

## (Re)considering Literacy and Linguistic Diversity in a Multicultural Society

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### **Abstract:**

Literacy has traditionally been conceptualized as functional literacy, which is generally defined as the ability to read and write in the majority language. However, this concept has been challenged (Chu 1998, 1999) within our contemporary societies, that are multicultural, multilingual, global and technological. Research has shown that job prosperity and health correlate with the ability to read and write in the national language(s) and to use information and communication technologies (ICTs). Nevertheless, for societies to thrive, I call for a reconsideration of the traditional definition of literacy and a re-imagining of literacy in multicultural communities. Traditional definitions of literacy recognize neither an individual’s literacy in nondominant languages nor differences in literacy levels when engaged in different social circumstances; for example, a sociologist is typically less literate at a physics conference than a sociology one. Literacy is problematized in order to challenge any classification of ethnolinguistic minorities as the “Other,” or “illiterate” (in the dominant language), that then, disenfranchises them. To engage linguistic minorities or others in developing their literacy skills, they cannot continue to be disenfranchised in libraries, education institutions or in wider society and they need to be involved in defining, developing, and using their own literacy.

This paper addresses the question: What is literacy and linguistic diversity in a multicultural society? Diverse concepts of literacy from a critical perspective will be examined and a holistic model of literacy is proposed. My Ecological Model of Literacy as Engagement and Transformation defines literacy as the activity of engaging with agreed-upon signs for communication, understanding, and action in an organized, socialized environment. It validates the notion of multiple literacies and literacy as situational and temporal, promotes literacy as an evolving and self-actualization process, and shifts the literacy dialogue from a discourse of skill sets to a discourse of power.

Keywords: linguistic diversity, multiple literacies, transformation.

### **Article:**

#### *1 Introduction*

Research has shown that job prosperity and health not only correlate with the ability to read and write in the national language(s) but also with the ability to use information and communication technologies (ICTs). This work builds on the notion of literacy as an indispensable skill set to succeed in society. Literacy has traditionally been conceptualized as functional literacy, which is generally defined as the ability to read and write in the majority language and the acquisition of literacy skills has been considered a motor activity (Berthoff 1987). Traditional definitions of literacy recognize neither an individual’s literacy in non-dominant languages nor differences in literacy levels when engaged in different social circumstances (e.g., a bar versus a teacher’s lounge); issues that have been raised by critical literacy scholars and educators (Chu 1998, 1999). An inclusive approach promotes linguistic minorities and others as protagonists in defining, developing, and using their own literacy/ies.

In order to thrive in our contemporary societies, that are multicultural, multilingual, global and technological, a reconsideration of the traditional definition or mechanistic approach to literacy and a re-imagining of literacy in

multicultural communities are fundamental. This paper addresses these goals and explores the broad question: What is literacy and linguistic diversity in a multicultural society? Literacy is examined from a critical perspective and a holistic model of literacy is proposed. My Ecological Model of Literacy as Engagement and Transformation defines literacy as the activity of engaging with agreed-upon signs for communication, understanding, and action in an organized, socialized environment. Librarians and other literacy educators on the frontline in providing literacy education and learning materials need to embrace an inclusive and emancipatory pedagogy that respects all forms of literacy and builds on them in acquiring multiple literacies.

## *2 (Re)considering Literacy and Linguistic Diversity from a Critical Perspective*

Contemporary studies of literacy incorporate the social context in which literacy is practiced. However, this discourse of literacy as a social act has not fully replaced the ‘ideological’ model of literacy (Street 1993) which is oppressive and elitist, as it defines literacy from the dominant culture and categorizes people into “haves” and “have-nots” (Baynham 1995). For example, it defines ethnolinguistic minorities as the “Other,” “illiterate” (in the dominant language), and disenfranchises them. It recognizes neither an individual’s literacy in non-dominant languages nor differences in literacy levels when engaged in different social circumstances; for example, a sociologist is typically less literate at a physics conference than a sociology one. In multicultural societies, literacy, as it applies to linguistic minorities, has to be understood as a discourse of power, and re-considered and re-defined in order to reduce oppression and validate the literacies that one possesses.

As the victors live to tell history so has language been used as a tool to dominate and assimilate people and impose the dominant culture. This strategy has been implemented by colonizers on indigenous communities as well as by a ruling society on immigrant or minority communities. Official language or education policies have been usually enacted as measures of enforcement and in cases of unofficial practice, the dominant language is inevitable and unavoidable in the work or market place. ‘Historically, schools have played an important part in efforts to assimilate linguistic minority groups and have been places where language loss is accelerated’ (Ovando and Gourd 1996, p. 301). Crawford (1994), Hale (1992), Ovando and Gourd (1996), among others, have written about the detriments of language assimilation and loss, including loss of cultural diversity, cultural/community identity and intellectual data for linguistic study, and the oppression of communities. On a personal level, feminist educator and dissident intellectual bell hooks (1994) describes how the line “*This is the oppressor’s languages yet I need it to talk to you,*” from Adrienne Rich’s poem “The Burning of Paper Instead of Children,” invokes her to think:

‘...of standard English, of learning to speak against black vernacular, against the ruptured and broken speech of a dispossessed and displaced people. Standard English is not the speech of exile. It is the language of conquest and domination; in the United States, it is the mask which hides the loss of so many tongues, all those sounds of diverse, native communities we will never hear, the speech of the Gullah, Yiddish, and so many other unremembered tongues....I know that it is not the English language that hurts me, but what the oppressors do with it, how they shape it to become a territory that limits and defines, how they make it a weapon that can shame, humiliate, colonize.’

Such forced linguistic assimilation and eradication render cultures silent and languages meaningless (hooks 1994). Language loss has been difficult to reverse. Gains have not been made even when there has been an increase in the population of linguistic minority communities, creating a potential increase in the number of heritage/minority language speakers, as experienced with the Maori in New Zealand and the Navajo in the United States (Fishman 1991; McLaughlin 1992).

The suppression of their languages has not always led to the complete submission of the colonized. As a form of resistance, counter-languages have been created. hooks (1994, p. 170) notes:

‘Needing the oppressor’s language to speak with one another [enslaved black people] nevertheless also reinvented, remade that language so that it would speak beyond the boundaries of conquest and domination....They put together their words in such a way that the colonizer had to [and still has to] rethink the meaning of English language.’

Black vernacular, African American Vernacular English (AAVE) or Ebonics is still used today in the United States but is not recognized as a distinct language and for children who speak it, they are not accorded bilingual

status. Rather, educational institutions and libraries have made few accommodations and expect African American children to effectively communicate in Standard American English (SAE) to succeed in school and in using information resources and technologies.

The history of library services in the United States to underrepresented groups is one of contrasts (MacCann 1989). MacCann (1989, p. 97) found “vigorous forms of affirmative action on behalf of European immigrant groups, whereas the approach to library service to Black Americans was a classic blame-the-victim approach that resulted in the blockage of initiatives to improve service.” These activities, including the provision of multilingual library materials to European immigrants, appear altruistic on the surface, but had cultural and linguistic assimilation as their primary purpose. For example, the American Library Association in 1918 created the Committee on Work with the Foreign Born which disbanded in 1948, to support the mission of the American public library in its work with immigrants to Americanize them by teaching them English and preparing them for citizenship (Jones 1999, 2004). A more recent case reveals the continued struggle of libraries in multicultural communities. The Bruggemeyer Memorial Library in the City of Monterey Park, a sleepy city, east of downtown Los Angeles, became a political battleground when longtime residents experienced a dramatic demographic shift from predominantly White to Asian American in the late 1970s and the 1980s (Chu and Honma 2007). The hostility of English language-only advocates spilled towards library policies, as the Bruggemeyer Library began to carry more “foreign” language books to meet the needs of its changing demographics, leading the city council to disband the board of library trustees in order to take control of the library. The Superior Court later overturned the decision.

Finally, the official status of language(s) extends to the assessment and reporting of literacy nationally or in international comparison. The ignoring of other languages/literacies creates a bias in research that has implications for policy making. A case in point is the National Adult Literacy Survey (NALS) which is “a survey of literacy in the English language - not literacy in any universal sense of the word. Thus, the results do not capture the literacy resources and abilities that some respondents possess in languages other than English” (Kirsch et al. 1993, p. 13). Although international literacy data now exist on twelve countries (Canada, Germany, the Netherlands, Poland, Sweden, Switzerland, the United States, Australia, Belgium (Flanders), Ireland, New Zealand and the United Kingdom) that participated in the International Adult Literacy Survey (IALS), again the literacy standard is that of the dominant language of the respective country. The IALS is the first multi-country and multi-language assessment on adult literacy allowing comparison across cultures and languages (Human Resources Development Canada 1997). Furthermore, in Brazil, the dominant model of literacy exposes its word-base bias, a model that propagated globally by the colonization activities of Europe and led to the suppression of diverse and alternative literacies.

### *3 Literacies in Contemporary Multicultural Societies*

The 21st Century has been referred to as the Information Age, Digital Age, Knowledge Society, Communication Society, Information Society and Networked World, among other terms. These denominations, often used interchangeably, refer to the increasing presence of information and communication technologies (ICTs) in everyday life that enable individuals to communicate faster anywhere, any time; have led to an explosion of information, available at one’s fingertips 24/7; and the automation of production, placing a higher value on knowledge, information and ideas over production. The ubiquity of ICTs was touted in the mid- 1990s (see for example, Liffick 1995) based on the improvement of technology, cost-effective production and increased consumer demand that would drive the prices down. Meanwhile, studies signaled that a digital divide existed in the United States for minorities, rural communities, poor people and seniors, and in the developing world (see for example, Carvin 2000, The Center for the Study of Technology and Society, Digital Divide Network, National Telecommunications and Information Administration 1999, etc.). The divide was due to the need for more connectivity (need for affordable computers and connection, and more sites of free access), capability (computers and software continue to be challenging to use) and content (the world- over experiences a lack of local, ethnic and other minority content, and content dominated by the English language). Although the digital divide as it relates to connectivity has been reduced substantially in developed countries, ICTs are yet not as affordable or freely accessible in other parts of the world. This stark reality has created an urgency

for the world's children, who need computers to have the equal opportunity to learn, exchange and participate in society. The concern has not escaped policy makers, such as Nicholas Negroponte, who has created a foundation and is leading the effort in developing the \$100 computer (<http://laptop.media.mit.edu/>). As computer software and hardware have evolved, the capability to use them is still not intuitive and requires a high learning curve. As more people have access to ICTs, the diversity of users have still not been able to reduce the dominance of the English language on the Internet. This is one element of a contemporary globalization process where production, distribution and other economic, cultural and political actions/decisions are controlled by a few developed nations and multinational corporations.

Another 21st Century reality is the increasing cultural diversity locally due to increasing migration; ease, speed and affordability of travel; access to global media channels and Web resources; and ease and speed of communication. Such diversity requires the ability to engage across linguistic, cultural, geographic and political boundaries. What is a national or dominant language, culture or identity is no longer fixed. What used to be familiar terrain becomes less recognizable.

The tensions and challenges brought on by technology and cultural diversity present individuals with a complex terrain whereby individuals need to traverse technological, cultural, linguistic and information overload obstacles which additionally necessitate political, economic and social capital. Thus, in the 21st Century the acquisition and practice of literacy go beyond learning the national (and other) language(s) and culture(s), but necessitate the engagement of ICTs, management of information overload and consciousness/discernment of dominant forces (whether economic, cultural, political or other) acting upon our world. Hence, what literacy is needed in modern-day multicultural society to “know/read the world”?

The contemporary discourse of literacy is filled with diverse concepts which are evolving to keep pace with a rapidly changing world. In the education field, much of the discourse revolves around the concept of new literacies defined by Leu et al. (2004) as:

“The new literacies of the Internet and other ICTs include the skills, strategies, and dispositions necessary to successfully use and adapt to the rapidly changing information and communication technologies and contexts that continuously emerge in our world and influence all areas of our personal and professional lives. These new literacies allow us to use the Internet and other ICTs to identify important questions, locate information, critically evaluate the usefulness of that information, synthesize information to answer those questions, and then communicate the answers to others.”

In the library and information studies field, the discourse revolves around “information literacy” which is defined as “the abilities to recognize when information is needed and to locate, evaluate, effectively use, and communicate information in its various formats.” (SUNY Council of Library Directors Information Literacy Initiative 1997) Information literacy emphasizes problem solving, critical thinking and lifelong learning, irregardless of media.

A new multidisciplinary approach that is evolving is the notion of “transliteracy” which is defined as “literacy across media” (Thomas 2005). Fisher (2005) illustrates this process in his consideration of “the literacies of teachers vs. the literacies of students. Kids don't need to theorize or organize their thoughts around different types of literacies. They know of complex, interwoven literacies that combine multiple forms of media, electronic and otherwise. Texts that are interactive and those that aren't. Keyboards and pencils, words and videos. Together, this is what makes them literate.” *The Transliteracies Project: Research in the Technological, Social, and Cultural Practices of Online Reading* is exploring this phenomenon.

‘Technological development will be integrated with humanistic and social-science research (empirical, historical, interpretive, critical, aesthetic) that explicitly questions what “improve” or “community” might mean. The idea is to exploit cross-disciplinary expertise to approach online reading from multiple angles simultaneously, rather than just as an engineering problem, just as a hermeneutical problem, or just as a social problem. The goal, in other words, is to avoid producing a quick-fix extra “feature set” for online reading, but instead to create a demonstration technology founded upon deep, wide reflection on the issues.’

Although these literacies respond to the needs of a technological society they do not prepare individuals to engage with social controls implicit in our cultural practices, social institutions, work places and other spheres of life. We need to teach individuals to engage in critical literacy which

‘shows us ways of looking at written, visual and spoken texts to question the attitudes, values and beliefs that lie beneath the surface.... to make meaning from the array of multi media, complex visual imagery, music and sound, even virtual worlds that confront us each day in addition to written and spoken words....Critical literacy provides us with ways of thinking that uncover social inequalities and injustices. It enables us to become agents of social change.’ (Department of Education, Tasmania)

Critical literacy is aligned with the notion of emancipatory literacy as proposed by the educator Paulo Freire. “Central to Freire’s approach to literacy is a dialectical relationship between human beings and the world, on the one hand, and language and transformative agency, on the other. Within this perspective, literacy is not approached as merely a technical skill to be acquired, but as a necessary foundation for cultural action for freedom, a central aspect of what it means to be a self and socially constituted agent” (Giroux 1987, p. 7). In Paulo Freire’s view (1988), an illiterate is an individual oppressed within a dominant system rather than a person living on the fringe of a society, a marginal man. All of these literacies as well as linguistic diversity are important and needed to exist in our multicultural societies.

#### *4 Ecological Model of Literacy as Engagement and Transformation*

Literacy and linguistic diversity in a multicultural society needs to engage an inclusive definition of literacy and a holistic literacy approach. My proposed definition encompasses all literacies, ranging from oral to textual to multimedia. From this viewpoint, literacy is the activity of engaging with agreed-upon signs for communication, understanding, and action in an organized, socialized environment. Key in this definition is that literacy is a social act between communicators/learners based on agreement of the use of specific signs/codes to connote meaning. These signs can be in any sensory form and involve rules so they may be re-engaged with limited confusion and re-learning.

The above broad definition of literacy is the foundation of my Ecological Model of Literacy as Engagement and Transformation (see Figure 1). It is ecological because involves a cyclical process where there is a starting point for any incident of literacy engagement and learning, and literacy becomes part of an evolving process where multiple literacies are acquired over a lifetime and which emphasizes self-actualization and community welfare. Borrowing from hooks’s practice of “engaged pedagogy” (1994), I wish to extend the notion of well-being (individual and community) as essential to literacy practices which corresponds to my holistic approach to literacy. This literacy cycle is described from the learner’s perspective and includes three phases:

**i. Subject-Position.** This first phase represents a learner’s situatedness. It identifies the position the learner finds him/herself before participating in the literacy learning process and reflects his/her readiness to engage literacy. One’s subject-position encompasses three facets situated at the individual, community and societal levels. At the *personal level*, we identify the AFFECTIVE, PHYSICAL and COGNITIVE DIMENSIONS of the learner to determine his/her motivation, stamina, prior knowledge, literacy experiences, etc. to engage in literacy learning. Taking a positive case, for example, literacy will be more easily acquired when one’s attitude is optimistic, one is young, rested and alert, is familiar with the literacy “classroom” and already knows another language. Krashen (1996) has found in his work and others’ research that it is much easier to learn to read in a language we already understand, and the ability to read transfers across languages, even when the writing systems are different. At the *cultural group or community of practice level*, a learner’s CULTURAL SCHEMA is considered, recognizing that culture may determine one’s right to acquire literacy based on age, caste, gender or other variable, the language(s) the culture uses, and the extent to which it shares cultural practices with the dominant culture. At the *societal level*, the identification of a learner’s SOCIO-POLITICAL STRUCTURE determines his/her socioeconomic status and whether the acquisition of dominant language(s) or other literacies is free, forced or available. Policies and legislation determine a learner’s subject-position in society in terms of social and economic capital and legal rights.

**ii. and iii. Subject-Process and Subject-Effect.** Literacy is not only a process, which may be engaged critically, but it also produces/results in an effect of learning and transformation, emphasizing self-actualization and community welfare. These two phases of the literacy cycle are discussed together as the activities engaged in the process tend to lead to particular outcomes. First, literacy entails the basic activity of CODING (linguistic, sensory), permitting individuals to COMMUNICATE (transmit, receive, confirm understanding). Second, in the acquisition of literacy, KNOWING takes place which may be active or passive, enabling the learner to LEARN, SHARE, UNDERSTAND knowledge, information or meaning. Lastly, individuals engaged in literacy acquisition and practice, are ACTING with an extent of purposefulness, which allows them to RESOLVE issues, EXECUTE plans, and/or CHANGE the world.

My Ecological Model of Literacy as Engagement and Transformation validates the notion of multiple literacies and literacy as situational and temporal, promotes literacy as an evolving and self-actualization process, and shifts the literacy dialogue from a discourse of skill sets to a discourse of power. Literacy is a socio-cultural act that can take place in any locale, individually with learning resources, in community with others and/or under the guidance of an instructor. As a socio-cultural act literacy has consequences in how we read and engage our world. At the basic level it engages a skill set enabling communication and learning, and at its most conscious level, it enables us to view the world critically and propel us to enact social change.

### *5 Conclusion*

A diversity of languages and literacies, and the ability to be critical and transliterate are needed for effective communication, understanding and information processing in a multicultural society. As noted in the subject-position phase of the ecological literacy model, a learner's situatedness and cultural schema signify the ease and accessibility to literacy/ies. However, the third facet addressing socio-political structure is vital so we need to be continually vigilant to curb systemic barriers to multiple literacies and linguistic diversity, and to reverse language loss.

Libraries can facilitate acquisition of multiple literacies as well as a diversity of languages through the provision of literacy materials and programs, information resources and services in diverse languages, and a community space for its multicultural and multilingual communities to meet (see Chu 1999 for more ideas and recommendations). These library services should be made available to the whole community and not just ethnolinguistic minority communities to experience the full effect of the saying: *El que habla dos idiomas vale por dos* (or Who speaks two languages is worth twice as much).

More important than services is to have in place policies that guide their implementation. For this reason, I call for libraries and other literacy institutions to implement policies that enhance equity of information access and reverse language loss. To begin, I propose first language access policy. The government of the City of Monterey Park in Southern California has implemented such a policy where all government services are available in the first languages of the majority of the community, that is, English, Chinese, Spanish and Vietnamese. Whether city residents walk in, call in or access online the city's services, they are available in these four languages. The city's library as a municipal service, provides services and collections in these four and more languages.

A second literacy-related policy would address minority language preservation and revitalization. As was noted earlier many communities that have been assimilated into the dominant language(s) have lost or have been losing their heritage/first languages. Libraries can support language preservation and maintenance programs in ways, which have been found to be successful. Elements that have led to success include local control (community involvement), culturally compatible curriculum, and strong support for instructors (Ovando and Gourd 1996). When all members of a multicultural society can learn and maintain the language(s) they desire for the purpose(s) they desire (social, cultural, economic, political, etc.), and can be critical users of information, we will have communities that are whole and free.

Literacy in a multicultural 21st Century needs to be considered as resistance and emancipation, which includes teaching, promoting and supporting literacy/ies beginning with one's first/heritage/native language. Extending our literacy/ies can be viewed as interweaving our knowledge of the world, creating a tapestry of understanding or as a continuum, expanding our literacy to engage with the world.

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### *References*

- Baynham, M. 1995. *Literacy Practices: Investigating Literacy in Social Context*. London: Longman.
- Berthoff, A.E, 1987. Foreword. In P. Freire and D. Macedo. *Literacy: Reading the word and the world*. Westport, CT: Bergin & Garvey, pp. xi-xxiii.
- Carvin, A., 2000. 1's and 0's: Mind the gap: The digital divide as the civil rights issue of the New Millennium. *MultiMedia schools: A Practical Journal of Multimedia, CD-ROM, online, and internet in K-12*, 7 (1).  
<http://www.infotoday.com/MMSchools/Jan00/carvin.htm>  
(Accessed: 8 June 2006).
- The Center for the Study of Technology and Society. *Equity*. <http://www.tecsoc.org/equity/equity.htm>  
(Accessed: 8 June 2006).
- Chu, C.M., 1998. Expanding the literacy of linguistic minorities: Coping skills and successful transition across discourse communities. In Section on Reading, IFLA. *Literacy and reading services to cultural and linguistic minorities: Papers from a workshop of the Section on Reading, International Federation of Library Associations*. Washington, DC: Center for the Book, Library of Congress AND *Proceedings of literacy and reading services to cultural and linguistic minorities workshop*, Conference of International Federation of Library Associations, 16th-21<sup>st</sup> August, 1998; Amsterdam, The Netherlands. <http://www.ifla.org/IV/ifla64/070-153e.htm>
- , 1999. Literacy practices of linguistic minorities: Socio-linguistic issues and implications for literacy services. *Library Quarterly*, 69 (3), pp.339-359.
- Chu, C.M. and Honma, T., 2007. Libraries as contested community and cultural space: The Bruggemeyer Memorial Library of Monterey Park, California. *AAPI Nexus: Asian Americans and Pacific Islanders Policy, Practice & Community*, 5 (1), pp.33-58.
- Crandall, J. and Imel, S., 1991. Issues in adult literacy education. *The ERIC Review*, 1, pp.2-5.
- Crawford, J, 1994. Endangered Native American languages: What is to be done and why? *Journal of Navajo education*, XI (3), pp.3-11.
- Department of Education, School Education Division (Tasmania, Australia). *Critical Literacy*. <http://wwwfp.education.tas.gov.au/english/critlit.htm> (Accessed: 8 June 2006).
- Digital Divide Network. *Digital Divide List*.  
<http://www.digitaldivide.net/community/digitaldivide> (Accessed: 8 June 2006).
- Fisher, C., 2005. Are new literacies already old literacies? *Remote Access*.  
[http://remoteaccess.typepad.com/remoteaccess/2005/10/are\\_new\\_literac.html](http://remoteaccess.typepad.com/remoteaccess/2005/10/are_new_literac.html) (Accessed: 8 June 2006)
- Fishman, J.A, 1991. *Reversing Language Shift*. Clevedon, U.K.: Multilingual Matters.
- Freire, P, 1988. The Adult Literacy process as cultural action for freedom and education and conscientização. In E.R. Kintgen et al., eds. *Perspectives on literacy*. Carbondale, IL: Southern Illinois University Press.
- Giroux, H.A, 1987. Introduction. In P. Freire and D. Macedo. *Literacy: Reading the word and the world*. Westport, CT: Bergin & Garvey, pp. 1-27.
- Hale, K, 1992. Endangered languages: On endangered languages and the safeguarding of diversity," *Language: Journal of the Linguistic Society of America*, 68 (1), pp. 1-3.
- hooks, b, 1994. *Teaching to Transgress: Education as the Practice Freedom*. New York: Routledge.
- Jones, P.A., Jr, 1999. *Libraries, Immigrants, and the American Experience*. Westport, CT Greenwood Press.
- . 2004. *Still Struggling for Equality: American Public Library Services with Minorities*. Westport, CT: Libraries Unlimited.

- Human Resources Development Canada, 1997. *International Adult Literacy Survey*.  
<http://www.nald.ca/nls/ials/introduc.htm> (Accessed: 20 January 1999).
- Kirsch, I.S. et al. September 1993. *Adult Literacy in America: A First Look at the Results of the National Adult Literacy Survey*. Washington, D.C.: Office of Educational Research and Improvement, U.S. Department of Education.
- Krashen, S.D, 1996. *Every Person a Reader: An Alternative to the California Task Force Report on Reading*. Culver City, CA: Language Education Associates.
- Leu, D.J. Jr et al. 2004. Toward a theory of new literacies emerging from the Internet and other information and communication technologies. In R.B. Ruddell and N. Unrau, eds. *Theoretical models and processes of reading*. 5th ed. <http://www.readingonline.org/newliteracies/leu/> (Accessed: 8 June 2006)
- Liffick, B.W. Social impact characteristics of computer technology. In *Proceedings of ETHICOMP95 Conference, De Montfort University, March 28-30, 1995; Leicester, UK*.  
<http://cs.millersville.edu/~liffick/compchar.html> (Accessed: 3 May 2006).
- MacCann, Donnarae, 1989. Libraries for immigrants and “minorities”: A study in contrasts. In D. MacCann, ed. *Social responsibility in librarianship: Essays on equality*. Jefferson, NC: McFarland & Co., pp. 97-116.
- McLaughlin, D, 1992. *When Literacy Empowers: Navajo Language in Print*. Albuquerque: University of New Mexico Press.
- National Telecommunications and Information Administration, 1999. *Falling Through the Net: Defining the Digital Divide* (Research Report).  
<http://www.ntia.doc.gov/ntiahome/fttn99/contents.html> (Accessed: 8 June 2006).
- Newman, A.P. and Beverstock, C, 1990. *Adult Literacy: Contexts & Challenges*. Newark, Delaware: International Reading Association, Inc.
- Ovando, C.J. and Gourd, K, 1996. Knowledge construction, language maintenance, revitalization, and empowerment. In J.A. Banks, ed. *Multicultural education, transformative knowledge & action: Historical and contemporary perspectives*. New York: Teachers College Press, pp. 297- 322.
- Street, B, 1993. Introduction: The new literacy studies. In B. Street, ed. *Cross-cultural approaches to literacy*. Cambridge: Cambridge University Press.
- SUNY Council of Library Directors Information Literacy Initiative, 1997. *Final Report*.  
<http://www.sunyconnect.suny.edu/ili/final.htm> (Accessed: 8 June 2006)
- Thomas, S., 2005. Transliteracy: Reading in the digital age. *English Subject Center Online Newsletter* (The Higher Education Academy), 9. <http://www.english.heacademy.ac.uk/explore/publications/newsletters/newsissue9/thomas.htm> (Accessed: 12 July 2007)
- reports on the ‘Transliterations’ Conference held at the University of California at Santa Barbara on June 7– 8, 2005
- The Transliterations Project: Research in the Technological, Social, and Cultural Practices of Online Reading*.  
<http://transliterations.english.ucsb.edu/post/researchproject/the-project#more-303> (Accessed: 12 July 2007)



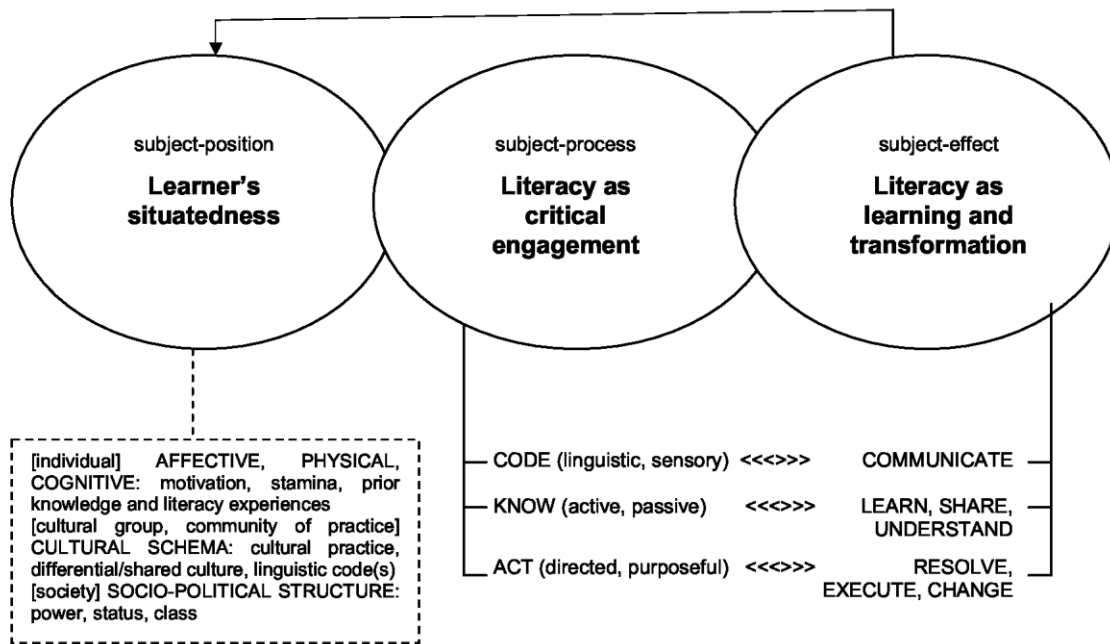


Figure 1. Ecological Model of Literacy as Engagement and Transformation