

# INTEGRATING LEARNERS WITH INTELLECTUAL CHALLENGES AND THEIR EFFECTS ON EDUCATIONAL PERFORMANCE IN PUBLIC PRIMARY SCHOOLS IN BORABU SUB-COUNTY, NYAMIRA COUNTY

Cherono Loyce Onsinyo<sup>1</sup>, Dr. Paul Kipkorir Mutai<sup>2</sup>, Dr. Naftali Rop<sup>2</sup>

<sup>1</sup> Cherono Loyce Onsinyo P.O Box 861Narok.

<sup>2</sup> Lecturers in the School of Education, Department of Special Needs, Maasai Mara University

DOI: <https://doi.org/10.5281/zenodo.7389975>

Published Date: 02-December-2022

---

**Abstract:** he goal of any education system is one of providing quality education for all learners, regardless of their educational level. All learners therefore, deserve nothing less than a quality education and training that would provide them with opportunities for lifelong learning, the world of work and meaningful participation in society as productive citizens. This study purposed to decipher the extent of integration for learners with intellectual challenges and their educational performance in public primary schools in Borabu Sub-county, Nyamira County in Kenya. The study examined the influence of physical environment on integration of learners with intellectual challenges. The study adapted a social constructivist theory and a conceptual framework with selected factors as independent variables and mainstreaming as the dependent variable. The study used descriptive survey research design. The target population was 54 public primary schools where 18 of them have special units and a total of 618 teachers in public primary schools. The study used purposive and stratified sampling techniques with a sample size of 30% giving 16 Head teachers, and 185 teachers from 16 schools. For data collection, the study used the questionnaire for the Head teachers, SNE teachers and the regular teachers and in-depth interview schedule for EARC officers. The study found that the physical environment played a critical role in mainstreaming of intellectually challenged learners and that the community, parents and the government had a joint share in availing the facility.

**Keywords:** Integrating, Intellectual Challenges, Educational Performance and Physical Environment.

---

## 1. INTRODUCTION

Integration is thought to help learners with intellectual challenges (IC) to live and learn in an ordinary classroom setup while allowing them to be independent. Integrated education has become more common in the recent times due to the belief that educating learners with ICs alongside their non-disabled peers facilitates access to the general curriculum for these learners. Australian disability clearing house on education and training (ADCET, 2018) reported that IC is a group of conditions caused by various genetic disorders and infections. IC is usually identified during childhood, and has an

ongoing impact on a learner's development and can be defined as a significantly reduced ability to understand new or complex information, learn new skills and to cope independently including social functioning. In addition, Project Ideal (2015) reported that IC, is not an inherent trait of any learner, but instead is characterized by a combination of deficits in both cognitive functioning and adaptive behavior. The severity of the IC is determined by the discrepancy between the learner's capabilities in learning and in and the expectations of the social environment.

Worldwide, there has been emphasis on the need to extend access to education to all. Education is understood as a tool that can be used to reduce poverty, to improve the lives of individuals and groups, and to transform societies (Grubb and Lazerson, 2004 cited in Mukambi 2017). Providing integrated education to all is necessary because it is linked to human, economic, and social development goals. Failure of any education system to provide an education for all learners not only leads to an educational underclass, but also a social and economic underclass which has serious consequences for society now and in the future. Development of policies that support integration at all levels of education is essential as a way of promoting learning and participation of all learners in education.

In Borabu Sub-County teachers generally have optimistic tendency regarding the benefits of integration, some personal challenges such as lack of knowledge and experience, administrative challenges that includes poor access to reports and information about the learner's challenges, lack of materials and professional support, structural challenges that is physical spaces with precarious accessibility; and others related to the learners – type and severity of the disability, high absenteeism in class and lack of motivation to participate in activities; are reported as factors that may hinder or even make the process of integration unfeasible (Hutzler & Barak, 2017). However, it is also recognized that changes in the organization of initial and continuing education, as well as a better school administrative structure, can be factors that may contribute to the development of teachers' more positive attitudes, thus favouring the creation of a truly integrated environment (Salerno & Araujo, 2016). Therefore, and in view of the relevance of the theme, the objective of this research was to analyse the attitudes of physical education teachers in relation to the integration of learners with IC in regular education, as well as the influence of gender, amount of professional experience and type of learner's challenges.

Other studies find that motor type of IC, especially cerebral palsy with greater severity, is pointed out by teachers as the most complex for integration in activities during classes (Hutzer & Barak, 2017). The reason for such differences may lie in the severity of the condition, since the teachers participating in our study had learners with IC with lower degrees of the challenge. In addition, the lack of specific classroom materials as well as inadequate architectural accessibility may lead to a greater tendency towards pessimism in the integration of learners with IC. For the participants of the study, the greater severity of the intellectual disability presented by the learners, which generated deep challenges of understanding and participation in the activities, may have been responsible for the results observed. The type and severity of learners with IC may interfere with teachers' preparedness towards integration. In general, learners with more severe conditions and involving behavioural challenges arouse more negative attitudes of rejection by teachers. Besides, the integration of learners in the initial grades generally arouses less rejection by teachers than in the more advanced grades (Tant & Watelain, 2016).

## 2. LITERATURE REVIEW

### 2.1 Physical Environment and Integration

The physical environment of a school will include but not limited to such amenities as the school buildings, the playground, the flowers and classroom settings. Since the school receives various visitors including the pupils it behaves the management and the administration to take cognizant of these stakeholders so that easy access to these structures is enhanced. The mentally challenged pupils together with those other pupils who would easily be classified as challenged need to have the school compound set in a way that movement is easy. Alshemari (2016) conducted a study to investigate special education pre-service teachers' preparedness for integrated education in Kuwait. An explanatory mixed method research design was the most appropriate research methodology for the study. Four of the interviewees had concerns about the application of IC in Kuwait due to the lack of the foundations for the integration of learners with IC, such as the proper environment (building and classroom), the availability of resources, and qualified teachers in special education.

One female teacher who was against integration of learners with ICs said, "As I said, no. But I would agree with the conditions of the availability of the proper environment and the factors for a successful integration". One interviewee indicated the importance of the time in case we want to apply the IC in Kuwait. She was for the idea of the integration,

however, she insisted on considering the time as a critical factor in order to achieve successful in this experience. Like in Kuwait, Kenya would be coming to terms now on inclusion since there is much information regarding human beings being equal. The challenges that others have should not be reason to exclude them from the others in society, communities and family as well as schools.

It is incumbent for the teachers to advice the BOM during the construction of classrooms and other structures which are used constantly by the children to be void of stress and cruelty or harassment. Sonti & Makobane (2011) irradiate that the treatment of learners with IC is essentially one of cruelty and misunderstanding: although, they have always been present in society. This has become more pronounced in the 21<sup>st</sup> century. First, the teachers who expressed their concerns about teaching learners with ICs justified their anxiety by the number of courses completed on ICs. What is surprising is that the regression analysis showed that the higher the number of courses completed, the lower the confidence level of these teachers. During the interviews, the teachers insisted that their special education program was inadequate and mostly limited to theoretical coursework which was not preparing them for the practical application of IC. Second, the other teachers who were more positive about teaching learners with ICs communicated that their confidence was based on their previous experience with a learner with IC. They also clarified that they were mostly confident about teaching in integrated settings if they had an assistant teacher with them in the classroom. They indicated that there would be better results when the teachers' course would be expanded to include more units in special education rather than the obvious one small one. These teachers expressed concerns about the level of support as well as the amount of resources they would receive in IC (Alshemari, 2016).

### 3. RESEARCH DESIGN AND METHODOLOGY

#### 3.1 Research Design

Research design refers to the overall strategy that a researcher chooses to integrate the different components of the study in a coherent and logical way, thereby, ensuring it effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data. The research problem determines the type of design a researcher should use, not the other way around Trochim, (2005 cited in Simion, 2016). The study used descriptive survey design. The study was a social research which sought to assess integration of learners with ICs and their educational performance. The survey was factual and its collection presented relatively few problems because questionnaires and interviews upon a phenomenon were used. In this study a combination of quantitative and qualitative methods was employed.

The study was conducted in two phases. During phase one, teachers completed a structured questionnaire. During phase two, individual interviews were conducted with EARC 1 and CSO 1. During the interview, the open-ended questions served as an interview schedule. The qualitative phase of the study was deemed important to gain a more in-depth understanding of learners with IC and their effects on educational performance within integrated classroom. The interviews were structured with the completed questionnaire forming the basis of the discussion.

#### 3.2 Sampling Procedures and Sample Size

Simion (2016) reported that purposive sampling is used to select specific respondents who were needed because of their occupation. With random sampling, the researcher used a sampling frame which was the subset of the population to select respondents. The sampling frame was a list from of the target population from which the sample was drawn. Specifically, critical case sampling was useful in exploratory qualitative research; research with limited resources, as well as with a single case can be decisive in explaining risk management in University libraries. It is this decisive aspect of critical case sampling that is arguably the most important (Patton, 2012). The Sub-County had a total of 54 public primary schools and 18 integrated programs of units with total number of 618 teachers, and 16000 learners. To select sample for the study 30% was used. This means 16 schools, 16 Head teachers, 6 mainstream units, EARC 1, CSO 1 and 180 teachers giving a total of 220 respondents.

### 4. RESEARCH FINDINGS

The first research question responded to was: What are the physical environment factors on integration of learners with intellectual challenges in Borabu Sub-County, Nyamira County? There were sixteen variables used to weigh the application of the physical environment for the schools in their preparations for accommodating the learners with IC in

their schools. The respondents' data was however analysed in each of the categories, namely; the head teachers, the regular teachers and the special needs and finally the responses of the ministry of education following every objective as follows. The responses were scored in a 3-point scale: DA =1, Sometimes =2 and Agree = 3 and the mean and standard deviation were calculated as indicated in the tables.

#### 4.1 Head Teachers' Responses on Physical Environment

Head teachers responded on a sixteen variable matrix and their responses were presented in Table 1 and 2 as follows:

**Table 1: H/Ts' Responses on Physical Facilities**

Statement	A	S/times	DA	Total	Mean	S.D
IC regarded	10	5	1	16	2.56	.727
Percentage (%)	62.5	31.3	6.3	100.1		
IC are hidden at homes	2	11	3	16	1.94	.680
Percentage (%)	12.5	68.75	18.75	100		
Provisions for IC learners	4	8	4	16	2.00	.816
Percentage (%)	25	50	25	100		
No amenities suitable for IC	6	8	2	16	2.25	.816
Percentage (%)	37.5	50	12.5	100		
Understand government policies	5	8	3	16	2.13	.957
Percentage (%)	31.3	50	18.8	100		
School receives funds for p/facility	3	5	8	16	1.69	.873
Percentage (%)	18.8	31.3	50	100		
Teachers/Parents IC funds	3	10	3	16	2.00	.730
Percentage (%)	18.8	62.5	18.7	100		
No challenges in mainstreaming	10	5	1	16	2.56	.727
Percentage (%)	62.5	31.3	6.2	100		
<b>Average</b>					<b>2.14</b>	<b>.791</b>

Table 1 shows responses of Head teachers regarding their views on impediments and actions that would be taken to speed integration of learners with IC in learning institutions. A mean of 2.56 (sd .727) indicate strongly that disabled pupils are not regarded with any esteem. This contrast with 1.94 (sd .860) that the intellectually challenged are not hidden at homes. It though raises the question as to where they are then. At 2.25 (sd .816) it is indicative that there are absolutely no provisions made for the learners with IC at most schools. Equally, in the same vein the head teachers stated that there are not amenities for the disabled children (2.25, with standard error .564). The researcher was surprised to know that 2.13 (sd .957) of the head teachers understand very well government policy on special needs education hence that the children who fall into this category ought to be enrolled and schools receive government funding for special needs children education (mean 1.69) and yet the teachers and parents do not take part in the utility of the funds meant for the disabled (2.00 with sd .730). This trend deepens with further exploration of this challenge.

Hettiarachchi & Das (2014) show that the attitudes and beliefs that teachers, administrators and other school personnel hold towards integration and the learning ability of learners with IC influences the set-up of school learning environments and the availability of equitable educational opportunities for all learners. This touches on the attitude created in both the teachers and other learners in school. Some indirect support for a relationship between teachers' attitudes towards inclusive practices and the types of learning environments that they provide for children and young people is provided by teacher self-report in qualitative studies of highly-inclusive schools. The study further found as shown in table that there is further misunderstanding or mishandling of this pertaining to the intellectually challenged child regarding their being integrated in the regular school programs as shown on Table 2.

**Table 2: Further H/Ts' Responses on Physical Facilities**

Statement	D	S/T	A	N	$\bar{X}$	S.D
Not enough trained teachers for IC	9	6	1	16	1.50	.632
Percentage (%)	56.3	37.5	6.2	100		
Not enough trained teachers for IC	12	2	2	16	1.38	.719
Percentage (%)	75.0	12.5	12.5	100		
Disabled sent for other errands	12	1	3	16	1.44	.629
Percentage (%)	75.0	6.2	18.8	100		
Enrolled come from distance places	3	4	9	16	2.38	.814
Percentage (%)	18.7	25.0	56.3	100		
Waste of time teaching IC	13	1	2	16	1.31	.806
Percentage (%)	81.3	6.2	12.5	100		
Learners made to repeat class to raise scores	3	10	3	16	2.00	.730
Percentage (%)	18.8	62.5	18.8	100		
<b>Average</b>					<b>1.67</b>	<b>.722</b>

Table 2 further analyses the responses of the head teachers on the next eight variables. An over average with a mean of 1.50 (sd .632) agreed strongly that there were no challenges for integration of learners with IC. Also 1.38 (sd .719) indicate with a leaning of 1.731 positively that there are not enough trained teachers for handling special needs learners, IC being in the train. In some of the schools, the head teachers and probably other stakeholders find an easy vulnerable group to use for sending to accomplish other errands (mean 1.44) skewing greatly beyond the normal (1.183) in confirming that whatever is stated is true. One aspect that tends to show that there are many more pupils close to the school facility that are not enrolled in these schools since (mean 2.38) confirm that for those who are enrolled come from distant places for services in these schools. Many head teachers view that putting so much on the intellectually challenged (1.31, sd .806) as a waste of valuable time since these make the standards, hence the school mean grade fall. In this way time and energy is spend (2.00 sd .730) are made to repeat classes even against government guidelines of transition. The study revealed that (Mean 2.13, sd .806) of the parents and teachers are ashamed to be identified with children with disabilities, intellectually challenged included. The same head teachers agreed almost unanimously (mean 2.38, sd .619) and negatively that there are no physical facilities to accommodate the intellectually challenged, hence low enrolment. Some head teachers indicate having had a chance to train 2.31 (sd .873) in special needs education.

From the above investigations it was apparent that for most head teachers the disabled and especially the intellectually challenged are not regarded with any esteem as fit children to learn in the normal classroom. They state that the same may receive their education at home or elsewhere; no wonder that is why they see them hidden at homes and they do nothing about it. They do not pass this buck to their boards or the parent associations which would come with strategies to provide the essentials. The head teachers were not bothered so much on the making applications to the ministry to allow them to have special education units in their schools just as there were in those nine others.

The head teachers very well received funds from the ministry meant for the challenged learners but admit that "that is used for other important school activities." They cannot enrol the intellectually in their schools because they lower set standards in terms of mean scores. This underscores the effect of not following government policy included in Vision 2030 that these children should also have an education "leaving no-child behind." It also confirms Taylor (2000) findings that "it is hard for them to be readily integrated or mainstreamed." Thus the reputation of their schools and the "appraisals" would find them in the wrong path of competing with other schools. When they were enrolled too, they were made to repeat in most of the classes thus leaving them to fate for their long stay in these schools. It was surprising that these head teachers understand very well government policies on "education for all children" but for fear of low performance they do not accept to enrol these challenged children.

The head teachers were categorical that putting up physical facilities and other amenities were not possible as the funds that the government send was not allocated for that but for tuition. Florian (2012) supports this aspect that these children with intellectual challenges are to gain access to schooling and get appropriate learning opportunities. This, the researcher may infer that the presence and enrolment of the learners with IC is wide-spread in Borabu Sub-County. Though wide

spread, the conditions for their learning are jeopardized by lack of the needed physical facilities which as the study found out were not availed and when availed they would be inadequate. Those who were charged with the responsibility of availing such facilities had taken their responsibilities with much laxity.

#### 4.2 Regular Teachers' Responses on Physical Facilities on Integration

The regular responded to sixteen variables on the influence of physical facilities regarding mainstreaming and their responses are presented in Tables 3 and 4 as follows.

**Table 3: Regular Teachers Responses on Physical Facilities**

Statement	A	S/times	DA	Total	Mean	S.D
IC regarded	90	22	68	180	2.12	.890
Percentage (%)	50	12.2	37.8	100		
IC are hidden at homes	110	20	50	180	2.33	.945
Percentage (%)	61.1	11.1	27.8	100		
Provisions for IC learners	60	40	80	180	1.89	.859
Percentage (%)	33.3	22.2	44.5	100		
No amenities suitable for IC	97	48	35	180	2.34	.917
Percentage (%)	53.9	26.7	19.4	100		
Understand government policies	120	38	22	180	2.54	.758
Percentage (%)	66.7	21.1	12.2	100		
School receives funds for p/facility	51	23	106	180	1.69	.623
Percentage (%)	28.3	12.8	58.9	100		
Teachers/Parents IC funds	47	29	104	180	1.68	.784
Percentage (%)	26.1	16.1	57.8	100		
No challenges in integration	25	25	130	180	1.42	.674
Percentage (%)	13.9	13.9	72.2	100		
<b>Average</b>					<b>2.00</b>	<b>0.86</b>

Table 3 illustrates the responses of the regular teachers regarding their views on how the physical facilities in their schools, would hamper integration of learners with IC. The view of the regular teachers was that the disabled children were not quite regarded in their schools (mean=2.12 sd=.890). There is evidence that the learners with IC are hidden in most homes (mean = 2.33, sd= .945) and are not given opportunity for interaction and exposure. In most schools there were absolutely not provisions for the intellectually challenged (mean=1.89, sd=.859). Equally there are no other amenities provided for the intellectually challenged. This included but not limited to toilets and playground. Amazingly (mean=2.54 sd=.758) understand government policies regarding integration. Another positive aspect is that the regular teachers stated (mean=1.69, sd=.623) that they witness funds meant for the learners with IC are received in their schools and that the parents and teachers have a say on its utility. A large part of the teachers (mean=1.42, sd=.674) agree that they personally do not have any challenge for carrying out integration in their schools and classrooms.

Gelder, & Flower (2014) stress that mainstreaming is less costly as the costs are kept to the minimum by drawing upon local resources, people and facilities thus making it cost-effective and in the long run there will be reduction of social welfare costs and future dependence. This study tried to establish this as a restricting factor in teachers rejecting mainstreaming and recommended ways of limiting it so that the teachers who are the main actors in the implementation of this policy was be informed through empirical data to take up their roles. Olufemi, & Olufemi (2015) states that the fear of most teachers to hold mainstreaming of learners with IC is that including them in a regular classroom can be disruptive and make learning more difficult for the majority. These same teachers would forget the fact that learners without IC can benefit from interacting with learners who struggle in some ways. By using both the regular classroom and individualized time in special education classes, learners are exposed to mainstreaming but get the attention they need for IC (Gal, Schreur & Engel-Yeger, 2010).

**Table 4: Further Regular Teachers Responses**

Statement	D	S/T	A	N	$\bar{X}$	S.D
Not enough trained teachers for IC	50	78	52	180	2.01	.916
Percentage (%)	27.8	43.3	28.9	100		
IC sent for other errands	75	81	24	180	1.72	.843
Percentage (%)	41.7	45.0	13.3	100		
Waste of time teaching IC	72	88	20	180	1.71	.871
Percentage (%)	40	48.9	11.1	100		
IC made to repeat class to raise scores	131	40	9	180	1.32	.513
Percentage (%)	72.8	22.2	5.0	100		
Parents and Teachers ashamed of identity IC	67	85	28	180	1.83	.759
Percentage (%)	37.2	47.2	15.6	100		
I am a trained IC teacher	51	73	56	180	2.03	.780
Percentage (%)	28.4	40.6	31	100	<b>1.77</b>	<b>.780</b>
<b>Average</b>						

Table 4 is further analysis of the regular teachers regarding mainstreaming. In a mean (2.01, sd .916) the regular teachers state categorically that there are not enough trained special needs teachers. Of (1.72 sd .843) it was revealed that the disabled and especially the intellectually challenged other than being kept in class are the easier prey to be sent to other errands than academic. However, (mean 1.73 sd .871) indicated that most enrolments in these schools were received from distant places. This poses another issue that the transportation of these children would be a challenge. At a mean 1.32 (sd .513) teachers' attitude affect mainstreaming as they state that putting these children in class is simply a waste of time since improvement is slow or not there at all. The teachers resort to making the learners to repeat classes (mean 1.73, sd .759). this gives reason for hampering mainstreaming (mean 2.20, sd .780) with a negative leaning of (-.366) that both parents and teachers contribute in causing a challenge to mainstreaming in that both are ashamed to be identified with the disabled. Because of these and others to be stated both the administrators and regular teachers do not plan for putting up any physical facilities in their schools (mean 2.18, sd .840) hence lack of interest and concern for the intellectually challenged (-.347). Most of the regular teachers upon whom the questionnaire was administered (mean 2.03, sd .916) stated that they were not trained in special needs education (-.326).

From the analysis it was revealed that the intellectually challenged pupils were not regarded by the regular teachers and some of the reasons were that cultural beliefs that pictured these children as contributing much misery in the world. That contributed to the parents hiding the challenged in their homes and not wishing to be identified with them. This denied the intellectually challenged children an opportunity to freely mix with other children of their age so that they can learn such virtues as compassion, tolerance and other fundamental freedoms agreeing with Rubin (2003). The teachers stated that they were not ready to plan for putting up certain provisions for the intellectually challenged.

The amenities in schools like the washroom and even the playground did not provide for the challenged. Classrooms did not have such easy access as should to contain the challenged. There was understanding of government policies regarding "all children" but it was believed that that meant these children enrolling in those separate school or in the units for those who had them (GoK, 2010). The regular teachers were aware that funds for disabled was sent to schools, agreeing with their head teachers that this is an annual programme but the same would be used for other school learning activities. Indeed, the government disburses enough funds for that purpose (GoK, 2010) but the decisions that heads of institutions take not to provide the funds for the intended purpose defeats the reason for sending the same. The protection of human rights is not the safeguarded by the institutions.

When the Boards of management or the parents' association were not involved in the utility of these funds, probably for not being informed that such funds are sent alongside the free primary education funds it becomes hard for any facility to be put in place. The researcher inquired as to why the Boards and Parents' Associations were not involved. It was reported by the Head teachers that the members did not know their roles. The teachers indeed confirmed that they had no problem with these children that were challenges being enrolled or rather included in the classrooms. They would use them for other hard errands which would be considered as a waste of time for the "normal learners" as the latter were encouraged to take their classes for better and high performance.

Further Martinez (2015) agreed that mainstreaming of learners with IC motivated them for they learn easily from their peers. This was not the situation in Borabu regular teachers who feared teacher appraisals which were attached to their high level performance of learners measured through examination results. This set precedence for not wishing or encouraging the intellectually challenged pupils in these schools.

#### 4.3 Special Needs Education Teachers' Responses on Physical Facilities

The special needs education trained teachers who handle the units were also asked to respond to the questionnaire as whether physical facilities contribute to the state of not effecting government policies regarding mainstreaming. Their responses are also elaborated in Tables 5 and 6 in the sixteen variables presented as follows:

**Table 5: SNE Teachers Responses on Physical Facilities**

Statement	A	S/times	DA	Total	Mean	S.D
IC regarded	5	1	0	6	2.83	.408
Percentage (%)	83.3	16.7	0.0	100		
IC are hidden at homes	1	4	1	6	2.00	.894
Percentage (%)	16.7	66.7	16.7	100		
Provisions for learners' IC	2	3	1	6	2.67	.516
Percentage (%)	33.3	50	16.7	100		
No amenities suitable for IC	1	5	0	6	2.17	.753
Percentage (%)	16.7	83.3	0.0	100		
Understand government policies	2	3	1	6	2.17	.983
Percentage (%)	33.3	50	16.7	100		
School receives funds for p/facility	1	1	4	6	1.50	.837
Percentage (%)	16.7	16.7	66.7	100		
Teachers/Parents IC funds	0	2	4	6	1.33	.516
Percentage (%)	0.0	33.3	66.7	100		
No challenges in mainstreaming	0	2	4	6	1.33	.816
Percentage (%)	0.0	33.3	66.7	100	<b>2.00</b>	<b>.715</b>
<b>Average</b>						

Table 5 features the responses of the teachers trained in special needs education in the schools of the study. A large number of the respondents (mean 2.83 sd .408) describes the regard of disabled pupils as quite low. It is negatively viewed (-2.449), actually the intellectually challenged children are hidden at their home (mean 2.00 and sd .894). This is proved by their claims during an in-depth interview that they find so many of these children in homes when they do their home school visitations. The SNE teachers also state that even in their respective units meant to address issues regarding the challenged there are not enough provisions made that are suitable (mean 2.67 sd .516). It is indeed disturbing that with the long time that these units have been in existence (mean 2.17 and sd .753) indicate that no suitable amenities have been put in place. This creates a situation that the intellectually challenged are intimidated by the situation that even if they were admitted into these schools they will still be regarded as intruders. The findings by Alshemari (2016) was that half of the participants in the interview held beliefs that were sympathy/empathy-oriented toward students with ICs in general, the findings from the survey indicated that almost half of the teachers (45%) held negative attitude toward students with ICs on statements regarding environment-related factors (i.e., the society awareness such as diversity acceptance and the priority of the society). However, the survey findings also specified that teachers' previous experience with a learner with IC had a positive impact on their attitudes toward learners with ICs regarding society awareness. About half of the teachers held higher levels of confidence on statements regarding environment-related factors such as efficacy for collaboration in mainstream setting, time management, curriculum adjustment, class management, and the availability of resources.

There is clear evidence that the SNE teachers understand and try to implement government policies because (mean 1.50, sd .837) know and witness the funds that government send for physical facilities for the disabled. They are positive that both teachers and parents take part in the utility of the funds (mean 1.33, sd .516). Asked whether they would have their pupils who are intellectually challenged mainstreamed, they find no challenge at all in inclusion (mean 1.33, sd .816). Further responses follow in Table 6.



**Table 6: Further SNE Teachers Responses**

Statement	D	S/T	A	N	$\bar{X}$	S.D
Not Enough trained teachers for IC	2	3	1	6	1.83	.816
Percentage (%)	33.3	50	16.7	100		
IC sent for other errands	2	2	1	6	1.50	.837
Percentage (%)	33.3	33.3	16.7	100		
Waste of time teaching IC	3	3	0	6	1.00	.020
Percentage (%)	50	50	0.0	100		
IC made to repeat class to raise scores	2	4	0	6	1.67	.816
Percentage (%)	33.3	66.7	0.0	100		
Parents and Teachers ashamed of identity IC	3	1	2	6	1.83	.408
Percentage (%)	50	16.7	33.3	100		
I am a trained IC teacher	2	3	1	6	1.83	.753
Percentage (%)	33.3	50	16.7	100		
<b>Average</b>					<b>1.61</b>	<b>.608</b>

Table 6 shows the analysis of further responses of the SNE trained teachers that (Mean 1.65 sd .816) hold that there are not enough SNE trained teachers in Borabu Sub-County given that there are many of these pupils in the homes and even those admitted into the existing schools. There is a worrying trend that (Mean 1.50, sd .837) hold that intellectually challenged children are sent used for other errands while other and “normal” children take their lessons. Most teachers (mean 1.67, sd .816) would state that it was a waste of time to teach the disabilities. The SNE teachers do not support the idea that the intellectually challenged pupils come only from near schools, they too come from a far off distances. The inference is that they will not improve in any way to support the needed high mean grade. In this way (Mean 1.83 sd .408) this cadre is made to repeat classes that does not add value for the objective is to have raised mean grades. It emerged clearly that (mean 1.83 sd .753) both teachers and parents are ashamed to be identified with the disabled since the same do not add value to their aspirations. And finally, although these teachers were trained (mean 2.33 sd .816) Schools still lack the needed physical facilities (mean 2.33 sd 1.033) to enhance mainstreaming.

The rejoinders of the special needs teachers indicate that a few of them still do not regard the intellectually challenged pupils even when they were handling the same children, but the majority of them did regard them genuinely. Although parents hid these children in their homes without revealing them in public the teachers indicate that these children are registered or enrolled in schools and would be visited at planned schedules from the teachers from the Units. Reports in respective school units show that there were such visits. The teachers stated that their respective head teachers planned with the teachers and even in these plans. It was stated that although these Special Units were not still not having enough provisions and amenities suitable for the intellectually challenged but as the teachers had placed to enhance their teaching and learning experiences. All teachers claimed that they understood the government policies. They agreed that they were aware of special needs funds sent to their schools annually but the disbursement to the Units was not in accordance with the provisions of the ministry.

Only those special needs units ever had any facility that accords comfort to some extent to the intellectually challenged learners. Teachers meant then to handle the units were in some schools asked to teach in the regular classes which actually do not have the intellectually challenged but to “fill in” the understaffing situation in those schools. However, in this way they become useful for they had the capacity to handle some learners who would be challenged intellectually. Teachers were not exposed to special needs education except for the one unit they received during their training in the teachers’ colleges; of which some were trained quite long ago. Government policy on the disadvantaged or disabled children is that separate schools should be there to cater for those with severe conditions which would need specialist attention but not separate special schools such as can be accommodated in the regular setting. It was quite rare for school staff meetings to discuss on the intellectually challenged so that they would put in place some strategies to help the teachers to offer learning to these children.

#### **4.4 EARC and Ministry of Education Responses on Physical Facilities**

The researcher in an in-depth interview with the Special needs officer in the Sub-County Director of Education’s office in Borabu obtained the following information on the status of the physical facilities in Borabu Sub-County schools. This was tape-recorded and the same verbatim data shall be reported and at times quoted verbatim. The same information would be presented as follows:

To the question: Do you encourage mainstreaming of intellectually challenged children in the regular schools in the Sub-County? The responses were in the affirmative. The government encourages all types of disabilities to be integrated so that they learn with the other children. What are you doing in the process of encouraging mainstreaming? The EARC Officer had the following to say: that although there would be such a policy most schools were not prepared in terms of putting up facilities for the disabilities. But for the intellectually challenged there are provisions of physical facilities.

*For instance, the physical facilities needed for the intellectually challenged are fewer compared to the demands of other disabilities. We cannot have separate classrooms for the intellectually challenged, except for those with severe levels. But, those facilities that they need are already in schools. These children require the regular desks for example, the regular classrooms and even for the play-ground is just the regular one. It is true they need a barrier-free environment such that it does not bring about unnecessary challenges in their movement but whatever was in schools would be sufficient.*

The EARC did not see that the present conditions in schools plays a role in head teachers not enrolling intellectually challenged children in their respective schools. On inquiring whether the officer deemed physical facilities as a challenge to mainstreaming, the answer was a calm no, but opined that the challenge was that the communities were not made aware of their involvement in the putting up of the said facility and hence enrolling their intellectually challenged children in schools. The challenge he attributed to head teachers and their Boards of Management not bringing the agenda up and sharing with the school parents. This agreed with Mpofu (2009) who states that enrolment was a concerted effort of the parents who have the children and the committees which govern these schools. The officer was positive that when the stakeholders together with the school administrators would come up with such requests they definitely would receive support from the office and even the ministry for the same. The EARC officer retorted that the government has limited funds for the infrastructure for special needs children but embraces the spirit of cost-sharing; this the office passes to the communities where such a need was observed. He acknowledged that physical facilities did play a crucial part in impeding the learning of the intellectually challenged as well as other special needs children.

## 5. CONCLUSION AND RECOMMENDATION

The study analyzed the effect of physical environment on mainstreaming of learners with intellectual challenges in Borabu Sub-county, Nyamira County. From the study the conclusions were that Head teachers were instrumental in availing the necessary physical facilities which include the suitable classrooms, play field, teaching-learning materials, toilets and others to attract all children and enable their learning. The four cadres of respondents stated that physical facilities or environment played a crucial role in mainstreaming of children with intellectual challenge. Parents and other stakeholder would be involved with proper information passed to them, in the availing the physical facilities. It was the responsibility of the head teachers to provide leadership so that the needed physical environment was created and sustained for the inclusion of the intellectually challenged learners was made to work. Those other facilities which the government supplies through the free primary program ought to be availed. The intellectually challenged should be enrolled and service to the rendered without any visible hitch.

School plant especially the infrastructure, playground and other resources which will enhance education for all cadres of learners including the learners with IC should be put in place as learners enrolling in various public institutions come in a variety of ways.

## REFERENCES

- [1] ADCET, (2018). Australian disability clearing house on education and training. <https://www.adcet.edu.au>.
- [2] Alshemari, H. (2016). Inclusive Education and Students with Intellectual Disabilities (IDs) in the State of Kuwait: Are We Ready? Accessed 12/7.2018, [https://www.research.libraries.wsu.edu:8443/xmlui/bitstream/handle/2376/12090/Alshemari\\_wsu\\_0251E\\_11596.pdf](https://www.research.libraries.wsu.edu:8443/xmlui/bitstream/handle/2376/12090/Alshemari_wsu_0251E_11596.pdf)
- [3] Avissar, G., Licht, H., & Vogel, L. (2016). Evaluation of the Reading Habits of Indian Students (Reading Aloud and Reading Silently) From Low, Middle and High Class Schools, Vol. 15, No.2. Accessed: 12/5/2018. *Educational Research and Reviews*.

- [4] Chu, D., & Griffey, D. (2015). The contact theory of racial integration: The case of sport. *Sociology of Sport Journal*. 2 (4): 323–333
- [5] Chumo, C. (2015). Kenya: Schools Reject Children with Disabilities. *Institute for War and Peace Reporting*. Accessed: 25 January 2016 at <https://www.iwpr.net/global-voices/kenya.com>
- [6] Cipkin, G., & Rizza, F. T. (2015). Teacher Attitude Towards Inclusion Practices and Special Needs Students. *Journal of Research in Special Educational Needs* 9(3): 188, November 2010.
- [7] Cooper, D. R. & Schindeler, P. S. (2014). Research Methods. *Journal of Business and Economics*,3(9):123-124
- [8] Donohue, C. & Bornman, G. (2015). Technology can Benefit Young Children When Used Appropriately. Accessed 12/7/2018 <https://www.erikson.edu/news/technology-can-benefit-young-children-when-used-appropriately.pdf>
- [9] Florian L. (2012). “Preparing teachers to work in inclusive classrooms. Key Lessons for the professional development of teacher educators from Scotland’s inclusive practice project.” *Journal of Teacher Education*, 63(4), 275-285
- [10] Foust, K. (2012). Examining the dos and cons of Mainstreaming. Updated 10/15/2015. Accessed 2/8/2018 at [www.brighthubeducation.com<mainstreaming>inclusion](http://www.brighthubeducation.com/mainstreaming/inclusion)
- [11] Gal, E., Schreur, N. & Engel-Yeger, B. (2010). Inclusion of Children with Disabilities: Teachers’ Attitudes and Requirements for Environmental Accommodation. *International Journal of Special Education*, 25(2) January, 2010.
- [12] Garmon, M. A. (2005). The Teacher as “More Knowledgeable Other” in Assisting Literacy Learning with Special Needs. *Reading and Writing Quarterly*. 16(4):299-336. October 2005
- [13] Gelderd, P. K. & Flower, H. (2014). Accessing Education in an Integrated Approach. *Journal of Educational and Social Psychology*. 33(3), pp. 34 – 45.
- [14] Greguol M., Malagodi, B. & Carraro A. (2018). Inclusion of students with disabilities in physical education classes: teachers' attitudes in regular schools. *Print version ISSN 1413-6538 On-line version ISSN 1980-5470* vol. 24, No.1 Bauru Jan./Mar. 2018.<http://dx.doi.org/10.1590/s1413538241810004>
- [15] Griffin & Shevlin (2011). Responding to special educational needs. Dublin: Gill and Macmillan.
- [16] Grubb, W. N., & Lazerson, M. (2004). *The Education Gospel: The Economic Power of Schooling*, Cambridge, MA: Harvard University Press.
- [17] Hettiarachchi, S. & Das, A. K (2014). Perceptions of Teachers on Children with Mental Challenges in the State of Kerela, India. *Journal of Teaching and Teacher Education*. Vol. 43, pp. 143 – 153.
- [18] Hodge, S. K. & Jansma, P. (2017). Physical education majors’ attitude towards teaching students with disabilities.” *Teacher Education and Special Education*, 23(3), 211 – 224.
- [19] Honebein, P. (1996) Seven goals for the design of constructivist learning environments. In B. Wilson (Ed.), *Constructivist learning environments* (pp.17-24). Englewood Cliffs, NJ: Educational Technology Publications.
- [20] Hutzler, Y.; Barak, S., (2017). Self-efficacy of physical education teachers in including students with cerebral palsy in their classes. *Research in Developmental Disabilities*, v. 68, p. 52-65, 2017.
- [21] Kochung,E (2003). Report of the Taskforce on Special Needs Education Appraisal Exercise. Nairobi, Kenya, Ministry of Education, Science and Technology
- [22] Mphongoshe S. J., Mabunda N. O., Klu E. K., & Matshidze P. E., (2015). Stakeholders’ perception and experience of inclusive education: a case of a further education and training college in south africa. <https://www.researchgate.net/publication/321207667>.
- [23] Mugambi M., (2017). Approaches to inclusive education and implications for curriculum theory and practice. *International Journal of Humanities Social Sciences and Education*. 4(10), PP 92-106. ISSN 2349-0373 (Print) & ISSN 2349-0381 (Online). <http://dx.doi.org/10.20431/2349-0381.0410013>. [www.arcjournals.org](http://www.arcjournals.org)