Data-Driven Teaching Using Technology-Focused Assessments

The focus will be on the importance of assessment in the classroom. We will discuss the progression of assessments focusing on the wonderful capabilities of Active Expressions and Smart Clickers. We will also tie our presentation to the new teacher evaluation standards.

Materials: Projector, Promethean ActivBoard and Active Expressions

Presenters:

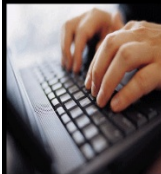**Fred Hoffmann - 8th Grade Science**

Amber Tucker - 8th Grade Language Arts

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MIDDLE SCHOOL

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Today's Outline ...

1. **<u>Activators</u>** - *Gathering assessment data with and without technology.*

2. **<u>Technology-Focused Assessments</u>** - *How does technology change the way students and teachers utilize data from assessments?*

3. **<u>What Do We Have?</u>** - *Taking a brief look at the assessment data and determining possible usages.*

4. **<u>Your Assignment</u>** - *With the data on your handout, what can be done to the benefit of the student and teacher?*

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Activator

Without Technology

With Technology

1. (Without Tech) MATH - Which statement is true?

A) 2 > -2   RED

B) 2 < -4   BLUE

C) -2 < -4   YELLOW

D) -4 > 4   GREEN

2. (Without Tech) SCIENCE - What characteristic of aluminum allows it to be made into aluminum foil?

(A) It is dense.   RED

(B) It is soluble.   BLUE

(C) It is magnetic.   YELLOW

(D) It is malleable.   GREEN

3. (Without Tech) LANGUAGE ARTS - Which relationship is MOST SIMILAR to the one here?

reserve : elephants

A. zoo : tourists   RED

B. tigers : jungle   BLUE

C. house : humans   YELLOW
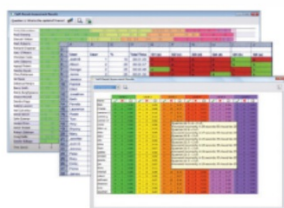
D. children : playground   GREEN

With Tech - Self Paced Assessment

Assessment for Learning Systems

- Leading Response System solution for K-12 market: over 3.2 million sold to date

- Durable and easy to use classroom design allows instant feedback and differentiated learning

- Fully integrated with ActivInspire but compatible with any other presentation application

- Available both standalone and with computer based software for "one-to-one laptop" use

- Revolutionary device offering multiple choice interface with full text support

- "Self-Paced Learning" solution goes beyond assessment to allow true personalized learning

- ActivProgress (Our new online assessment management tool) offers:
  - Classroom Management
  - Assessment
  - Data Analytics
  - Collaboration

"Promethean's ActivExpressions are an important breakthrough that take Learner Response Systems to a whole new level" – Alan November[1]

[1] Alan November is an American educator and educational consultant. Alan co-founded the Stanford Institute for Educational Leadership through Technology, and is the author of "Empowering Students with Technology". Alan runs November Learning educational consulting as well as the educational blogging software NLCommunities

PROMETHEAN

We can look at Technology-Focused Assessments from two perspectives...

The Student Perspective

The Teacher Perspective

From the Student Perspective ...

What do they gain from Technology-Focused Assessments?

#1) Student Engagement
- *Your students are 21st-Century learners, living in a world that is deeply immersed in technology.*
- *Student Response Devices (SRDs) allow for students to show their knowledge at their pace with a "cell phone" type device.*

#2) Instant Feedback for Students
- *Answers this question immediately: "What did I make on my...?"*
- *Fix student misconceptions instantly, instead of "at the end of the class" or "next class."*
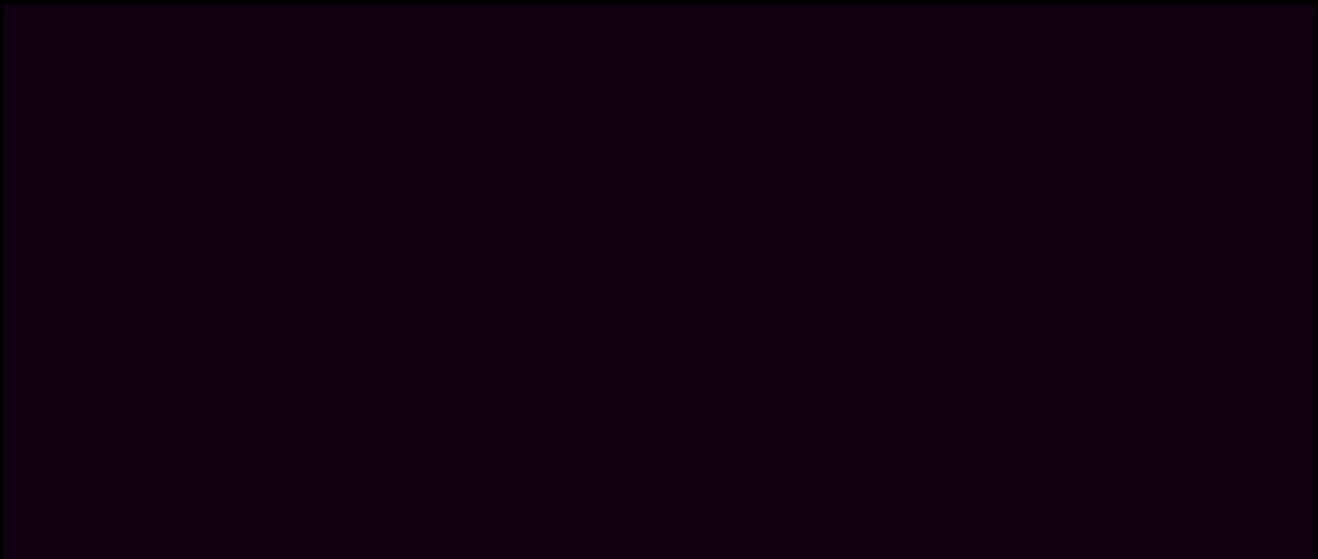
#3) Student Remediation
- *Allows the teacher to utilize one-on-one instruction, collaborative pairs, small groups, and whole class remediation based on immediate student assessments.*

1. Student Engagement

2. Instant Feedback for Students

ActivExpression results from flipchart:	Ch 3 Sec 1-2 - REVIEW + Quiz - 10-1 A 10-4 B.flipchart
File location:	C:/Documents and Settings/hoffmannf/Desktop
Creation Date:	Sun Sep 26 11:20:15 2010

	Student Name	Student 1	Student 2	Student 3	Student 4	Student 5	Student 6	Student 7	Student 8
	Student ID								
	Total	19	19	19	19	19	19	19	19
	%	100%	44%	100%	100%	50%	100%	94%	94%
	Total Response Time	194.3	541.0	96.4	170.2	167.8	79.1	199.3	393.4
	Q5	ent to charlot	lay the gam	madden 11	read	ayed my gar			tched anime
Chapter 3 Section 1/2 Quiz	Q1	C	C	C	C	C	C	C	C
Fri Oct 1 14:50:31 2010	Q2	E	F	E	E	E	E	E	E
1. third-largest ocean.	Q3	B	D	B	B	B	B	B	B
2. physical change of water from liquid to g	Q4	F	E	F	F	F	F	F	F
3. largest ocean.	Q5	D	D	D	D	A	D	D	D
4. physical change of water from gas to liq	Q6	A	B	A	A	D	A	A	A
5. smallest ocean.	Q7	B	C	A	B	B	B	B	A
6. second-largest ocean.	Q8	C	A	C	C	C	C	C	C
7. Which of the following statements is tru	Q9	A	A	A	A	D	A	A	C
8. The measure of the amount of dissolved	Q10	D	C	D	D	A	D	A	D
9. The ocean's surface temperatures vary	Q11	D	D	D	D	C	D	D	D
10. The movement of water from ocean to	Q12	B	B	B	B	B	B	B	B
11. area between the shoreline and the co	Q13	F	E	F	F	C	F	F	F
12. area between the continental shelf and	Q14	A	D	A	A	E	A	A	A
13. the base of the continental slope (bum	Q15	C	A	C	C	A	C	C	C
14. broad, flat part of the deep-ocean basi	Q16	C	C	C	C	C	C	C	C
15. mountain chain on the ocean floor (rift	Q17	D	A	D	D	D	D	D	D
16. With sonar, what happens to sound pu	Q18	D	D	D	D	A	D	D	D
17. The longer it takes sound to return to a									
18. To study the ocean floor, scientists us									

3. Student Remediation

From the Teacher Perspective ...

What do they gain from Technology-Focused Assessments?

#1) End of Course/End of Grade Summative Assessments
- *Make sure your students are prepared to excel when given the opportunity.*

#2) NC FALCON - Formative Assessment Learning Communities Online
- *How can we use this data as evidence of formative assessment in the classroom?*

#3) NC Teacher Evaluation Process
- *Teachers will have exceptional data to show student growth in their classroom.*
- *Be prepared for your evaluation with excellent artifacts!*

NC FALCON

FALCON ▶ Login to the site

North Carolina
TEACHER
EVALUATION PROCESS

NC FALCON

FALCON ▶ Login to the site

http://center.ncsu.edu/falcon/

tance of Formative Assessment. This module provides an intro
ive assessment, its importance and role in North Carolina's 21st Centur
ment System. At the end of the module, participants will be able to:
  Explain the purpose of formative assessment and why it is defined as a
  Distinguish   between   formative   assessment   and   benchmark
  assessment;
  Articulate how formative assessment is used in their classroom/scho
  they plan to use formative assessment in the future.

ing Targets and Criteria for Success. This module focuses on how t
lear learning targets and define criteria for success in order to help stud
estion, "Where am I going?" At the end of the module, participants will
  Recognize clear and unclear learning targets;
  Develop clear learning targets and their associated criteria for success
  lesson or series of lessons.

ting and Documenting Evidence. This module explores how teachers
cument evidence of learning to help students answer the question "V
At the end of the module, participants will be able to:
  Identify at least three ways to collect and document evidence of studen
  Choose strategies for collecting and documenting evidence of stude
  that provide accurate information about where students are in their le
  align the strategies with the targets and criteria for success.

ing Data and Descriptive Feedback. This module provides teache
tanding of how to analyze evidence of learning and how to use
ck to reflect student strengths and weaknesses with respect to speci
nd success criteria to help students answer the questions, "Where am I
can I close the gap?" At the end of the module, participants will be able
  Effectively examine student work;
  Understand the differences between evaluative and descriptive feedbac
  Enhance student learning through descriptive feedback;
  Plan instructional modifications to address learning gaps or enrich instr

North Carolina
TEACHER
EVALUATION PROCESS

North Carolina Evaluation Process.pdf

Standard IV: Teachers Facilitate Learning for Their Students

Teachers use a variety of methods to assess what each student has learned. Teachers use multiple indicators, including formative and summative assessments, to evaluate student progress and growth as they strive to eliminate achievement gaps. Teachers provide opportunities, methods, feedback, and tools for students to assess themselves and each other. Teachers use 21st century assessment systems to inform instruction and demonstrate evidence of students' 21st century knowledge, skills, performance, and dispositions.

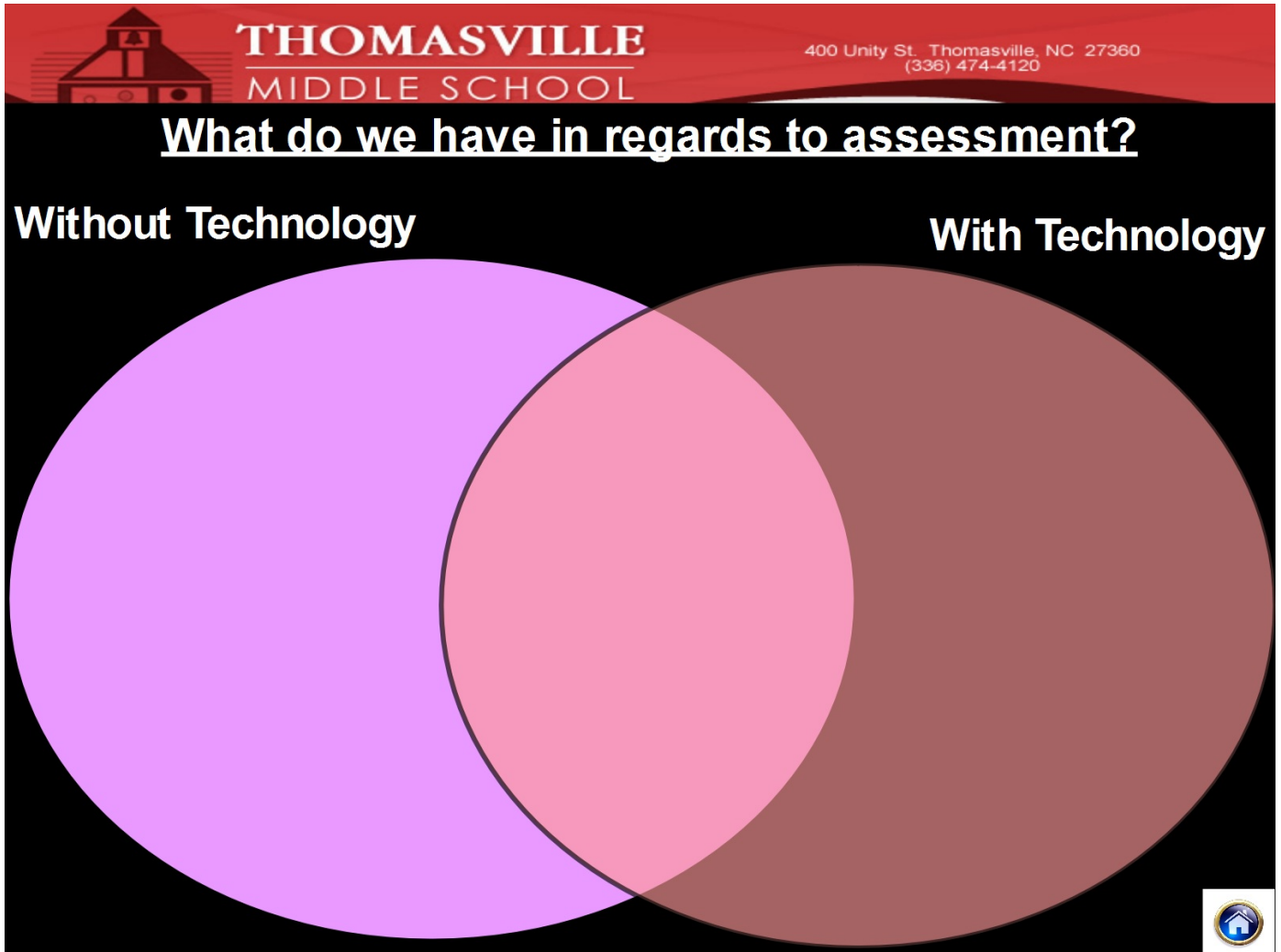|	. . . and	. . . and	. . . and	
Uses indicators to monitor and evaluate student progress.	❑ Uses multiple indicators, both formative and summative, to monitor and evaluate student progress and to inform instruction.	❑ Uses the information gained from the assessment activities to improve teaching practice and student learning.	❑ Teaches students and encourages them to use peer and self-assessment feedback to assess their own learning.	
Assesses students in the attainment of 21st century knowledge, skills, and dispositions.	❑ Provides evidence that students attain 21st century knowledge, skills and dispositions.	❑ Provides opportunities for students to assess themselves and others.	❑ Encourages and guides colleagues to assess 21st century skills, knowledge, and dispositions and to use the assessment information to adjust their instructional practice.	

What do we have?

#1) Based on the information from our assessment, what are your initial thoughts about competency levels of these students?

#2) What are two possible strategies that you could use to show growth in these students?

#3) How could you use this data to help fulfill your requirements as a teacher to display student growth?

What do we have in regards to assessment?

Without Technology

With Technology

Your Assignment

ACTIVITY - **Collaborative Pairs/Groups**

1. **On your handout, you have two sets of data.**

    DATA Set #1: Assessment information from one question for all students in the class.
    DATA Set #2: Assessment information from multiple questions displaying achievement from multiple students.

2. **Analyze DATA Set #1**
       - Use the discussion questions below the Set to talk to your partner or group members.

3. **Analyze DATA Set #2**
       - Use the discussion questions below the Set to talk to your partner or group members.

THANK YOU FOR YOUR TIME!

If you have any questions, comments or ideas based on the presentation, then feel free to call or email.

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"A good teacher is like a candle - it consumes itself to light the way for others."