LITERACY AS A PREREQUISITE FOR WORLD PEACE

ALICIA POUSADA
UNIVERSITY OF PUERTO RICO, RIO PIEDRAS

Introduction
Literacy is commonly perceived as learning to read and write; however, there is considerable disagreement among scholars as to what it means to be literate (Hull & Hernández, 2010). Currently, there are at least four distinct scholarly conceptions of literacy: literacy as a discrete set of skills; literacy as situated practice; literacy as a learning process; and literacy as text (EFA Global Monitoring Report Team, 2005). Literacy as a discrete set of skills refers to the cognitive skills of reading and writing conceived as decontextualized and independent of the learner’s social background. Within this perspective, there has been sustained controversy between those who favor the “phonetic” approach (popularly termed “phonics”) which stresses “sounding out” words, and those who favor the “semantic” approach (popularly termed “reading for meaning”) which pays special attention to the holistic relationships among phonetics, word recognition, spelling, and vocabulary. Recent research has focused on the way the brain processes reading patterns and on techniques such as phonological awareness training and timed reading tasks (Abadzi, 2003). The view of literacy as a bundle of discrete skills also includes numeracy, the capacity to interpret and communicate via language different types of quantitative and spatial information in contextually appropriate ways (Gal, 2000). The skills model was very popular until the 1960s and 1970s when studies of functional illiteracy pointed to the importance of context in literacy acquisition and use, and revealed that no one set of literacy skills applied to all situations and communities.

Literacy as situated practice emerged from anthropological observations of the variable enactment of literacy in different cultures. The New Literacy Studies of the 1980s and 1990s (e.g., Scribner & Cole, 1981; Heath, 1983; Canieso-Doronila, 1996; Gee, 1999) viewed literacy as a culturally-mediated practice that was highly dependent upon social factors such as class and race, and upon the nature of the interactional setting. As Hull & Hernández (2010: 329) explained it: “[Literacy] does not operate in a decontextualized manner outside fields of power, and can itself be implicated in the maintenance of social and political inequalities as well as turned toward the egalitarian.” Practitioners of this approach carried out ethnographic fieldwork to document literacy events and practices and discovered that individuals labelled as “illiterate”
actually utilized literacy practices for specific purposes and relied on effective oral practices to accomplish other functions.

*Literacy as a learning process* is an approach based upon the learning theories of Dewey and Piaget, which were utilized by constructivist educators and developed more fully in the work on *collaborative learning* and *communities of practice* (Wenger, 1998). Its most influential proponent was the Brazilian adult literacy educator, Paulo Freire, whose *pedagogy of the oppressed* stressed active engagement with written texts and with “reading the world”, in other words, questioning and reflecting on social experience in order to raise consciousness about the contradictions of society, act upon them, and transform society (Freire & Macedo, 1987; Freire, 1995). *Critical literacy*, as this process is now termed, has been utilized fruitfully in Latin America and Africa. We can see its historical roots in the highly successful Cuban and Nicaraguan literacy campaigns of 1961 and 1980, respectively (see Kozol, 1978; Murphy, 2013; Hirshon, 1983; Arnoé, 1987; Hanemann, 2005).

*Literacy as text* draws strongly from the theories of French philosopher Michel Foucault (1972) and is centered on the *critical analysis of discourse*, focusing upon the topic, genre, modalities, linguistic complexity, and overt or covert ideological content. It views literacy as a communicative and political practice that constructs, legitimizes, and reproduces social power structures (Fairclough, 1991; Gee, 1999). It questions the adequacy and relevance of traditional skills-based literacy instruction in schools and adult programs. Some studies in this vein, like Collins & Blot (2003), reveal how the hegemony of the literate standard is embedded in colonialism, neo-liberalism, and institutionally-anchored power relations.

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) has utilized various definitions of literacy. In 1958, it stated that: “a literate person is one who can with understanding, both read and write a short simple statement on his or her everyday life” (UNESCO, 1958). In 1978, it adopted a more stringent definition of functional literacy: “A person is functionally literate who can engage in all those activities in which literacy is required for effective functioning of his group and community and also for enabling him to continue to use reading, writing and calculation for his own and the community’s development” (UNESCO, 1978).

In this article, literacy will be defined as *the ability to handle written text in its myriad modern manifestations in an effective and empowering manner*. This includes actively engaging traditional academic and literary documents and books, plus everyday genres like grocery lists, love letters, street signs, leases, traffic tickets, song lyrics, movie listings, and product labels, as well as technological genres like text messages, emails, online ads, and websites.

The different multimodal genres of literacy today are heavily dependent on the economic development and opportunities available in a given society.
Literacy is critical to the development and well-being of all of the residents of this planet because it permits intercultural communication over distance, raises awareness of and respect for the needs and goals of other groups, expands human understanding, and is a precondition for meaningful participation in democratic processes (Bokova, 2011). It also serves as the most efficient means of conserving human history and enhancing cultural identity and distinctiveness.

**Literacy, “literacies”, and the “literacy gap”**

Today there is recognition that literacy comes in many forms and varies even in the life of a single individual. As a result, the term literacies is now in vogue, along with new literacies, multiliteracies, digital literacies, and 21st century literacies (Coiro et al., 2008). Biliteracy and interliteracy describe how bilingual children actively construct literacy from two language systems, sometimes keeping them apart and sometimes mixing them creatively (Reyes & Moll, 2010).

In 2002, the U.N. declared the United Nations Literacy Decade and affirmed the crucial nature of literacy in enabling individuals to confront life challenges and participate effectively in the social and economic activity of the 21st century. The National Council of Teachers of English went even further in 2013 and stated that multiple literacies were necessary in order to respond flexibly to technological changes. Specifically, literate individuals need to:

- Develop proficiency and fluency with technological tools;
- Build cross-cultural connections and relationships to pose and solve problems collaboratively and strengthen independent thought;
- Design and share information globally;
- Manage, analyze, and synthesize multiple streams of simultaneous information;
- Create, critique, analyze, and evaluate multimedia texts;
- Attend to the ethical responsibilities required by complex environments

Unfortunately, this list has a strong “first World” bias to it, and many communities worldwide are not materially able to meet these 21st century literacy requirements. In the next section, we will take a look at the existing “literacy gap.”

It should come as no surprise that literacy is not evenly distributed across the world (see United Nations, 2013). Many individuals, particularly females, oppressed and marginalized ethnic minority groups, impoverished populations, and differently abled individuals have historically been denied full literacy. The lack of access to universal literacy has created great disparities among nations and permitted only certain groups to benefit from globalization and information technology.

Among the many factors which contribute to the “literacy gap” by disrupting the educational process and societal stability are emergency and conflict situations (natural disasters, genocidal campaigns, war), health issues (HIV/AIDS, epidemics like Ebola,
famine), mass migrations, and cultural practices that favor males over females (child marriage, male-only education, cloistering of females, etc.).

Age is a major variable. Typically elderly adults have the most limited literacy skills; however, today, with so many disrupted communities, childhood education is not a given. The regions in which young people have particularly limited literacy skills are countries in West and Central Africa, Ethiopia, Madagascar, and Afghanistan (see UNESCO, 2016).

Gender is a particularly crucial variable. The global gender divide distributed by region is most pronounced in Southern and Eastern Asia and throughout Africa (Deutsche Welle, 2012), where a difference of 20% or more exists between male and female literacy rates. This depressing difference is rooted in longstanding patriarchal ideologies that value men above women and maintain male hegemony. One way this is accomplished is by tying women down with many children. The European Environment Agency (2012) has found a strong correlation between fertility and literacy among adult females worldwide. The more children a woman has, the less likely she is to be literate. Moreover, female illiteracy is linked to high rates of infant mortality. The more literate the woman, the more informed reproductive and healthcare decisions she makes for herself and her offspring, thus maximizing her children’s lifespans (Saurabh, Sarkar & Pandey, 2013). Since women are still primarily responsible for the well-being of children, educating women advances the community as a whole.

**Need for literacy and peace education**

The need for literacy is tightly bound to the need for peace education. The United Nations explicitly supports literacy and peace education as essential to human survival and progress. The 1945 UNESCO Constitution begins by noting that the defenses against war must be erected in the minds of individuals. This implies that education is essential to preventing warfare and interpersonal violence. Article 26 of the Universal Declaration of Human Rights (1948) asserts that: “Education shall... promote understanding, tolerance and friendship ... and shall further the activities of the United Nations for the maintenance of peace.”

The 1959 Declaration of the Rights of the Child affirms a child’s right to an education that develops moral and social responsibility, and the 1989 Convention on the Rights of the Child specifies that the child is to be prepared for a “responsible life in a free society, in the spirit of understanding, peace, tolerance, equality of the sexes, and friendship among all peoples, ethnic, national and religious groups and persons of indigenous origin” (Article 29.1 d). To this end, in 1996, peace education was explicitly incorporated into the anti-war agenda of the United Nations International Children’s Emergency Fund (UNICEF).
Shapiro (2015: 1) defines *peace education* as “a holistic process of development of human potential to coexist in a less violent manner. Peace education encourages students to care about the welfare of others and work as agents of peace. It also informs students about the value of peace and justice and the consequences of war and social injustice (Page, 2008). It develops moral values, positive attitudes toward others, productive skills for building peace, and behaviors that foster harmony with oneself, others, and the natural environment. It may take the form of conflict resolution training (Conflict Resolution Network, 2008), instruction in democratic principles and practices, human rights orientation, or worldview transformation. Topics commonly addressed include: gender equality, religious tolerance, intercultural understanding, bullying, sexual harassment, and domestic violence.

Jakar and Milofsky (2016: 44) define *peacebuilding* as “a process of establishing peaceful relationships and building institutions that can manage conflict without resorting to violence.” They describe how the English language classroom can provide a space for young people in many countries to discuss peace and conflict, develop critical thinking, learn conflict management skills, and participate actively in peacebuilding. Their work in Israel is applicable to the situation in Puerto Rico. By means of a curriculum that addresses conflict and seeks to build peace, students can improve their oral and written skills in English in a meaningful and engaging way.

The authors suggest that teachers honor diversity and emphasize multiple perspectives, teach dialog (not debating) skills, engage students in creative interactive tasks (e.g., role play, small group work, experiential activities, etc.), share real life stories that tap into student empathy, and alleviate despair by showing students how to empower themselves by finding peaceful solutions to conflicts. Milofsky (2011) presents many excellent techniques in her peacebuilding toolkit for educators.

Approaches to peacebuilding used by educators in areas plagued by internal violence (e.g. Israel, South Africa, Ireland, Bosnia) include:

- visits to communities of opposing groups in order to deconstruct their Otherness,
- development of textbooks to explain the viewpoints of the Other,
- field trips to places that evoke painful memories in the Other community,
- shared art, music, and dance events,
- joint projects to foment socially just situations and contexts, and
- celebrations of the Other’s holidays and festivals (Shapiro, 2002).

Puerto Rico has serious problems that disrupt the peace of the society and the individual. Collective anxiety and discord are at an all-time high for multiple reasons. There is street violence linked to drug sales (48% of all homicides are drug-related), domestic violence stemming from economic frustration and the inability of couples to successfully negotiate changing gender roles, hostility toward Dominicans and other im-
migrants (González-Espada, 2005), discrimination and hate crimes directed at the LGBTI community, sexual harassment in the workplace (Lugo Fournier, 2009), and bullying in schools as young children act out the intolerance and domination scenarios they see modeled in the media and their own families (Bauzá, 2013; Matos, 2015; Convivencia Escolar, 2014). Much is the by-product of ignorance due to limited formal education exacerbated by poor communication skills which foster violent action rather than discourse and negotiation.

The police homicide statistics for Puerto Rico in 2016 available at: http://policia.pr.gov/informe-preliminar-de-asesinatos/ make it clear that the island is not at peace. Drug trafficking accounts for nearly half (48%) of the 433 killings; however, many cases listed under vengeance (17.3%) and grudges (27%) are also drug-related. A recent article in El Nuevo Día (Cortés Chico, 2016) reports that about 66% of homicides are due to drugs and rivalries among the gangs that control drugs. In contrast, domestic violence only accounts for 2.8% of the deaths.

It is not difficult to see the link between illiteracy or incomplete education and the drug trade. When young people leave school early and are not fully educated, they are not equipped for employment at a living wage. A certain percentage will opt for the greater and more immediate monetary rewards reaped in drug trafficking and other illegal activities. This is yet another reason why it is so important to teach children to read and write well and engage them fully in the literate world so they can better prepare themselves to critically understand and withstand the pressures they will be subjected to by forces that seek to misuse their talents and shorten their lives.

**Special literacy needs in Puerto Rico**

Literacy has long been a concern in Puerto Rico, and the level of illiteracy has steadily decreased since 1898 when the Spanish ceded Puerto Rico to the U.S.

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent</th>
<th>Total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>79.0</td>
<td>953,243</td>
</tr>
<tr>
<td>1910</td>
<td>65.5</td>
<td>1,118,012</td>
</tr>
<tr>
<td>1920</td>
<td>55.0</td>
<td>1,299,809</td>
</tr>
<tr>
<td>1930</td>
<td>41.4</td>
<td>1,543,913</td>
</tr>
<tr>
<td>1940</td>
<td>31.5</td>
<td>1,869,255</td>
</tr>
<tr>
<td>1950</td>
<td>24.7</td>
<td>2,210,703</td>
</tr>
<tr>
<td>1960</td>
<td>16.6</td>
<td>2,349,544</td>
</tr>
<tr>
<td>1970</td>
<td>10.8</td>
<td>2,712,033</td>
</tr>
<tr>
<td>1980</td>
<td>11.5</td>
<td>3,196,520</td>
</tr>
<tr>
<td>1990</td>
<td>10.4</td>
<td>3,523,037</td>
</tr>
<tr>
<td>2000*</td>
<td>-----</td>
<td>3,808,610</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau (2000)

*Note: The illiteracy question was not included in the 2000 Census, so no statistics are available.*
During the 1930s, the federal Puerto Rico Emergency Relief Administration (PRERA) ran 22 literacy camps, and during the 1940s, combating illiteracy was an indispensable part of the plan to industrialize the island. By 1950, only 24.7% of Puerto Ricans were still illiterate. In 1954, the Literacy Program (Programa de Alfabetización) was initiated, and by 1970, illiteracy had dropped to 10.8%. The 1990 census indicated that only 10.4% of Puerto Ricans (245,291) were still unable to read and write in Spanish.

This would seem to indicate undeniable progress; however, modern literacy needs are far more complex than those of the past, and the question of functional illiteracy is paramount. In 2000, according to the U.S. Census Bureau, more than 25% of residents 25 and over had not completed the ninth grade, a sign of limited functional literacy. The Literacy Survey of Puerto Rico (Encuesta de Alfabetización de Puerto Rico) was carried out in 2010 to fill the void left by the Census. It consisted of phone interviews with 6,574 persons aged 18 or older.

The results indicated that overall literacy was 92%, with slightly lower figures for females and the elderly. The greatest levels of illiteracy (32.3%) were found among rural senior citizens. Only 45.8% of respondents claimed to read books weekly, while 98.5% watched TV or listened to radio. More than 7% of the men had trouble writing, and 18.5% of the interviewees had children with reading difficulties (Disdier Flores, Pesante González & Marazzi Santiago, 2012: 1). The correlation between poverty and illiteracy was robust, and literate individuals were more likely to be healthy and physically active (Disdier Flores & Pesante González, 2013).

The Education Commission of the House of Representatives in Puerto Rico (Cámara de Representantes, 2012) criticized the Department of Education in 2012 for failing to eliminate illiteracy since so many young people were dropping out before graduation. Young people who are functionally illiterate cannot cope well in a technologically advanced society and often end up permanently “discouraged,” underemployed, or involved in criminal activities. The problems tend to worsen when they become adults, especially if they are immigrants or differently abled.

**Adult illiteracy**

Much of the early work on literacy in Puerto Rico of necessity had to address adult educational needs because so many adults lacked schooling. However, by the middle of the 20th century, it was felt that adult illiteracy was best tackled in specialized units. In 1954, the elementary school program for adults was transferred to the Office of Adult Education. During the 1980s, the Literacy Component was created and developed numerous projects to continue reducing the level of illiteracy on the island. Among these were:
- **Uno Enseña a Otro** (One Teaches Another) – high school students supervised by teachers gave classes to adults and received academic credit.

- **Educación para Adultos Deambulantes** (Education for Homeless Adults) – federally funded classes were given in shelters and community centers.

- **Alfabetización en Marcha** (Literacy on the March) – combined academics and artisanry.

- **Alfabetización desde la Biblioteca Pública** (Literacy from the Public Library) – teachers offered classes in public libraries.

During the 1990s, classes were offered in night schools, adult academies, centers for educational services, and a volunteer project in which citizens gave classes to family members and neighbors. Approximately 66,440 adults were taught to read and write. In 2000, the Literacy Project (**Proyecto de Alfabetización**) was established and launched a creative curriculum called **Alfabetización: La Magia de Leer** (Literacy: The Magic of Reading). It featured reading, math, learning games, flexible hours, and alliances with other government agencies. By May of 2005, it had provided services to 42,334 adults (Ortiz, 1990).

Today the Department of Education of Puerto Rico offers adult basic education via the **Programa de Educación para Adultos** (PEA) in centers located in Arecibo, Bayamón, Caguas, Humacao, Mayagüez, Ponce, and San Juan. This program was created under the aegis of the federal Workforce Investment Act of 1998, Title II: Adult Education and Family Literacy Act. It focuses on developing the abilities of adults who left school early, so they can deal effectively with workplace demands and successfully face the challenges of modern life. Specifically, it helps them complete high school degrees, increase their employability, and become active participants in their children’s education. Among the curricular offerings are basic literacy, basic math, English as a Second Language, high school equivalency, and parenting.

**Teaching immigrants to read and write**

A second group that requires special attention with literacy is the immigrant population. Puerto Rican schools receive growing numbers of students from the Dominican Republic, Haiti, and other Caribbean islands, as well as return migrants who have been living in the United States (Nuyoricans). Dominican Spanish is somewhat different from Puerto Rican Spanish, and Haitians and return migrants may lack formal training in Spanish. Dominicans and Haitians usually possess few English skills, and Puerto Rican return migrants generally use non-standard English which is looked down upon or rejected in the schools in Puerto Rico (Pousada, 1994; Clachar, 1997).

The Department of Education operates a Title III-A funded Spanish as a Second Language program called **Programa de Limitaciones Lingüísticas en Español e Inmigrantes** (Program for Linguistic Limitations in Spanish and Immigrants) which serves...
students who speak a language other than Spanish at home or who come from outside of the U.S. and its territories. It provides instruction in reading, writing, speaking, and understanding Spanish as well as content area curriculum and aims to help students assimilate into Puerto Rican society. Participants are chosen on the basis of a Home Language Survey and a screening and placement test. The program additionally makes available tutoring sessions, parent literacy workshops, mentoring services, and individual counseling. Differentiated instruction is utilized to address the needs of the students.

However, many needy immigrants may not be documented or participate in the school system. The Department of Education needs to expand its efforts to identify and serve Puerto Rico’s ever-growing immigrant population. In addition, it must be noted that Puerto Rican return migrants who are exposed to Spanish in their households must rely on other forms of assistance to deal with their limited or non-standard Spanish skills and to help them adapt to island norms.

Providing literacy instruction for the deaf

The final group with special literacy needs we will examine is the Deaf community. The 2012 American Community Survey reports a hearing challenged population of 150,000 in Puerto Rico; however, the Puerto Rico Deaf Association (Sordos de Puerto Rico) considers that there are at least 340,000 hearing impaired and 80,000 totally deaf individuals (Williams & Parks, 2012). There are four sign varieties in active use: American Sign Language (ASL), Puerto Rican Sign Language (PRSL), Signed Spanish, and Signed English. In rural areas, homemade signs are also common. PRSL came before ASL but is mainly used in rural zones and can be catalogued as endangered. ASL is definitely prevailing over PRSL. ASL interpretation is familiar to Puerto Ricans during televised hurricane warnings and speeches by the governor, and close-captioned TV in Spanish is provided by some local stations. However, there have been numerous documented violations of the federal Americans with Disabilities Act, including refusals to provide sign interpreters, limited educational services, and job discrimination (Academia Estudios Relacionados al Sordo, 2000).

There are only four schools for the deaf in Puerto Rico (in Luquillo, San Juan, Ponce, and Aguadilla), and ASL for teachers and other interested parties is taught at the Universidad del Turabo in Gurabo. Until 2010, the Academia de Estudios Relacionados al Sordo (Academy of Studies Related to the Deaf) offered ASL instruction in San Juan, Aguadilla, Ponce, and Arecibo. In addition, there are at least four interpreting agencies and a number of text and video relay services. Most sign language interpreters in Puerto Rico (100-150) are freelance and uncertified, given the absence of a formal certification process, and the supply is insufficient to meet the demands of the deaf population (personal communication, Ramón Valle-Jiménez 2014).
In Puerto Rico, deaf children may be mainstreamed and accompanied by an interpreter, enrolled in one of the four schools for the deaf, enrolled in a Special Education program, or home schooled. Many receive a patchy or incomplete education, and some may attain only a fourth grade literacy level. Teaching deaf children to read is challenging since they must learn to link written symbols representing a spoken language they cannot hear to meanings or mental representations, a process referred to by Padden and Ramsey (2000) as “chaining.” It was long felt that the deaf should be taught via an oralist approach to “fit into” the hearing world. Oralism was also viewed as a prerequisite for teaching literacy, leading to a focus on speech therapy and auditory training and resulting in educational lag and emotional trauma. Research during the 1970s and 1980s led to acceptance of sign as a full-fledged human language suitable for educating the deaf. However, initial work in teaching literacy through signs relied upon artificial systems like Manually Coded English which follow English morphological and syntactic patterns rather than those of ASL. Supalla and Cripps (2010) view such an approach as dysfunctional since it confuses deaf students and causes errors in their ASL signing. Recent studies reveal positive effects of sign language proficiency on reading and academic achievement (Hermans et al., 2008). However, teachers need special literacy tools and instructional procedures to help deaf children make the transition from sign to written language. One technique has the teacher fingerspelling a word while pointing to letters written on a blackboard and finally using a sign for the entire word. Few teachers in Puerto Rico (even those certified in Special Education) have the skill in ASL to accomplish this. It should be noted that deaf children with deaf parents often learn to read more easily, probably because their parents are adept at sign and can support the learning process.

While these comments have of necessity been brief, and have over-simplified matters, they should be convincing evidence that services for all three special needs groups—adults, immigrants, and the deaf—must be provided within a coordinated public education policy if functional illiteracy is to be completely conquered in Puerto Rico.

Conclusion

Nowadays illiteracy tends to be the result of social marginalization and exclusion. When it prevails, it means that individuals and groups are disenfranchised and denied basic human rights. Such denial leads to conflict and inter-group hostilities. Literacy, on the other hand, empowers people and allows them to obtain the information they need to participate in democratic processes and shape their communities’ destinies. Furthermore, it provides the skills required for meaningful employment and helps eradicate poverty, reduce infant mortality, control population size, promote gender equality, and guarantee sustainable development (UNESCO, 2016). It additionally
enables inter-group dialog and cooperation and maximizes opportunities for mutual understanding and peace.

It is important to underscore that “literacy is no longer exclusively understood as an individual transformation, but as a contextual and societal one” (EFA, 2006: 159). Accomplishing full societal literacy is an absolute necessity if the many ills that plague Puerto Rico today are to be confronted and a peaceful and harmonious society created.

Solid curricular design, careful planning, pre-service and in-service teacher training, continuous collection and publication of data, political and economic backing by the government agencies, and community support are essential. School facilities must be made available to both the native-born and immigrants during the evenings, weekends, and summers so adults and adolescents can attend classes with as few obstacles as possible. In addition, the literacy skills of the deaf and other differently abled groups must be developed further so they can fulfill their potentials.

Conquering functional illiteracy will pay off in innumerable ways, among them increasing individual and societal peace. It must be a priority for all educators and policymakers. English teachers in Puerto Rico can do a lot to help by selecting readings and class activities that reflect the principles of peace education and develop critical analytical and writing skills among students at all levels.

REFERENCES


Hirshon, Sheryl L. (1983). *And also teach them to read*. Westport: Lawrence Hill.


Murphy, Catherine (2013). Maestra (Teacher). Documentary film produced by the Literacy Project and distributed by Women Make Movies.


