



Analysis of Blind Students Attitude towards Science

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Introduction:

According to this research many students are not considered in taking science subjects due to eye problem, this causes them to miss enjoyment and applications of science in their daily life. Worldwide we are in the century of science and technology were application of science is more emphasized as to alleviate poverty in our countries, so it is the obligation of the government to ensure science is for all in primary and secondary level of education, so how come our education system ignoring students with such problem? do you think we will be able to eliminate poverty with these segregations?

Method:

The project were done by means of questionnaires given to 27 students and the result were provided below:

1. What is the nature of problem (visual impairment)	3. Have you ever gone to hospital? Yes- 24 No - 2	9. What challenges do you think you will face if you learn science subjects? Lack of teaching and learning material, lack of experts (teachers of special education), poor infrastructure
(i) inherited ans, 19/26	4. Where do you come from? (i) Regions – Ruvuma 6, Njombe 4, Mtwara 3, Iringa 5, Mbeya 6 Lindi 2.	
(ii) Disease. Ans 7/26	5. Do you like science subjects? Yes - 22 No - 4	
2. If disease what kind of disease, ans - malaria, 4 Unknown disease, 3	6. If so which subject do you like? Physics- 13, Biology- 7, Chemistry – 4, Math's 1 Dislike- 4	
	7. Why are you not taking subject subjects? Because of the eye problem (visual impairment)	
	8. If considered, will you be able to learn? Yes – 23 No – 3	

Appendix 1: Table showing enrolment rate of students at Primary and Secondary School by type of Disability.

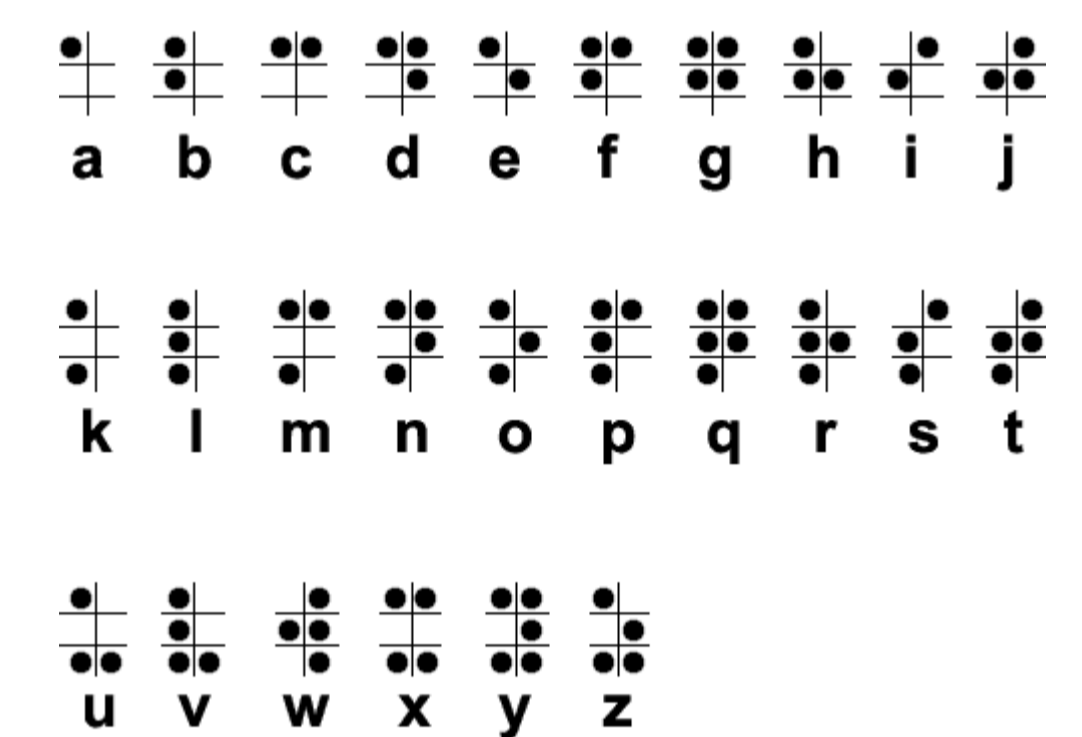
	Primary Education			Secondary Education		
	M	F	T	M	F	T
1. Visual Impairment	2498	1533	4031	452	418	870
2. Autism	332	225	557	18	15	33
3. Deaf	2541	2207	4748	300	220	520
4. Deaf-Blind	745	600	1345	64	91	155
5. Mental Impairment	4655	3281	7936	115	55	170
6. Multiple Impairment	413	293	706	37	24	61
7. Physical Impairment	8138	5798	13936	1814	1011	2825
8. Other Impairments	1951	1375	3326	389	242	631
Total	21273	15312	36585	3189	2076	5265

Source: URT (2010).

Adaptive Teaching Methods for Students with Visual Impairments:

The following are several methods teachers use to teach students with visual impairments in inclusive classroom. Some of these methods are used as they are but other methods require adaptations to work better for students with visual impairments.

- Encouraging Collaborative Learning** - Students with low ability will learn from their fellow capable peers
- Using Questions and Answers** - Oral method of giving instructions and receiving responses
- Sound Projection and Calling Students Names** - Speed of talking, volume and pitch are very important
- Adapting Written Texts** - printed text can be adapted through increasing the font size, bolding etc
- The use Audio and Optical devices** - audio cassettes and compact discs
- The use of Tactile Materials** - Tactile images or diagrams
- Extra Time Allowance** - Students complete their work very slowly due to the nature of their impairment



Braille Letters

Appendix 2: Table showing Secondary Schools Currently Enrolling Children with Visual Impairments in Tanzania

SN	SCHOOL	STATUS	DISTRICT	REGION
1.	Shinyanga Sec.	'O' level-Boys Only	Shinyanga Man.	Shinyanga
2.	Mwenge Sec.	'O' & 'A' level-Boys Only	Singida Municipal	Singida
3.	Moshi Sec.	'O' level-Boys Only	Moshi Municipal	Kilimanjaro
4.	Tumaini Sec.	'O' Level - Girls Only	Iramba	Singida
5.	Kilosa Sec.	'O' level-Boys Only	Kilosa	Morogoro
6.	Korogwe Girls Sec.	'O' level-Girls Only	Korogwe	Tanga
7.	Tabona Girls Sec.	'O' & 'A' level-Girls Only	Tabona Municipal	Tabona
8.	Kantambwa Sec.	'O' level-Boys Only	Samburungu Man.	Rukwa
9.	Songea Boys Sec.	'O' Level Boys	Songea Municipal	Ruvuma
10.	B.W. Mkuu Sec.	'O' & 'A' level-Cod. Edu.	Ilaia Municipal	Dum
11.	Lugalo Sec.	'O' & 'A' level-Cod. Edu.	Iringa Municipal	Iringa

Conclusions

These students with eye problem are able to learn science subject if and only if the government will take Consideration on them by providing special support. In order to make all students enjoy the context of Science these students should be involved and not ignored since according to the data collected it seems They like science subjects but there is no special effort made by the government to let them learn.

In order for these students to participate fully in science subjects, we advice the government to do the following, provide special machines for writing which include science symbols, teachers, special books and laboratories with apparatus.

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