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Information and communication technologies in curriculum studies

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- ICT and curriculum studies
- Case studies
- Conclusion

ICT in education – some common topics

- How can ICT make education more efficient?
- Educational opportunity providers:
 - How can ICT contribute to the economic competitiveness of higher educational institutions at the global (educational) market?
 - How should ICT be integrated into the educational practices?

Students:

- Does the usage of ICT effect students' physiological and psychological development?
- How do the differences in the availability of ICT effect the racial, gender and class inequalities?

ICT and education

- The concept of education is not explicitly questioned:
 - Education is perceived as a means to an end (external to education itself).
 - The curriculum is grasped as an instrument.
 - Curriculum (functional tool) is not a subject of an explicit examination.
- Since ICT-enhanced curriculum is not neutral, on whose moral values and ethical ideals is it based?

ICT amplified aspects of culture

- Representing data as the basis of thought
- Seeing the language as a communication mediator while ignoring the metaphorical nature of the language
- Reducing culture to concepts that the experts are explicitly aware of
- The authoritative position of individual judgments and corresponding reduction of the cultural history to the events that individuals consider important
- ICT-mediated language that favors instrumentalist and anthropocentric worldview
- Identifying the intelligence incorporated into the ICT as the universal mode of thinking

ICT reduced aspects of culture

- Marginalizing and ignoring all the forms of implicit cultural knowledge
- Neglecting the ways in which the language reproduces the epistemology of cultural groups
- Ignoring the facts that individuals are nested in cultures and that the cultures are nested in nature
- Neglecting the ways in which the tradition is reenacted through everyday practices
- Ignoring the impact that the discourse of culture has on the further cultural development

ICT and the curriculum studies

- The questions are posed in a broader perspective:
- ICT are not just a tool, but they have the ability to change the culture through education

Curriculum studies

- Multidisciplinary studies of educational experiences
- Autonomous field of educational research
- There is no unifying paradigm in the field of curriculum studies
- The research is therefore positioned in the historical context

Curriculum studies – a short historical overview

- The emergence of the field and the stabilization of the curriculum development paradigm
- Field reconceptualization
- The internationalization of the curriculum research

The period of Curriculum development

- 1918 1969
- Instrumentalist approach to the curriculum
- Applying the scientific management methods to the process of education
- The epoch culminates with the Tyler rational
- Results with the crisis
- Still defines the basic curriculum concepts in the most educational practices

The reconceptualization of curriculum studies

- The establishment of an intellectually independent academic field
- Social engineering => the project of understanding curriculum, and the concept of curriculum as a conversation
- Instructional technologies => multidisciplinary configuration of curriculum studies
- The influence of continental philosophy, most notably phenomenology and post-structuralism

Aspects of the reconceptualized curriculum studies

- In addition to the curriculum development in the reconceptualized curriculum studies, curriculum is studied:
 - historically,
 - politically,
 - (auto)biographically,
 - esthetically,
 - ethically,
 - theologically,
 - in an international context,
 - institutionally,
 - in light of gender, class and race,
 - **–** ...

The internationalization of curriculum studies

- The emergence of transnational spaces in which the local traditions of curriculum research can be practiced together
- Two pillars of curriculum internationalization:
 - globalization, the main driving force behind the curriculum internationalization
 - diversification, most notably the development of regionally specific features of curriculum research
- Two ways of curriculum internationalization:
 - Studying the regionally and nationally specific features of curriculum through the *horizontal* and *vertical* growth of knowledge
 - The construction of a common global language in the field of curriculum studies

Case studies

- Automata Data Corporation¹
- Public Knowledge Project (http://pkp.sfu.ca/)
- Levinux (http://levinux.org/)
- StudyPlace (www.studyplace.org/)
- Sistem za internacionalnu razmenu kurikuluma

¹Willinsky, J., 2001. The Strategic Education Research Program and the Public Value of Research. *Educational Researcher*, 30(1), pp.5-14.

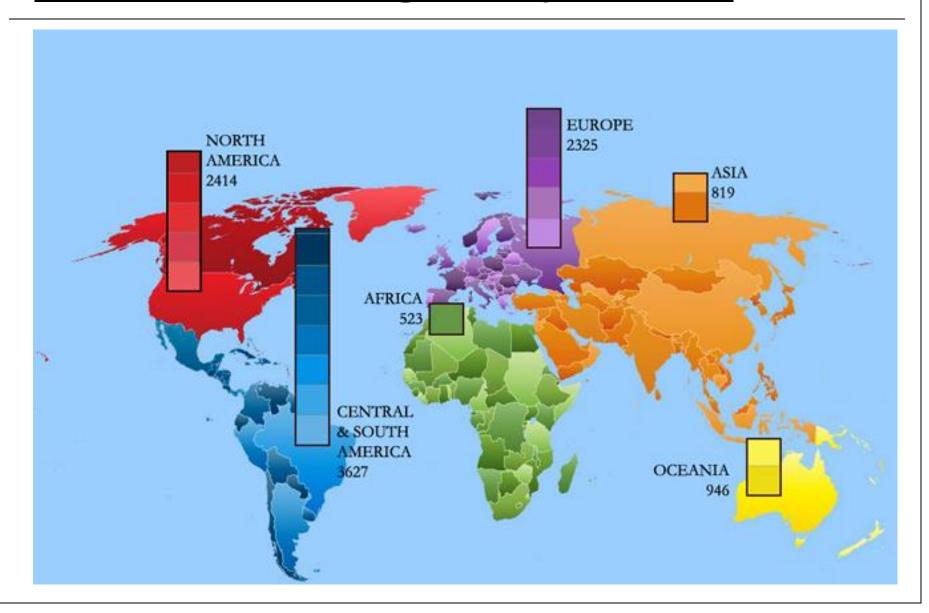
Automata Data Corporation

- John Willinsky, 2001
- Public access to the social studies research
- The goal: increasing public availability of knowledge in the field of (not exclusively) curriculum studies
- Web application developed for a wide audience
- Does not tend to unify the knowledge made available, but to map the field of research

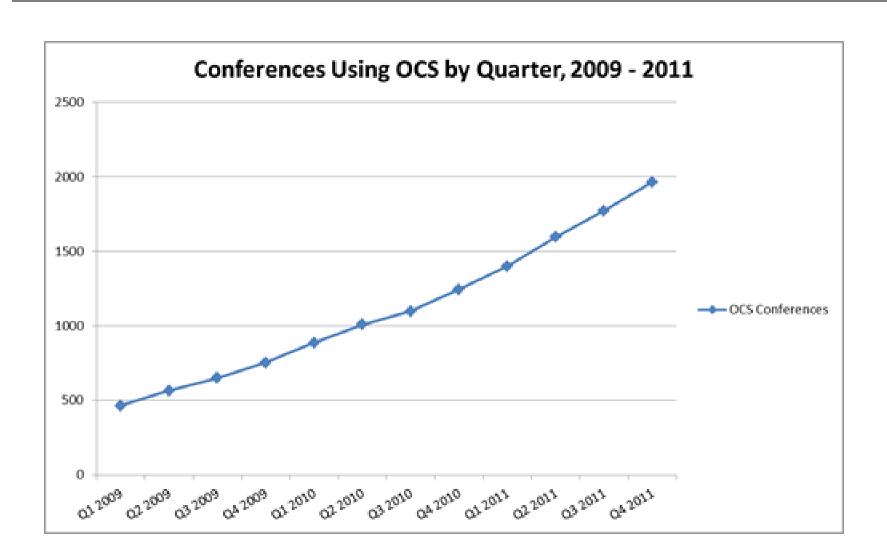
Public Knowledge Project

- John Willinsky, 1998
- Open Journal System, Open Conference Systems and monografijama Open Monograph Press
- Jorunal of curriculum and instruction
 (http://www.joci.ecu.edu/index.php/JoCI), Journal
 of the Canadian Association for Curriculum Studies
 (http://www.csse-scee.ca/) and Transnational
 Curriculum Inquiry
 (http://ojs.library.ubc.ca/index.php/tci)

Public Knowledge Project OJS



Public Knowledge Project OCS



Levinux

- Jacques Daignault, 1999
- Examining the potentials that ICT have in redefying the relations of power in educational institutions
- Setting free the development of educational institutions through the free evolution of ICT that the institutions use
- Open source software, based upon the same principles as the public education (publicly available knowledge)
- Everyone has access to the ICT:
 - suggesting the possible changes,
 - contributing in the process of software development
 - using the existing source code in the in a new way
 - rearranging the software platform

Levinux

- Similar projects in Morocco and Gabon
- Laboratories consisting of recycled computers and open source software
- Anti-corporative approach to the application of ICT in educational
- EduPunk personified the educational practices that result from do-it-yourself (DIY) approach and avoiding mainstream tools (such as Moodle and Blackboard)
- By seeing ICT are as fluid, it is avoided that the rigid ICT application limits the educational practices

Levinux



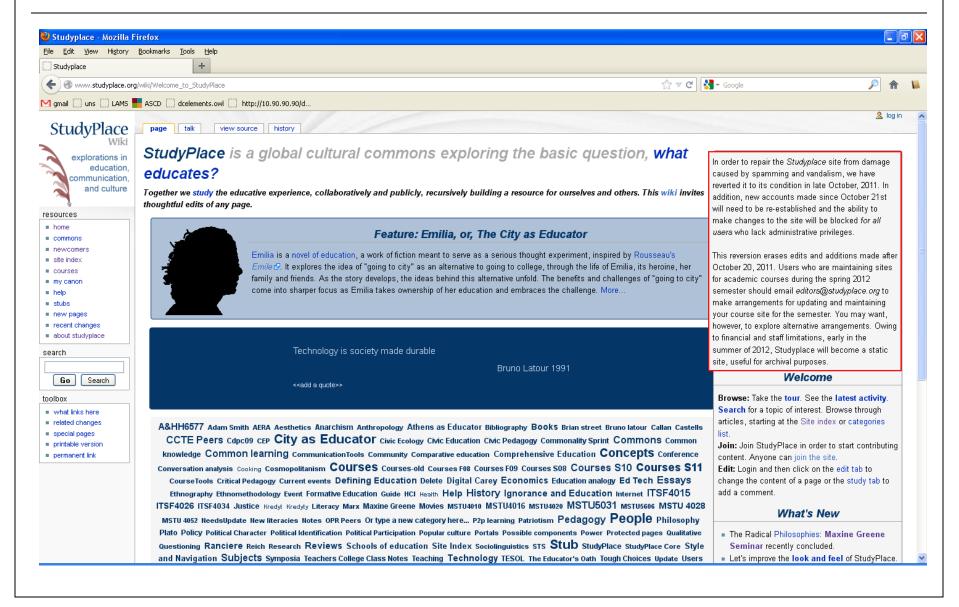
StudyPlace

- Robert McClintock
- Wiki with a mission to "to develop a global pedagogical commons, a repository of knowledge and thought, free and open to all, in which we assemble and advance the study of education."
- Educational studies that surpass the applied research of instructional methods, educational design and the classroom organization
- In the historical context it is being studied how the concepts of education have developed, and how education interacts with society

StudyPlace

- ICT brings together multitude of educational experiences and insights in education
- The StudyPlace contains:
 - essays and publications on education
 - educational material
- Integrates academic curriculum studies with the practical curriculum realizations

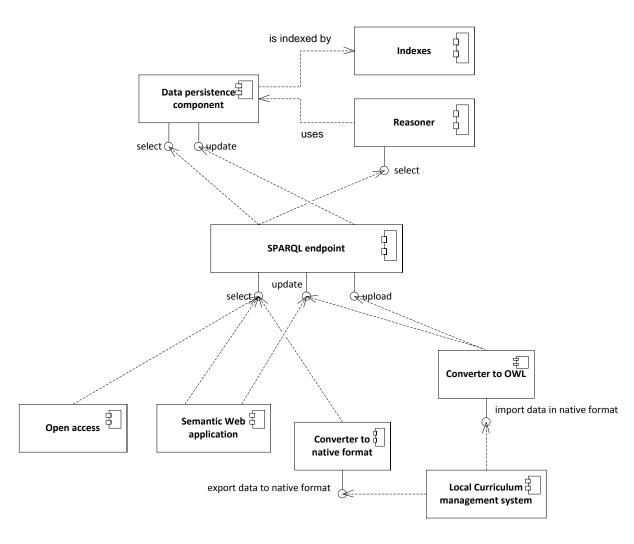
StudyPlace



International curriculum exchange system

- Work in progress
- Based upon Semantic Web technologies:
 - computers interact so that the data is being interpreted in the cultural context in which they have been created (with respect to the conceptualizations of local communities of practice)
- Uses standards for representing educational opportunities (MLO-AD (CWA 15903:2008) and MLO ECTS IP/CC (CWA 16076:2010))

International curriculum exchange system



Conclusion – how ICT can contribute to the curriculum research?

- Increased knowledge availability through open education
- Allowing participants in educational process to redefine structural and institutional characteristics of education – through the usage of open-source systems (software and information sources)
- Advancing the internationalization of curriculum studies by facilitating the establishment of new institutions and journals, and simplifying the communication among the local communities of practice
- Preserving the local specificities of educational practices through do-it-yourself principle
- Fading of borders between the curriculum studies and educational practice – through the electrical approach to the ICT such as StudyPlace