"Literacy" as a case of ICT4D

Dan Perkel School of Information February 20, 2007

- Why are we talking about literacy?
- Why is the week called "literacies"?
- What is literacy?
- What should fall under the scope of talking about literacy?

"Literacy empowers and nurtures inclusive societies and contributes to the fair implementation of human rights."

"Literacy is an indispensable means for effective social and economic participation, contributing to human development and poverty reduction."

src: UNESCO Education Literacy Portal http://portal.unesco.org/education/en/ev.php-URL_ID=40338&URL_DO=DO_TOPIC&URL_SECTION=201.html

"Literacy is not merely a cognitive skill of reading, writing and arithmetic, for literacy helps in the acquisition of learning and life skills that, when strengthened by usage and application throughout people's lives, lead to forms of individual, community and societal development that are sustainable."

- Koihiro Matsuura, UNESCO Director-General in his message on the occasion of International Literacy Day 2006.

"Literacy as freedom." -UNESCO Literacy decade slogan

"Literacy sustains development." - UNESCO International Literacy Day slogan

Today's coverage

- The "Great Divide" conceptions of literacy
- Challenges to the divide: Literacy (and multi-literacies) as social practice
- What next? Rethinking the role of technology and media of representation

Literacy as technology - the "instrinsic efficacy" of writing systems



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Literacy as technology - the "intrinsic efficacy" of writing systems

- Expressiveness
- Flexibility
- Ease of use
- Ease of learning
- Elite, technocratic class as early users
- Issues of diffusion
- Greece the first widespread diffusion of "literacy" (?)

The social consequences of literacy

- History vs. mythology
- Homeostasis and structural amnesia
- New notions of "truth"

The individual/cognitive consequences of literacy

- Logical thought and deduction
- Abstract categorization
- Individual/private vs. Social/collective thinking
- Democratizing or stratifying? (but either way, rather technologically deterministic...)

From utterance to text

- New notions of successful communication
- New notions of truth
- New orientation to language

Olson. (1977). From Utterance to Text: The Bias of Language in Speech and Writing

Orality vs. Literacy (Walter Ong)

- Primary vs. Secondary Orality
- Writing as technology and the technologies of writing
- Oral thought vs. Written thought
- Writing as the extension of man

Key findings of Luria

- Names of things were concrete, not abstract
- Categories were situational not abstract
- No deductive thinking
- Resistance to definitions
- No self-analysis

Recounted in Ong. (1982) Orality and Literacy: The Technologizing of the Word

Example: Abstract categories



"They're all alike. The saw will saw the log and the hatchet will chop it into small pieces. If one of these has to go, I'd throw out the hatchet. It doesn't do as good a job as the saw."

"Yes, but even if we have tools, we still need wood otherwise we can't build anything."

Recounted in Ong. (1982) Orality and Literacy: The Technologizing of the Word

Example: the syllogism

- "Q: In the Far North, where there is snow, all bears are white. Novaya Zembla is in the Far North and there is always snow there. What color are the bears?
- A: I don't know. I've seen a black bear. I've never seen any others... each locality has its own animals."

Recounted in Ong. (1982) Orality and Literacy: The Technologizing of the Word

But...

"The subject's reactions that it is perhaps impossible to devise a test in writing or even an oral test shaped in a literate setting that would assess accurately the native intellectual abilities of persons from a highly oral culture.

"Proponents of intelligence tests need to recognize that our ordinary intelligence test questions are tailored to a special kind of consciousness, one deeply conditioned by literacy and print...The people who ask such questions have been living in a barrage of such questions from infancy and are not aware that they are using special rules."

Ong. (1982) Orality and Literacy: The Technologizing of the Word

But are we talking about "textual thinking" or "school thinking"? Or something else entirely?

The Cognitive Critique: Scribner and Cole

- Literacy vs. Schooling amongst the Vai in Liberia
- Studied the learning of and the uses of reading and writing for three scripts: Vai script, Arabic, and English
- Studied the relationship between outcomes of experiments and the verbal explanations

Scribner and Cole: Key Findings (What "Great Divide"??)

- Greatest relationship: schooling and some of the verbal explanations
- Tests for logic showed highest relationship with schooling
- Effects of Vai and Arabic script only significant for tasks that matched everyday uses of those scripts
- Non-literates not worse off generally
- <u>No general "consequences of literacy"</u>

The Literacy Practice

- Technology + Knowledge + Skills used in a patterned way in a domain of activity
- "We approach literacy as a set of social organized practices which make use of a symbol system and a technology for producing it and disseminating it. Literacy is not simply knowing how to read and write a particular script but applying this knowledge for specific purposes in specific contexts of use."
- Local effects of literacy are not effects of a technology, but effects of social practices that involve the use of a technology

Scribner and Cole. (1981) The Psychology of Literacy

Historical critique: Harvey Graff and the Literacy Myth

- In short, "literacy" causes none of the societal consequences attributed to it
- "Oral vs. Literate" dichotomy unhelpful, misleading, and obscuring (echoes many other scholars at the time)
- Need to look at institutions: economic, political, and religious who have always exercised greatest influence on the actual uses of reading and writing

Graff. (1982) The Legacies of Literacy: Continuities and Contradictions in Western Society and Culture

A historical/linguist critique: Geoff Nunberg

- "Literacy" as a particularly *English* (not "Western") concept
- The very word "literacy" is loaded with ideological implications

Cultural, Theoretical critique: The Ideological Model of literacy

- Literacy is not "autonomous"
- Literacy is a social practice
- Reading and writing always comes with issues of power and values
- Oral and literate is always a mix
- Ethnography is required to study literacy studies the actual uses of reading, writing, and materials
- Case study of reading and writing in Iran
- Has spawned two decades of ethnographic case-work
 Street. (1984) Literacy in Theory and Practice

Street. (1995). Social Literacies

Social and theoretical critique, Jim Gee

- There is no neutral way to read and write
- Literacy is about identity
- The Discourse: "socially accepted association among ways of using language, other symbolic expressions, and 'artifacts,' of thinking, feeling, believing, valuing, and acting that can be used to identify oneself as a member of a socially meaningful group or 'social network', or to signal (that one is playing) a socially meaningful role."
- Literacy as mastery of new Discourses

Are multiple literacies new? (Another historical critique)

- Multiple, widespread literacy preceded "schooled literacy" in the United States and Great Britain
- Literacies based on forms of popular culture
- School as the place to learn "literacy" comes at the intersection of multiple, paradoxical interests
- Lesson: what price to create a school based notion of "media literacy"?

Now: The Role of the technology and media in "new media" literacies??

- diSessa (2000, 2007): "Material intelligence" involved in generic uses in multiple social niches (a reaction to Gee's notion of the "props" of literacy)
- Multimodal literacies, multimodal semiotics (Jewitt and Kress 2003, Kress 2004)
- "Limits to the local"?? (Brandt and Clinton 2002)
- "We lack a sophisticated analysis of the new media environment in terms of text, technology, and cultural form..." (Livingstone 2004)

"We are not suggesting that the technology of literacy carries its own imperatives no matter where it goes. But we want to grant the technologies of literacy certain kinds of undeniable capacities - particularly, a capacity to travel, a capacity to stay intact, and a capacity to be visible and animate outside the interactions of immediate literacy events. These capacities stem from the legibility and durability of literacy: its material forms, its technological apparatus, its objectivity, that is, its (some)thing-ness."

> Brandt and Clinton. (2002) Limits of the local: Expanding perspectives on literacy as a social practice

The implications for ICT4D

- Literacy and technology: Learn to see reading, writing, and the materials and artifacts of reading and writing as case studies for ICT4D
- But like other technologies, reading and writing are not "neutral" skills based on "neutral" technologies. They are wrapped up in ideologies, values, belief systems, and embedded in social practices.
- Be careful what you think of as a "problem" needed to be solved by technology. The "problem" statements are often value-laden as well...
- Literacies are multiple along a medium related dimension, but more importantly on a "practice" related dimension
- What is landscape of communication practices? What are the uses of language and communication technologies?

UNESCO wrestling with these issues...

"UNLD also endorses the expanded notion of literacy which is not limited to the generic skills of reading, writing and calculating, but is instead a human right related to development. Literacy may be culturally, linguistically and even temporally diverse. It does not fall in one-shot learning occasion but in lifelong learning."