Modeling ICT in primary and secondary schools as a curriculum subject for blind learners through assistive technology.

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About Tanzania League of the Blind

• Tanzania League of the Blind is a registered non-governmental organisation, that is committed to improve the quality of life of people with visual impairment in Tanzania through lobbying and advocacy, awareness raising, research, information sharing, facilitating access to education and vocational training and economic empowerment.

• TLB envisions a society, which promotes equality for all including people with visual impairments, in all aspects of human development.
Objectives

• Assistive Technology mainstreamed in national education system.
• To ensure that, Assistive Technology for people with visual impairment at workplaces, tertiary, secondary and primary levels of education developed and operationalized.
• The learning outputs towards development and improvement of teaching and learning for people with visual impairment on Assistive Technology monitored, documented and disseminated.
Statement of the Problem

• Due to computer illiteracy and lack of assistive technology, persons with visual impairment undergo serious challenges in accessing information, communication, and services in the widest scope.

• Persons with visual impairment are less considered when new technology is introduced. For example, Introduction of ICT in learning institutions have had not considered special needs for learners with visual impairment. Hence making it not to be taught to them.
Solution that has been Developed

- TLB, TEA, SSI and OUT attempted to train VIPs the in accessible ICT. This facilitated a total of 68 visually impaired to be trained in ICT.

<table>
<thead>
<tr>
<th>Year</th>
<th>Female</th>
<th>Males</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>3</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>2012</td>
<td>10</td>
<td>17</td>
<td>27</td>
</tr>
<tr>
<td>2013</td>
<td>5</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>2014</td>
<td>4</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>22</td>
<td>46</td>
<td>68</td>
</tr>
</tbody>
</table>
Solution cont ....

• Pilot the idea in eight institutions enrolling visually impaired learners by establishing one fully furnished computer laboratory at each of those institutions.

• Develop the training curriculum of ICT subject for upper primary, secondary, tertiary level and teachers course in the light of assistive technology.

• Conduct trainings in application of a screen reader.

• Translate screen reader into Swahili speech synthesiser for primary school learners.
Beneficiaries

• 170 students graduating every year from SEKOMU appointed with assistive technology skills for training visually impaired learners.

• 168 diploma students graduating from Patandi teachers college every year appointed with assistive technology training skills for visually impaired learners.

• Visually impaired students completing secondary school education with knowledge and skills on computer applications.

• 95 pupils completing primary education with elementary knowledge on computer application.
Beneficiaries in Picture
Implementing partners

- The project partners are: Ministry of Education (curriculum and policy development), Patandi teachers college (train special needs education teachers – diploma level), Sebastian Kolowa Memorial University (train special needs education teachers – university level), Mpwapwa, Old Moshi and Kilosa secondary schools (intergrated schools designated to educate visually impaired students), Makalala, Ikungi and Mugeza interpreted primary schools. A sample of pupils at primary six and seven, all students in secondary schools (intergrated primary schools which enrol pupils with visual impairment and those with albinism).

- After 2 years of project implementation the learnings best practice and impacts registered by this project will be adapted by Ministry of Education, policy and curriculum developers in order for them to scale to institutions admitting visually impaired persons in the country.
Project impact and sustainability

• ICT shall the sustainable subject taught in schools. This will benefit all visually impaired students which will enable their academic competency and performance.

• Visually impaired people will enjoy access to information available in the internet and other soft format materials.

• ICT literate visually impaired people shall be equally competent and expand their employability because the available employment vacancies are solely tied to computer literacy individuals.
Resources required

• In order for the project to function well and make intended impact to the beneficiaries the following inputs will be required:
  • 120 computers and its relevant appliances
  • 8 fully furnished computer laboratories one in each of the beneficiaries institutioin.
  • ICT curriculum development
  • Training of trainers
  • Training of specialist teachers
  • Continous Training of VIPs in ICT
  • Administration cost
  • Oversight, followup and monitoring cost