Critical Thinking and High-Level Discourse in a 1:1 Environment

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Critical Thinking and High-Level Discourse in a 1:1 Environment

Abstract
Learn about our experiences co-teaching a K–8 methods course using 1:1 tablets in a high-tech lab. This innovative course included a move away from a textbook to a dynamic research-based curriculum supported by NCTM resources and CCSSM as well as integral utilization of apps, web 2.0 tools, and professional learning networks.

Keywords
critical thinking, learning, teaching, classroom environment

Disciplines
Christianity | Mathematics | Teacher Education and Professional Development

Comments
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Critical Thinking and High-level Discourse

Teaching, Learning, and Professional Development in a 1:1 Environment

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EDUC 332
Teaching Mathematics in Grades PK-8
Supported by:

- The Learning Lab
Supported by:

- 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
- 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
Successes

- Critical thinking
  - Constructivist approach
  - Small group discussions
  - “Meta” questions
  - Plussing

- K-8 Practicum
  - Relevance
  - Deep Questions
Successes

- 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
Plussing

- I wonder...