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RESEARCH PAPER

Teachers and Parents' Perspective about Sex/Sexual Health Education for Students with Disabilities Enrolled in Special Schools/Centers of Punjab

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ABSTRACT

Sexuality education is considered a helpful tool for the sexual development and well-being of disadvantaged children and youth. This study aimed to identify teachers and parents' perspective about the importance of teaching sex/sexual health education for their special students facing mental retardation, hearing impairment, visual impairment and physical impairment. This is an established fact around the globe. In Pakistan the idea is not fully accepted though understood by academia without any serious practical effort. Punjab is the largest province with maximum special schools and centers (317) for major four categories of special students, but no sensitivity is found to educate students with disabilities about sexual health education. The phenomenon is also under observation by the parents of students with disabilities with their worries how to aware their special children about sexual health education without any specific management guidelines available for them. This study has been conducted by eliciting the 100 teachers and 100 parents' responses by implementing two separate questionnaires based various aspects related to sexual health education with Likert scale. Results revealed with strong recommendations by the teachers followed by the parents that students with disabilities should be taught about their sexual health needs. To achieve the target government should take massive steps to add the content in offered teachers training programs.

KEYWORDS Parents, Sexual health education, Students with Disabilities, Teachers , Special Schools

Introduction

It is reported that in world's population about one billion people or 15 % of this total world population are experiencing some form of disability and this prevalence is higher in developing countries. Moreover one–fifth of the estimated global total, or between 110 million and 190 million people, experience significant disabilities (World Bank, 2019).

According to Census 1998 in Pakistan, 2.49% of total population consists on persons with disabilities (National Policy for Persons with Disabilities, 2002). Presently in Pakistan the special education is offered at provincial levels after the 18th amendment of constitutions. Each province is working on independently developed policy. The education of children with disabilities is offered in government special schools and centers established for this specific population. There are many challenges of learning for these children including the lack of accurate epidemiological evidence on disabilities, insufficient resources, weak health care & hygienic facilities, less advanced educational support in terms of syllabus, technology, skill based teaching, not equipped labs, no networking with mainstream schools, and no awareness to sexual health education to teachers of students with disabilities. Though the efforts are in continuation by public and private to deliver the best for the rehabilitation of students/persons with disabilities but need to do more. Particularly, the establishment of "early childhood" throughout the country in formal setup with the addition of conceptual acceptance of "sex or sexual health education "by the teachers, parents , policy makers and all stake holders of the relevant field.

Education about sexual health issues is a sensitive and extremely important issue, and its current implementation in schools has raised public concerns. Islam binds sexuality and sexual education to a moral grid with rights and obligations, justice and equity. There is a dominant discourse and stereotype around 'Islamic sexuality', which presents sex and sexuality as the biggest taboo, fraught with fear and seldom discussed as reported by Khan., et al., (2020).

Comprehensive sexuality education that addresses gender norms, human rights, and power within relationships, can help to reduce child marriage and unplanned pregnancies by equipping young people with skills to control over their lives. Present public policies about disabilities in Pakistan has resulted little improved opportunities for students with disabilities, i.e. enhancing their enrollment, giving free education , offering various incentives for parents and students etc., but unfortunately societal attitudes have changed less in regard to health or sex education , parenthood among girls with disabilities.

A person with disabilities means a person who, on account of an injury, disease, or congenital deformity, is handicapped in undertaking any gainful profession or employment, and includes persons who are visually and hearing impaired, physically handicapped and mentally retarded. Persons with disabilities can be found everywhere in the world belonging to different socio-economic background, age, race and gender (Farooq, 2012).Among 10 percent of the World population i.e. 650 million in which 80 percent belong to developing countries are faced with physical, mental or sensory disability (United Nations, 2011). According to the census for 1998, there are 3,286,630 people with disability constituting 2.49 percent of the population (Bureau of Statistics, 1998). The figure is underestimated, as the definition of disability did not include moderate and mild disability. In practice, such number may vary or change in relation with the framework of definition of disability given in the population census of Pakistan (Ali, 2014). Disability has often been regarded as a peripheral issue in discussions on health services. Despite a number of progressive policies included in the Pakistan's Constitution that declares equal rights for all, disabled people are still regarded as an insignificant minority. In the health sector particularly, they are regarded as cases to be cured, tailing which they are referred to welfare for care. The denial of human rights, and the exclusion and marginalization of disabled people is manifested in many forms within the health sector.

The development of children with disabilities is like all people including sexual development, which consists of an interaction between physical, cognitive, mental, social, relational, ethical, religious and cultural factors (UNFPA, 2018; Murphy and Elias, 2006). Löfgren-Mårtenson (2012) found that sexuality education can support in sexual development and wellbeing of children and young people with disabilities. Kristien Michielsen and Laura Brockschmidt (2021) stated that there are strong arguments for the provision of sexuality education to children and young people with disabilities.

The UN Convention on the Rights of Persons with Disabilities (2006) recognizes that people with disabilities have the right to enjoy the highest attainable standard of health without discrimination. This includes their right 'to decide freely and responsibly on the number and spacing of their children and to have access to age-appropriate information, reproductive and family planning education. By ratifying the Convention, states commit themselves to enabling people with disabilities to exercise these rights, including the provision of sexuality education.

Literature Review

Literature revealed that children and young people with disabilities have similar needs concerning sexuality to their peers without disabilities, and sexuality education is helpful in responding to these needs (McCann, Marsh, and Brown 2019; Verhoef et al. 2005)

de Carvalho and da Silva (2018) found that Incomplete and inadequate sexuality education has been identified as a main factor impeding the development and execution of the sexuality of people with disabilities.

Multiple studies unfolded that children and young people with disabilities may be especially vulnerable to sexual ill-health and may have an increased risk of acquiring sexually transmitted infections, experiencing unplanned pregnancy, and falling victim to sexualized violence (Lane, Cambridge, and Murphy, 2019; Lehan Mackin et al., 2016; Sevlever, Roth, and Gillis, 2013; Simpson, Andrews, and Isaac, 2010).

Research has revealed that children and young people with disabilities receive less sexuality education than their peers without disabilities.

McDaniels and Fleming (2016) reviewed that young people with intellectual disabilities are lacking formal, individualized and specific forms of sexuality education.

Gray et al. (2017) reported that women with cerebral palsy didn't get the sexuality education from their parents before the age of 18 years when compared were compared with nationally representative sample. Jacobs et al. 2015 described that young people (16–24 years) with and without mobility impairment in the USA have less access to most sources of sexuality education. It is clearly reflected by the above mentioned researches that children and young people with disabilities have a particular gap regarding disability-specific sexuality education (Akre et al., 2015; Giami, 2016) reported in the study that the sexual rights of children and young people with disabilities have not yet been fully recognized.

Michaela et al,. (2020) described that internationally, both parents and children experienced personal barriers, such as embarrassment, discomfort and fear; communal barriers, such as outside sources and responsibility shift; and cultural barriers, such as sex as taboo, focus on abstinence and age/generational differences.

The present advanced world requires skillful females either they are normal or special, but in Pakistani schools many young girls age 11 to 18 years have little or no formal sexual health education in school or at home, in-spite of understanding their sexual feelings, needs and desires, regardless of their abilities or disabilities. All young girls with disabilities have the same right to this education as their peers and can benefit from sexual health information. However, considerations must be made in order to modify the educational programs particularly at secondary level to allow girls to get the information to be understood and learned in a way that is meaningful to them, specifically when the learners are with visual or hearing impairment. Lack of access to education for girls is part of a broader landscape of gender inequality in Pakistan. The country has one of Asia's highest rates of maternal mortality. Violence against women and girls including rape, so-called "honor" killings and violence, acid attacks, domestic violence, forced marriage and child marriage is a serious problem, and government responses are inadequate. Pakistani activists estimate that there are about 1,000 honor killings every year.

Young adulthood is an important time for developing identity, social relations and sexuality. Mostly socio-sexual development can be constrained by physical inaccessibility, judgmental attitudes and inaccessible sexuality and relationship education, therefore, in addition to requiring basic sexuality and relationship education like all young people, customized education in relation to disability experiences is needed, specifically for person with disabilities. In the pursuit of rights and equality for people with disabilities, the promotion of sexual rights has trailed behind. When issues of housing, jobs and equal access to opportunities and services are so integral to daily living, it is easy for sexuality to become a secondary issue. In the service provider cohort, it was noted that the barrier of societal integration affects all aspects of life.

Literature revealed that sexual lives of people with disabilities have been actively disregarded and socially stigmatized. Moreover the focus phenomena is consistently avoided because of its taboo nature and the fact that it was difficult to address, further sexuality as a form of pleasure and an expression of love is still not recognized for individuals with disabilities. Fixed socio-cultural beliefs have created significant barriers preventing people with disabilities from exploring their sexuality. It is assumed that the issue of sex education is personal, private entity of a person and not a necessary component of one's rehabilitation and overall health to be discussed. Various studies reported that the largest barriers that individuals living with disabilities face regarding their sexuality is societal misconception.

It is also perceived that sexual rights have trailed behind when other absolute necessities still require advocacy. Cultural and structural barriers, such as unequal employment practices and exclusionary education, have served to reinforce negative attitudes towards people with disabilities. For many individuals living with a disability, the whole topic of sexuality is less likely to be normalized and is never raised, and therefore assumed to be non-existent for the

The present system of special education has no formal practice to teach sexual health education to children with disabilities, even no considerations in-spite of the fact that this can help the students with disabilities to live a better healthy life. The present study is carried out to unfold the basic barriers by getting the teachers' insight about the sex/sexual health education for students with disabilities with a cross check opinion of their parents to highlight the one of basic rights of person with disabilities (male /female). It is also pertinent to take this initiative as advanced countries is already offering the same in their special schools but in Pakistan still no policy or attention by government is taken seriously.

Objectives of the Study

The present study was conducted to achieve following objectives.

1. To identify the perspective of special education teachers about the sex education or sexual health education of their students with mental retardation, visual impairment, hearing impairment or physical impairment.
2. To find out the perspective of parents of children with mental retardation, visual impairment, hearing impairment or physical impairment about the sex education or sexual health education of their special children.

Material and Methods

Research Design

The study has been conducted by using quantitative cum qualitative research approach by using mixed method technique.

Population of the Study

The population of the study comprises on the teachers of students with disabilities working in the special schools of mental retardation, visual, hearing and physical impairment along with the parents of same special students.

Sample of the Study

Punjab has 09 divisions and 36 districts comprise on 317 special schools or centers established for four major categories of special students. For data collection the Punjab was divided in four (04) Zones, selecting 50% centers from each zone by using simple randomization. Following the procedure 50 % teachers working as J.S.E./S.S.E.T. (whoever is available) in special school/centers and 04 parents of the special students of the same

school/center were contacted to elicit their responses about sex/sexual health education for their students/children with disabilities respectively. A sample of 100 teachers and 100 parents was selected to draw the results of the study through simple random sampling technique.

Instrument of the study

Two instruments was developed one for the teachers and second for the parents of children with disabilities. Both questionnaires were developed on same 23 domains leading to sex/ sexual health education. Under these domains 41 questions were asked following the 3 point Likert scale to collect the responses of the respondents. The both instrument were developed in English, later on translated into Urdu for best comprehension of the parents assuming them below literacy line. After developing the instrument in hard copies, an online Google form was also developed to address the distance difficulties for data collection.

Data Collection

The data was collected by using two approaches i.e., physical and online by applying Google form where it was not possible to visit. More these two procedures were used due to shortage of time and summer vocations in the schools. The researcher contacted the principals to get the telephone numbers of the working teachers and parents to collect the data in physical mode and by sharing the Google Form on what's app numbers. The research assistant was also hired for data collection from far flung areas.. The data was collected on the basis of inclusive and exclusive parameters. The focus of the data was on the gender and qualification of the respondents. For data collection majority of the divisions eight out of nine were listed to collect data which has become a strong alignment of the topic with respondents as per the need of era for students with disabilities. Reason the developed instrument for the two population group has been reported on excellent reliability which highlights the importance of this research.

Ethical Issues

The conducted study was unique in nature and sensitive in conception, therefore, the efforts has been made to keep the record confidential by assigning the different code to each case. Following the ethics of research and as per the sensitivity of topic, the privacy and confidentiality of respondents is maintained by the researcher.

Results and Discussion

Table 1
Descriptive statistics and reliability coefficients of sex/sexual health education for students with disabilities

Variables	N	M	SD	α	k	Actual	Potential
Parent's perspective on sex/sexual health education	100	72.60	20.95	.95	41	41-120	3-123
Teacher's perspective on sex/sexual health education	100	63.80	14.68	.89	41	41-120	3-123

Note. M=Mean; SD=Standard Deviation; Mini=Minimum value; Max= Maximum value; α = Cronbach alpha

Table 1 shows psychometric properties, descriptive statistics and reliability coefficients of teacher's and parent's perspective regarding sex/sexual health education for students with disabilities.

Table 2
Independent Sample t test show educational differences in Parent's perspective on sex/sexual health education

Variables	BS/MSc		Mphil/PhD		t (100)	p	95 % CI	
	M	SD	M	SD			LL	UL
Parent's perspective on sex/sexual health education	73.58	20.50	67.00	21.47	.97	.33	-6.96	20.14

Note. For education 1=BS/MSc, 2= Mphil/PhD*p < .05; M= Mean; SD= Standard Deviation; CI=Confidence Interval; LL= Lower Limit; UL= Upper Limit

Table 2 reflects the Independent sample t-test that reveals no significance difference on the basis of parent's qualifications about sex/sexual health education for children with disabilities. That's concludes that parents are agree that there should be sex/sexual health education for children with disabilities.

Table 3
Independent Sample t test show educational differences in teacher's perspective on sex/sexual health education

Variables	BS/MSc		Mphil/PhD		t (100)	P	95 % CI	
	M	SD	M	SD			LL	UL
Teacher's perspective on sex/sexual health education	63.55	15.10	64.24	14.58	-.21	.83	-7.1	5.79

Note. For education 1=BS/MSc, 2= Mphil/PhD*p < .05; M= Mean; SD= Standard Deviation; CI=Confidence Interval; LL= Lower Limit; UL= Upper Limit

Table 3 reflects the Independent sample t-test that reveals no significance difference on the basis of teacher's qualifications about sex/sexual health education for students with disabilities. That's concludes that teachers are agree that there should be sex/sexual health education for students with disabilities.

Table 4
Independent Sample t test show gender differences in parents perspective on sex/sexual health education

Variables	Female		Male		t (100)	P	95 % CI	
	M	SD	M	SD			LL	UL
Parents perspective on sex/sexual health education	75.42	19.71	66.47	22.67	1.71	.09	-1.4	19.32

Note. For education 1=female, 2= male *p < .05; M= Mean; SD= Standard Deviation; CI=Confidence Interval; LL= Lower Limit; UL= Upper Limit

Table 4 shows that there is no significant difference on the basis of parent's gender about sex/sexual health education for children with disabilities. That concludes that both female and male teachers are agreed to educate children with disabilities about their sex/sexual health.

Table 5
Independent Sample t test show gender differences in teacher's perspective on sex/sexual health education

Variables	*Female*		*Male*				*95 % CI*	
	M	*SD*	*M*	*SD*	*t (100)*	*p*	*LL*	*UL*
Teachers perspective on sex/sexual health education	63.98	15.65	63.83	12.07	.04	.87	-6.87	7.17

*Note. For education 1=female, 2= male *p < .05; M= Mean; SD= Standard Deviation; CI=Confidence Interval; LL= Lower Limit; UL= Upper Limit*

Table 5 shows that there is no significant difference on the basis of teacher's gender about sex/sexual health education for students with disabilities. That concludes that both female and male teachers are agreed to educate students with disabilities about their sex/sexual health.

Table 6
Mean Analysis of Sex/sexual Health Education Domains (parents)

Sr. No	Domain of Sex/Sexual Health Education for SWD	Mean Value	St. Deviation
1	Teachers perception about sexual health education (importance)	8.82	2.81
2	Biological information(gender identity)	5.41	2.08
3	Biological information (puberty)	3.37	1.43
4	Relationships (intimate relationship)	1.81	0.90
5	Relationships (responsibility)	1.78	0.89
6	Biological information (pregnancy)	5.32	2.16
7	Relationships (parenting)	1.58	0.81
8	Relationships (family role)	1.79	0.90
9	Role of print media	3.60	1.51
10	Psychological aspects (self-esteem)	1.72	0.89
11	Self-protection (protection against abuse)	1.80	0.92
12	Barriers (resources/ access/ attitude)	7.39	2.55
13	Teachers perception about sexual health education (importance/ biases)	5.32	1.88
14	Biological information (gender differences)	3.98	1.58
15	Health and hygiene (personal hygiene)	1.71	0.86
16	Health and hygiene (Sexual Transferable Disease)	1.78	0.92
17	Biological information (anatomy)	1.72	0.88
18	Role of electronic media and technology	1.89	0.96
19	Self-protection (protection against abuse)	4.75	2.12
20	Self-protection (personal rights awareness)	1.53	0.79
21	Psychological aspects (psychosocial adjustment)	1.88	0,81
22	Social norms	1.82	0.92
23	Barriers (religion)	1.71	0.88

Table 6 shows that out of 23 domains only 09 domains (1, 2. 3. 6, 9, 12,13,14, & 19) are strongly recommended by parents of children with disabilities for their sexual health education and on rest of domains they still have difference of perspectives between them

Table 7
Mean Analysis of Sex/sexual Health Education Domains (teachers)

Sr. No	Domain of Sex/Sexual Health Education for Students with Disabilities	Mean Value	St. Deviation
1	Teachers perception about sexual health education (importance)	8.72	3.182
2	Biological information(gender identity)	4.83	1.883
3	Biological information (puberty)	2.89	1.521
4	Relationships (intimate relationship)	1.64	.917
5	Relationships (responsibility)	1.57	.879
6	Biological information (pregnancy)	4.29	1.847
7	Relationships (parenting)	1.16	.519
8	Relationships (family role)	1.58	.889
9	Role of print media	3.62	1.522
10	Psychological aspects (self-esteem)	1.56	.879
11	Self-protection (protection against abuse)	1.43	.822
12	Barriers (resources/ access/ attitude)	6.40	2.435
13	Teachers perception about sexual health education (importance/ biases)	4.93	1.725
14	Biological information (gender differences)	4.25	1.551
15	Health and hygiene (personal hygiene)	1.52	.864
16	Health and hygiene (Sexual Transferable Disease)	1.38	.771
17	Biological information (anatomy)	1.61	.916
18	Role of electronic media and technology	1.70	.931
19	Self-protection (protection against abuse)	3.60	1.517
20	Self-protection (personal rights awareness)	1.17	.544
21	Psychological aspects (psychosocial adjustment)	1.43	.622
22	Social norms	1.73	.956
23	Barriers (religion)	1.50	.870

Table 7 shows that out of 23 domains only 09 domains (1, 2. 3. 6, 7, 12,13,14, & 19) are strongly recommended by teachers of students with disabilities for their sexual health education and on rest of domains they still have difference of perspectives between them

Table 8
One Way ANOVAs on Type of Disability and Total score (parents)

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2824.909	3	941.636	2.257	.089
Within Groups	28784.571	69	417.168		
Total	31609.479	72			

Table 9
One Way ANOVAs on Difference based on type of Disability

type of special children	Type of special children	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
hearing impaired	vision impaired	3.75194	7.48689	.618	-11.1840	18.6879
	physical disability	-10.45640	7.86432	.188	-26.1453	5.2325
	mental disability	-14.04293*	6.46463	.033	-26.9395	-1.1464
visual impaired	hearing impaired	-3.75194	7.48689	.618	-18.6879	11.1840
	physical disability	-14.20833	9.92461	.157	-34.0074	5.5907
	mental disability	-17.79487*	8.85674	.048	-35.4636	-.1262
physical disability	hearing impaired	10.45640	7.86432	.188	-5.2325	26.1453
	vision impaired	14.20833	9.92461	.157	-5.5907	34.0074
	mental disability	-3.58654	9.17801	.697	-21.8962	14.7231

mental disability	hearing impaired	14.04293*	6.46463	.033	1.1464	26.9395
	vision impaired	17.79487*	8.85674	.048	.1262	35.4636
	physical disability	3.58654	9.17801	.697	-14.7231	21.8962

*. The mean difference is significant at the 0.05 level.

Table 9 shows that parents of children with hearing and vision disability have significant difference in their opinion with regard to sexual health education of mentally retarded children as they cannot handle print and electronic material related to sexual health education. However, the no significant difference has been found by the teachers of physical impairment children on other three categories.

Table 10

Paired sample t test shows difference in perspective of parents and teachers regarding sex/sexual health education of students with disabilities

Variables	*Parents*		*Teachers*				*95 % CI*	
	M	*SD*	*M*	*SD*	*T*	*p*	*LL*	*UL*
Sex/sexual health education	3.15	2.08	2.80	1.98	4.94	.00	0.20	0.49

*Note. level 1=parents, 2=teachers *p < .05; M= Mean; SD= Standard Deviation; CI=Confidence Interval; LL= Lower Limit; UL= Upper Limit*

Table 10 shows that mean, standard deviation and t values of parent's and teacher's perspective on the all domains of sex/ sexual health education mentioned in the instrument. Results indicate there was significant difference in opinions of parents and teachers regarding sex/sexual health education. However, parents have more strong and clear perspective for sex/sexual health education of their special children as compared to their teachers.

Findings

1. The Independent sample t-test reveals no significance difference on the basis of parent's qualifications about sex/sexual health education for children with disabilities. That's concludes that parents are agree that there should be sex/sexual health education for children with disabilities.
2. The Independent sample t-test that reveals no significance difference on the basis of teacher's qualifications about sex/sexual health education for students with disabilities. That's concludes that teachers are agree that there should be sex/sexual health education for students with disabilities.
3. There is no significant difference on the basis of parent's gender about sex/sexual health education for children with disabilities. That concludes that both female and male teachers are agreed to educate children with disabilities about their sex/sexual health.
4. There is no significant difference on the basis of teacher's gender about sex/sexual health education for students with disabilities. That concludes that both female and male teachers are agreed to educate students with disabilities about their sex/sexual health.
5. Result indicate that out of 23 domains only 09 domains (1, 2. 3. 6, 9, 12,13,14, & 19) are strongly recommended by parents of children with disabilities for their sexual health education.
6. Results indicate that out of 23 domains only 09 domains (1, 2. 3. 6, 7, 12,13,14, & 19) are strongly recommended by teachers of students with disabilities for their sexual health education.
7. Result indicates that parents of children with hearing and vision disability have significant difference in their opinion with regard to sexual health education of mentally retarded children as they cannot handle print and electronic material related to sexual

health education. However, the no significant difference has been found by the teachers of physical impairment children on other three categories.

8. Results indicate that teachers of children with hearing and vision disability have significant difference in their opinion with regard to sexual health education of mentally retarded children as they cannot handle print and electronic material related to sexual health education. However, the no significant difference has been found by the teachers of physical impairment children on other three categories.
9. Results indicate there was significant difference in opinions of parents and teachers regarding sex/sexual health education. However, parents have more strong and clear perspective for sex/sexual health education of their special children as compared to their teachers.

Conclusion

The conducted study based on 23 domain mentioned in mean comparison table by the both sample groups (teachers and parents) unfolded the strong agreement of both respondents to initiate sex/sexual education for students with disabilities. However, the standard deviation among the two groups on various domains also highlights more deliberation and conduction of studies in the same lines for the benefits of the special population living in Punjab/ Pakistan. It is also found in the present study that the perspective of parents and teachers has emerged in different aspect for children with mental retardation. the literature for the special need particular for children with mental retardation recommend the sexual health education for this segment of population as well as to meet their sexual needs but unfortunately the present study based on analysis unfolded the fact that parents and teachers are still reluctant or not clear how to educate these children about their specific need as they fear that they cannot handle the print and electronic content properly by themselves.

Recommendations

On the basis of the data analysis and finding of the study it is recommended that:

1. Sex education or sexual health education found to be even more essential for special children according to this study. Thus it should be ensured for students with mental retardation, visual impairment, hearing impairment or physical impairment in all special education centers and schools.
2. Sex education or sexual health education should also be provided in inclusive schools for students with and without mental retardation, visual impairment, hearing impairment or physical impairment.
3. Qualitative study is direly need to address the pros and cons of sexual health education to establish the guideline for the parents of children with disabilities
4. The agreement of the respondent of the study also open the doors for policy makers, content writer and school setups to initiate the idea via content development for all above mentioned students with disabilities.
5. Although, sex education is found to be important for special children, thorough study should be conducted on the content suitable for each disability separately.

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