

Gender Elevation through IT Training: A Social and Emotional Dimension

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Abstract: Gender discrimination in education for girls is a rampant problem in Pakistan. Information Technology with its provision of vast and diverse opportunities of global awareness and access to the latest educational resources has a potentially valuable approach for the benefit of girls of rural and remote areas. To explore whether Information Technology can play a role in the personality enhancement and gender elevation of deprived girls, an action-research project investigated the social and emotional qualitative aspects of conducting an Information Technology training for a group of deprived girls. An induction of selected IT skills for enhancing social awareness into global issues and computer application for progressive use was made for a period of four months. During the sessions, the researchers considered social and emotional changes occurring in the group through the methods of participant observer, semi-structured interviews, qualitative analysis of on the spot reflections by the researchers. The whole process and events of the teaching-learning activities was video-taped and finally summarized in a sequenced visual documentary report of the session. The findings are that the group showed enhanced social and emotional skills and a much more positive attitude towards their learning in this area. The approach holds considerable potential.

Keywords: gender elevation, information technology, social and emotional stability, digital divide

Introduction

Gender discrimination in education for girls is a persistent practice in Pakistan since its inception. For this reason, women in Pakistan society often lag behind in economic and social fields of life (Shah, 2008). Like the women of other developing countries, they grow up in a male dominated society and frequently have to face a depressed and oppressed life. However, under the impact of educational policies, the literacy rate among women has been substantially raised. Thus, for example, the National Literacy Programme (1998) aimed to increase the adult female literacy rate from 28% to 40% by

2010 and the adult male literacy rate from 51% to 65%. Nonetheless, women still would lag behind men in terms of adult literacy in 2010.

Increasing participation in education at all levels has enabled women to raise their voice for their rights and social status (Looker, 2008). Indeed, Serbessa(2006) and Robert (1985) have argued that education has been sought as the only solution for social and economic inequities on the grounds that education instills in the young crucial humanitarian values such as equity, tolerance and peace.

Information holds tremendous potential for improving the lives of women and their families, including opportunities for employment, education, political empowerment, access to resources and information, and communication with a world outside the boundaries of home. Barrett et al. (1999) and Biber et al. (1994) have argued that, although technology is not the immediate solution of poverty, nonetheless ensuring the provision of computer technology can help deprived groups of the community to bridge the gap of social classes.

Hafkin et al. (1998, 2001) has noted that “improving the quality and reach of basic education through IT is increasingly essential to mitigating the gender divide for women in developing countries”. Hafkin et al. (2001) has regarded the digital divide (the difference of haves and have not in regard to IT facilities) as a central international development concern and suggested “if pursued thoughtfully and strategically, IT can position women as global leaders in the mainstream of those seeking development solutions in the information age.”

Learning computer skills may help economically yet its social and emotional influences have been entirely ignored. The young women blooming with ideas, imaginations and fantasies of life, who do not find opportunities to express themselves, may have a catharsis through digital communication. They may come out of the realm of depression through wide exposure for their creativity and innovations because the World Wide Web provides them access not only to their friends but to the whole world beyond their immediate environment.

The importance of sociability and of affect are widely recognized in educational literature. Long ago, Vygotsky et al. (1978) appreciated the vital importance of the group in learning while Piaget (1995) and Picard (1997) both advocate learning as a social

process: “Intellectual development is achieved when learners are involved in learning activities in which they interact with others” (Picard (1997). Zaharias (2009), Kim (2006) and De Lera, et al (2008) regard affect as the “fuel” that learners bring to the learning environment connecting them to the “why” of learning.

Technology rich classrooms can lead to more creative and more independent work. Modern IT technology can offer opportunities for the learners to engage with materials that allow students to explore complex problem solving techniques, to build critical thinking skills and to elicit diverse emotions (Sanders,1988; Yates, 1997 & Siemens et al. 2009). Nonetheless, De Lera (2008), Siemens et al (2009) and Gulz (2004) have noted that girls tend to have less confidence in their own use of computers, and both boys and girls perceive computers as predominantly in the domain of males.

The researchers discovered a phenomena, during a classroom discussion about sources of knowledge and information regarding syllabi, that the female prospective teachers of Government College for Elementary Teachers, Sharaqpur had no opportunity to use computers especially internet or communicational sites at their homes or institutions. They complained that they were kept away from computers by their brothers and fathers and it was thought harmful or dangerous for their values.

Research Question

It was clear that the B.Ed students in the Government College for Elementary Teachers, Sharaqpur suffered from a kind of social inferiority and had few opportunities to widen their horizons and see their confidence boosted. The question then arose: “How could researchers help them to come out their inferiority complex through use of Information Technology?” This led to some practical developments which are now described. Numerous observations were made of the female students as they became involved and these are reported in this paper. The study is based on an action research model of enquiry.

Materials and Methods

A completely new programme was organized to enhance the social and emotional status, along with motivational enhancement, of 52 female B.Ed students (the only class) at the Government College for Elementary Teachers, Sharaqpur. The researchers introduced

some self-prepared movies to motivate students. A semi-structured interview was conducted at the beginning of the IT session. The responses to the interview were recorded by a video camera, with the approval of the learners.

A couple of computers were lent from DTEs (District Teacher Educators) working in the premises of the college. Multimedia and computer accessories were obtained from the same source.

The two researchers collaborated for a two hours class for four days in a week for the period of four months from October 8th 2008 to January 10th 2009. The class was taught MS Word, PowerPoint, e-mail, internet surfing for related material. Prospective teachers prepared and posted images and movies to blogs and forums. They explored Internet safety guides and comprehended copyright permission etc.

The students were divided into ten groups having five members in each group and group leaders were nominated. The groups had distributed the time for practicing on the computer. During the session, one of the researchers taught the computer application and the other one observed the class while coding their behavior, expressions, participation and enthusiasm, and wrote points for the reflections in detail. She also recorded the important event in the class by video camera.

Insights were gained from numerous sources. It was hoped that this process of triangulation would offer some useful overviews of the impact of the new programme. The students were interviewed in the beginning of the session; they were observed throughout the session and reflections were written on their behaviors and their learning activities were recorded through video camera. In the end of the session, the students were interviewed for their emotions and expressions about the session. This interview was also recorded by the camera.

Data Analysis

Data obtained from semi structured interview responses, behaviors recorded by participative observers, and analysis of reflections written during the class were noted and recorded in categorical form. Some of these data are now discussed.

The questions in the beginning of the sessions were as below:

Q 1: Do you have computer in your home?

Analyzed answer: About 30% of the students had computers in their homes but 70% of the girls had no computers in their homes or with neighbours.

Q 2: Can you use it?

Analyzed answer: Most of the girls could play games and use a word processor for academic purposes but could not use the Internet and other social communicational sites because their brothers and fathers did not allow them. These sites were considered dangerous for their safety and values.

Q 3: If you are provided with access to the computer and Internet, what type of advantages you may expect?

Analyzed answer: Girls considered the Internet a great source for international knowledge, more advanced subject material and informative for further admissions and degrees.

Reflections

Extraordinary events occurred during the session were recorded through reflections where observers watched the situation. Wherever possible, reasons for the specific behaviors were considered. The following are some important events reflected by the researchers:

Pleasant Curiosity

It was Wednesday 8th October when I and my co researcher introduced our class with basics of computer with the help of presentation. Students were extremely happy and excited because this was their first computer class. After showing the presentation, we asked students to raise hands if they had some knowhow of computers or had used them for some purpose. Eight students raised their hands. We selected them for basic instruction and told them to go to the (DTE's) room for the only computer. We made the students sit before it and introduced them with the basic applications. The doors were closed. After some time we noticed that someone was trying to open the door stealthily. I came out and saw that the whole class was gathered there. I told them to go back to the classroom.

After some time. the same practice repeated. I asked one girl to explore the situation. She came back after some time and, with blushing cheeks, told me that

everyone wanted to see what we were doing. Then, she requested quietly that could she bring her friends with her in the room. We felt ashamed to deprive our students from computer learning due to having one computer only. It was obvious that everyone was excited and enthusiastic to learn more of the computer. The introductory lesson had attracted them and had generated curiosity in them.

We were unsure how could we satisfy them and share with them. Finally, we decided to make groups and made the selected girls group leaders and asked them to lead and teach their fellows whatever they would learn in future. The girls were happy and then all were enjoying learning by computer. We further thought of multimedia and requested the DTEs to borrow it for teaching the whole class. Now the class was happy and satisfied because everyone had opportunity to see what was going on.

An unnoticed aspect of IT

On 26th October 2008, I was in the classroom and taking the class on my subject. Then a girl came to me and requested that she wanted to talk to me after the class. When the class ended, she came out of the class. I observed her closely. She was a thin girl, looking sickly and weak. Her eyes were pale and I felt that she was trembling slightly. She told me with tears in her eyes that she, after the death of her father five years ago, feeling insecure and depressed. I asked her whether she had her mother, sisters and brothers. She told that she had two brothers and two sisters but still she felt insecure. She remained tense and could not share with others because she felt she had no confidence. She requested me to postpone the test for her. I allowed her to divide it into subtopics.

The very next day when I and my co-researcher were teaching the girls how to make blogs she, through one of her friends, sent me the message that she wanted to make her blog also. I allowed her to create the blog. She was so happy and proud of having the blog that I saw brightness in her eyes and confidence in her voice for the first time. I thought that we can help students with such problems as depression, inferiority complex and covert personality to get rid of these sicknesses by creativity and sharing on computer.

A factual fear

On 10 January 2009, we completed our research work and undertook final interviews with our students. They were very happy and excited. They participated in the final session with gleaming smiles but, when the period was over, a group of five girls came to us and said, “You have taught us many useful and new things. Your project (they thought it was a project) has ended but will you also teach us these skills after your project ?” Their faces were sad and gloomy even with the thought that this computer teaching session would end with the completion of the project. They also doubted that DTEs would no more give them their computer for learning. I wanted to reassure them but really I was stunned because I knew well that DTEs would not give us computer forever. They had already accommodated us with great difficulty. It was a question for me too, so how I could assure them?

Finally the researchers conducted another interview to capture the students’ final remarks about the session and the change they were feeling among themselves. It was a semi structured interview with three open ended questions:

Q 1: How do you feel now in the end of the session?

Analyzed answers: All the prospective teachers were very happy and excited to know about the communicational sites.

Q2: What activity did you like the most and why?

Analyzed answers: The students liked blogs and forums the most because they could share their thoughts and ideas with friends and the whole world.

Q3: How will you use your IT skills for your career?

Analyzed answers: All the students longed for higher studies because they had then access to a bigger realm of knowledge. They could share their creativity and choice through sites of social communication.

Results

The researchers launched the programme of action research to enhance the capability of prospective teachers in the field of information technology and overcome their deprivation from modern methods of finding access to a wide range of international knowledge. However, the prospective teachers came up with significant change in social and emotional behaviors and the research raised the possibility of gender elevation by

communication through information technology.

It was concluded that the use of IT substantially added to their learning and the sense of awareness as an individual influential to world's information sources. The girls were very much excited, their aspirations rose and they longed for higher education because it seemed them possible to have sufficient information from admission to the subject oriented material. They longed for continuing the IT practice to contribute to their creative expressions, ideas, skills and explorations to blogs and forums. They loved sociability provided through IT to propagate their interests, emotions and expressions with their friends and other people. They felt themselves confident and heightened to be the part of the world's community. The students complaining of depression and loneliness were happy to share their ideas to a bigger community and being a member of world's mainstream and experiencing a vast exposure to the world's knowledge. The prospective teachers were so happy and felt proud of their skills that they were raising slogans as if they had succeeded to carve out their own way through IT and they got freedom of the constraints imposed upon their democratic rights. They could express themselves and touch the higher standards of education and fame. They felt recognized and elevated and were proud of being women and girls.

Discussion

Although our original intention was simply built around developing the skills related to IT, we observed that Information Technology can be a peaceful source of reducing gender divide and elevating disadvantaged groups of women and girls in developing countries. They not only may attain economic and social status through developing their capabilities but also feel emotional satisfaction and social security to raise their voice on wider forums.

Of course, some of the enthusiasm may simply have arisen because we offered them something new. Nonetheless, for women brought up in relatively deprived social contexts, their horizons and opportunities are inevitably limited. IT opens access to a much wider world. It opens access to new forms for communication. It offers scope for creativity and self expression. It offers an enhanced social and emotional experience where they feel valued and where they can express ideas.

It is important that the women are guided and provided with useful access to Information Technology. This may open new and exciting doors of opportunity and experience and enrich their lives enormously, thus contributing to the reduction of the gender divide.

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