

Ethnography Supports Changes to Student-Centered Instruction

TQR 4th Annual Conference

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US Education is changing

No Child Left Behind

Race to the Top (RTTT)

Race to the Top: Annual Professional Performance Review

Federal Programs

State Teacher Evaluations



Advancing Technology



Schools have to adapt

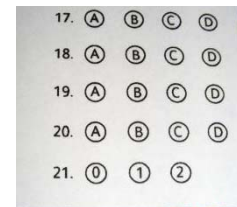
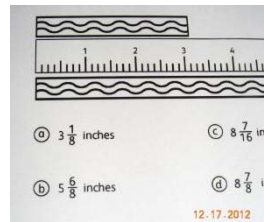
Standards



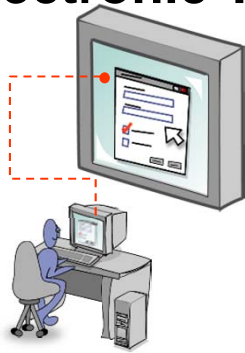
Common Core
State Standards

Partnership for
Assessment of Readiness for
College & Careers

Assessments



Electronic Testing

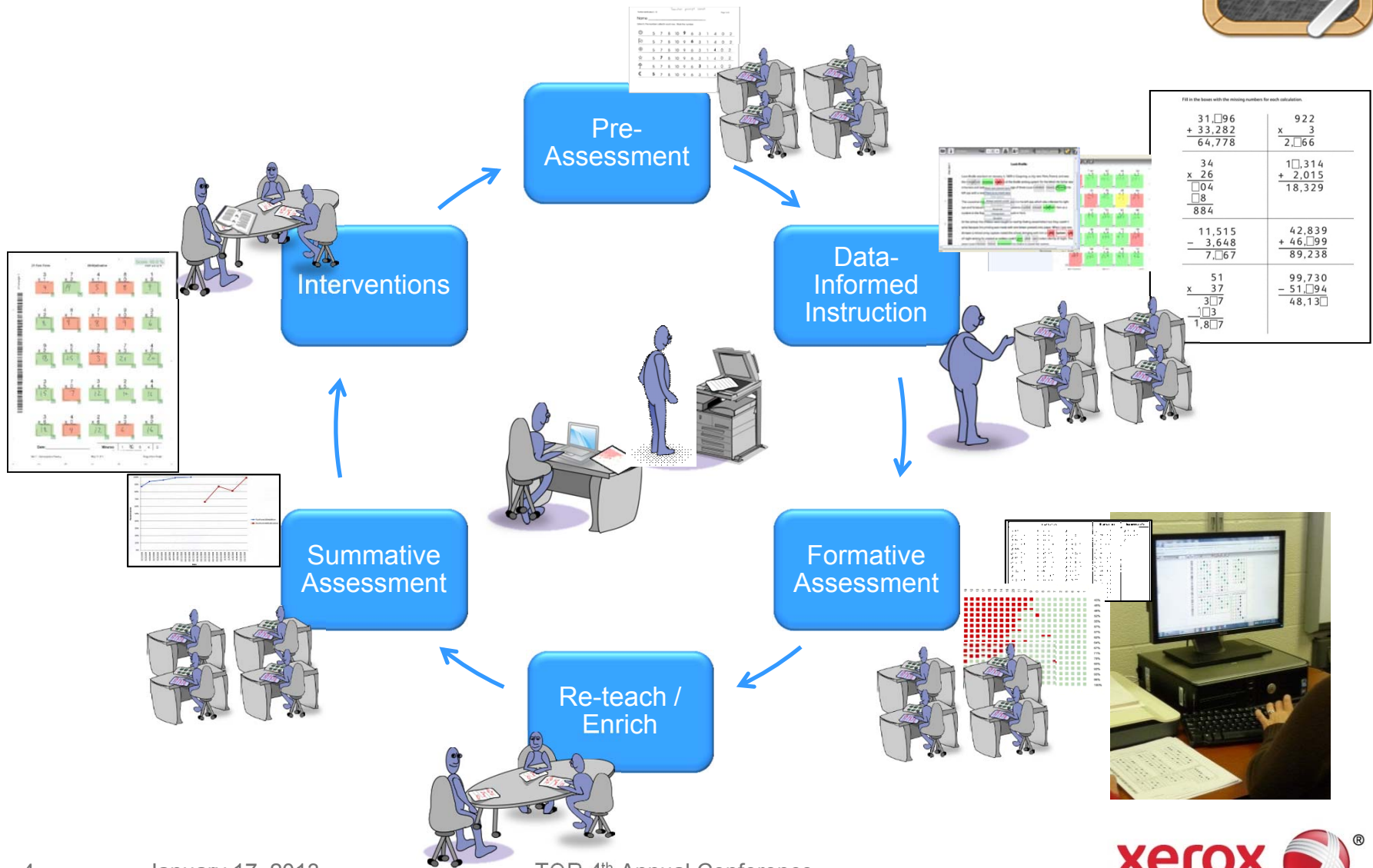


NWEA

Acuity

Yearly Progress Pro
(YPP)

Xerox Educational Assessment Management System supports adaptive learning



Fill in the boxes with the missing numbers for each calculation.

$\begin{array}{r} 31, \square 96 \\ + 33,282 \\ \hline 64,778 \end{array}$	$\begin{array}{r} 922 \\ \times 3 \\ \hline 2, \square 66 \end{array}$
$\begin{array}{r} 34 \\ \times 26 \\ \hline \square 04 \\ \square 8 \\ \hline 884 \end{array}$	$\begin{array}{r} 1 \square,314 \\ + 2,015 \\ \hline 18,329 \end{array}$
$\begin{array}{r} 11,515 \\ - 3,648 \\ \hline 7, \square 67 \end{array}$	$\begin{array}{r} 42,839 \\ + 46, \square 99 \\ \hline 89,238 \end{array}$
$\begin{array}{r} 51 \\ \times 37 \\ \hline \square 07 \\ 1,8 \square 7 \\ \hline \end{array}$	$\begin{array}{r} 99,730 \\ - 51, \square 94 \\ \hline 48,13 \square \end{array}$

Aiding the teacher behind the assessment

Capital Letter	Lowercase Letter	Sound
A	a	A
F	f	F
K	k	K
P	p	P
W	w	W
Z	z	Z
B	b	B
H	h	H
O	o	O
J	j	J
U	u	U
C	c	C
Y	y	Y
L	l	L
Q	q	Q
M	m	M
D	d	D
N	n	N
S	s	S
X	x	X
I	i	I
E	e	E
G	g	G
R	r	R
V	v	V
T	t	T
A	a	A

Math - Factor Pairs

Write the word that matches the picture.

Write the number.

Shade 3/8 of the pie.

Mark alphabet on the map.

Circle all of the factor pairs for the given number.

Score: 33%

16: 3,4, 2,5, 1,15, 3,5, 1,16, 2,8, 3,6, 2,9, 2,7

28: 4,6, 1,28, 4,8, 3,9, 2,15, 5,6, 4,7, 6,14, 5,5, 3,7

19: 5,5, 2,10, 1,18, 4,4, 3,7, 2,9, 1,19, 3,6, 4,5, 2,8

24: 2,13, 2,12, 3,7, 3,8, 4,5, 1,24, 4,6, 5,5, 4,7, 3,9

36: 2,12, 6,7, 3,12, 1,35, 4,9, 2,18, 4,8, 6,6, 3,13, 1,36

56: 1,56, 6,9, 7,8, 2,29, 4,14, 7,9, 2,28, 1,57, 3,22, 5,11

Math - Factor Pairs Page 1 of 1 Level 4.1A

What is the best estimate for 5×4 ?

Which of the following is always true?

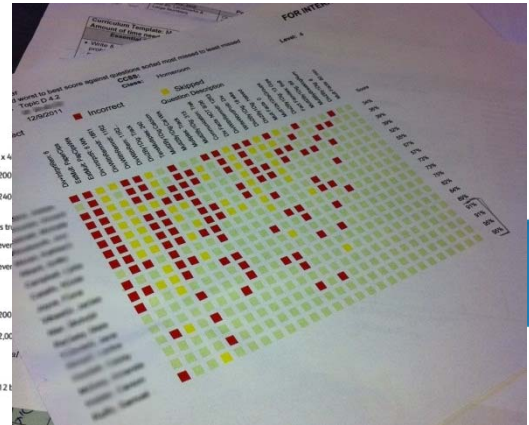
Solve 8×25 .

Rachel has 7 shelves that hold 12 books each. How many books does she have?

Find the product of 2 and 4. List the first 5 multiples of your answer.

Answers: 8, 8, 16, 24, 32, 40

Math - Page 9 Page 1 of 3 Level 4.1



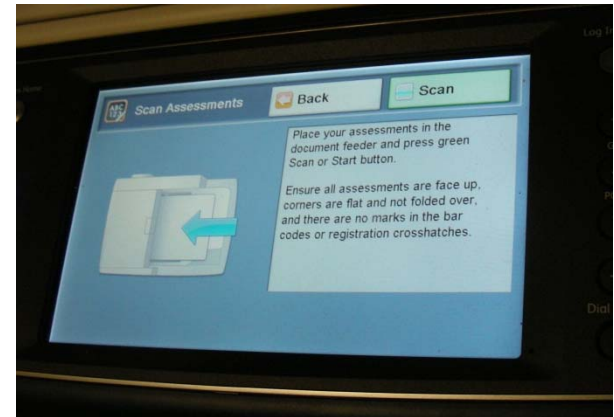
Studying the Pilot



Work Practice Study

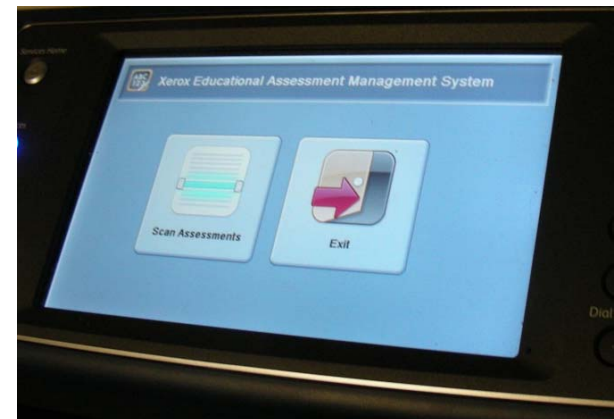
Alpha Test: 2011-12 school year

- Technology pilot in 4 elementary schools, ~100 teachers, ~1,200 students.
- Focus on assessment work process, user experience and administration data needs



Beta Test: 2012-13 school year

- Additional schools, commercialization focus
- Identifying process changes and improvements



Site Challenges

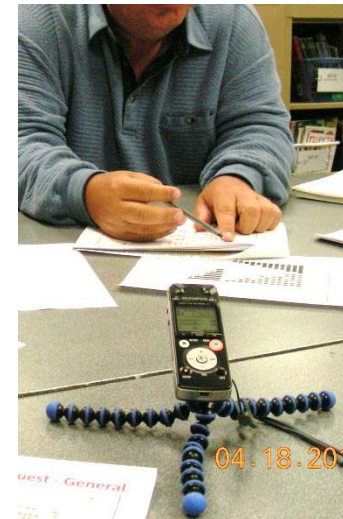
No video allowed in classrooms

Relied on observation, audio and notes

Team coordination

Participants confused by multiple Xerox contacts

Repeated information transfer



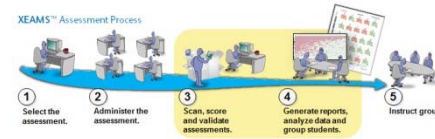
Ethnography Process & Methods



1) Systematic Observation



2) Open-ended Interview



3) Representing the Data

Create user Videotape Library and Database

- Video records
- Transcripts
- Site maps
- Mock-ups
- Scenarios of use

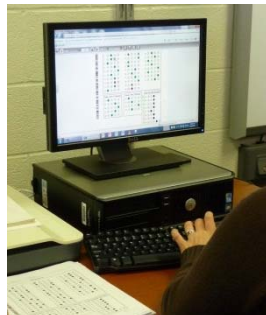
4) Data Analysis



5) Co-design : Prototype

Cluster Matrix: Proposed Enhancements

Proposed Enhancements	Student 1	Student 2	Student 3	Student 4	Student 5	Student 6	Student 7	Student 8
1) Question 1								
2) Question 2								
3) Question 3								
4) Question 4								
5) Question 5								
6) Question 6								
7) Question 7								
8) Question 8								
9) Question 9								
10) Question 10								
11) Question 11								
12) Question 12								
13) Question 13								
14) Question 14								
15) Question 15								
16) Question 16								
17) Question 17								
18) Question 18								
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96) Question 96								
97) Question 97								
98) Question 98								
99) Question 99								
100) Question 100								



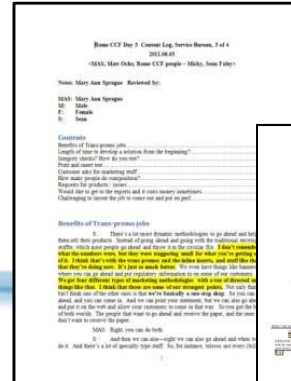
5) Co-design : Analytic



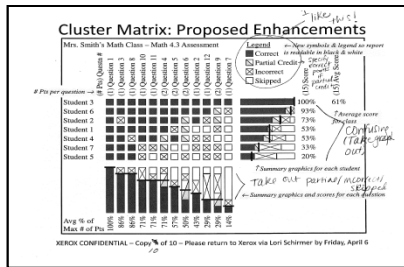
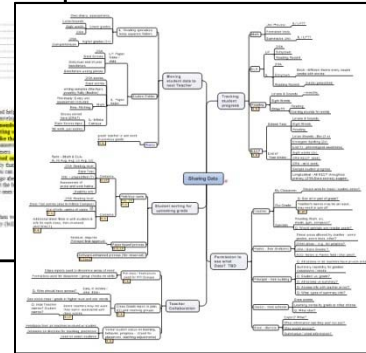
Ethnographic Technology



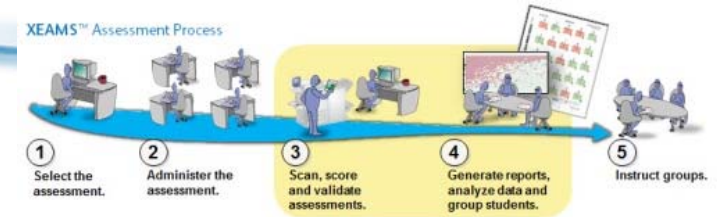
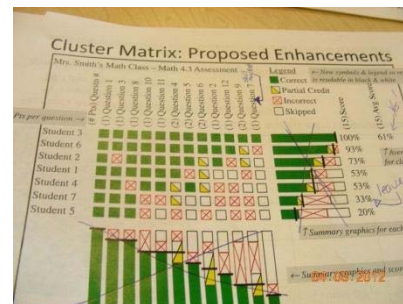
Observation & Recording



Transcription Data Analysis



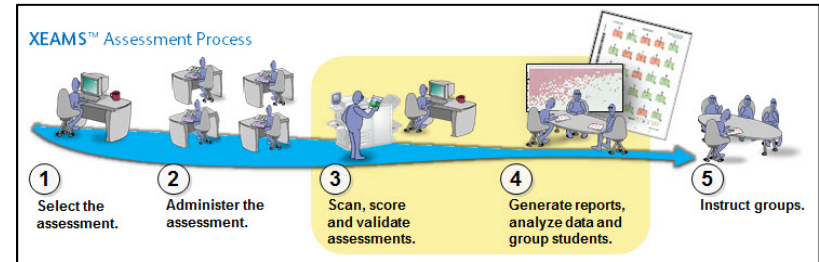
Brainstorming Co-development



Representations

Outcomes

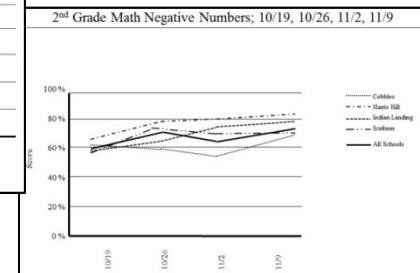
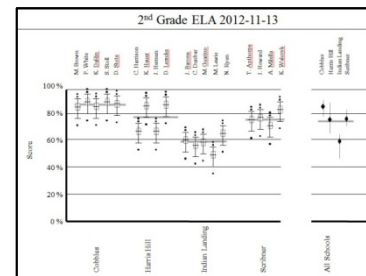
- **Improving integration with teacher processes**
 - Making the assessment process seamless



- **Flexibility for forming learning groups**
 - Providing data needed for regrouping



- **Administration roles and requirements added**
 - New data analytics for school and district personnel



Insights

- Different timelines accelerated feedback
 - Limited teacher and administrator availability
 - Ethnographers shared findings with pilot team, & participants iteratively
- Utilized pilot support team experiences
- Identified new development areas and opportunities
- Ethnographic process still works without technology

Questions?

Thank you

