Lausanne Learning Institute 2013

What Can Students Learn With Ubiquitous Access to a Personal Learning Device?

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Download the handout at http://tinyurl.com/lli13mh

My Background

- Head of Learning Resources, German European School Singapore
- Member of the Board of Directors, ISTE

- 10+ years of experience
  - Teacher – IT, Informational Literacy, Math, PP, EE
    All grades PreS -> GradS
  - Administrator

- Educational Doctorate in Educational Leadership
- Worked in private schools, international schools, universities

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Why?

Why do we implement/fund/support/sacrifice for/believe in/evangelize/engage/<INSERT VERB HERE> in one-to-one student laptop/device programs?

Are you satisfied with these answers?

Substantive vs. Methodological

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Important Concepts

Ubiquitous Computing

Where, when, and how does laptop/device learning occur?

Academic vs. Non-Academic Learning

Student-centered vs. Teacher-focused

What the Research Says About the Impact of 1:1 Laptop/Device Programs on Teaching and Learning

Effects on Teachers

- Movement toward constructivism, changing instructional roles

Changes to the Classroom Environment

- Increased technology use (and reliance)
- Student centered learning activities
- Motivation, engagement, management, and distraction

Impacts on Students

- Inconclusive impact on standard test scores
- Improved work quality, writing
- Technology skills, higher order thinking skills, Information literacy
- Degree of impact

Scholastic Learning

Teacher Dependent Tool for Learning

- Effectiveness directly to teachers' knowledge and interest
- Laptops were tools of entry to resources, software, and the Internet
- Innovative and dynamic instruction

Content Understanding and Academic Performance

- Academic performance did not improve for most part
- Performance varied within content areas
- Writing and media studies
- High order thinking skills

Changes to the Learning Environment

Access to Resources

- Resources, immediacy, and pacing

Impacts on Learning Processes

- Collaboration, individualized instruction, PBL, multi-tasking, asynchronous learning, and cross-curriculum instruction

Engagement and Distraction

- Distractions noticeably impeded learning
- Entry students

Technology Skills

Computer Usage Skills

- Hardware, software, media, and Internet usage
- Acculturation and interest in technology

Information Literacy

- Procedural elements of online research
- Source access, validation, and presentation

Internet Safety

- Personal information, cyberbullying, and malicious software
- Entry students

Communication

Communication Media
- Variety of media
- Multi-thread and asynchronous communication

Quantity and Quality
- Higher frequency
- Conflicting impact on quality

Community Development and Social Interaction
- Expanded social and academic communities

Social Networking
- Emergent area of learning
- Point of entry for social communication

Responsibility

Possession Responsibility
- Responsibility for something with value
- Paranoia vs. responsibility

Data Responsibility
- Organization and file management
- Backing-up

Maintenance Responsibility
- Behaviors required for basic care

Personal Responsibility
- Dealing with distraction, self-discipline
- Consequence of online conduct
- Time and task management

What does this mean for you?

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Academic Student Learning Outcomes

Deeper understanding of content

Wider breadth of content knowledge

Integration of content areas

Greater relevancy of learning

Improved capacity for learning

Increased ability to process information

Teacher centric

Creative vs. Consumptive learning

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Non-Academic Student Learning Outcomes

Technology proficiency

Attainment of Internet safety skills

Communication media aptitude

Improved communication quality

Community development

Responsibility

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How Do We Use This Information in Our Program Design, Assessment, and Improvement?

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Questions? Discussion?

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