# CITY HALL OF RECIFE'S ITINERANT SCHOOL OF INFORMATICS AS A TOOL OF DIGITAL INCLUSION – LIMITS AND POSSIBILITIES

Recife – PE – May, 2009

Flávia Barbosa Ferreira de Santana — Universidade Federal de Pernambuco — flaviabfs@hotmail.com

Category (Research and Evaluation)

**Educational Sector (Medium and Technological Education)** 

**Nature (Description of Ongoing Project)** 

Class (Scientific Investigation)

#### **ABSTRACT**

The term digital inclusion had already became common, the problem is that a lot was spoken about democratization of the digital access and inclusion, but without an analysis of what in fact this inclusion promotes, if it meets the desired objectives, which are its consequences to society, among other possibilities. Digital inclusion is seen today as a basic requirement to citizen's formation, becoming a fundamental part to the exercise of citizenship, professional life, learning, researching, and adequate social insertion to the new parameters of contemporary society. This justify the presence of technology on the educational field since it brings a new look over the school and what establishes and priorises the integral development of the man and his critical insertion on the world he lives. Having as sine qua non objective rethink the matter of attitudes and values.

Keywords: Digital Inclusion; Technology; School of Informatics

#### 1. Justification

Digital inclusion is seen today as basic requirement to the citizen's formation, becoming fundamental part to the exercise of citizenship, professional life, learning, researching, in other words, the social insertion adequate to the new parameters of contemporary society.

The term digital inclusion had already become common, the problem is that a lot was spoken about democratization of the digital access and inclusion, but without an analysis of what in fact this inclusion promotes, if it meets the desired objectives, which are its consequences to society, among other possibilities.

Digital inclusion creates conditions so the person acquires ability to operate and communicate from a computer and produces, organizes and appropriates information. As the Wikipedia, the free encyclopedia, says "Digital inclusion is also to simplificate your dialy routine, maximize time and your possibilities" [1].

However, this appropriation is still in need of profundity in relation to the project analysis and critical thinking, because the focus is on acquisition of abilities and mechanical skills.

To exist digital inclusion it must: aggregate values that outpoint to development of personal attitudes and postures, among this values are included ethics, autonomy, responsibility and the skill to learn and create conditions for the subject to increase its quality of life establishing connections between abilities, skills and values, developing the critical thinking. These values pass by the admission of citizenship as a basis to the man's role in society.

Must be noted that the principle of digitally inclusion is not only to present the computer to people or teach them how to use informatic programs and applicatives, sometimes proprietary softwares. But make them understand that the computer may be used in self and collective benefit, that it may be an instrument of changes and social transformation, using this support for improvement on community's quality of life and acting on modification of its context, through the use

of technology.

With the objective of real making the digital inclusion on the city, the City Hall of Recife created Itinerant School of Informatics that is: "formed by six laboratory busses that run the communities offering to the population places for formation on informatics and internet. The Municipal Network acts on a perspective of working together with population on technological resources as instruments for stronger citizenship and resolving the demands of community. Each vehicle, acclimatized and equipped with physical deficients' elevator, 13 computers, TV, video, sound, scanner, and printers, surrounds the Political Administrative Region according to the demands of Participative Budget reunions, remaining two months on each place." [2]

Still, as established by the City Hall of Recife, "The mobile unities give greater reaches, permitting the project to get to the farthest communities. Digital inclusion is granted for being free of cost and with easy access." [3]

How is the Itinerant School of Informatics from the City Hall of Recife acting and contributing to achieve the proposal objectives on his program? Whose limits and possibilities of digital inclusion permeate the project's execution? Answer these questions will contribute to reveal the real conception of inclusion that is being made in the Itinerant School of Informatics, collaborating with a better inclusion of the people from community that participated of the courses promoted by it.

#### 2. Hypothesis

Hypothesis is that we still need to better develop our concept of digital inclusion and that the Itinerant School of Informatics' actions are much more of adapting subjects to a exploring and global society, meaning of the intention is just to prepare for the capitalist working market, than otherwise, properly, including

democratically, critically and consciously the subject in a complex and digital reality.

#### 3. Literature Revision

## 3.1. Social and digital inclusion: concepts, objectives, and expectations...

In these days much has been deliberated about social inclusion, for it is considered vital condition for every citizen's development since it is prerequisite for public life participation and for allowing the exercize of rights and duties. *Demo*, as quoted by Silveira, "defines citizenship as the basis for human rights" [4].

This social inclusion must be a lattere with digital inclusion.

It is fundamental that proposal for digital inclusion goes beyond the acquisiton of ability, mechanical skill, and informatics instrumentalisation. We expect to follow the supositions defended by some authors, like De Luca, Cruz, and Pellanda.

De Luca afirms: "the digital inclusion must promote the technology appropriation in a conscious form" [5]. Pellanda says: "We need to realize strategies for digital inclusion not strictly connected to instructions and service accesses, but improved strategies for social inclusion allied to a digital culture with the aknowledgement and consciousness" [7]. In his turn, Cruz affirms: "To be digitally included, its not enough to have access to micros connected to internet. Also, it is needed to be prepared to use these machines, not only with informatics capacitation, but also with educational preparation wich allows to fully use its resources" [6].

This way, becomes clear that digital inclusion is not only a simple matter that is resolved buying computers and/or teaching people to utilize this or that software. Digital inclusion pressuposes a series of conected objectives others than the merely technological ones. Its essential to unite people and technology to reach a

more deserving life for averyone.

## 3.2. Technology on schools and the necessity of informatics for a formation beyond professional

Technology in society, meaningly the use of computer, did provoke deep changes. Since the perception of reality, time, and space, until the construction of more competent, qualified, and criticise citizens. School cannot stay beneath these changes.

Belloni, discussing the technology in school subject, affirms: "...the post-modern school must produce citizens capable of 'read and write' in all the new languages of the informatical universe it is merged in" [8].

This justifies the presence of technology that brings a new sight about the school, estabilishes and priorizes the man's full development and his critical insertion on the world he lives. Having as objective *sine qua non* rethink the question about attitudes and valours.

In this matter, technology in school becomes necessary because enables the teacher to integrate the student to the different spaces where he experiences and recognizes reality, favouring insertion on informal and professional environment. Making them understand the world and act on the changings of its context.

Today, the emergent paradigm turns teacher and student cooperators on the construction of knowledge, as been said by Santos and Radike: "The student is no more an information receiver only, becoming responsable for construction of his knowledge, using the computer for search, select, interrelate significative informations on the exploration, consideration, and depuration of his own ideas, according to his style of thinking. Teachers and students develope actions together, in cooperation and interaction with context, environment and culture" [9].

The self learning and the learning with the other are essentials. It is necessary to transform the informations under consideration and critical analisys, changing the quotidian, context, and community. Leite affirms "to experience new forms of learning and to acknowledge incorporation of technologies requires

carefull with the teacher's initial and continuous formation" [10].

It is established that the teacher must not only repass knowledge, but more an element that unleashes changes on the scholarly and social environment, stimulating the student to the development of competences to deal with modern society, enfaticizing autonomy, ecthics, responsability, and research, promoting the development of criticize and reflexive thinking. In other words, the actual educator must aggregate her professional practice with her social role, mediating the construction and production of knowledge, aiming the integral development of the student.

#### 4. General Objective

To investigate which conception about digital inclusion permeates the project entitled Itinerant School of Informatics and if the proposed actions are effective in practic.

#### 4.1. Specific Objectives

To identify the conception about digital inclusion in the Itinerant School of Informatics Project; To investigate which actions are been developed by the Itinerant School of Informatics to fight against the digital exclusion and for insertion of the users in the labour market; To identify the conception about digital inclusion that permeates the developed actions by the Itinirant School of Informatics.

#### 5. Methodology

The finality of scientific research, as said by Selltz *et al*, is "to find answers for questions, through the use of scientific methods" [11]. The used methodology will have a quality approach, since it will consider the dialoguecity between real world and the subjects (objectivity and subjectivity).

As the instruments of data collection, we choose to utilize the observation

technique, which is very often used on quality research and in accordance with Marconi and Lakatos, "not only consists in eyesighting and listening, but also in reviewing facts and phenomena that a one may desire to study" [12]. Besides, the observation can also gives us the possibility of answer prehestablished propositions and may be applied individualy or associated to other techniques.

Along with observation, we choose also, for the interview technique, demistructured, whose which, in according to Laville and Dionne: "The themes are specified and the (open) questions prepared previously. But all the liberty is supported, in the matter of retake some questions, to the order in which the questions are made, and to the increment of other improvised ones" [13].

Still, as said by Minayo, "through this procedment, we can achieve some obective and subjective data. The first can also be achieved by secondary sources, such as census, statistics, and other forms of registration. The last, otherwise, relates with values, attitudes, and opinions of the interviewed subjects" [14].

As the proposition of analysis for the collected data, in observations as in interviews, we must stabilish relations between the obteined data and formulated hypotesis, so through analysis we can compare or negate them.

This done, we will interprete the obteined data looking for to give a greater meaning to the answers, linking to the objectives of the problem to be explored.

#### 5.1. Foreseen stages to the development of the work

First the study will be estructured in six stages as described ahead: bibliographic selection/theoric deepening. research, lecture, study, and analysis of the proposal of the Itinerant School of Informatics; accompanying/observation of the Itinerant School of Informatics' activities; realization of interviews and questionnaires with users and teachers; analysis of the observations and interviews; analysis of the data/Evaluation of the work.

#### 6. Final Considerations

On the contemporary society the importance of technology is evident. The

use of the computer made deep changes, since the perception of reality, time, and space, until the construction of more competent, qualified, and critic citizens.

The actual society demands of the individual the development of knowledge with conscious in such a way that the subject has full insight of the aprehended objects and may use this knowledge in several situations.

The Itinerant School of Informatics understands that it needs to integrate the student in this society that emerges, getting involved with the social, cultural, politic, labour market, and life dimensions, through a qualified education, having in consideration the personal history and the social and cultural environment of each one.

We believe that the conception about digital inclusion of the Itinerant School of Informatics is based on preassumptions of a digital inclusion beyond mechanization. But the actions are more related to the adaptation of the subjects to a society where the intention is to prepare for the labour market than actions to include them in a digital reality that allow their active performance on community.

Thus, we must have clarity that the authentic projects on education must promote the usage of the information and knowledge after reflection and critical analysis, allowing transformations in the everyday, in the context and in the society. The City Hall of Recife's Itinerant School of Informatics, through its Project, believes that the digital inclusion will promote life improvement for the person allowing his greater participation on society.

#### 7. References

[1] WIKIPEDIA. <a href="http://pt.wikipedia.org/wiki/Inclus%C3%A3o">http://pt.wikipedia.org/wiki/Inclus%C3%A3o</a> digital. Accessed in 27/10/2008.

[2] PREFEITURA RECIFE.

http://www.recife.pe.gov.br/2007/07/02/mat 144795.php. Accessed in 23/10/2008.

[3] PREFEITURA RECIFE.

http://www.recife.pe.gov.br/urbis2003/informatica.html. Accessed in

23/10/2008.

- [4] SILVEIRA, H. F. R. Um estudo do poder na sociedade da informação. Ciência da Informação, Brasília, v. 29, n. 3, p. 79-90, set./dez. 2000.
- [5] DE LUCA, C. O que é inclusão digital? In: CRUZ, R. O que as empresas podem fazer pela inclusão digital. São Paulo: Instituto Ethos, 2004.
- [6] CRUZ, Renato. O que as empresas podem fazer pela inclusão digital. São Paulo: Instituto Ethos, 2004.
- [7] PELLANDA, Nize. M. C.; SCHLÜNZEN, Elisa T.; SCHLÜNZEN, Klaus. S. J. (orgs.). Inclusão digital: tecendo redes cognitivas/afetivas. P.Rio de Janeiro:DP&A, 2005.
- [8] BELLONI, Maria Luiza. Tecnologias e Formação de professores: rumo a uma pedagogia pós-moderna? *Educação & Sociedade*. Campinas CEDES, ano XIX, nº 65, dez. 1998, pp. 143-162.
- [9] SANTOS, B.S. dos; RADIKE, M. L. Inclusão digital: reflexões sobre a formação docente. In: PELLANDA, Nize. M. C.; SCHLÜNZEN, Elisa T.; SCHLÜNZEN, Klaus. S. J. (orgs.). Inclusão digital: tecendo redes cognitivas/afetivas. Rio de Janeiro:DP&A, 2005.
- [10] LEITE, Lígia Silva (coord); POCHO, Claudia Lopes; AGUIAR, Márcia de Medeiros; SAMPAIO, Marisa Narcizo. Tecnologia Educacional: descubra suas possibilidades na sala de aula. Rio de Janeiro: Vozes, 2003.
- [11] SELLTIZ et al. Métodos de pesquisa nas relações sociais. Ed. revista e nova tradução de Dante Moreira Leite. São Paulo, 1965.
- [12] LAKATOS, E. M. e MARCONI, M. A. Fundamentos da Metodologia Científica. 5a. ed. São Paulo: Atlas, 2003.
- [13] LAVILLE, Christian e DIONNE, Jean, 1999. A construção do saber: manual de metodologia de pesquisa em ciências humanas. Porto Alegres: Editora UFMG:

### Artmed.

[14] MINAYO, Maria Cecília de Souza (org.). Pesquisa Social. Petrópolis: Vozes, 1994.