Internet café as a supportive educational arena - a case study from the urban slum of Kibera, Nairobi, Kenya

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Abstract

The purpose of this paper is to interpret a case study of the unexpected educational impact of an Internet Café – Cyber – in the slum of Kibera, Kenya. Our focus is here to examine the transformation of ICT in development country, and more specific in Nairobi, in Kenya. We consider this an interesting illustration of the spread of globalization to a local community in a development country and how learning takes place in unexpected contexts. Therefore the paper takes off from a comprehensive portrait of one Internet café in the urban slum area and its management, some users and non-regular users. As a part of a long-term field study this analysis is a first analysis of the project and it also aim to illustrate from conception to realization, and implementation of Internet café.

We are studying one actor, a NGO driven commitment that opened an Internet café in Kibera primary to generate income, provide access to Internet for the local people and a more general ambition to develop the local community. Field work has been on-going and consists of a series of interviews with key informants in the management, and interviews with adolescent customers (users and non-regular users) of the Cyber. Our findings show that there is a clear ambition from the management of the Internet Café to enable computer literacy and bridge digital divides, as well as social and educational progress. Such learning takes place even if it looks like clients mainly use Facebook or browse the Internet. The findings also show that focus on eco-friendly technique to act as a role model was overshadowed by profit-making aims. Even if Internet Café is managed by a NGO they have a clear profit focus. In the beginning the Cyber had a more educating purpose, or a charity purpose, by letting poor people have access to Internet to a cheaply cost, but when established the economic aspects made it behave like a market actor. The main purpose of the management to empower poor people computer literacy is worthy, however doubtful, because it emerges with training and economy. Recent technological development of Internet on the cell phones has challenged the Internet cafés and there are incentives to use the cell phone even for activities that formerly was performed at the Internet Café. If the Internet is in everyone's pocket the educational arena of the Internet Cafes' are threaten, but the Cyber's advantage is tutorial support from peers and management. The Internet Café promotes learning ambitions in the slum and presents opportunities available for them, but it also shows the divides of the knowledge society. Although youth in the slum with computer skills has got increased access to Internet, and their voices has reached out and in some way the digital divide between North and South has decreased.

Key words: Internet café, ICT, case study, formal/informal learning, Kenya.

Introduction

New information and communication technology (ICT) is now widely spread and indeed associated with globalization. There is no doubt that in the information age there are a flow of information between people in the world. We can have an intense contact with remote areas, so actually we have to reconsider the concept of remote. An area or region is not remote thanks to ICT instead all on-line communities are to be considered as a very active part in the globalization processes. The

impressions of localisation and places are challenged by ICT in general, on-line activities and the Internet (Castells, 2001).

ICT has also a key role of development of education. Education is communicative and ICT, as well as educational opportunities, are indeed differently spread globally – there is a digital divide (Arora, 2010). ICT has (at least) a double role in relation to education since it is both a tool for learning and it is an arena for learning new competences.

Internet is the main source for information for learning in western schools and multimedia has a strong influence in the field of education even internationally. Technology is a strategy and an environment for learning, however the focus in this case is on the learning arena. Pedagogical assumptions give us the view that we learn and receive knowledge in school and in the formal education. Outside this formal box there is informal learning and according to a general opinion only learning for leisure. We can call this view for a second hand education. Hence we can be critical to that assumption and there are several different settings and environments to learn a content, and not only from textbooks.

Learning is contextual, both in content and form. What is learned depends on the situation where and when learning takes place. But there are also different demands on learning in different contexts. Thus the digital divide between the rich North and poor countries in South is also challenged by implementation of ICT. There are opportunities for both increase or decrease of divides as the usage of ICT improves. Internet cafés exist in many countries and are especially prevalent where computers or Internet subscription rates are not affordable for large parts of the population (Cilesiz, 2009), and they may bridge digital divides.

An Internet café offers opportunities for low income people to access the Internet (Adetoro, 2010). "Internet cafés —businesses that offer access to computers and the Internet on a drop-in basis for hourly fees — are a kind of informal learning environment where social interaction is at the heart of computer use." (Cilesiz, 2009, p. 233). Internet cafes' are spreading rapidly in Africa and offer privacy you don't find at library or place of work (Mutula, 2003, Sairosse & Mutola, 2004). Availability of mobiles phones, computers, bandwidth and wireless connection is no guarantee that marginalized people will have access to express their voice. In Kenya there are not many libraries with public computers, but some post office offers computer access, otherwise Kenyans have to go to Internet cafes' or using their mobile phone to access Internet. In Kenya only 3, 6 % of the households has a computer at home (Kenya National Bureau of Statistics, 2010), and we can assume that there are less households with computers in the slum of Kibera (where our case study took place). However, more than 63 % inhabitants in Kenya have a cell phone. But the cell-phones are mainly used for text messages and calls and more advanced applications as Internet access, GPS etc. are not affordable for most cell phone users. Thus there are even double gaps between rich and poor groups in Kenya when it comes to ICT. Computer literacy needs education and training (West, 2006), as well as larger financial input to bridge the digital divides. This raise questions if development of ICT reaches the most marginalized in the local community? Can an Internet café be a learning area, creating ICTawareness and enhance abilities to be an active part in the society?

Aim of the paper

In this paper we will analyze and discuss how an Internet café promotes learning ambitions in the Kiberai an Kenyan slum area and present opportunities of empowerment and new life chances for clients visiting the café. Based on the specific case study we will also in more general terms discuss implications on (digital) divides of the knowledge society.

Our research questions in relation to the case study of Kibera are following:

- What motivates to open an Internet café in the slum?
- How does the Internet café function as a learning setting?
- What are the learning outcomes at the Internet café?
- What are the challenges towards the Internet café?

The case study - Kibera

Kibera is an urban slum of Nairobi, and has an area as approximately 2.3 sqKm and estimations of inhabitants says 500.0000 to 1 million. So for long has Kibera been seen as one of the largest slums

in Africa. However, it's an overestimation and the National Census of 2009 (Kenya National Bureau of Statistics, 2010) says 170.000 residents in Kibera (38.6 million in Kenya, and 3.1 million in Nairobi). Nevertheless a slum area with harsh life conditions, high illiteracy rate and the annual average income in Kibera is about \$ 1/day, even if the variation of income is high.

Methods – Case study design and fulfillment

In this case study we did open-ended interviews (all interviews were conducted by P-O Hansson) with five key informants at three occasions (from November 2009 to August 2010) and with youth who are users and non-users of the Cyber. The youth were 11 persons in total and age of 17 to 22 years. They were interviewed individually once (July/August 2010). It's a part of a long term study of the Internet café and youth educational programme.

This analysis focuses on the construction of narratives of the Internet Café. The narratives is generated from listening to the informants and building a combined picture of the process as a whole. The key informant was responsible for the set-up of the Internet café in Kibera and holds a leading position in the project. The key informant can explain what happened, their judgements and decisions (USAID, 1996). They are in total five people who are in charge of the management of the Internet café and we have interviewed all of them three times. The five informants (three men and two women in the age of 24 to 30 years) are all deeply involved in the project and have influenced the process. In this text they are called Diana, Peter, David, Pamela and Bernard. Their work is to fulfil the project, from conception to reality, and also help clients in the Cyber. That can be technical aspects to handle the hardware, and to be helpful in the using of the software. The Internet café is organized by NGO with global partners. The researcher Hansson¹ is also their contact in Sweden supporting the Internet Cafe. There is always a researcher effect in studies in development studies may even more.

The interviews, with the key informants, was a conversation with a loose structure in purpose to find out motives, motivation, explanations and perspectives behind the Cyber, as well as implementation (USAID, 1996). Kvale & Brinkmann (2009) argues that a qualitative research interview is more of a conversation between the interviewer and respondent. The interviews strived to be formed as a conversation seeking to construct a conceptual understanding and a balanced view of descriptions. The interview situation as conversations aim is to understand the others lived daily world (ibid, 2009, p 24). This conversation must of course have an approach and red alignment, which are built up by different themes in an interview guide (here a semi-structured interview). The questions aim is to clarify the respondent's life world, however statements can sometimes be ambiguous and reflects contradictions from the livelihood.

Every interview was conducted in a separate room close to the Cyber and took about 30-40 minutes each. Thoroughly notes was taken and typed just after the interview. The notes from the interviews was analysed and transformed into categories. The second and third interview started with a summary. An informant review and then additional from me, to summarize previous interviews and coming in to the right wavelength. The interviews in phase two and three was aiming to elaborate and further exploration of the previous interview and explanations of factors affecting the management of the Cyber. The interviews with 11 youth (6 male and 5 female) were structured as mentioned above: semi-structured guide, individual and carried out in a room close to the Internet café. Every interview took 25 to 35 minutes, and was audio recorded and verbatim. The youth were selected in the study due to be part of a youth exchange programme and consider themselves to be customers in the Cyber and some of them non-regular customers. The youth are also part of the long-term study of ours.

Since the interviewer (P-O Hansson) speaks, even if not fluently, Kiswahili this research interviews was fulfilled without the use of an interpreter. This is regarded as an advantage for two main reasons. Firstly, being a foreign person (msungu in Kiswahili) creates a distance to people in these contexts. Speaking the local language contributes greatly to decrease this distance, even if the informants have English as their "first" language. All of the interviewees had finished their Secondary School, even if some of them were still in their last years of that education level. Secondly, the loss of information,

¹ Hansson has being familiar with the management for a long time (since 2001) and having a straight forward communication with them, so they might speak out clearly.

which occurs by use of an interpreter, can be avoided. There is neither any additional translation of issues through the process when the main researcher also conducts the interviews. Hereby, also unexpected and new issues (for ex social inclusion, relations to other NGOs) and ideas for analysis appeared and could be taken up and included into the on-going interviews.

ICT as a learning tool and learning situations – a theoretical approach

Information and Communication Technology (ICT) can be a tool for learning and pedagogical development. It is can both be considered as a tool but also as contextual setting for learning (Orlikowski, 2000). In the field of education there are also several on-line education programmes making this statement evident.

Thus there are complex processes of interplay when considering ICT from a learning perspective, as discussed in several studies not at least regarding developing settings (see for ex Lopez 2002; Mwesige, 2003). In a given educational setting such as schools and vocational training settings there are challenges to choose appropriate technology and pedagogy in relation to the content of the training. Market driven flow of technical refinements enhance and improve pedagogical choices and can support collaborating, student-centred learning and empower pedagogy. Though, we can be critical. Technology and alternative methods in all its glory, but it can't be a learning package that we, in North, just deliver to people in South. Both Pedagogy and technology must be adjusted to the local context. New technology can be a way forward to enable these skills and promote life-long learning. With this comes the need to rethink the pedagogy in terms of multiple paths and of non-linear forms of learning and teacher-learner transactions (Edwards & Usher, 2000). Thus, there is a shift towards a learning environment with focus on learning and not only mediation of knowledge. In a virtual environment the focus moves from teacher to the content and learning.

Similar to the Mexican context (Robinson, 2004) customers in the Cyber cafes' of East Africa (Mwesige, 2003) are those who can't afford computers at home, or not have access in school or at work. And it is an increasing number of small Cyber cafes' in towns of Mexico, and we can also see that upcoming trend in Kenya. The findings of Robinsons' (2004) survey also show that the clients are young, often students, and are often doing their school work in the Cyber. There is a risk that the trend polarizes the society between youth who are Internet literate and the rest of population (Robinson, 2004, p 103).

Kenway & Bullen (2005, p. 31)) refers that teachers find their students lacking motivation in the ordinary school. The authors claim the students to have a "5-D relationship" to their schooling: students are Dissatisfied, Disengaged, Disaffected, Disrespectful and Disruptive. Nevertheless the youth are called digital natives (Hovlin, 2008). The young generation are growing up with digital media or actually born into digital media. A time where we are always on: on-demand etc. By sorting us in different virtual groups there is a risk of virtual apartheid (Schlove, 2004). We set aside our interest in the physical livelihood with an online chat room, which can interfere the local democracy. Digital native utilization and approach of digital tools are different to elder generation, which include education and learning. There are not only new insights of technology and usage, it is also receptiveness of skills and learning. Crucial factors are technology in general, but especially how youth develop their abilities and skills.

There is a distinction between formal, non-formal and informal learning. Formal learning appears in schools and education stipulated by national curriculum and syllabus. "Non-formal learning refers to the learning which takes place outside formal educational curriculum. Non-formal learning activities involve people on a voluntary basis and are carefully planned, to foster the participants' personal and social development. Informal learning refers to the learning in daily life activities, in work, family, leisure, etc. It is mainly learning by doing. In the youth sector, informal learning takes place in youth and leisure initiatives, in peer group and voluntary activities etc." (European Commission youth in action programme guide, 2010). The latter ones are seen as complementary to formal learning and more of added value to the ordinary school and their educational programmes. It is easy to see formal learning as more rigid and routine with lectures, predetermined aims and tasks that have a certain and correct results. Non-formal/informal learning has, generally, more participative activities and a learner-centred approach. The voluntarily factor is high and activities are seldom planned or structured according to a certain subject, curriculum or syllabus. The learning setting also varies and has a diverse range of situations and environments. The formal learning is supervised by professional

teachers, and in non-formal/informal learning is carried out by volunteers or learning by doing. Assessment and documentation are important values in formal learning, and less important in informal, and as well difficult to capture a process that is not always recognized.

The organization and logistics of classrooms, supervision, curriculum and teachers practices as well as attitudes and values are contextual factors shaping the educational training programmes. In an informal setting these factors has less meaning and instead as Dewey's stated: the unknown encountering with the non-structured environment (Dewey, 1915). Hereby there are two main learning approaches: learning which is focusing mostly on oral communication and mediation of knowledge (from someone who knows more, educator, to a pupil who knows less in a question-answer model). The pupil should learn what other generations has been taught and transferred in the same way. Theoretical knowledge is highly appreciated, as written tests and one correct result. On the other side an approach where learning in more practical situations and transfer of knowledge is problematic. Both these mentioned approaches are found in formal and informal settings, though in informal learning environment there is an excess of the latter perspective.

In an informal learning environment, as an Internet café, the individual interact and relate to its context. An Internet café has a socializing impact and youth attend the facility to meet their friends. Even if the reason for visiting the Internet Café is not to learn something, but to do other stuff like keeping contacts with friends, finding information on different things and might even doing home-work from the formal learning contexts learning takes place. As a contrast to the formal school youth can develop their creativity via playing games and become important entrepreneurs in their use of new technology. And there are also educational opportunities in non-school settings.

Studies of informal learning in India, so called hole-in-the-wall concept, showed that children learn in informal settings and establish their own learning structures based on their curiosity (Arora, 2010). The children learn basic computer skills by themselves without guidance or little supervision. However, there is a concern that such project can be play stations for boys, though games would probably attract mostly male adolescents' users (Hansson, Mozelius, Gaiani & Megammana, 2010). Anyway the project as whole has a huge educational potential.

Analytical outline

Returning to our four research questions as presented above we can form four analytical approaches to the field work and findings in Kibera, Kenya.

• What motivates to open an Internet café in the slum?

Motives can be expressed in terms of formal learning as an educational approach or a more informal learning presented in much more general terms. In this case motives may be expressed as a tool to bridge digital divides. Even if digital divides are general and seen on an aggregated level, they are bridged by each and every individuals learning and stretching out their reach in the cyber space as well as in the real world.

• How does the Internet café function as a learning setting?

In spite of the lack of formal learning settings, there may be local informal learning settings arranged at the internet café. These settings may promote clients own learning processes and development. Even if this can't be explicitly expressed by the clients our long term study may uncovers such changes from one visit to another.

• What are the learning outcomes at the Internet café?

Similar to research question number two we may see unintended learning outcomes as problem solving strategies, creativity and critical thinking that may not are expressed explicitly.

• What are the challenges towards the Internet café?

We ICT is used in social context there are challenge both of social and technological nature. We here discuss the improved mobile phones that becomes carrier of Internet and the social setting of a profit-making NGO.

Findings of learning and

In Kibera there are only five Internet cafes' (Bernard, personal communication, 2010) and examined Internet café is among those. The location was decided by security reasons. A more secure area of Kibera was selected to open an Internet café. The specific Cyber has 19 computers, of about 12 works well. Six of them, lap tops, are connected directly to solar panels by a cable. It's a unique technique which reduces the extra battery that are normally used to store power from the solar panel. An Internet café is a business that offers a high-speed Internet access, and helpdesk technician service. Usage of Internet is on a drop-in basis and in the particular Internet café they charge 50 Kenyan cent (approximately \$ 0,0055 or 5 Swedish Öre) a minute, and a complementary starting fee of 10 Kenyan shillings (ksh). The public in the area are lacking many facilities, and computers are expensive and not affordable. Browsing in the mobile phone cost 8 ksh/day (10 Mb), which is equivalent to less than \$ 0,10. Due to the starting fee in the Internet café, usage of mobile phone would be cheaper to access Internet. Though disposable income in Kibera is very low, and using Internet in the mobile requires a modern mobile phone, which most people in Kibera probably don't have access to.

This study shows that the basic ambition of the NGO to open an Internet café in the slums is profitmaking, since they have to handle investments and make the business run. Initially there was a more educating purpose, or a charity purpose, by letting poor people have access to Internet to a low cost. *"It will affect the community positively. Also improve knowledge and skills of computering which is necessary in this world."* (David, personal communication, Nov 2009) and Diana says (personal communication, Nov 2009) *"It will be different to them* (read community) to have access to Internet." And the management state ambitious plans: *"Therefore there is a greater need to make opportunities for the economically disadvantaged pupils, more so to receive computer education, to make them compete effectively with other pupils from affluent areas in Nairobi and Kenya as a whole."* (Odhiambo, 2010). Although later in the process Pamela states the purpose (personal communication, July 2010): *"It has not change. It's to generate income. And also create awareness through our curio shop, showing the handicraft the Kibera that hiv-infected women are doing, marketing our organization...//...person can gain education in the Cyber. People can come there and we assist them."*

The game plan was that the Cyber should be generating income, and after meeting the expenses, the surplus would fund other projects in the organisation, aiming for other project and community development. Though when Internet café was not attractive (computer malfunctions, uncomfortable, lack of proper design etc.) to the market also the business, with its high house rent, was not sustainable. *"The purpose has changed a bit. Due to the location it's income generating activities, and not education for Kibera people, that is priority"* (David, personal communication, March 2010). It's easy to understand the first priority for slum dwellers are incomes.

The management of the Internet Cafe see themselves as role models in many ways and that they make a different. Thus they also use eco-friendly technology as solar panels, that also cuts the costs for electricity. "Solar was one of the best ideas. We have never seen solar powered Cyber café" (Peter, personal communication, Nov 2009). Although, high expectations of doing business with solar panels as bonus attraction didn't fall out properly. "Solar panels are a good idea. It works sometimes, but problem when it's cloudy. And batteries of the lap tops are bad. They can not power. We should at least have batteries to the server." (Peter, personal communication, July 2010).

Hence, the Internet café had a loss for a long period, and explained by the management with poor management. They were not acting as team, and they had also involved an employee, with whom the management were not familiar. The management blame their inexperience of business and "... others were busy so we relayed on the woman (read employee). And in our meetings we don't take actions, we are just delaying it and we are hoping for a change." (Diana, personal communication, July 2010). Pamela also argues about this: "No responsibility from us, it was everybody and no one was really appointed, so no one took that responsibility." (Pamela, personal communication, July 2010)

After an evaluation, the management themselves decided to investment, upgrade and improve the Internet café. More appropriate design and comfort, curio shop and TV-game (Nintendo Wii) completed the settings. "Now we have discovered key issues; comfortability and marketing. And now we have games (read Nintendo Wii) and more things. So we are hoping for the best. That will pull customers." (David, personal communication, July 2010). And also the co-manager Bernard (personal

communication, July 2010) is more relieved than before and claims: "Our prices are down (read reduced from 1 ksh to 50 kenyan cent), and people goes to the cheapest place. We have now an attractive place: we have been painting, the Wii game and many activities."

In contrast to Mwesige's (2003) findings in Uganda the "ordinary" citizens in Nairobi are considered to be Internet café users according to the management in this survey. Target groups for the management are all kinds of customers from the local area, but especially adolescents. They mainly use the Cyber is social media and particular Facebook. Social media is used in desire for affiliation in a community. A virtual affiliation via communication with people mainly in North, but Facebook is also used to interact with other local youth. So it's possible to say that a youth from one shelter communicate via chat with a neighbouring youth next door. The adolescents either use the Cyber, or their mobile phone to access Internet. Reason for the latter is the costly entry fee at the Internet cafes', and it can be more effective to access Internet several times a day via the mobile phone (though requires a fairly new model). One youth says *"I can have one Kenyan shilling on the phone and then I go to Facebook. I can't call but go to the Facebook. So the internet service is easy."* (Phyllis, personal communication, July 2010). It is important for the Kenyan youth to have daily access to Internet. Many of them access Internet, and mostly Facebook, several times (up to 7 times) a day, to check others status. Wilma says: *"when somebody writes to you, it should be good to reply so when you reply you also expect that they will write back...//...that is how the conversation keeps going."*

The communicative language used, as in this example on Facebook, differs between the youth depending on the context and who they communicate with. In the global context it's English, on regional level Kiswahili, and local level tribal language. This may open for a further analysis that we at this moment just have noticed. Anyway the different levels are kept apart by language. There is also a different content of the discussions between the different levels. On global level (with English as mediator) a broad and general discussion occurs. Questions and answers of the life in the community, school, work, future plans etc. On local level (either usage of Kiswahili or tribal language) there is communication of more basic topics on daily basis: what are you doing now? Have you eaten? Shall we meet later? Etc. This shows the double roles of on-line communication and their competence to give different images of their daily life to people they daily meet face-to-face and others.

However, interest for other languages has risen thanks to global communication since Facebook consist of friends who are networking, and sometimes write in their local language. Even those who do not use a certain language get curious and copy/paste the text into Google translate. Within the network they also teach each other local words and local customs. This may open for even further learning out comes that could be analyse in other ways than in relation to the Internet Cafe.

Analysis

We are now returning to the research questions and state four major implications. Since this is the very first analysis of this case study we will in the next step develop the integration of theoretical understanding, thus this has to be seen very much as an inductive first tentative analysis.

Bridging the gap - Internet café as an organisational setting

The studied Internet Cafe is indeed and learning setting, but it is also a social meeting point and place for daily catching up among both youth and the staff at the Internet Cafe. Even if they have a specific issue to handle at the Internet Cafe – as home work, communication, checking the news etc – they learn computer skills from the staff in the Internet café or friends at the café, as in line with Furuholt & Kristiansen (2007) studies of Internet cafes' both in Tanzania and Indonesia. They also pointed out the price of the Internet Cafe as the main barrier for increased use. In pricing of Internet café were higher in Tanzania than Indonesia, and the use was consequently lower in Tanzania (Furuholt & Kristiansen, 2007). Even in our case study it was obvious that the cost is the most crucial factor for Kenyan users. The interviewed youth who are non-regular users of the Internet café claims that cost is the main aspect of not using Internet cafes. They had several other good reasons and incentives to use the internet Cafe, but the cost stopped them. The starting fee is considered too high to be affordable, so these youth. Some of them saw their mobile phones as an alternative. The cost for connection to Internet was lower but not at all as good as at the Cafe. But time was than considered as a less scare resource than money.

The idea of an Internet café, from the management in the local NGO, is to earn incomes but also improve the computer literacy in the community. There are regular customers in the Internet café and their interest is mostly social media, but with tutorial support from management it would be possible to improve computer skills. So more advanced technology as computers may increase the gap between rich and poor, because computer literacy needs education and training (West, 2006), as well as larger financial input.

There is a tradition of unpaid work in community work and in NGO:s, and their work must be valued according to that. Even if NGOs play key roles in the community and community development (Delves, 1989) they have limited possibilities to reach marginalised, vulnerable, poor people that are excluded from the formal, often costly, education (Mihr, 2009). NGOs are often seen as tool to educate and empower people, and encourage them to improve human rights, work for justice and push for democratic movement. Certainly there is a great potential for an organization to promote change and impact on the youth in these areas even on Internet. However, in these cases the needs for financial investments became a barrier both for NGO setting up the Internet Cafe and the visitors. Thus the ordinary understanding of the role of NGOs cannot fully explain the setting and out-come of the Internet Cafe. It is still an interesting mix of voluntary work and paid market relations, that has to be further analysed in order to improve and develop implementation.

Learning by playing and social media

When visiting the Internet Cafe it is obvious that they spend their resources on games and social communication. Interest in computer games can develop adolescents, non-users into educational use of computers, if the initial experience with computers is focused on entertainment (Cilesiz, 2009). By these activities they both improve their general computer awareness and also interact since these activities are not as individual at the Cafe as when playing at home.

In addition game also merely seems to attract boys than girls. Even if there is an ambition to promote use and access to Internet in both gender groups there is a lag in getting girls engaged. However, there are potentials in communicative applications as Facebook when a critical mass of their pears join and are on-line. The Children/youth learn Facebook and games at the Internet Café very much by themselves or together with other youth. They who act as "educators" are themselves taught by trial and error methods. Computer skills have improved by informal learning and daily activity usage of computer games. Thus the Internet Café is an important arena for making games and play a social rather than individual activity and hereby promoting learning.

Visualizing learning outcomes

The Internet Cafe was here mainly considered as a NGO activity and a local business the social and learning out comes were not primarily visual. Thus there are needs to both promote these and make them more visualize in order to improve and support them.

Therefore an integration of a so called computer school with the Internet café would be suitable, which is an idea that the local management at the studied Internet Cafe also have. It is a sort of multipurpose communication centre. Educational use at Internet cafés can be supplementary to school work (for instance completing school assignments, home works or preparation for tests) or complementing by exploring areas not covered in school (Cilesiz, 2009). It may even be way to lower the threshold to Internet both economically and socially. This may also increase gender equality among the users. We think it is a must to enhance focus on education, especially software but also computer literacy. The clients in the café both learn to use and relate to technologies and not at least the Internet.

Challenging Internet cafes' as learning centres

The increased use of cell phones and less expensive access to Internet challenge the Internet café. If Internet is in everyone's pocket the educational arena of the Internet cafes' are also threaten, but the facilities advantage is the tutorial support from peers and management. We can't underestimate the impact of a social context. Not only to be involved in a virtual community as social media, but also the local context in the facility of an Internet café. Theories of social construction of technologies support the importance of considering the time-spatial local setting of the technology. So it seems that social media is the driver for the Internet customer and learners are embedded in different social realities. Thus we will in further field studies also try to integrate the daily use of cell-phones and the settings of them in to evaluation of informal learning, to gain knowledge of the combinations of informal and formal learning that enriches each other and improve pedagogical content knowledge.

Conclusion

Even if the implementation of the Internet café also had a pure business focus and profit-making interest the learning out comes where obvious. This highlights the importance of considering learning in broader settings than the primarily educational. Policy making bodies often focus on formal educational incentives, and implementation then is seen as the schools, neglecting the supporting structures around. Thus we will for our further studies point at the importance of including more aspects into the evaluation learning and apply an everyday life approach to the analysis of learning among teenagers in slum areas and their use of Internet and other ICT tools.

In the in-depth case study of the Internet Cafe as presented above education aims were subordinate to the business approach of the Cafe. However, there was among the visiting teenagers indeed an increased access to Internet and communication, as well as the competences to use them. They also gained a general increased computer awareness and idea of the opportunities that could be opened up. It is obvious in this study that are users of the internet café are mostly youth that already have a basic ICT-awareness and interest in technology even if they come from a poor background. With increased numbers of Internet café in slum areas, it would be possible to offer computer training to a large number of people. Computer training centres will help the community in Kibera to meet the requirement of the national Kenyan educational curriculum by offering computer studies to the illiterate. An Internet café is an arena for social meetings, but also arena to discuss societal action as well as educational arena.

However, after making this case study and supporting Internet café one is still curious if this can be an arena for more than a few poor people in Kibera. A related challenge is also the growing use of cellphones and when 3G systems are quickly growing there are new ways to access internet. However, the social setting and supportive system of the Internet Café may then be lost on the way. There are challenges to find additional ways to support new technology in its social settings. There are new emerging ideas on how to support the less elncreased computer literacy would even make the Kenyans more accessible to different e-services. It is one way to decrease the digital divide between North and South, and improve global communication for a better understanding between cultures.

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