

# **Inclusive Early Childhood Education, Play and Recreational Activities as Predictors of Social Adjustment of Children with Hearing Impairment in Oyo State, Nigeria**

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## **Abstract**

This study investigated inclusive early childhood education, play and recreational activities as predictors of social adjustment of children with hearing impairment in Oyo State, Nigeria. A sample of two hundred and seventy (270) participants comprising of 150 teachers having children with hearing impairment in their classrooms and 120 parents of children with hearing impairment. A ten (30) item questionnaire with a 4-point rating scale and reliability coefficient of 0.71 to 0.77 was used to collect teachers' and parents' opinions on inclusive early childhood education, play and recreational activities as predictors of social adjustment of children with hearing impairment. The data collected were statistically analyzed using Pearson Product Moment Correlation and was used to determine the significant relationship in the stated research questions while Multiple Regression Analysis (MRA) was used to verify whether the independent variables predicted the dependent variable or not. The findings revealed that the independent variables (inclusive early childhood education, play and recreational activities) were associated and predicted social adjustment of children with hearing impairment

in Oyo State, Nigeria. The authors recommended among others that parents should enroll their children in an early childhood education program as part of the early intervention package for the child to help the child start making early interactions with other children in social contexts.

**Key words:** Inclusive, early childhood education, play, recreational activities, social adjustment.

## **Inkluzivní vzdělávání, hra a rekreační aktivity v raném dětství jako prediktory sociální přizpůsobení u dětí s poruchami sluchu ve státě Oyo v Nigérii**

### **Abstrakt**

Tato studie zkoumala inkluzivní vzdělávání hru a rekreační aktivity v raném dětství jako prediktory sociální přizpůsobení u dětí s poruchami sluchu ve státě Oyo v Nigérii. Vzorek dvou set sedmdesáti (270) účastníků sestával ze 150 učitelů pracujících ve své třídě s dětmi s poruchami sluchu 120 rodičů dětí s poruchami sluchu. Desetipoložkový (30) dotazník se čtyřbodovou hodnotící škálou a koeficientem spolehlivosti od 0,71 do 0,77 sloužil ke sběru informací o názorech učitelů a rodičů na inkluzivní vzdělávání, hru a rekreační aktivity v raném dětství jako prediktory sociálního přizpůsobení u dětí s poruchami sluchu. Získaná data byla statisticky analyzována za použití Pearsonova korelace součinu momentů a použita pro identifikaci významného vztahu ve stanovených výzkumných otázkách. Dale byla použita mnohonásobná regresní analýza (MRA) pro verifikaci otázky, zda nezávislé proměnné předpovídají závislou proměnnou, či nikoli. Zjištění ukázala, že nezávislé proměnné (inkluzivní vzdělávání, hra a rekreační aktivity v raném dětství) se pojí se sociálním přizpůsobením u dětí s poruchami sluchu ve státě Oyo v Nigérii a předvídají ho. Autoři mimo jiné doporučili, aby rodiče zapsali děti do vzdělávacího program v raném dětství jako součást balíčku rané intervence u dětí, a pomohli jim tak vytváření brzy interakce s jinými dětmi v sociálních kontextech.

**Klíčová slova:** inkluzivní, vzdělávání v raném dětství, rekreační aktivity, sociální přizpůsobení.

## Introduction

The period of childhood is a critical period where all children undergo dramatic physical, mental, psycho-emotional, and social changes as this marks a crucial period of their development. In this period, children develop on many fronts, entering new endeavors and experiment with many things to get adjusted to the social environment. They begin to learn how to establish healthy relationships, find socially acceptable ways of engaging in social activities that interest them to be accepted by peers, and make their way through school. This is a hallmark of socialization and adjustment to life. However, a number of children experience more difficulties in engaging in these activities than their peers' due to differences in nature (Hall & Filar, 2017). One of the categories of children that may experience undue trials in their relationship and social adjustment are those with hearing loss. Hearing impairment has debilitating effects on a child's social competence due to imperfect or lack of linguistic competence. This disability may keep these children from engaging in social activities that promote their social integration into children fold due to inability to acquire the communication and social skills needed for this endeavor.

Due to this disabling condition, some children with hearing impairment are unable to find a solid emotional and social ground as they progress through their developmental stages. An inability to "fit it" or adjust to social norms can have behavioral manifestations that cause significant difficulty for the children themselves, school, family and the community at large. When a child's behavior violates or negates the acceptable social norms at home, at school, or in the community, negative repercussions such as social disintegration, punishment or suspension from school may follow which further result in more social maladjustment. Many children with hearing impairment encounter additional hurdles that complicate this difficult time of childhood. As these children are making transition to adolescence, when being like their peers becomes a priority, social, language and communication incompetencies set them apart in the ways they behave, learn, or interact with others, presenting additional challenges to positive social adjustment. The increased challenges of the disability and their implications result in these children facing a greater risk than their peers without disabilities for poor social adjustment. Hearing impairment has the tendency of making these children lag behind in pragmatic contexts due to language deficiencies (Carl, Camille, & Wagner, 2011). Children with hearing impairment who have trials adjusting socially at home, school and community are more likely to suffer from feelings of loneliness, anxiety, and depression which result in social maladjustment and disintegration. Thus, social adjustment is crucial for the development of children with hearing impairment as well as social, educational and economic integration into the larger context of the society.

Therefore, social adjustment is an effort made by a child with hearing impairment to cope with the standards, values, norms and needs of the society which promotes

acceptance as an integral member of the society. It is a psychological effort to get along with others at school, home and community, overcoming the debilitating effects of hearing loss. Also, as defined by Gerdes and Mallinckrodt (2014), social adjustment is the process by which children with hearing impairment become integrated into the community, build support networks, and negotiate the new freedoms afforded by social life. These children's adjustment is a combination of students' social, personal, emotional, and academic adjustment along with their reported feelings of learning enthusiasm. The efforts by which these children overcome the effects of hearing loss is through a gradual process of intrapersonal discipline and emotional responsibility developed through interaction with others which result in socially acceptable behavior and relationships with other children. Thus, according to Yemi and Kainde (2016), to promote social adjustment of children with hearing impairment to the disability as well as to the social standards of the society, socialization with peers through a range of inclusive social opportunities are critically vital to the process of social adjustment. Amongst the range of inclusive socialization avenues that may promote social adjustment of children with hearing impairment are inclusive early childhood education, inclusive play and recreational or leisure activities. Through these avenues, these children may learn to get along with others, come out of their silent world, and embrace joy and happiness of being around other children, being loved and valued by others. These inclusive social platforms are initiated to help develop the social skills of these children so as to enable them to accept themselves, their condition and others in the society thereby developing important understanding of the difference existing between them and other children without disability in his/her fold.

Docafer (2017) stated that today an ever-increasing number of infants and young children with and without disabilities play, develop, and learn together in a variety of places—homes, early childhood programs, neighborhoods, and other community-based settings. The notion that young children with disabilities and their families are full members of the community reflects societal values about promoting opportunities for development, social responsibility, and a sense of belonging for every child. It also reflects a reaction against previous educational practices of separating and isolating children with disabilities. Inclusive early childhood education is a crucial opportunity accorded to children with hearing impairment to learn, play and integrate with other children as means of acquiring the norm and social standards of the society. Tokpe and Chalu (2012) asserted that early childhood inclusion embodies the values, policies, and practices that support the right of every infant and young child and his or her family, regardless of ability, to participate in a broad range of activities and contexts as full members of families, communities, and society. The desired results of inclusive experiences for children with and without disabilities and their families include a sense of belonging and membership, positive social relationships and friendships, and development and learning to reach their full potential. The defining features of inclusion that can be used

to identify high quality early childhood programs and services are access, participation, and support. Inclusive early childhood education is designed as a measure of starting integration of children with hearing impairment into the social, economic, educational and political mainstream of the society which in turn promotes social adjustment of the child (Aidina & Haji, 2013). The mandate of inclusive early childhood education is based on the biblical principle of "training a child how he should go and when he is old he would not depart from it. The behavior of these children at school is a crucial element in their overall social adjustment. Not only is school the context in which these children spend most of their day, it also is where they engage in the important social activities to gain academic knowledge; learning and practicing more generalized skills, such as problem solving, being on time, and following directions; and developing formative relationships with peers and adults. Furthermore, the consequences of their behavior at school can be powerful. Students' inappropriate behavior at school can distract both the students themselves and those around them from their learning tasks.

Other avenues through which social adjustment of children with hearing impairment could be enhanced are through inclusive play and recreational activities. Inclusive play stresses the importance of including all children, with or without disabilities by fostering an environment where diversity is respected, valued and celebrated as a crucial endowment in nature. Children naturally enjoy the benefits of playing together with others in the outdoor environment. Inclusive play enables the interaction of all children with or without hearing impairment in social contexts to promote a feeling of happiness, acceptance, value which help these children to learn vital skills necessary for social adjustment. Inclusive play and recreational activities can bring children of all ethnic groups, races, abilities, colours, languages and cultural creed together, expand and strengthen social ties and networks, link children to resources and provide them with a sense of belonging (Campbell & Jag, 2012). Children benefit from being outside, interacting with their environment, learning from nature and developing through play. Creating places that are truly inclusive is also important for the understanding of diversity. By ensuring that children, young people and adults can all socialize, play and be part of a community enables them a greater awareness and understanding of the needs of different people. These activities are also the elements that build and promote the worth, sense of belonging and promote social adjustment (Ertmold & Hassen, 2015). They have also been recognized as tools for promoting acceptance and social adjustment to disability. Therefore, inclusive early childhood education, play and recreational activities are strategies that help these children respond to acceptable social demands to overcome the effects of the hearing loss. It is against this background that this study is keen to investigate inclusive early childhood education, play and recreational activities as predictors of social adjustment of children with hearing impairment.

## Statement of the Problem

Social adjustment is a crucial facility that promotes acceptance, coexistence, and compliance to norms, values and standards of the society. Social adjustment of children with hearing impairment is crucially essential for developing acceptable behaviors and relationships with self and other people around. Research and experience have shown that most children with hearing impairment in Oyo State, Nigeria have deficiency in this facility needed to get along well with others, accepting their differences and socializing in a manner that is typical of well-adjusted children. Research has also demonstrated that these children because of their disability are often kept from other children right from cradle. This isolation results in difficult social adjustment to the social standards of the society. These children manifest behaviors such as isolation, depression, aggression and other socially inappropriate behaviors that show lack of self-acceptance.

It is in response to these inadequacies that the researcher conceived to investigate whether inclusive social activities such as inclusive early childhood education, play and recreational activities foster social adjustment of children with hearing impairment. The problem of this study is to what extent do inclusive early childhood education, play and recreational activities predict social adjustment of children with hearing impairment in Oyo State, Nigeria.

## Purpose of the Study

The purpose of this study was to investigate inclusive early childhood education, play and recreational activities as predictors of social adjustment of children with hearing impairment in Oyo State, Nigeria. Specifically, the study aimed:

- i. To find out the relationship between the independent variables (inclusive early childhood education, play and recreational activities) and the dependent variable (social adjustment of children with hearing impairment).
- ii. To determine the composite contribution of the independent variables (inclusive early childhood education, play and recreational activities) to the dependent variable (social adjustment of children with hearing impairment).
- iii. To examine the relative contribution of the independent variables to the dependent variable

## Research Question

The following research questions were answered in the study:

1. What is the relationship between the independent variables (inclusive early childhood education, play and recreational activities) and the dependent variable (social adjustment of children with hearing impairment)?
2. What is the composite contribution of the independent variables (inclusive early childhood education, play and recreational activities) to the dependent variable (social adjustment of children with hearing impairment)?
3. What is the relative contribution of the independent variables (inclusive early childhood education, play and recreational activities) to the dependent variable (social adjustment of children with hearing impairment)?

## Methodology

The research adopted a correlational survey design and multistage sampling technique was used to sample 270 (two hundred and seventy) participants comprising of 150 teachers having children with hearing impairment in their classrooms and 120 parents of children with hearing impairment. The instrument for data collection was a questionnaire of ten (30) items with a 4-point rating scale. It was used to survey the opinions of teachers and parents on the perceived extent to which inclusive early childhood education, play and recreational activities predict social adjustment of children with hearing impairment. The instrument was validated by three experts and has reliability coefficient 0.71 to 0.77 obtained through the Cronbach Alpha method of determining reliability. Pearson Product Moment Correlation was used to determine the significant relationship in the stated research questions while Multiple Regression Analysis (MRA) was used to verify whether the independent variables predicted the dependent variable or not.

## Presentation of Results

**Research Question 1:** What is the relationship between the independent variables (inclusive early childhood education, play and recreational activities) and the dependent variable (social adjustment of children with hearing impairment)?

Table 1

*Correlation between the independent variables (inclusive early childhood education, play and recreational activities) and social adjustment of children with hearing impairment*

Variables	Mean	Std. Deviation	N	Df	R	P	Remark
Social adjustment of children with hearing impairment	7.56	2.23	270	3	—	—	—
Inclusive early childhood education	7.50	2.19			.699*	.000	Sig.
Inclusive play	7.81	2.74			.779*	.000	Sig.
Inclusive recreational activities	6.99	2.01			.367*	.000	Sig.

\* Correlation Significant at 0.05 level

Table 1 above revealed that there was a significant relationship between the independent variables (inclusive early childhood education, play and recreational activities) and social adjustment of children with hearing impairment. It revealed that social adjustment of children with hearing impairment has a significant correlation with inclusive early childhood education ( $r = 0.699$ ,  $P < 0.05$ ), inclusive play ( $r = 0.779$ ,  $P < 0.05$ ) and inclusive recreational activities ( $r = 0.367$ ,  $P < 0.05$ ), since P-value (.000) was below 0.05 level of significance, therefore, there was a significant relationship between the independent variables (inclusive early childhood education, play and recreational activities) and social adjustment of children with hearing impairment in Oyo State, Nigeria. This indicates that children exposed to inclusive early childhood education, play and recreational activities have a higher chance of being socially adjusted to their environment than those who are not. The extent of this exposure determined the level of their social adjustment and competency respectively.

**Research Question 2:** What is the composite contribution of the independent variables (inclusive early childhood education, play and recreational activities) to the dependent variable (social adjustment of children with hearing impairment)?



Table 2

*Summary of Regression Analysis of the combined prediction of the independent variables and the dependent variable*

R		R Square		Adjusted R Square		Std. Error of the Estimate
0.800		0.633		0.601		1.211
SUMMARY REGRESSION ANOVA						
	Sum of Square	Df	Mean Square	F	P	Remark
Regression	723.011	3	878.936	12.412	.000	Sig.
Residual	221.122	266	7.922			
Total	944.133	269				

Table 2 above showed that there was a significant composite contribution of the independent variables (inclusive early childhood education, play and recreational activities) and social adjustment of children with hearing impairment. The Table also shows a coefficient of multiple correlation <sup>®</sup> of 0.800 and a multiple R Square of 0.633. This means that 60.1 % (Adj. R<sup>2</sup> = 0.601) of the variance in social adjustment of children with hearing impairment is accounted by the independent variables compositely. The significance of the composite contribution was tested at p < 0.05 using the F-ratio at the degree of freedom (df = 3/269). The table also shows that the analysis of variance for the regression yielded a F-ratio of 12.412 (sig. at 0.05 level).

**Research Question 3:** What is the relative contribution of the independent variables (inclusive early childhood education, play and recreational activities) and the dependent variable (social adjustment of children with hearing impairment)?

Table 3

*Relative contribution of the independent variables to the dependent variable (Test of Significance of the regression Coefficients)*

Variable	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	(B)	Std. Error	Beta		
Constant	4.191	.346	–	21.577	.000
Inclusive early childhood education	.571	.022	.711	17.654	.000
Inclusive play	.499	.019	.524	10.360	.000
Inclusive recreational activities	.252	.013	.316	6.980	.000

Table 3 above reveals that there is a significant contribution of the independent variables (inclusive early childhood education, play and recreational activities) to the dependent variable (social adjustment of children with hearing impairment), expressed as beta weights. There is a correlation coefficient of inclusive early childhood education, play and recreational activities on social adjustment of children with hearing impairment in Oyo State, Nigeria. That is, social adjustment of children with hearing impairment in Oyo State, Nigeria has a relative contribution on inclusive early childhood education, play and recreational activities. Using the standardized regression coefficient to determine the relative contribution of the independent variables, inclusive early childhood education ( $\beta = 0.711$ ,  $t = 17.654$ ,  $p < 0.05$ ) indicates the highest contributor to the prediction, while the second one in that order is inclusive play ( $\beta = 0.524$ ,  $t = 10.360$ ,  $p < 0.05$ ), and the last one is inclusive recreational activities ( $\beta = 0.316$ ,  $t = 6.980$ ,  $p < 0.05$ ) contributing to social adjustment of children with hearing impairment in Oyo State, Nigeria. It implies that there is a significant relative contribution of the independent variables (inclusive early childhood education, play and recreational activities) and social adjustment of children with hearing impairment in Oyo State, Nigeria.

## Discussion

The research question of this study investigated what relationship exists between independent variables (inclusive early childhood education, play and recreational activities) and social adjustment of children with hearing impairment in Oyo State, Nigeria. The findings of the study revealed that inclusive early childhood education, play and recreational activities are good predictors of social adjustment of children with hearing impairment. The findings of this study agree with the work of Budeua and Haji (2013) which affirmed that when children with hearing impairment were given access to learning together with other children without disabilities, social competence, acceptance of self and others is drilled and crested in the minds of children at the early stage. It forms indelible marks and gives them a belief system that promotes togetherness and social adjustment. Inclusive early childhood education has gotten consensus around three general areas that transcend the developmental domains in which young children with hearing impairment should demonstrate progress toward becoming more meaningfully engaged in their day-to-day life alongside other children. According to Kiy and Fhodu (2015), to develop socially and successfully integrated into the school and community, children with hearing loss need opportunities to do the following:

- Develop positive social-emotional skills (including social relationships with peers at the early age as part of early intervention programmes)
- Acquire and use knowledge and skills (including early language/communication and early literacy skills)
- Use appropriate behaviors to meet their own needs

The rationale for these functional outcome areas is that children should be acquiring the rudimentary knowledge, skills, and behaviors needed to socially adjust, think critically, and solve problems in social contexts, as well as getting along with others. Research has shown that children with hearing impairment who have multiple interactions with peers and adults throughout early childhood education show a marked improvement across multiple areas of development, particularly in social development (Buysse, Goldman, & Skinner, 2013). It is vitally important for children to be placed in inclusive early childhood education in which they can interact with peers and adults alike. Buysse, Goldman, and Skinner reported that these children who were included in high-quality inclusive early childhood education classrooms with their typically developing peers stood to reap positive gains across social domains and likely in the functional outcome areas such as social integration.

Similarly, inclusive play itself brings crucial and wide-ranging benefits to children and the people around them. This agrees with the findings of Awhol and Veshim (2017) which supported those children who were exposed to good quality inclusive play experience, interesting and stimulating environments throughout their childhood and would gain many benefits to their well-being, happiness and social development. They noted that through experience of inclusive play in which they felt included and supported, children gained many benefits including:

- a truer understanding of the world: that there are similarities and differences between people;
- the development of attitudes such as tolerance, appreciation of difference, acceptance of perspectives and perceptions other than their own;
- a richer play environment which includes different language and methods of communication, a wider range and use of play materials;
- a positive sense of self, self-esteem and positive reinforcement of their sense of identity;
- experiences linked to curricular goals, in the realms of social and emotional development, language development, knowledge and understanding of the world and citizenship;
- The ability to exercise their rights under the UN Convention on the Rights of the Child.
- Children's relationships and friendships continue outside the setting.
- Connections between children at play, foster connections between parents and families through play at each other's homes and encounters in community play spaces.
- Opportunities arise for communication, building relationships and gaining a greater sense of connectedness and understanding.
- Greater openness to and appreciation of diversity emerges. Encounters between people of different backgrounds and circumstances or needs are based on familiarity.

The findings of this study are also in line with Fiona, Elliott and Day (2014) who supported that many opportunities for children with hearing impairment were severely restricted. Community-based facilities, such as sporting activities, play schemes, and organized clubs and groups frequently exclude these children. In addition, these children often attend specialist schools or nurseries away from where they live, reducing their opportunities to make friends in their own communities. Reduced opportunities for inclusive play and leisure also affect these children's families. Most parents can take a break from parenting responsibilities while their children are playing with friends or involved in leisure activities. Parents of these children often do not experience these breaks; so also, brothers and sisters may be required to play with their hearing-impaired sibling rather than pursuing their own friendships and interests. This limits their opportunity of interacting with other children, discovering differences and accepting all as a rich source of humanity.

The message from inclusive play is that it makes it better for everyone. Play is crucial to children's experience of a setting. Whether the staff are pleasant, the buildings adequate, the program varies, if the time spent at play with peers is unsatisfactory then that sets the tone for their whole view of the setting. Whether play is the primary objective of the setting or a way of working, access to play is crucial from the child's point of view. The work of play specialists illustrates this well in that good home care is not enough for children with hearing impairment to feel positive about their disability and that child's opportunities for play aid his/her adjustment and coping. In the same vein, Sobel, Katie and Kientz (2015) supported that children with hearing impairment benefited from inclusive play because they were not being implicitly told they were different, wrong, abnormal, or that they did not deserve to have the same experiences as other children. Inclusive play environments support all children to develop important social and positive outcomes ripple through the community of the setting, helping families of children to build inclusive relationships as well. For young children, play is a meaningful, active, pleasurable, and intrinsically motivated experience and medium for learning. Inclusive play provides significant learning opportunities that are in line with the goals of inclusion. Through inclusive play, young children with hearing impairment naturally learn how to use language, communicate, cooperate, make and maintain friendships, control impulses, take different perspectives, and develop other social and emotional skills. Thus, having opportunities for children to play and learn through play is fundamental for social adjustment.

Similarly, the findings of this research corroborate with the findings of Justin, (2011) which supported that involvement of meaningful recreational activities was essential for every child's physical, psychological, and emotional well-being. The primary goal of using an inclusive approach is to have all children without disabilities recreate and interact with the hearing impaired in their choice of recreational activities. The rationale behind inclusive recreational activities is to bring all children together to interact with

the environment both in its natural way and its developed state to help children with hearing impairment adjust socially while acquiring the needed social skills to function in society. Across country, as the momentum to create learning in school communities is growing, increasing numbers of states, communities, and organizations are using an inclusive approach to recreation and leisure in many, diverse ways— providing adaptations, accommodations, and supports so that every pupil can participate and benefit from a typical recreational experience in the school community to foster national unity and social development of persons with hearing impairment (Hugh, 2015).

In recent years, there has been a growing awareness of the social benefits for hearing-impaired children who indulge in participation in community recreational activities. People with hearing impairment, their families and care givers are also seeking these benefits and are increasingly seeking access to their recreational activities providers, with varying degrees of success (Wedra, 2014). In Nigeria, recreational sport is a fundamental part of adjustment to disabilities for children with hearing impairment. It enables school children with hearing impairment to develop social skills, form friendships, develop physical skills and learn about and become confident in their environment. However, for many deaf and hard of hearing students, opportunities are severely restricted to inclusive recreational activities which bring about the wildest excitement and psychological upturn in students. Community-based facilities, such as recreational activities, play schemes, and organized clubs and groups frequently exclude hearing impaired children. In addition, many hearing impaired children often attend special schools or nurseries away from where they live, reducing their opportunities to make friends in their own communities through inclusive recreational activities (Catedral & Wayne, 2017). Ural and Denka (2010) noted that while the benefits of an integrated, inclusive approach to recreational activities in schools for individual hearing impaired and the general school communities were becoming better understood, historically, such opportunities had been very limited. Younger people with hearing impairment have often been excluded from community recreation or participated in “special” or “segregated” programs, often with few activity options. This lack of involvement has often led to social isolation, physical inactivity, and depression for both seniors and younger people with hearing impairment.

## Conclusion

Inclusive early childhood education, play and recreational activities are potent strategies through which the school and the community can explore to facilitate the social adjustment of children with hearing impairment as part of the early intervention program for these children. Providing children with a wealth of contact with other children facilitates their understanding of diversity and acceptance of this diversity as a rich

of source of humanity. This in no little measure promotes their social adjustment by developing social skills.

## Recommendations

Based on the findings of this study, the researcher recommended that:

- i. Parents should enrol their children in early childhood education programmes as part of the early intervention package for the child so as help the child start make early interactions with other children in social contexts
- ii. Schools having children with hearing impairment should constantly design inclusive play programmes to help strengthen social interaction between children with hearing impairment and those without disabilities.
- iii. The school, community and family should work collaboratively and at frequent intervals to take these children for inclusive recreational activities where they interact together with both man-made and natural beauty of the environment. This increases their social contact, strengthens friendships and helps them develop positive perception of self, peers and the environment in which they live.

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