Collaborative Research Project

Overcoming Obstacles to Scaling-Up with a Cyberlearning Professional Development Model











It's About Time

•Barbara Zahm, PI – Lead Developer

•Ruta Demery, Developer

University of Colorado, Boulder & University Corporation for Atmospheric Research

• Tamara Sumner, PI – Assoc. Professor Cognitive and Computer Science

 Holly Devaul, Co-PI – Mgr. Educational Programs and Services

• Heather Leary, Research Associate, Institute of Cognitive Science

WestEd

- Steve Schneider, Co-PI Senior
 Program Director
- Cathy Ringstaff, Senior Research Associate
- Danielle Brown, Research Associate

Innovative, research-based curricula require significant changes in teaching practices. Once adopted, the implementations of these programs often struggle due to the lack of sustainable and costeffective face-to-face professional development.

The goal of this project is to design and study scalable, affordable, flexible, "educative," and effective cyberlearning tools supporting districts and teachers adopting and implementing research-based curricula.

We chose *Project-Based Inquiry Science (PBIS),* an NSF funded middle school science curriculum that we publish, in which to wrap this project around.







Outcomes to date

- An *integrated suite of cyberlearning tools*
- **Preliminary data** on the usability and utility of the cyberlearning suite from two different sources of feedback and research
- A replicable online process a scenario guided design evaluation lead by UC and UCAR
- Instruments and protocols for conducting *implementation studies* of the tools lead by WestED

Stage 1

ITERATIVE PROJECT DESIGN

Stage 2

Stage 3

Stage 4

Cyberlearning Tool Suite	Assets	Assets Site v1.0	Assets Site v2.0 Getting Started v1.0	Assets Site v3.0 Getting Started v2.0 Planning Guide 2.0
Teacher Participants	Design Advisors (11)	Design Advisors (10) One Field Site (11)	Design Advisors (10) Three Field Sites (17)	Design Advisors (10) ??? Field Sites (XX)
Research Methods	Scenario guided design evaluation Needs surveys	Scenario-guided design evaluation Implementation study	Scenario-guided design evaluation Implementation studies	Scenario-guided design evaluation Implementation studies

The CyberPD suite of tools

• Preparation

Pedagogical, content, and planning assets to help teachers prepare to teach the curriculum

• Just-in-Time Support

Student-page specific support assets that teachers can access anytime and anywhere as needed during their actual teaching

• Reflection

Journaling capability and questions that encourage teachers to reflect on their classroom practices in order to make improvement

• Professional Learning Community

Opportunities for teachers to communicate and share with each other and with the Project Team on an ongoing basis