X	X
Devin	0.829	0.82	X	X
Naudia	0.738	0.73	X	X
Lazrua'	0.829	94.00%	X	X
Eli	0.538	0.49		X
Jamel	0.588	0.63	X	X
Jameco	0.517	0.52		X
Erin	0.758	0.64	X	X
William	0.829	0.98	X	X
Ja'Onte'	0.829	0.91	X	X
Jordan	0.788	0.73	X	X
			17/20	18/19
			85%	94.7

Classroom Implementation
Intervention Groups

- Create intervention groups of 3-6 based on current quiz scores or based on the data document.
- 4 days from quizzes, 1 day from data document is recommended.
- Work in these groups for 7-12 minutes.
- Set up centers or enrichment activities for remaining students during intervention time.

Interpreting DAR Predictions
Extraneous Factors

- Student Relationships
- Excessive Absences
- Cheating
- Data not collected after interventions

Grading

Mastery vs. Work Completion

- Grading system is about mastery of concepts, not work completion.
  - Categories and weights
    - Quizzes – 10%
    - Participation / In Class Work – 30%
    - Tests – 35%
    - DAR Document Level – 25%
- The DAR Method can be used without this grading system, but this approach has been used successfully at making the grade reflect the knowledge the student has demonstrated.

Things to Remember

- The DAR Method is considering mastery at 70% or better.
  - Mastery does not mean they will score perfect every time.
- DAR predictions measure mastery, even though the percentages are often close to actual scores.
- Every classroom and school is different. Formatting to specific needs is acceptable as long as the basic guidelines are followed.

QUESTIONS?