Eink-12mm

Interactive Ink Inscriptions in K-12

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INK-12 : Interactive Ink Inscriptions in K-12

- Technology: set of Tablet PCs
 - **Pen-based interaction:** Draw and write to create "ink" inscriptions
 - *Wireless communication*: Share in-class work anonymously
- Explore in science and math:
 - Inscriptions: Handwritten sketches, graphs, notes, etc.,
 - *Classroom communication*: Real-time sharing of student work
 - "Understanding" student expression: To facilitate classroom discourse



INK-12: Model of Interaction



INK-12: Research Questions

- 1. How do inscriptions created using pen-based technology differ from those created using pen and paper?
- 2. How can "structured vocabularies" enhance student inscriptions and the ability of software to interpret student work?
- 3. What tools can effectively support teachers in selecting student work for classroom discussion?
- 4. How does the use of technology for submitting and sharing student work change classroom participation structures?



INK-12: Curricular Context

• Investigations in Number, Data, and Space: K-5 mathematics





 The Inquiry Curriculum: 3-5 science focusing on the nature of matter





INK-12: Students Create Explanations

• Ink





• Audio



- 7. Number puzzles! For each puzzle, find an answer that matches the clues and record an explanation of how you found it.
- a. This number is a multiple of 5. This number is odd. This number is greater than 50. This number is less than 70.





INK-12: Students Create Explanations





• Tiles





INK-12: Sharing Student Work

- Students submit via wireless network
- · Teacher views and selects work for display and discussion





INK-12: Interpretation for "Smart" Sorting of Work





Stamps





INK-12: Interpretation for "Smart" Sorting

Handwriting





Shading







INK-12: Technology for Expressing and Sharing Meaning

- Continuing to work with fourth and fifth grade teachers and students
- Working on professional development for supporting classroom conversation
- "Dynamic" representations to express reasoning

When a number is subtracted from one addend and added to the other addend the sum is the same.

