Universidad de Guadalajara Aprenred 2. Congreso Internacional de Tecnologías para el Aprendizaje Conferencia Magisterial

The World of e-Learning Research: an Overview of Current Research

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Agenda

- 1. Introducción and methodology
- 2. Survey of research in e-learning:
 - · strategies and policies
 - teaching and learning
 - · technology
- 3. Who sets the research agenda?
- 4. How to improve research in e-learning
- 5. Conclusiones

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Sources

2006 survey of literature on e-learning research from 2003-2005
15 print-only journals + 50 online journals = >2,000 reviewed papers

28 books/major reports/theses with research focus

Google search for keywords
Articles in English/Spanish/French

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Methodology

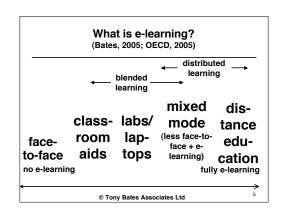
Focus on post-secondary/vocational education (NOT schools)

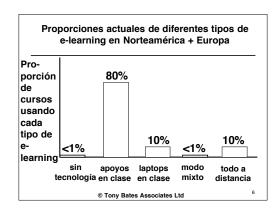
Many theoretical/analytical papers with no empirical base

So results/conclusions based ONLY on papers with:

- actual experience of e-learning
- · qualitative and/OR qualitative data
- · analysis/evaluation of data

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Main focus of research studies by type of e-learning

- 1. Majority on fully online (distance)
- 2. Some on 'blended learning' meaning classroom aids
- 3. Very little research on e-learning in vocational education/training (but **HALF** of all e-learning students)
- 4. Almost no research on mixed mode (the future?)

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Main areas of research

MAIN focus:

- 1. Policies and strategies: 10%
- 2. Teaching and learning: 30%
- 3. Use of technology: 60%

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Research into policies and strategies

Very broad category, includes at international/regional/national levels:

- policies/strategies/developments in elearning, e.g. virtual universities
- longitudinal statistics (funding, enrolments)
- completion rates/drop-out/satisfaction
- national quality standards
- globalization and e-learning
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Research into policies and strategies (cont.)

Institutional level:

- strategic planning for e-learning
- identification of best practices
- · evaluation of virtual universities
- · partnerships/consortia
- · costs of e-learning
- business strategies for e-learning
- · copyright & IP issues

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Research into policies and strategies (cont.)

What is NOT being researched:

- performance indicators for e-learning
- evaluation of government or institutional strategies for e-learning
- · cost-benefit analysis of e-learning
- effects of quality assurance processes
- · impact of e-learning on workforce

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Teaching and learning

Research being done on:

- · methods of course design
- quality assurance and best practice
- e-learning and learning outcomes
- synchronous vs asynchronous
- students: digital natives, learning styles
- tutoring/learner support/discussions

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Teaching and learning (cont.)

What is NOT being researched:

- blended learning in mixed mode
- · role of face-to-face
- best combinations
- · types of learners who benefit most
- models of course development
- supporting knowledge construction
- · inter-cultural issues in global e-learning

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Technologies

Greatest area of research

- Europe: learning objects, personalization
- North America: social networking, Web 2.0 (podcasting, Second Life)

LMS (integration with admin

systems), open source, open content Problem: research needs to be within educational context

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What is NOT being researched

Content management
Impact of Web 2.0 tools on course design/learning outcomes/students
Role of animations/simulations
Costs: LMS, social networking, learning objects, simulations
Business models/cost-benefit analysis of new technologies

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Features of the research

- Few large research programs in elearning: individuals working in isolation
- 2. Separate worlds: educators vs computer scientists; on-campus professors vs distance educators
- Poor quality: single cases, personal reflection, inadequate knowledge of the field

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Features of the research

- 4. In teaching/learning, lack of
 - · quantitative studies
 - · large samples
 - · convincing results
- 5. Focus on narrow range of issues: drop-out; constructivist learning; learning objects; technology standards; university teaching

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What sets research agenda?

- 1. Funding
 - Europe: European Commission; lots of problems
 - national research councils: e-learning interdisciplinary; lack of earmarked funds
- 2. Traditional academics vs students: difficulty in finding supervisors; lack of good program proposals

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What sets research agenda? (cont.)

- 3. Personal interests of individual academics
- 4. Governments: sometimes create earmarked funds for innovation, but don't really understand elearning
- 5. Private sector: EnCana, Cisco, IBM, Gates Foundation, Hewlett

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How can research in e-learning be improved?

Structural:

- Establish educational technology as an inter-disciplinary department in universities: home for Ph.D. students
- 2. National research councils/ government to give higher priority to research in educational technology
- 3. Inter-university research groups
- 4. Partnership with businesses/industry
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How can research in e-learning be improved? (cont.)

Academic:

- More research into e-learning in schools/vocational education
- 2. More emphasis on large-scale, quantitative research (e.g. surveys)
- 3. Develop on-going programs of research
- 4. Inter-disciplinary teams: academics, instructional designers, Web specialists

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How can research in e-learning be improved? (cont.)

Academic:

- 5. More focus on strategies/policies, less on technology per se
- 6. More focus on theory-building, best practices, based on empirical data
- 7. Ph.D. students to work on on-going research programs, not in isolation
- 8. Better academic time management (projects, deadlines, research time)

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Conclusiones

- 1. E-learning research to date is poor very little influence on practice
- 2. Many areas of e-learning not being researched
- 3. Lack of innovation in blended learning, use of Web 2.0
- 4. Much to be learned from research in distance education

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Conclusiones

Problems:

- funding
- · lack of large-scale, on-going projects
- lack of academics with interdisciplinary (education + technology)/research qualifications

Is e-learning a useful term for research purposes?

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Conclusiones (cont.)

- MTA is well positioned: area devoted to e-learning; SUV as partner; masters and Ph.D.
- But: research plan essential to ensure funding, appropriate staff, projects, and quality research

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