



The Potential Impact of Mobile-assisted Language Learning on Women and Girls in Africa: A Brief Literature Review

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Abstract

Mobile-assisted language learning (MALL) is a burgeoning area of study in the field of e-learning. The growing ubiquity of mobile phones has spawned studies, mainly with university students in the developed world, which examine the positive impact that mobile phones can have on language learning. Although mobile-assisted language learning is currently imperfect, scientists and instructional designers are working to eliminate the shortcomings of MALL so that language learning through mobile-assisted language learning is more effective and unbound from a traditional classroom.

Framed in the underexplored context of women and girls in Africa, this article reviews the barriers to mobile-assisted language learning, discusses the possibility of mobile-assisted language learning given these barriers, and hypothesizes the impact of mobile-assisted language learning on the lives of women and girls in Africa. The author finds that the literature review suggests a strong case to investigate the potential of mobile-assisted language learning for women and girls in Africa because of the benefits that could be derived from anytime, anywhere language education.

Current barriers to mobile phone access and usage for African women and girls

Before mobile-assisted language learning can take place, women and girls in Africa need to be able to access and use mobile phones. The scarcity of studies that survey the impact of MALL in Africa is undoubtedly due to the challenges inherent with utilizing technology there. In order to confront the issues preventing the implementation of MALL in Africa, it is helpful to first list and describe the issues present.

Electricity

In Africa many areas are frequently without electricity or not wired for electricity at all (The Earth Institute, 2004). When Africans do have access to electricity in their home, it is often very expensive to use. When using an electrically-powered mobile phone with long talk times, the need for frequent recharging can quickly add up. A common practice in Africa when electricity is not obtainable in a person's place of residence is to travel, sometimes long distances (and the trip itself can cost money), to have it recharged at another location where a recharging fee may also apply (Hafkin, Untitled - Gender and ICT, 2009).

Cost of Calls and Ownership

Given that the monthly income for poor and rurally-located Africans can be extremely low, a three-minute call that can cost up to \$1.56 (USD) is a small fortune to spend on mobile phone services (Rose, 2002).

In addition to cost-prohibitive call rates, users lose money when poor network service in their area takes call credit when trying to connect a call, even if the call is unsuccessfully connected (Buskens & Webb, 2009; Gillwald, Milek, & Stork, 2010). When mobile phone call credit is lost in this manner, there is no recourse for the caller to recover the calling fee, and a call that was once \$1.56 could easily become double or triple the amount.

In Africa, a call made with a mobile phone can be done either through private ownership or public borrowing. Private ownership of a mobile phone poses another financial barrier in that, depending on the country in Africa, the fee to purchase a mobile phone can be the equivalent of half a family's average monthly income, (Aker & Mbiti, 2010).

Mobile Handset Languages

When a mobile handset and its menus are only available in “world” languages that they do not know how to read or speak, many mobile phone features remain largely inaccessible for African users.

When technology is transferred from one world region to another (in this case North America, Europe, or Asia to Africa), the transfers should be made in a way that enables the recipients of the technology to use all of the technological features without barriers to entry. Poor planning and design develops users who are only partly capable of using the imported technology. An example from Ethiopia explains this language barrier further: “As the majority of the people of the country are not familiar with the English language or other languages that are used on mobile phones, we observe many people can't do a routine operation like save a friends [sic] name and number” (Sisay, 2007).

Gender Roles

Women and girls in developing countries have institutionalized difficulties that prevent them from entering into realms that are traditionally believed to be appropriate only for males. Ownership and usage of ICTs, which includes mobile phones, is one of the “male only” realms.

Simple technology like a radio may be fully masculine. I remember my father had a tiny radio in the 1970s that my mother had no leisure to listen to, nor was she allowed to join to sit around as men did outside the house. [...] By hindsight, it made me think that radios, TVs and computers are masculine assets and microwaves and cookers are feminine. (Njeru, 2009)

Interpersonal relationships also play into women and girl's usage of a mobile phone. Jealous husbands or boyfriends have suspected that their wives or girlfriends are using their mobile phones to communicate with paramours (Hafkin, Untitled - Gender and ICT, 2009). Problems a woman has with her romantic partner regarding mobile phone usage can destabilize homes, with a woman typically giving up the phone before she gives up an important relationship.

Women and girls in Africa are responsible for the majority of house chores, are obligated to raise any children in the household, and if they are able they must also work a job to help support their family. Given these conditions, female responsibilities in Africa do not leave much time for accessing and using a mobile phone. “One of the barriers to the uptake of mobile phone technology, [...] is their [women's] lack of time to learn the technology and apply it” (Kinoti, 2010).

Finally, because more women than men live in rural areas in developing countries (Huyer & Sikoska, 2003), factors such as reduced buying power owed to limited income opportunities and the cost to maintain ownership of a mobile phone prevents women from accessing and using the technology.

Breaking down barriers: The potential of MALL for women and girls in Africa

Although there are a number of barriers, some of which may never be overcome, to mobile-assisted language learning for women and girls in Africa, there are still many workable solutions that can decrease the number of barriers to obtaining mobile-assisted language education.

High-Tech Learning for Low Cost

Electricity and the cost of calls and ownership of mobile phones are two barriers to accessing and using mobile phones for MALL that are starting to disappear. The majority of the phones currently on the market in Africa are electrically-powered but a cost-effective alternative may soon be more widely available. Mobile phone makers such as Samsung and the ZTE Corporation began rolling out solar-powered mobile phones as early as 2009 (Voice of America News, 2009). By placing the back of the mobile phone in the sun, the phone can be recharged without the need for electricity. The only drawback is that recharge times can run upwards of 12 hours in the sun just to get an hour of talk time (Ngo, 2009).

Mobile phone manufacturers such as Nokia and Google are responding to the demand for mobile phones with low-cost models that are more readily affordable (Hafkin, Untitled - Gender and ICT, 2009). Placing a call with a mobile phone is still expensive, depending on the country, but SMS messages remain cheap to send and receive. As recent mobile phone statistics show, even with the cost to make calls and the cost to own a mobile phone, access to this technology is growing in Africa and reaching communities that were once not served at all (Dogbevi, 2010).

Circumventing Language Hegemony

Mobile headset languages may soon no longer pose a barrier to accessing and using mobile phones. Andualem Sisay's aforementioned article from Ethiopia goes on to describe how three Ethiopian college students designed software for the mobile handset that uses the Amharic alphabet for text input and output on certain parts of the mobile phone (Sisay, 2007). If these college students' software design finds success in implementation on mobile phones in Ethiopia then mobile phone software could reasonably be manufactured to accommodate other languages that do not use or have letters that are not found in the Latin alphabet. An additional example of the promising possibility to overcome the mobile handset language barrier for African women and girls is Tostan and Rapid SMS's work with the Jokko Initiative in Senegal. The pilot activities of these two organizations that are being conducted with Senegalese women have been successful in part because the organizations adapted the mobile phone environment to support characters found in the alphabets of the languages that the research participants speak. With the mobile handset language adaptation, these women are quickly learning how to use the mobile phones for communication and literacy-building activities (RapidSMS, 2010).

The potential impact of MALL on women and girls in Africa

While MALL may not be superior to classroom instruction with a competent language teacher, it can provide an effective opportunity to begin learning a language now given that the problems of teacher shortages and a dearth of well-trained teachers in Africa do not have any immediate solutions available (Education International, 2008). Women and girls in Africa should not have to wait for a language education if a viable solution in MALL is presently available.

The ability for women and girls in Africa to gain a language education in an out-of-school setting is well within reach with mobile-assisted language learning. First language education can help build learner literacy, providing a solid background in language learning that can later be applied to second language learning. With eventual second language education, the chance for the millions of women and girls in Africa who speak a less-commonly taught African language to access information available on the web in an International Language of Wider Communication is a real possibility. Because the content of the Internet is primarily from countries on the North American and European continents (Warschauer, 2003, Chapter 4), the ability of women and girls to access web content is more likely if the user knows how to read and understand the language(s) that web content is written in. African women and girls who are literate in their L1 and eventually obtain proficiency in an "official" language of the country they live in will also have better prospects of attending and having academic success in secondary and postsecondary educational institutions, if their financial situation permits, since the majority of institutes of higher education in Africa use an "official" language as the medium of instruction (Teferra & Knight, 2008, p. 70).

The betterment of the lives of women and girls in Africa benefits men and boys, too. In 2003 Sophia Huyer delivered a report that explains the links between gender and development. Huyer describes how countries that help maintain women in an impoverished state have difficulties to overcome poverty across populations within their borders. Educating women and girls is not only the right thing to do but it can also pay dividends that no one can put a price on. "Educated women are better able to engage in productive activities, find formal sector employment, earn higher incomes and experience greater returns from schooling. Investments in female education therefore tend to increase the incomes of families, with benefits for men, women, and children" (Huyer, 2003, pp. 102-103).

African women and girls who live in rural areas that are served by mobile phone towers could use the benefits of literacy-building through mobile-assisted language learning to improve aspects of their lives other than the ability to read. In a 2006 study conducted by Dr. Lantana Usman with a group of rural women in northern Nigeria, the researcher puts forth the idea that mother tongue literacy can build women's self-esteems, enable women to help their children with language learning activities, improve women's communicative competence, and empower women to confidently interact with their government and government officials (Usman, 2006, p. 19). In this case, the research participants also enjoyed having the option to eventually learn English and Hausa because these were both languages of trade in Nigeria that could facilitate the women's abilities to conduct and expand business with both new and old clients (Usman, 2006, p. 23).

The next steps

For far too long exploration of the potential of mobile-assisted language learning has been neglected in developing countries and particularly in Africa. If the international community truly endeavors to grant educational opportunities for all, then governments and non-governmental organizations must lead the charge for providing access to education. Although the challenges and barriers associated with operating



in a developing country context can be difficult to overcome when technology is involved, the women and girls of Africa deserve the privilege of educational access that is designed with their needs and situations in mind.

While in the developed world we have 'digital natives' and 'digital immigrants', African women and girls remain 'digital neophytes' or 'digital non-users' in this time of rapid technological advancement. But this gap can potentially be closed with language education delivered through mobile-assisted language learning. More research on the provision of language education through mobile-assisted language learning for the contexts of the majority of women and girls in Africa is an investment that will yield benefits for generations to come. The race to the top starts by extending a helping hand to those at the bottom.

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