Critical Thinking and High-level Discourse:

Teaching, Learning, and Professional Development in a 1:1 Environment Drs. Ryan and Valorie Zonnefeld

Course Redesign of EDUC 332: Teaching Mathematics in Grades PK-8

Supported by

- The Learning Lab
- Co-teaching
- Innovations Grant
 - 30 iPad 2's
- Library
 - iPad cart
 - Technical support

Intended goals

Prepare prospective teachers to:

- Teach in a 1:1 environment
- Locate resources
- Think critically
- Develop a PLN

Model:

- Collaboration
- Deep, conceptual learning
- A constructivist approach
- Co-teaching strategies
 - Co-Teaching Strategies
 - One Teach, One Observe
 - One Teach, One Assist
 - Station Teaching
 - Parallel Teaching
 - Supplemental Teaching
 - Differentiated Teaching
 - Team Teaching
- "Textbook"less Curriculum
- Curriculum resources
- Professional organization membership
- Canvas

Successes

•

- Safe environment
 - Encouraging, plussing
 - Challenging each other
 - High level discourse
 - Classroom structure (tables, huddle boards, iPads)
 - Inquiry-based environment
- Co-teaching
- Critical thinking
 - Constructivist approach
 - Small group discussions
 - "Meta" questions
 - Plussing
- Discerning users of technology
 - Modeled in class
 - Discussed qualities of good apps and bad apps
 - A-ha moment with lattice multiplication app
- Growth in teaching confidence and ability
 - Practicum teaching
 - Textbookless curriculum

Not successful...yet

- PLN
- Integral use of NCTM
- Time with specific methods decreased

Apps we used

Plussing

I wonder...