

# Empowering rural women in Kenya with literacy skills using web 2.0: experiences of language & communication barriers in learning

## Research-in-Progress

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**Abstract.** The purpose of this paper is to illuminate ways in which language and communication related barriers may be experienced in learning. Because of increased ICT usage, Project Africa's Women's Academy, that is in focus of the research, felt that some issues regarding language and communication appeared in another way than before without using ICT. The research was conducted in Lunga-Lunga, Kenya, November 2009 and through Internet communication (e.g. logs, letters stored in a social networking site). The paper mainly draws on literature on ICT and Joseph Kaipayil's ontology to collect individual 'experiences'. The results show that many barriers arise because of cultural diversities among the learners; e.g. difference ways of employing concepts and regard the objects in the world. In making policies, therefore, account must be taken on a local and individual level as well as on a transnational and collective level.

**Muhtasari.** Madhumuni ya nakala hii ni kuungazia vizingiti dhidi ya lugha na mawasiliano katika mafunzo. Kwa ajili wa utumiaji zaidi wa teknolojia mpya wa habari na mawasiliano, Shule ya akina mama iliyoanziswa na shirika la Project Africa kuafundisha masomo ya watu wazima. Utafiti huu ulifanywa katika eneo la Lunga-Lunga, Kenya mnamo Novemba 2009 na kwa kupitia njia ya mtandao wa internet ambapo barua na ripoti zilikaguliwa kutoka kwenya SNS. Ili kuangazia ujuzi na maarifa ripoti hii imenukulu maandishi ya teknolojia katika sector ya habari na mawasiliano na nakala zalizochapishwa na Joseph Kaipayil. Mandumuni kuu ni kuangazia maarifa na ujuzi wa kibinafsi na kwa ujumla.

**Résumé.** Le but de cette article est d'éclairer la façon dont les barrières de la langue et de la communication liées à "l'expériences" et l'apprentissage. En raison de l'utilisation des technologies de l'information et de la communication (TIC) a augmenté, Women's Academy (l'Académie des femmes) de Project Africa, qui est en centre de la recherche, a estimé que certaines questions relatives à la langue et de la communication semble d'une autre manière qu'en l'absence de tels usages. La recherche a été menée dans la Lunga-Lunga, Kenya, en novembre 2009 à travers la communication de l'Internet. Afin de capoturé des 'expériences', l'article s'inspire essentiellement de la littérature sur les TIC et l'ontologie pour Joseph Kaipayil. L'idée est de collecter les expériences individuelles et de les discuter conjointement avec la notion d'expériences.

**Keywords:** communication barriers, social learning, intercultural learning, Kenya, language acquisition, language barriers, literacy skill, web 2.0

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## THE WOMEN'S ACADEMY - ADULT EDUCATION UNDER PROJECT AFRICA

This paper is a study of Project Africa's Adult Literacy program for rural women, and looks in particular at the intercultural communication between women in Kenya and Sweden at the Women's Academy. Project Africa is non-profit organization established in Kenya with the aim to empower rural women and girls with literacy skills with the use of both traditional and new media, through education, information, and enterprise development. The project is directed towards rural women in Kenya with synergies in other parts of Africa.

Until recently, The Women's Academy has faced technical dilemmas in accessing, adopting, and implementing digital resources in aid of this adult education program for rural women. Currently, the educational program has computers with Internet capacity, which enables learning through interaction and socialization by means of social networking sites (SNS) i.e. *web 2.0* (DiNucci, 1999). The challenge facing the project now, as well as building up Internet capacity and overcoming the remaining digital and infrastructural barriers, is how to make language preferences blend with the literacy capacity of rural women in multilingual Kenya. From having followed the adult literacy programs for rural women run by the Women's Academy in the last two years, it is believed that to some degree information and communication technology (ICT) have brought another kind of communication related barriers that were not present before. Not all of the barriers probably are related to the ICT implementation, e.g. web 2.0, but some of them probably could be derived from such technological initiatives.

Three major issues contribute to the motivation of conducting this research. Contemporary literature on learning and education in relation to ICT focuses mainly on western views of experiences of language and communication barriers that are caused by ICT usages (Hallberg, 2010). The idea of Project Africa's educational project Women's School, i.e. empowering rural women and girls is a contributor. In addition, the usage of web 2.0, mainly SNS, in an intercultural setting as a motivation for women to engage adult literacy education motivates too.

In this paper, focus is put on one of the major concerns after the implementation of web 2.0 into Women's Academy, i.e., the experiences of language and communication barriers in learning to read, write, and communicate through English. This is because barriers were experienced by many of the women and believed to be hurdles raised within the acquisition of literacy. About 20-30% of the total empirical data has been analyzed. The data provided in this paper was collected in English. The next stage is to translate and transcribe verbatim all that was said in both English and Swahili and local languages during the sessions and put it together with other material (e.g. photo, video).

*The objective of the research and thus this paper is to illuminate ways in which language and communication related barriers might be experienced in learning using ICT.*

## INTERNAL AND EXTERNAL EXPERIENCES

Because of the increased Internet usage, "distance" in terms of distance education has become misleading. Now, education is experiencing a closer sense of interconnectedness amongst participants

than it used to be in traditional classrooms. Credit goes to the Internet usage that has the capability of increasing the interaction among learners and broadens their view on the world (Passerini & Granger, 2000; Simsek, 2008). In addition, only through ICT usage, “distance education moves away from an objectivist approach to education to a constructivist environment.” (Passerini & Granger, 2000, p. 4) Though cultural and demographical factors, relative to a country may affect experiences to ICT, Ni and Kirkup (2007) discovered such differences between students from China and Great Britain. In addition to prior research, Ni and Kirkup found evidence for women’s attitudes toward Internet usages as more negative than those of men. A reason for these claims can be individual experiences of the world. The experiences and pictures the learner brings from their home create an expression of the world they live in. That is, experiences of ICT can be both in terms of knowledge or physical experiences, and mental experiences or “our experience of the world and in the world shapes the signs we create” (Bonnycastle, 1997, p. 1).

The view on different kinds of barriers in this research has relations to Vygotsky’s physical tools, e.g. computers, and psychological tools e.g. language (1978). These tools touch upon concerns in regards to ‘existence’ ‘reality’ and ‘being’ that all are difficult to define (Raju, 1957). Hrastinski (2009) in his paper on online learning as online participation, drawing from Vygotsky’s physical and psychological tools in terms of participation, states that language and communication are prominent features of human knowledge and learning. In the same context, he mentions the new possibilities that have come through the Internet in communicating at a distance. Because of these new options in learning, it is fruitful to identify on the one hand the physical tools, e.g., computers that help people to achieve their goals, and on the other hand psychological tools, e.g., language that is usually used together with physical tools. This notion on tools makes language a link between external communication and the internal thinking (Hrastinski 2009; Säljö 2000).

Vygotsky’s tools stand in relation to Kaipayil’s (2002; 2003) philosophical and ontological notion on experience. Kaipayil believes that an explanation or interpretation of something is taken to be true if it is intellectually convincing. Experience is experience of something that exists, i.e. something that a person is aware of and that something is called ‘reality’. ‘Reality’ is what a person experiences of it. For anything to exist therefore it must be experienced. This paper assumes that experience of language and communication barriers is experience of something real no matter its internal or external character. Kaipayil means that an individual’s experiencing of the world begins from the individual’s prenatal period and is influenced since being a fetus. The object of experience given may be an *external object*, *internal feeling*, a *previously acquired thought* (memory), or a *mental image created*. Kaipayil’s *external* may be related to Vygotsky’s *physical*, and his *internal* to the *psychological* of the other. Thereto, Kaipayil also talks about memories and conceptions, which both may affect the ways an individual communicates and regards the world.

Kaipayil’s critical ontology is fruitful for this research because of its reflective characteristic, explanations, and upholding of the experiences of human and the realm of spiritual inwardness and its process of inward movement (2005). The drawback with such an emphasis, however, is that such an interest in human inwardness has led to a sort of indifference on the part of the social life of people. What this research offers in employing Kaipayil’s ‘experience, is to convey ways in which rural women in different ways experience language and communication barriers that might affect their learning, and how philosophy can contribute empowerment and development in a good way. As Kaipayil and Raju comment, biology limits its study to biological life and sociology to social life, but philosophy treats all aspects of human experience. Life and reality cannot be split up since they are given to people in experience as a totality. In philosophy, there is not just one view of everything, but also many legitimate

views of issues, i.e. *pluralism*, which realistically represents everyday experiences of the world. Therefore, for this research, *'experience' is anything that affects one's conscious being*.

## RESEARCH METHODOLOGY AND APPROACH

### *Delimitations*

This paper excludes communication in terms of infrastructure and language in terms of computational language. Only some of the experiences of women of Women's Academy are included.

### *Context*

*Kenya has a land area of around 582,646 km<sup>2</sup> and a population of about 38.5 million. The country has 40 indigenous ethnic groups, each with its own language. English is the official medium of instruction in schools but Swahili and other local languages are also used especially in lower primary school grade levels. [Hungu, 2009, p.1].*

Swahili and vernacular languages are commonly used in the rural setting. The Kenyan government (Government of Kenya, 2009) refers to English as the official language and Swahili as the national one. Several sources (e.g. SIDA, 2009) estimate that men are more likely to be able to read and write than women (around 90% for men and 80-85% for women). These numbers seems to be misleading, however, since the realities for many people that live in the rural areas are different compared for those in the cities.

### *Rafiki and The Rafiki Club*

*Rafiki* is the Swahili word for *friend*. In this case, Rafiki letter writing and reading club is the education tool employed in learning and teaching literacy skills to rural women in Kenya with the help of international pen friends/rafikis who are recruited into the program via the Internet. When a woman in Lunga-Lunga receives a letter from her rafiki, she gets a chance to read and when she replies the letter, she gets a chance to write (Project Africa, 2009). It is worth mentioning, the Rafiki Club as an educational tool within the Women's Academy has merged the use of traditional letter writing mode of communication with using the Internet to ensure that information and education can reach even the remotest parts of Africa. In this case a rural village like Lunga-Lunga located in the Msambweni district on the south coast of Kenya, near the border with Tanzania. To prevent possible misconceptions, Rafiki Club simply is an educational tool in use within Women's Academy. It consists of a web application that recruits international women into a letter writing exchange program that allows pen friends to communicate with women in Project Africa network of Women schools in this case women in the Adult education Literacy program in Lunga-Lunga.

### *Research Design*

To some degree the method employed in this paper follows Marton's (1981) and Brammer's (2006) phenomenography. This paper is part of a research that has followed the Project Africa and women's school in the last two years. The most notable change in this project has been the increased use of ICT in their learning. For instance, the women are using SNS in their learning to gain literacy skills and communicate in an intercultural way through building global friendships.

The Project Africa Women's school in Lunga-Lunga, Msambweni district consists of four groups with approximately 100 women. From these four groups two to three women in each group plus the teacher of each group were randomly selected for an open forum/round table discussion. This makes a total number of 16 women the first day and 12 women the second day (because of drop off). After all the

sessions, sporadically chats were conducted, which involved the participation of particular women mentioned as case studies during the general discussions. An observational visit to some of the women's homes and reading of some of the rafiki letters aided in gathering additional data.

The part of the research that is in focus in this paper was conducted in a period of three days in November 2009. Data were collected through two-day group sessions that were stored using mp3-player, traditional black-board, writing board, brief/sporadic and individual discussions and observation during walk/drive-around. The data were used to identify different ways of experiencing different kinds of barriers, categorize different kinds of barriers, and map out diversities. The group discussion was held in both Swahili and English, and in one local language translated into English, in a way that calls to *code switching*. Reordering is a good way of being aware of one's own mistakes during the interviews and observations (Levy & Hollan, 2000, p. 353). From the discussions, key elements were identified and grouped. In terms of gaining literacy skills through the usage of digital tools, the women were asked to give their experiences of language and communication barriers in learning using ICT. Follow up questions referred to information already provided by the participants (Brammer, 2005, p. 966). Examples of such follow-up questions were as follows:

- What experience comes with learning using ICT and SNS
- What questions are discussed among the *rafiki* during the Rafiki Club Sessions: main subjects and themes
- What language barriers are experiences by the rural women vis à vis the international Rafiki, what they mean to them/define the term
- What are the advantages and disadvantages of multi -lingual learning

The ways in which the empirical procedure was conducted, including data collection and analysis, conforms to ethical guidelines on research on human subjects of Vetenskapsrådet ([Swedish research Council] 2005).

### *Circumstances that might have affected the study*

It should be mentioned that this study was conducted in more or less 35 degrees Centigrade during two full days. Several of the women had around ten kilometers walk to reach to the centre in order for the authors of this paper to conduct group discussions. Future sessions might be better to conduct where the subjects live.

## EXPERIENCES OF LANGUAGE AND COMMUNICATION BARRIERS

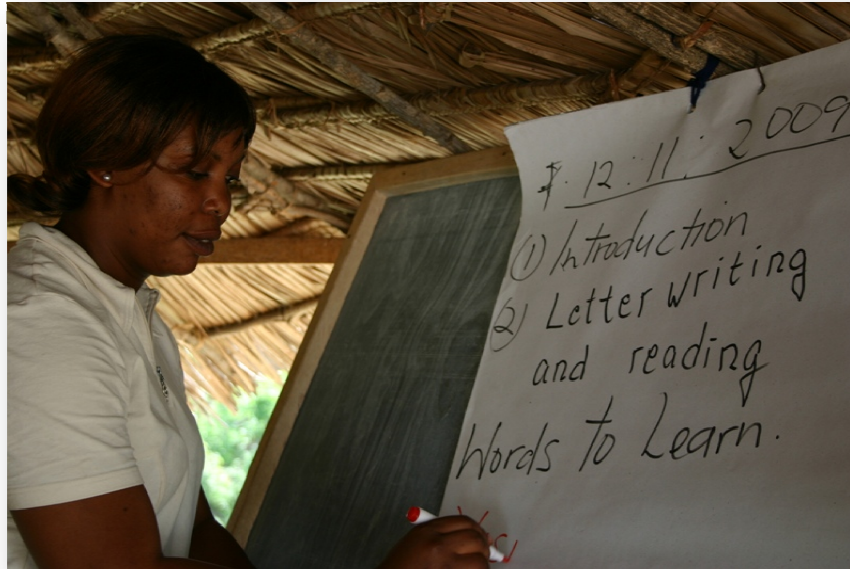


Figure 1. Lecture in progress, Women's Academy (Photo: Hallberg 2010)

Three major issues that were exhibited during the sessions were related to *language*, *infrastructure* (e.g. ICT access), and *culture*. Outlined below are categories of language and communication barriers as the women experienced them. A primary motivation for starting a project or program as Women's School is to integrate all a nation's citizens, no matter where their location happens to be. The founder of Project Africa, who is the second author of this paper, explains this in terms of *empowerment*. Teaching them the official language is one way of empowering.

### Experiences of language barriers

#### Feeling of helplessness

One of the major concerns expressed by the women was that of *not being able to communicate effectively due to high illiteracy amongst rural women compared to experts and other business people in the community*. This feeling was explained in different ways. For example, one woman mentioned, to which several other women agreed, the *sense of helplessness when not being able to find out the cost of a product*. From a Swedish primary school point of view, this is something the teachers talk about when teaching mathematics to students; you will need mathematics when buying products in a store. The internal feeling of helplessness was very intense among the women. This helplessness was formulated in different ways. For example, *not being able to buy things in stores or withdraw money from the bank*. Apart from not being able to read numbers or count, the issue with money was expressed as a kind of *sense of clumsiness when using finger- or thumbprint instead of written signature*. Not only helplessness was expressed here, but also a sense of *exclusion*; in the sense of not being human or an individual.

Another expression of helplessness in closer relation to the family life was of *not being aware if one's husband is cheating on you*. Overall, the issue of men that do not commit to one woman was a very big



concern and a major topic for lively discussions. In this respect, two women had an intensive debate about the importance to being able to read so they could understand incoming mobile messages (SMS) that were sent to their husband by their mistress. In conclusion, the women exclaimed, that of course, almost every husband cheats on his wife, and being able to read may to some degree prevent this behavior because *he cannot hide it that easily any longer*.

### **Teaching tool Rafiki**

As for external objects, this research in progress paper focuses upon the teaching tool Rafiki. Note, Rafiki as teaching tool refers to the web 2.0 application in use, and not to Rafiki in terms of pen-friends. The Rafiki tool was experienced as a language barrier itself among the women, both positively and negatively. The regard to 'barriers' in a positive sense might be interesting from a western point of view. Reading such a seminal literature, barriers mostly are believed to be bad or be prevented from existents, and if exists, bridged (Hallberg 2010). In a positive sense, Rafiki is a tool that makes communication in an intercultural setting possible, and thus, *improves English language learning*. It also helps to improve digital literacy, i.e., be able to use a computer. The framework in this paper makes it clear that, to some extent ICT improves socialization and decreases physical distance, or the feeling of such a distance. By some of the women, the capability of being a tool for *sharing ideas and becoming socialized* was something good with Rafiki. When having gained literacy skills, the Rafiki tool could also be used as a way of promoting and developing new products for income organization i.e. extending Rafiki or creating a new web site for this particular purpose.

The following show ways in which internal feelings may be incorporated into external objects. The Rafiki Club was perceived in a negative sense because of lack of letter responses or short letter responses. The immediate tentative suggestion for the reason to this concern that several of the women raised was because of being an African women living in a village.

### **Feeling of exclusion**

Several of the women felt that it was difficult to be informed of what is going on in the world outside Lunga-Lunga and everyone agreed that Rafiki tool was a kind of *information/enlightenment* tool that also had the potential of breaking prejudices and biases. For instance, through communicating with their Rafiki/pen friend from the United States, some of the women's previously acquired thoughts or mental images created were broken down. Namely, most of the women *didn't think a white person should ever talk to them*. These thoughts and images say very much of the nature of Lunga-Lunga's appeal, which would be interpreted in at least two ways; one being, there are no people with western roots in this area. The other being, there are no people with western roots that talk to the women.

That of being African, women, and living in a village, was something that they came back to several times in the discussion on language and communication barriers. Another reason for the short letter response or lack of it was difficulties in understanding English and Swahili vocabulary used by either Rafiki.

## **Experiences of communication barriers**

### **Everyday life**

One woman, in response to heavy jobs, said, she has come from far with her baby on her back, and when she goes to the garden to perform her duties, she still has her baby on her back. If she has to go for water, probably she has her baby; and through a whole day, it is one task to another so it becomes heavier. In addition, the man is sleeping and does not want to do heavy jobs. One woman talks about

her husband who has no job so he has to go for casual work and has to come back with at least 100 KS (about 1 Euro) after a whole day work (i.e. 12 hours). Once he has earned the 100 KS, he does not do more no matter of the time that was devoted to earn this money. In general, the topics of men not willing to work much and cheating husbands were frequently discussed among the women and their rafikis. This was perceived as a communication barrier since the reason for this could be related to lack of understanding the role of each other.

***Cultural diversities in terms of race and social status***

Another topic for discussion was social differences based on race and social status in terms of the lack of letter response. One suggestion the women brought up was that this happens because they are coloured and poor. As motivation for their statement, two women said that during their whole life, they never saw more than their own area in which they live and work, which is about 10 sq. km, which makes it difficult to communicate with other people. In this area, one woman commented, there are no such things as tourists coming to see the village, and foreigners do not settle down so far from the cities or beaches. One of the crossing points goes via Lunga-Lunga. This crossing, as another woman comments, is used by the truck-driver who are men, and other men, who stop by along the road to take a rest and pick up young girls. One woman reported that she has seen some of the volunteers working in Lunga-Lunga, mostly women but also men, and just discovered that there are good men too.

***Cultural diversities in terms of different ways of conceptualising the world***

Internal feelings arise because of different ways of understanding concepts behind different terms. For instance, several women found it difficult to conceptualize certain terms that their rafikis were discussing. Almost every woman had in common that they have very little understanding of how the world outside their own or what their neighbouring village looks like. In addition, they have their own view on the meaning of certain concepts. Therefore, it would be quite difficult to some of them when their rafiki talked about how they left their home in a car to go to their work-office, passing-by the daycare center to leave their child or children. For example, as for the term of *family*, one of the women explained that families constitute a mother, father, and their children, and there are almost more than two children. The role of the mother is to take care of the children and the house. Without these attributes, there would be no family. Several of the other women agree. The women exhibited these indifferences from knowledge about their rafiki in western countries whereby women were even more independent as single mothers. That in western countries like the USA, Sweden, Canada, etc. where international Rafikis are drawn from, the role of a woman in this is not the obvious role of a mother, or housewife as it is in Lunga-Lunga, Kenya. Rather, a woman can decide what her role would be like, and that this decision would be agreed together with her husband, but on equal conditions.

Many of these barriers caused a feeling of despair and frustration among the women. When they discussed which barrier that has major impact on the learning they all agreed that the lack of letter responses was considered as one of the pervasive barriers to learning.





Figure 2. Women's Academy, Lunga-Lunga (Photo Hallberg 2010)

## DISCUSSION

### *Language and communication barriers*

The regards on language and communication barriers that were illuminated during the sessions in Lunga-Lunga stand in significant contrast to that Hallberg (2010) found in his review on language and communication barriers in learning using ICT. Hallberg in his review did not find any examples of such barriers in a positive sense, for example. He did not discover these everyday life events that the women related to both these barriers and to their learning using ICT. One reason for this might be that he just focuses on the journal *Computers & Education* containing papers that do not put much emphasis on ICT in settings like in this research.

The framework proposes that Internet may decrease the feeling of distance. While Internet does have this potential, this research also shows that ICT can be a reminder of the distance and separation from the rest of the world.

### *Reading material reflecting the Western culture*

The women in Women's School normally communicate with rafikis from the United States in learning English, i.e. the so called Western World. What would be more of interest is to think about what kind of influence affects the women in their learning. What would it be like if the women communicate with other women in Kenya or throughout Africa with good or native command in English? The way in which the women gain literacy skills and learning English could be compared with employing schoolbooks that only treat the Western culture. UNESCO (2001) in its report on empowering women farmers through literacy, comments that reading material used in educational programs for rural women too often reflect the lifestyle of the authors; and this lifestyle often has nothing to do with that of the women's.

These Western influences in learning can be referred to as "post-colonialism". The women stated that not many, if any, Western person ever talk to them, but when it comes to teaching and learning material, Western influences is what they got, and women from the West are to support them in

learning English. However, Project Africa has made a choice in designing the teaching, though alternative options would be of interest to discuss.

### *Defining experiences*

The ways in which ‘experiences’ were illuminated call to understand Kaipayil’s framework (*internal feeling, external objects, previous acquired thoughts, mental images created*) as fruitful in covering many human aspects to experiences of learning in this research. Nonetheless, it is still difficult to clearly separate his four concepts from one another. Rather, they are proven to be reciprocal and should so be interwoven into the others. This is a proof of individuals as just individuals whose thoughts cannot be strictly bounded to either concepts or terms in a static way.

## CONCLUSION

ICT usages may decrease the feeling of having a geographically distance in learning, but it can also be a reminder of the distance in terms of cultural diversities. That is, language and communication barriers do not only arise because of ICT usage, but also because of cultural differences, for instance, in defining terms, concepts, and ways in which the life is lived. The portrait of the man in this study is conveyed essentially in a negative sense because of women and men communicate and conduct according to certain norms in differently ways. It is worth mentioning that “barriers” were not only regarded as something bad, but also as something positively.

### *Implications to Practice and Policy*

It is possible to conduct adult education for rural women through ICT; however, this must be complimented with literacy skills. Though the Rafiki program offers women the opportunity to learn by socializing and telling their own stories, the program is limited by its lack of a structured curriculum to follow which would also ensure assessment of progress in acquiring language skills by the participating students.

Communications in terms of infrastructure to facilitate transportation, Internet, and telephone access are integral parts of learning. Studies that cover communication not only in terms of language, but also in this other sense, therefore, should be conducted. The ways in which ICT might be integrated into learning would be a question for stakeholders to discuss jointly *with* Project Africa and the learners within. Policies in this regard, therefore, need to support the building and development of infrastructure in rural Kenya.

### *Future Research Directions*

For future research, it would be fruitful to not only continue analyzing the results but also put as many of the suggestions for improvements in learning using ICT into practice jointly with the perspective of the women studied, in bringing knowledge to fruition.

It is also important to engage research on education since it does not take only a genuine democracy for individuals to flourish (Kaipayil, 2003; 2008), but also individuals with literacy skills; and having the opportunity of gaining literacy skills is democracy.

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