ICT in ODL: Mobile Learning for Inclusive Education.

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ABSTRACT:
UNESCO believes that information and communications technology (ICT) has great potential to facilitate knowledge dissemination, improve learning and assist the development of more efficient education services. ICT can extend educational opportunities to marginalized groups; increase education quality; and reduce inequalities based on gender, class, race, age and disabilities. Today, large population is using mobile for communication. Now a day, many researchers point out that mobile learning is an integral part of educational process and best gadgets for current scenario. In the age of ICT, we have to commit that every one gets education without any hurdles, we as part of educational system to devote for inclusion of education. The widespread diffusion of mobile technologies offers an opportunity to develop policies aimed at participation and social inclusion.

However, mobile learning can contribute to the global commitment to provide quality education for children, youth and adults specially students with disabilities i.e. visually impaired. A person is defined as visually impaired who has no vision or greatly reduced vision or partial vision and cannot perform their work without assistance of sighted person or assistive technology as the sighted person can do.

In this paper we focus on interaction of blind users with educational content delivered via mobile devices, posing a special attention to touch screen technology. The paper is organized in 2 sections. In the primary section, we are discussing about learning for especially visually impaired. And other section we have been discussed about our cases. As a case study, researcher does a work on the some persons, who has no vision but with help of mobile and other supplementary, they can perform their duties. Today some of them are using this gadget for their profession and earn desirable amount for their life. Peoples with visual disabilities will benefit from the significant social, cultural and economic benefits of ICT as long as the information and services are designed appropriately. Tim Berners-Lee has said, ‘the power of the web is in its universality. Access by everyone regardless of disability is an essential aspect’.

Key Words: ICT, technology, Inclusive Education
INTRODUCTION:

India is now home to the world's largest number of blind people. Of the 37 million people across the globe who are blind, over 15 million are from India. What's worse, 75% of these are cases of avoidable blindness, thanks to the country's acute shortage of optometrists and donated eyes for the treatment of corneal blindness. While India needs 40,000 optometrists, it has only 8,000. On the other hand, while India needs 2.5 lakh donated eyes every year, the country's 109 eye banks (five in Delhi) manage to collect a maximum of just 25,000 eyes, 30% of which can't be used. (Times of India, 2007). Visually impaired children are not very familiar with regular environment. This attitude of general people towards visually impaired is not so positive. Generally, people have sympathetic attitude towards them, it's not so thoroughly. Different types of reasons are occurring for blindness in India. The most recent estimates from WHO reveal that 47.8% of global blindness is due to cataract and in South Asia region which includes India, 51% of blindness is due to cataract. Since cataract is a major cause of avoidable blindness in the developing countries.

There is need of research which focuses on development of visually impaired accessible in regular or common life. For that purpose we have to work on Inclusive education. Johnson (1994) provides most comprehensive definition of inclusive education: “It is a flexible and individualized support system for children and young people with special educational needs (because of a disability or for other reasons). It forms an integral component of the overall education system, and is provided in regular schools committed to an appropriate education for all.”

Johnson (1994) lists the following distinguishing features of inclusive education:

a. It preferably takes place in a regular class, in the student’s nearest, regular school.
b. Separation from the regular class environment, whether partially or in exceptional cases fully, occurs only where there is evidence that education in a regular class, accompanied by supplementary support and services, fails to meet educational, emotional and social needs of such students.
c. It recognizes, and responds to, the diversity of children’s needs and abilities, including differences in their ways and paces of learning.
d. It encourages use of individualized teaching methods, adapted curricula and teaching devices.
e. It is a team work of the whole school with class teacher provided with the following support services plays the major role:
   • Supply of special teaching aids and material.
   • Availability of assistance by parents, volunteers or older students.
   • Modification or adaptation of physical environment, curriculum, time table and evaluation procedure as per specific needs of the child.
   • Provision of in-service training to upgrade knowledge and skills of the class teacher
   • Appropriate services of guidance and counseling.

Johnson (1994) concludes that “with careful planning, it should be possible to meet the unique needs of all students within one unified system of education - a system that recognizes and accommodates for differences.”

THEORETICAL BACKGROUND:

The research is based on Bloom’s Mastery Learning Theory, as this theory advocates that any individual who desires to learn can learn and have mastery on learning if learning conditions are modified according
to individual needs of student. Based on this theory present research study tried to suggest solutions to create conducive environment in biology lab to enable visually impaired students to learn and perform practical work. (Bloom, 2000)

ATTITUDE TOWARDS VISUALLY IMPAIRED: - The constitution of own country gives all children the hardship to education there is no discrimination between the singled child and the visually impaired child. But it is seen that majority of the visually impaired children are deprived of their right to education. Only a new percentage at the visually children get an opportunity to wail mainstream education like other sighted children. The parents can play an importable role in helping their visually impaired child to get an opportunity to get education and other facilities like all other children at the same age group. If parents will conserved about will development and education at their visually impaired child their all child will delicately have a equal chance of attending school be it special school or mainstream school the attitude of the paretic a profound effect on the social and educational development of a visually impaired children It make a great difference to the visually impaired children wiles their parents are concerted about their real needs is education etc. or are their parents niggled their disabled children. A disables child first needs the acceptance of this parents and family members. A disabled child brought up by love and care by the family is able to adjust will the society and to integrate in the mainstream batten and lead a successful life the parents need to have a positive and a caring attitude towards their disabled children and in turn shape the future at the child. But it is observed that majority of the blind come from rural areas they come from poor and illiberally family backgrounds they have lots of blind failed and misconceptions about blindness. They believe that a child born with a disability in due to some curse of some magic or consequence of some bad deed committed in the previous birth. Hence the disabled child is neglected and not taken care of in the urban society the parents feel ashamed as their blind child and the child is kept indoors hidden from the society. In some cases the parents are not aware of the educational and republication facilities child hence the child is deprived of this right to education duel right to live with dignity as any other citizen of own country. In certain cases it is observed that parents on the family and they adjust their child in special school will residential facilities as a mean of getting rid of the child they are of the opinion that now it is the duty of the special school to look after the child totally the family mudding the brother and sisters are happy for not having the disabled sibling at home.

In some cases the disabled child in a banded in a train. We can across a case where the blind girl was kept tied to a cot in the hat through education the day. The child could not walk on her own she could only walk when some body supported her. The moment the person left her hand the child sat down and would not walk. This won because she had no confidence and felt very insecure. After she won admitted to the special school and taught mobility and daily living skills the child became independent and future as the blind child it a observed that the Childs development is very normal. The child is very adaptable and is back to integrate in the mainstream will easily the child is able to get swell education higher education & get good jobs an per their qualification and lead a dignified life. There are blind person when are law gens, professors, teachers, bankers, business men, scientists, sportsmen, politicians, renowned, social works etc. The adjustment of the visually impaired to society begins with the ability to adjust to their own family members and this acceptance & support as the family. This equips the blind child to cope up with the world. It is in fad these families that moulds and design this future as the blind child. The attitude as this parents being very important for the education as this blind child therefore the parent and the school could work together for the eructated rehabilitation as the child.
STATUS OF SPECIAL SCHOOL IN MAHARASHTRA STATE, INDIA

It is very burning issue in the global as well as at local level. Here we are trying to update some information regarding special school in Maharashtra state of India

1. Only Mumbai region has 60% Special School in Maharashtra. Remaining Maharashtra has less than 60% Special School
2. Pune and Latur district has 50% Special School.
3. Amravati, Yavatmal, Bid, Thane, Nagpur, Solapur district 25 to 30 % special school.
4. Akola, Raigad, Gondia, Ratnagiri, Nandurbar, Sindhurgh district has only 5% special school.

Types of school are given below about region wise of Maharashtra State.

<table>
<thead>
<tr>
<th>Region</th>
<th>Bone Deformity</th>
<th>Mentally Retired</th>
<th>Blind</th>
<th>Deaf and Dump</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amravati</td>
<td>38</td>
<td>13</td>
<td>14</td>
<td>33</td>
</tr>
<tr>
<td>Aurangabad</td>
<td>26</td>
<td>14</td>
<td>09</td>
<td>26</td>
</tr>
<tr>
<td>Mumbai</td>
<td>10</td>
<td>48</td>
<td>13</td>
<td>34</td>
</tr>
<tr>
<td>Nagpur</td>
<td>26</td>
<td>24</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Nasik</td>
<td>07</td>
<td>24</td>
<td>18</td>
<td>26</td>
</tr>
<tr>
<td>Pune</td>
<td>17</td>
<td>43</td>
<td>14</td>
<td>44</td>
</tr>
<tr>
<td>Kolhapur</td>
<td>01</td>
<td>19</td>
<td>07</td>
<td>16</td>
</tr>
<tr>
<td>Nanded</td>
<td>69</td>
<td>25</td>
<td>19</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>210</td>
<td>113</td>
<td>247</td>
</tr>
</tbody>
</table>

PROJECT TITLE:
Development a program for Parents of Special Child and Use of Technology for special child

OBJECTIVES:
1. To find out the attitude of parents special child.
2. To develop a program for parents of special child.
3. To test the effectiveness of this program.

METHODOLOGY:
1. Method: In descriptive research, survey method is for primary understanding of parent’s attitude of special child.
2. Population and Sample: All the parents of all type of special child i.e. Bone Deformity, Blind, Mentally Retired, and Dump and Deaf. For the present project 10 parents of each category of special child. 40 Parents are selected for this project but only 35 are reported.
3. Tool of Data collection:-1. Questionnaire for parents
4. Tool of Statistics- Percentage and Mean.
5. Procedure: Researchers are known to first what are the problems of all type of handicapped children of Maharashtra. With the help of questionnaire gathered data for understating the primary stage of children.

This program carried one hand book and a DVD of successful people.

HANDBOOK-
Basic capter in this book and this is developed according to the SIM steps.
1. Development of Child and Diet.
2. Diet of Special children
3. Games of Special Children.
4. Reasons of any handicapped.
5. The mental condition of Special Children Parent.
6. Education for Special Children.
7. Skills development of Special children.
8. Sex education for special children
11. Role and functions:- NGO

This book is developed as per the steps of self-instructional material.

SOME SUCCESSFUL STORIES: A DVD is designed with some successful stories with their own and live interviews and consultations. This DVD is prepared under the observation of experts of this area i.e. Dr. Lele D. N., Dr. Rajnita Limaye, Dr. Kalantri, Dr. Mukteshwar Munshettiwar and Shri. Vinod Jadhav.

The details of DVD’s heroes:-

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Name of person</th>
<th>Disability</th>
<th>Vocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ketan Bhogale</td>
<td>Blind</td>
<td>Worship</td>
</tr>
<tr>
<td>2</td>
<td>Anand Pachorkar</td>
<td>Dumb and Deaf</td>
<td>Goldsmith</td>
</tr>
<tr>
<td>3</td>
<td>Aahat Shaikh and Sadana Borade</td>
<td>Blind</td>
<td>Teacher</td>
</tr>
<tr>
<td>4</td>
<td>Kedar Kulkarni</td>
<td>Mentally retired and Blind</td>
<td>Artists</td>
</tr>
<tr>
<td>5</td>
<td>Yogini Joshi</td>
<td>Blind</td>
<td>Computer Engineer</td>
</tr>
<tr>
<td>6</td>
<td>Suryabhan Salunke</td>
<td>Blind</td>
<td>Social Worker</td>
</tr>
<tr>
<td>7</td>
<td>Dr. Simpi and Mrs. Simpi</td>
<td>Blind</td>
<td>Doctor</td>
</tr>
<tr>
<td>8</td>
<td>Shankar Kute</td>
<td>Blind</td>
<td>Business</td>
</tr>
<tr>
<td>9</td>
<td>Bhupendra Deshpande</td>
<td>Multiple Disability</td>
<td>Self- Depended</td>
</tr>
<tr>
<td>10</td>
<td>Runwal</td>
<td>Physical Handicapped</td>
<td>Classes</td>
</tr>
<tr>
<td>11</td>
<td>Studnets of NAB</td>
<td>Blind</td>
<td>Athletic</td>
</tr>
</tbody>
</table>

A. Ketan Bhogale: - This boy has clear sight still he was in 11th class but unfortunately he was lost his eye sight today. All the family members are disturbed and they were worried about his future. Today, he is using mobile technology for the activity of worshipping at temple and fare. And he is able to earn desirable amount for his family. (His Interview-video).

B. Anand Pachorkar: -By birth he is deaf; his parents spend money and time to develop his career. Somehow they were succeeding, but Anand was not happy because of his knowledge of power utilization. Today he is become good goldsmith. He is slowly losing his eyesight, also but with help of new technology of learning Brail script, he is growing his business. (His Interview-video).

C. Aahat Shaikh and Sadana Borade:- Both are blind students of YCMOU but with the help this program their parents changed their attitude towards their Childs. Today Shaikh and Sadana is completed their Diploma in Education with help of mobile. Mobile learning is strongly help to them for completing their practical and getting guidance through mobile. (Their Interview-video).
D. Kedar Kulkarni: - He is blind and mentally retired child so his parent were become very nervous. With the help of computer knowledge today he is doing his small business. (His Mother’s Video).

E. Yogini Joshi: - At the age of 11 yrs, she lost her eye sight. This big attain on her mind and her parents are also not ready to support her. But her willingness to learn computer, today she is become computer engineer at Software Company in Pune.

F. Suryabhan Salunke: - He is blind student. But today he formed a blind society and he is connected with the entire member on mobile. He is using this gadget for monthly meetings and other purpose. (See video)

G. Dr. Simpi and Mrs. Simpi: - This couple is blind, but he become doctor. Both are serving people very enthusiastically. (See video).

H. Shankar Kute: - He is blind but today he is become a businessman. Today he is developing the file making industry. (See video).

6. FINDINGS: The following major findings
   a. 80% parents are not confidantes about their child.
   b. 70% parents are did not know the inclusive education for their child.
   c. 82% parents have not confidants that their child earns money.
   d. 90% parents are disturbed because of they have special child.

All the finding is not able to say that their parents are with them. Special children are not supported from their own family and this is very sad to them. So it is necessary to build the capacity of parents of special children. For that purpose we have develop a program for parent and their children.

Results:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Details</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre Test</td>
</tr>
<tr>
<td>1.</td>
<td>Parent Number(Clientele)</td>
<td>35</td>
</tr>
<tr>
<td>2.</td>
<td>Mean</td>
<td>9.31</td>
</tr>
<tr>
<td>3.</td>
<td>SD</td>
<td>3.30</td>
</tr>
<tr>
<td>4.</td>
<td>Standard of Error</td>
<td>0.56</td>
</tr>
<tr>
<td>5.</td>
<td>r</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Degree of Freedom</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>t</td>
<td></td>
</tr>
</tbody>
</table>

In the above table t value is 7.09 means the difference between the pretest and post test is significant. So it seems that the program developed under this project is effective.

CONCLUSION AND DISCUSSION: During this project researchers’ works on the various issues of all disability and this handbook, which is developed under the guideline of Self Instructional Material, is very useful for the parents and teacher, those are working for Inclusive education. Person of visual impairments, including those with multiple disabilities and/or deaf blindness, are a heterogeneous population. The small number of such person makes it difficult for any one school/institute or program to have full knowledge and adequate resources to meet varied and intensive particularized needs of this unequaled person. This program and DVD is designed to provide a road map into key components for appropriate individual. The DVD and handbook is useful to all the parents those think that their children cannot do any thing because of physical and mental disability. This entire program is trying to convert in audio form; YCMOU is doing this work very soon.
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