

The Role of Teachers' Perceptions in the Implementation of Inclusive Education in Uasin Gishu County, Kenya

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Abstract

Trends in the educational provision for children with disabilities have, since the past two and a half decades, continued to focus on their education in the same setting as that for their peers without special needs. Despite the many benefits of inclusion, difficulties inherent in this process are major setbacks to wider implementation of inclusive education. Many teachers of regular schools and other stakeholders doubt the workability of the strategy and resist the idea of having children with special needs in regular classrooms. This paper is premised on the findings of a study that sought to establish the influence of teachers' perceptions on the implementation of Inclusive Education (IE) in Early Childhood Development Education (ECDE) curriculum among rural public primary schools in Uasin Gishu County, Kenya. Adopting a mixed design approach, the study sampled 221 teachers. Stratified and proportionate sampling was used to select schools (ECDE centres) and teachers while data was collected using questionnaires, interview schedules and observation guides. Data collected was analysed both quantitatively and qualitatively. Pearson Chi-square and Regression, and correlation analysis were used to establish the existence and strength of association between the study variables. The level of significance was set at 95% or at a p-value of 0.05. Open-ended questions were analysed through reporting themes and quotas as they emerged. The analysed data was presented in frequency tables, graphs and charts denoting the findings of the study. The study findings indicated that there was no significant association between teacher's perception ($\chi^2=0.834$; $df=4$; $p=0.934$) and the implementation of IE. The paper demonstrates that the attitude of the teachers has so far grown into a pure positive one and as such, attitude is no longer an issue. The teachers have graduated to accepting and embracing Inclusive Education in their respective settings. Consequently, the authors call for the mobilization of teaching and learning resources, assistive technologies and all other relevant aids towards the success of SNL.

Key Words: Teachers' Perceptions, Inclusive Education, Uasin Gishu County, Special Needs Learning, Early Childhood Development.

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I. Introduction

As evidenced in research, teacher quality is an essential factor in student learning (Blanton et al., 2003). Inclusive educators are responsible for providing a learning environment for all students, even those who are struggling (Fallon & Brown, 2010). Besides, internationally, inclusive education is seen as a system which caters for the needs of a diverse range of learners and supports diversity, effectively eliminating all forms of discrimination (UNESCO, 2009). Education is a right for all children, and inclusive education aims to ensure that all children have access to an appropriate, relevant, affordable and effective education within their community. Most conceptual literature on inclusive education was Northern (European and North American) in origin, taking a 'whole-school' approach to institutional change (Davis & Peters, 2011), and influenced by the social model of disability. Children in special schools were seen as geographically and socially segregated from their peers, and the initial movement to integrate these students in mainstream schools ('integration') shifted to one where the whole school was encouraged to become more adaptable and inclusive in its day-to-day educational practices for all students ('inclusive education').

Inclusive education is a global movement that emerged as a response to the exclusion of students who were viewed as different (e.g., students with disabilities, students of colour, students from lower caste backgrounds, students from low socio-economic backgrounds) by educational systems; these constructions of difference are highly consequential for they have mediated over time student access and participation in education. As Thomas and O'Hanlon (2005, p. x) state, it "has become something of an international buzzword, almost obligatory in the discourse of all right-thinking people". The notion of inclusive education, however, is highly contested. Definitions of inclusive education vary across nations (Artiles, Kozleski, & Waitoller, 2011),

schools (Ainscow, Booth, & Dyson, 2006a), and the inclusive education literature (Artiles et al., 2006). Whereas in the international community, inclusive education is concerned with a broad equity agenda for all students, in the United States, inclusive education has been defined in terms of access to the general education classroom for students with disabilities (Artiles & Kozleski, 2007; McLaughlin & Jordan, 2005). Furthermore, with the advent of accountability reforms, the rhetoric of inclusive education has also focused on the academic outcomes of students with disabilities (McLaughlin & Jordan, 2005).

Stakes and Hornby (2010) suggest that teachers have to identify, possibly through individual assessment, children's learning style in order to meet their needs. By learning style, we refer to the application of an individual's cognitive style to a learning situation, the nature of the learning environment and the structure of a lesson. Cognitive style is concerned with an individual's characteristic and relatively consistent way of processing incoming information of all types from the environment. The argument is predicated on the premise that since each person is different, 'the way he learns will also differ' (Exley, 2003). This means that the teacher has to teach to satisfy the learning style of the different ranges of students in the class. This situation may be difficult as postulated by Gyimah (2006), who indicated considering the huge numbers of class sizes that some schools particularly in countries such as Ghana have to deal with.

In Kenya, the recommended teaching approach is child-centred and participatory, which is effective in facilitating learning based on individual needs of the child (KIE, 2008). The ECD handbook developed by Kenya Institute of Education (KIE) emphasizes on the development of Individualized Education Programs (IEP) for differentiated curriculum instructional plan. Special needs education started in Kenya after the end of the Second World War and has since been mainly offered to four categories of children with disabilities, namely; children with hearing impairments, mental handicaps, visual impairments and those with physical handicaps (GoK, 2007). Education to these children was only offered in special schools until the 1970s when units and integrated programs were initiated. However, Educational opportunities for children (learners) with special needs and disabilities are a major challenge to the education sector.

The national education system has been characterized by lack of systems and facilities that respond to the challenges faced by learners with special needs, particularly in schools in rural Kenya (Charema, 2007). The government is placing emphasis on inclusive education through regular schools for SNE learners as opposed to the practice of strictly using special schools and special units attached to regular schools. However, special schools and units are essential for learners with special needs in the areas of hearing, visual, mental and serious physical challenges. With the increase in demand for special needs education and in line with the international development, the government has adopted Inclusive Education (GoK, 2007). This approach will increase access to education for children with special needs. Inclusive education calls for restructuring of the education system in terms of physical facilities, curriculum, instruction and other aspects to children joining schools of their choice and convenience. It is important to note that the government will face serious challenges in providing education to all its citizens with special needs in education unless it implements inclusive education (Wilczenski, 2012). The government under the Free Primary Education (FPE) program is facilitating provision of additional capitation grants to facilitate implementation of inclusive education. The funds are provided to learners with special needs enrolled in both special education institutions and units attached to regular schools. So far, majority of learners with special needs and disabilities in Kenya do not access educational services. For instance, in 1999 there were only 22,000 learners with special needs and disabilities enrolled in special schools, units and integrated programs. This number rose to 26,885 in 2003 (Kiptoon, 2006). This compares poorly with proportion in general education.

Currently, there are over 1100 units and 100 public special schools in the country which include vocational and technical institutions that cater for learners with special needs and disabilities (GoK, 2007). In view of this, this situation calls for a re-appraisal of available approaches to expand Special Needs Education services so as to achieve an enrolment rate at par with that of other children. To attain this, Kenyan Government needs to address impeding factors to the realization of inclusive education and simultaneously develop and implement guidelines that mainstream special needs education at all levels of the education system. This study investigates factors influencing effective implementation of inclusive education in public ECD centers in Uasin Gishu County.

II. Literature Review: Putting Teachers' Perceptions and Inclusive Education in Perspective

As countries move to embrace inclusion, increased attention has been paid to the attitudes of those directly involved in facilitating authentic inclusive practices (Cross, Traub, Hutter-Pishgahi, & Shelton, 2004; Wong & Cumming, 2010). Given their significant role as an agent of change within the classroom, teachers' positive views toward inclusion can contribute to others forming affirmative positions toward inclusive education (Guralnick, 2005). Inclusive education is likely to be unsuccessful when teachers do not hold positive attitudes toward inclusion (Engelbrecht, Oswald, Swart, & Eloff, 2003). Moreover, teachers' attitudes have a significant impact on learning in an inclusive classroom. For instance, Murphy, Delli, and Edwards (2004)

found that children are more motivated to learn from teachers who are caring and show respect. When teachers adapt their teaching strategies to meet the needs of children with learning difficulties, those children will benefit from their adapted instruction (Vaughn, Gersten, & Chard, 2000).

Such findings cast the investigation of teacher attitudes as pertinent to the promotion of inclusive education. For instance, a study done by Yuen and Westwood (2002) found that many Hong Kong secondary school teachers found children with special needs an additional burden and felt that they should not be included in their already stressful working environment. This finding has been supported by other numerous teacher-related variables which have been shown to influence the implementation of inclusion in the classroom. In their review, Avramidis and Norwich (2002) found that younger teachers and those with fewer years teaching experience are more likely to be positive about inclusion. Parasuram (2006) found a similar result, suggesting younger, less experienced teachers are more likely to adapt their skills and resources to accommodate all types of students. In terms of environmental variables, financial and personnel support to regular classroom teachers were found to be the most consistent predictor of successful inclusion (Avramidis & Norwich, 2002).

A growing body of research suggests that positive teacher attitudes towards inclusion are the most important factor governing the success of inclusive education (Jordan & Stanovich, 2003, 2004; Moberg, Zumberg, & Reinmaa, 1997; Sharma, Forlin & Loreman, 2008). Beliefs and attitudes about inclusion are highly varied within the education community and, consequently, highly influential as to whether or not inclusion is successful in classrooms and schools (Wilkins & Nietfield, 2004). In fact, teachers' resistance to inclusion is one of the most challenging aspects of implementing an inclusive policy (Avramadis & Norwich, 2002; Brighton, 2003; Dyson, Farrell, Polat, Hutcheson, & Gallannaugh, 2004). In an article describing a project dubbed ACCEPT (Achieving Creative & Collaborative Educational Pre-service Teams), Toni, Munk, Bosma, and Rouse (2007) indicated that pre-service educators, also referred to as teacher candidates, benefit from instruction on specific collaborative behaviours and, perhaps more important, opportunities to collaborate with their special or general education counterparts during their education. With regard to the implementation of the project, special education teachers typically had a more positive outlook and attitude towards inclusion than general education teachers (Woolfson, Grant & Campbell, 2007). Not only is it likely that special education teachers are more positive towards inclusion because they have a more positive perspective about the abilities of children with special needs (Woolfson et. al., 2007), it is also likely that they have had more training and, therefore, increased confidence about teaching within an inclusive classroom (Buell, Hallam & Gamel-McCormich, 1999; Subban & Sharma, 2006). Special education teachers often see themselves as supporting the general classroom teacher in the implementation of inclusion (Bean, Hamilton & Zigmond, 1994); however, the daily learning experiences of all students in each classroom is ultimately dependent on the classroom teacher.

Inclusive education is a new phenomenon in education discourse and its uptake, while a bit higher in developed countries, inclusivity is slowly taking place in developing nations. Despite the generally negative attitude across board, the findings of a study done in the South East Europe depicted a significant effect of country, teachers' and teacher educators' perceptions of competencies being generally similar across the five Western Balkan countries. However, there were small differences (Nataša, Theo & Mainhard, 2011). Preliminary discussions with element education majors revealed their overall attitude of ambivalence about, and to some degree negativity toward, the notion of teaching in an inclusion class- room. It was therefore concluded that the approach to teacher preparation needed to address these concerns expressed by our systems now offer the model of teaching (Carnell & Tillery, 2005). Singal (2008) concluded that many teachers believe that children who need academic moderation would be unable to cope with the level of academic demand in the mainstream schooling system. She argued that such children should be taught in a separate system of segregated education. She also noted that inclusion programs are not fruitful for the average teacher or child. There is a negative correlation between student's academic ability and their level of disability such as dyslexia or autism (Slavin, 2011).

From the range of studies discussed here, most reported that teachers possess positive attitudes or views on inclusive education (Ali, Mustapha & Jelas, 2006). If teachers have positive views on inclusion, then they value all children, whatever their needs, and interact with them accordingly (Whyte, 2005). Ali, Mustapha and Jelas (2006) used a self-rated questionnaire with teachers in Malaysia to measure teacher attitude. Their findings were that overall teachers had positive attitudes towards inclusive education and agreed that inclusive education intensifies social interaction, while it decreases negative stereotypes of special educational needs children. The authors argued for cooperation between mainstream and special education teachers in order to implement inclusive education.

While teachers may think that the small class teaching can enhance the efficiency and effectiveness of students' learning, the students with special needs should be paid more attention to. Nonetheless, the utmost importance is that teachers can tackle the learning problem of the developmentally challenged students and handle the atmosphere of the class in appropriate manner. Teachers without training may lose control without knowing how to handle the situation. However, a teacher could take back control of his/her class by not being

the centre of all classroom routines. More interaction between students and the teacher are necessary for quality education. It is easier for teachers to know the students' progress and then adjust the teaching speed as teachers are often the pillars of learner's acquisition of quality education in any country. Chhabra, Srivastava, and Srivastava (2010) carried out their study in Botswana, whose research purpose was to identify the attitudes and concerns of teachers towards the inclusion of students with disabilities in the general classroom. Their findings indicate that teachers in Botswana have somewhat negative attitudes with some concerns about inclusive education. This is similar to studies in Hong Kong that focused on primary and secondary teachers (Forlin, 2010; Forlin, Loreman, & Sharma, 2014; Leung & Mak, 2010). However, there is an absence of empirical research in early childhood settings.

As substantiated by research, Rajovic and Jovanovic (2013) observe that the longer an individual has been involved with implementing inclusion, the more accepting he or she becomes. It may be that initial attitudes toward inclusion were neutral or negative, but over time, they become increasingly positive. Our finding of moderately positive attitudes to inclusion is noteworthy given that in Hong Kong, the government has only mandated inclusion since the 1990s. As mandatory directives from the authority may not always result in compliance or support (Yeung, Taylor, Hui, Lam-Chiang, & Low, 2012),

Why this Study?

In Kenya, and particularly in Uasin Gishu County, special needs learners cannot access education as advocated by inclusive education practitioners, to the extent that public primary schools are reluctant to enroll specially challenged children in the pretext that they doubt their preparedness from ECDE centers. This is attested by low enrollment and high rate of dropout of specially challenged children, as statistics at Uasin Gishu County education office reveal that only 29% in 2010, 30% in 2011, 26% in 2012 and 27% in 2013 of such children accessed ECDE. According to Khadija (2016), there was evidence of lack of support both from the school managers in supporting teachers who are teaching inclusive education. In addition, there is an insufficient knowledge and a lack of skills in supporting teachers teaching inclusive education as there has been no proper training for these teachers. Kabiari (2013) has indicated that teachers of specially challenged children are not adequately prepared for entry into primary schools. Studies have attempted to establish the factors contributing to this situation but have not focused on the basic and foundational factors that influence implementation of inclusive education and the magnitude of that influence. To this end, this study aimed at establishing school-based factors that influence the implementation of inclusive education in ECDE curriculum.

Theoretical Grounding

Our study adopted the Ecological Systems Theory of Bronfenbrenner's (1992). The theory is fully compatible with the concept of inclusion, where support is provided within the framework of an integrated, holistic educational support structure. Bronfenbrenner's theory spells out the complexity of the interaction and interdependence of multiple systems that impact on learners, their development and learning (Swart & Pettipher, 2005). Bronfenbrenner compares the different environments or social contexts in which children operate and all are interrelated. These nested structures, contexts or environmental systems consist of the microsystem, the mesosystem, the exosystem and the macrosystem, which all interact with the chronosystem. These systems tend to maintain themselves, but at the same time are constantly changing and reorganizing themselves in an attempt to achieve a state of equilibrium. A systemic understanding of change assumes circular rather than linear causality and the interrelatedness of all aspects of a situation. A small change at one level will potentially have an effect on the entire system. This approach acknowledges and accepts some degree of unpredictability. This model suggests that any individual is likely to experience a range of contexts shared with others, but that the interactions of the individual characteristics, time, contexts and chance will have different consequences for different learners. It implies that each individual consists of multiple systems in interaction and develops holistically.

The successful implementation of inclusive education is, to a large degree, dependent on the development of an effective education support structure. To achieve the aims of an inclusive education system, it becomes imperative that educators be trained and supported to meet the new challenges with confidence. Bouwer and Du Toit (2000) support this contention, reporting that educators perceive education support as "... gravely inadequate..." intensifying their general feeling of helplessness. In addition to educators, parents, school managers, School Governing Body (SGB) members and community organisations need to be empowered to collaboratively fulfil their support roles.

Through collaboration, all role-players need to ensure that the school becomes an inviting, inclusive, health promoting arena where all learners are fully supported in order to maximise their individual potential as Kenyan citizens. It is against this background that the researcher undertook to establish the critical areas of support required by both learners and educators within the inclusive classroom. The researcher explored the available support structures in school and surrounding areas in order to recommend effective ways in which

educators, learners, education support personnel, parents and community members can collaborate, with the goal of providing effective educational support structures in ECDE centres.

III. Methodology

This study was done in Uasin Gishu County, 330 km North West of Nairobi. It lies between longitudes 34 degrees 50" East and 35 degrees West and latitudes 0 degrees 03" South and 0 degrees 55" North. It borders Nandi County to the South, Trans Nzoia County to the North, and Elgeyo Marakwet County to the East. It shares some rather short borders with Bungoma County to the West and Kericho County to its South Eastern tip. It occupies 3,345 square kilometers and as of 2012, it had a population of 894,179 people (CRECO, 2012). Uasin Gishu County was selected as the study site due to its convenient to the research topic. In addition, Uasin Gishu registers one of the populous counties in Kenya. It is growing and is now rated one of the counties that have heavily invested in Early Childhood Education. The other consideration is that, Uasin Gishu ECDE centers in the rural areas are inaccessible from the main roads. Owing to their unreachability, learners with special needs are vulnerable because such ECDE centers are way far from being monitored closely by the education authorities.

The research embraced the pragmatic worldview which has affinity with mixed methods research (MMR), allowing the use of qualitative and quantitative techniques either sequentially or concurrently. In terms of research design, we adopted the use of mixed research design of quantitative and qualitative approaches. This design was considered appropriate for collecting data necessary to determine the school-based factors influencing successful implementation of inclusive education in ECDE curriculum. This design was also found useful in identifying the standards against which the existing conditions in ECDE centers would be compared. The design was also chosen as dictated by the nature of the study, which primarily involves gathering of facts. The variables were studied in their natural setting without any manipulation by the researchers (Creswell & Plano, 2011).

The target population studied comprised all head teachers and ECDE teachers in the 492 ECDE centers in which 471 are attached to public primary schools in Uasin Gishu County and 21 as stand-alone ECDE centre. There were a total of 1036 ECD teachers and 492 head teachers in the public primary schools in Uasin Gishu County. Yamane's (1967) formulae, was used to determine the sample size. It provides a simplified formula to calculate sample sizes for finite proportions. It operates on the assumption of a 95% confidence level and $p=0.5$ for maximum sample. The formulae is as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where n is the sample size; N is the population size; and e is the level of precision. For $N=1036$, we substitute it in the formulae to get the sample size of the ECDE teachers as follows:

$$n = \frac{1036}{1 + 1036(0.05)^2} = 288.5 \approx 289$$

With finite populations, correction for proportions is necessary. This is because a given sample size provides proportionately more information for a small population than for a large population. The sample size (n_0) can thus be adjusted using the corrected formulae:

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}$$

Where: n is the sample size; N is the population size; and n_0 is calculated sample size for infinite population

$$n_0 = \frac{1036}{1 + (289 - 1)/1036} = 221$$

Similarly, the same procedure is applied for population the sample of the ECDE centre, to obtain 20 centres.

Stratified and proportionate sampling was used to select schools in the six sub-counties of Uasin Gishu County. Schools were stratified as per sub-county and a proportionate sample for each sub-county computed based on the overall sample for the County and total number of schools in the respective and County. The selected schools (ECDE centres) in each Sub-County were selected randomly using random numbers generated in excel sheet. Then in the ECDE centres, the teachers were selected randomly to attain the numbers required for that ECDE centre.

Data collection was done by use of questionnaire, observation schedules, document analysis, and structured interview schedule. Data was analyzed both quantitatively and qualitatively. The structured

questionnaire and observation guide items were coded into SPSS ver. 20 while taking care as to whether the responses were nominal, ordinal or scale. Frequencies and percentages were generated into tables and interpretation made. For open questions, similar themes were extracted as per the number of times that they appeared and the same procedure was repeated, that is, the open-ended questions was analyzed through reporting themes and quotas that emerged. Similar, procedure was done for the data generated from the interview guide as was done for the open-ended items in the questionnaire. However, the frequencies generated were not reported but just used to inform. Data was analyzed and presented in frequency tables, graphs and charts to present the findings of the study. The themes emerging from secondary data were identified to augment the primary data. Chi square test of independence and regression was used to establish nature of correlation between the study variables and how much the independent variables contributed to the dependent variable (Implementation of IE). The level of significance was set at 95% or at a p-value of 0.05.

IV. Results and Discussion

Respondents' Demographics

Majority (79.7%) of the ECDE centers did not have special unit attached. However, there were those that had special units attached, and this comprised 20.3%. In addition, most of the ECDE centres were offering NACECE type of curriculum, with others offering Montessori. The other ECDE centers (2.0%) were offering other types of curriculum other than the above mentioned. The area of specialization for most (64.3%) of the ECDE teachers was early childhood education (ECD). There were few teachers who were specialized in special needs education represented by (13.6%) of the teacher respondents. This proportion of teachers in special education is low and jeopardizes the implementation of SNE, since inclusive education has largely been defined in terms of access (Artiles, Kozleski, Dorn & Christensen, 2006; McLaughlin & Jordan, 2005). IE is adequately implemented when Special Need Learners can get access to teaching and learning materials, qualified and adequate teachers and friendly infrastructure such as spacious fields, accessible toilets and other social amenities.

Learner's Population and Disability Statistics

There were an estimated 39,473 pupils in the selected ECDE centers, with 51.2% of this being boys. A higher proportion of the boys (3.8%) were with disabilities compared to their female counterparts who comprised (2.9%). On average, the proportion of the learners with disabilities stood at 3.4% (Figure 1).

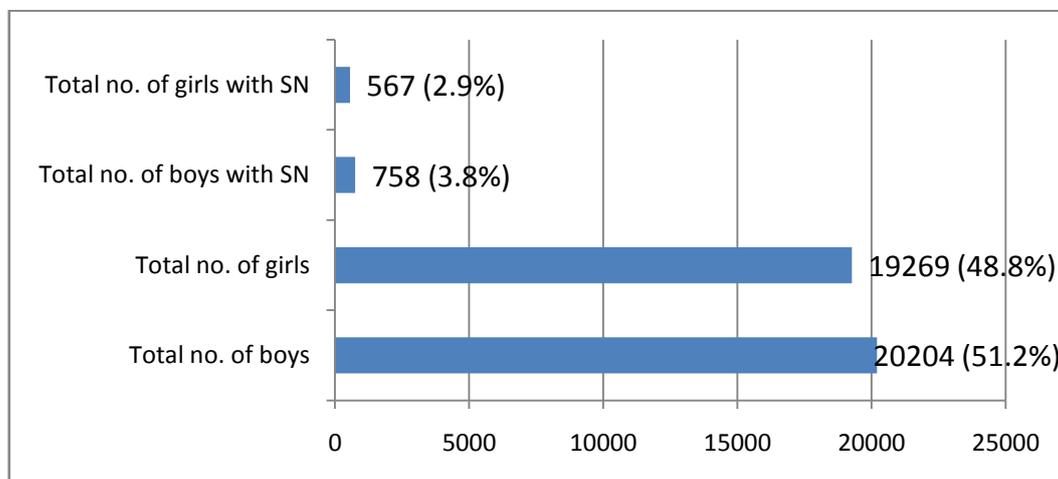


Figure 1: Learner's Populations and Statistics

Across all the ECDE centers studied, the learners with various disabilities were represented. There were those with vision problems (9.0%), learning (28.0%) and communication (16.9%) difficulties, emotional problems (17.1%), physical handicapped (11.3%) and the gifted (17.7%). From the findings, there were few learners with vision but many learners with learning problems (Figure 1). Other categories of learners include mental problems (7.5%), Autism (4.1%), ASD, down syndrome, hearing impaired and the orphaned. The foregoing results is cream to the fact that disabled learners are well within the regular classrooms in the education system and as such the Salamanca statement that there was need to take actions that will ensure accommodation for all children "regardless of their physical, intellectual, social, emotional, linguistic or other conditions" (Salamanca Statement and Framework for Action, UNESCO, 1994, Article 3). The statement was clear enough to also indicate that street and working children from remote or nomadic populations, children

from linguistic, ethnic or cultural minorities, and children with special educational needs and disabilities were also to be included. The UNESCO International Conference in Education, which was held in Geneva in 2008 also supports the inclusion of more diverse range of learners, regardless of their ability or their characteristics. The conference also advocated for the promotion of respect for the needs and abilities of learners including the elimination of all forms of discrimination (UNESCO, 2009).

Influence of Teacher's Perception Variables on Implementation of Inclusive Education

The study results indicated that, in the ECDE centres, the teachers were positive for most aspects of the implementation of IE. These ranged from pedagogy to beliefs about learning of special needs learners. The teachers moderately or to a great extent believed that it is indeed difficult to aligning teaching to incorporate learners with special needs (48.0%). Also, it was difficult to use complex tasks in dealing with SNE learners (38.5%), besides being hard to teach class with special need learners (35.3%). On the other hand, the teachers indicated that it was stressful to align pedagogy in an inclusive setting (39.8%). However, most (58.4%) of the teacher believed that their fellow teachers like aligning the content of the course with that of special needs. Even a higher proportion (66.5%) of the teachers feels that they have the capability of aligning course content with that of SNE learners. The teachers also felt capable of using complex tasks with multiple solutions (54.8%) and teach where regular and SNE learners execute experiments (62.9%). This result resonates well with other studies which have indicated that indeed teachers can identify children's learning style in order to meet their needs (Stakes & Hornby, 2010). As Stakes and Hornby (2010) suggested teachers can carry out assessment of each student so that they are able to apply the variety of pedagogy based on the learning style of the student. In any case each child has his/her way of learning (Exley, 2003). However, as the findings suggest, it may sometimes prove difficult to perform the multiple tasks generated keeping in mind the fact that some of these classes have many pupils (Gyimah, 2006). Otherwise research such as that by Norwich and Lewis's (2001), has confirmed that having multiple teaching strategies and methodologies is sufficient if teaching objectives have to be met in a special needs class. Further, Vaughn, Gersten, and Chard (2000) indicated that teachers who adapt their teaching styles will benefit the children much more than teachers who do not adapt to teaching strategies. Some special need experts such as Florian and Holly (2010) did find that the strategies and the teaching approaches are not much different and that most of them can work for multiple groups. Despite this, Florian (2005) later found that whatever worked for most children does not work with some. The study findings indicated that there was no association between the teacher's perception and implementation of IE.

The above findings on the influence of the perception of the teacher on the implementation of IE neither agree nor disagree with studies by Cross, Traub, Hutter-Pishgahi and Shelton (2004) and, Wong and Cumming (2010) as the studies have affirmed that the implementation of inclusive education will be successful when teachers hold positive perception towards inclusion (Engelbrecht, Oswald, Swart, & Eloff, 2003). This is because they presume that the perception of the teachers, have a significant influence on the learning that is going on in the staff room. Murphy, Delli, and Edwards (2004) had also highlighted that positive teachers motivate children to learn when they show and give care to the children. Ross-Hill (2009) and Croll and Moses (2000) had suggested that the initial attitudes of the teacher are fundamental to the implementation and experiences of inclusive education. While inclusive program may be supported by the all stakeholders including parents and professionals, all may be in vain when the attitude of those tasked with implementing the curriculum is negative (Croll & Moses, 2000). Consequently, the physical placement alone of students with special needs into regular school does not solve the problems. Avramidis and Norwich (2002) and Parasuram (2006) did a study and found that younger teachers and those with fewer years of teaching experience are more likely to be positive about inclusion since they were more likely to adapt their skills and resources to accommodate all types of students.

The observation guide indicated that the attitude and motivation of the teachers in performance of their teaching duties at the ECDE centre were positive most of the time. There was evidence of the teachers being highly motivated to perform their duties with SNE learners. Cooperation and communication was depicted as well as teacher preparation with regard to inclusive education and remedial programs (Figure 2).

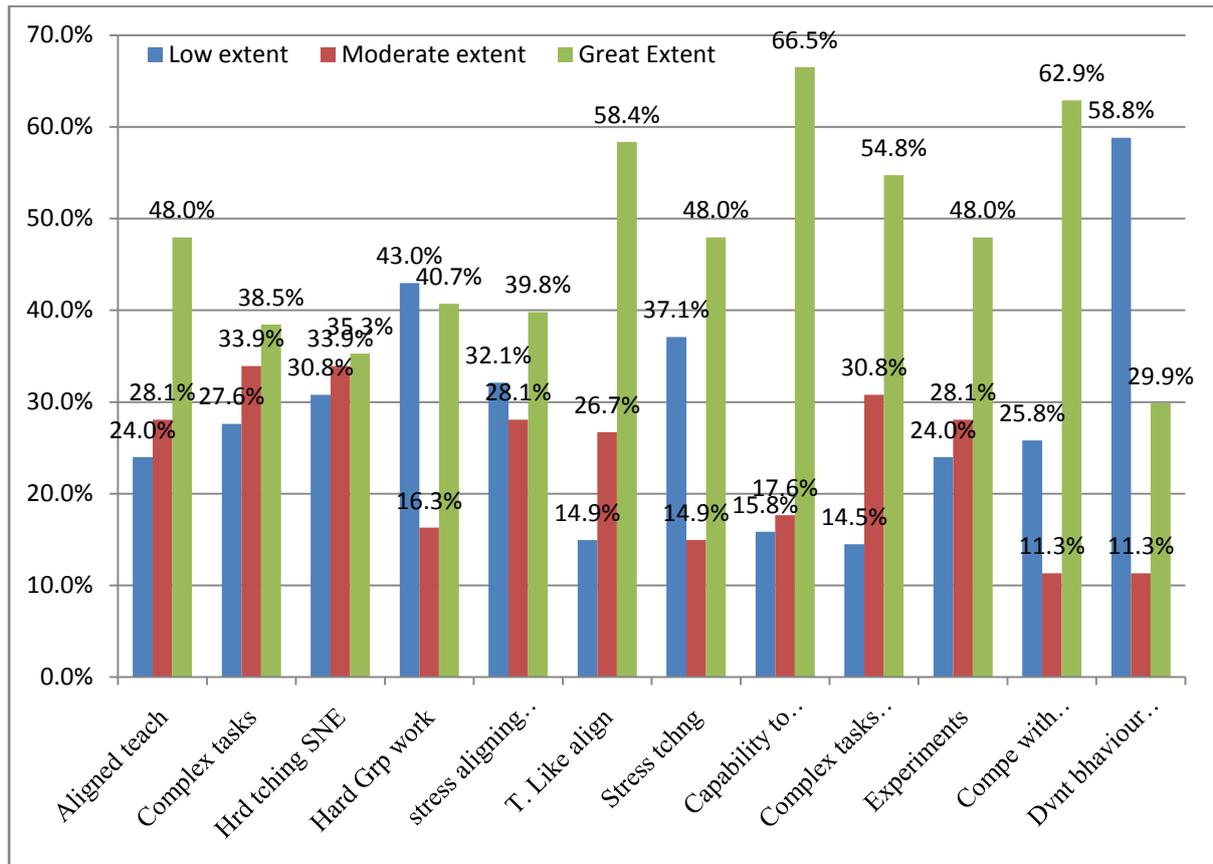


Figure 2: Perception of Teachers on Aspects of Implementation of IE

Further, the study findings indicated that there was no significant association between the teacher's perception ($\chi^2=0.834$; $df=4$; $p=0.934$) and the implementation of IE. In addition, through regression methods, the analysis revealed that the correlation between the perception of the teacher showed no contribution to the implementation of IE. This was expected since the Chi-square results showed no association of the variable with the implementation of IE. Therefore, the attitude of the teachers in implementing inclusive education is no longer an issue, since there are indications that a teacher possesses positive attitudes towards the implementation of IE.

V. Conclusions and Way Forward

This paper has demonstrated that the absence of association between the teacher's perception and implementation of IE implies that the attitude of the teachers has so far grown into a pure positive one and as such, attitude is no longer an issue. The teachers have graduated to accepting and embracing Inclusive Education in their respective settings. Indeed, observation guide indicated that, the attitude and motivation of the teachers in the performance of their teaching duties were positive most of the time. To support these, the teachers ought to be highly motivated to perform their duties with SNE learners. As such, while the study zeroed in on specific factors that affect the implementation of inclusive education, there may be indeed other factors that influence it. However, it is apparent that teacher attitude is no longer an area of concern because the tutors are more ever exposed to children with special needs who interact with them daily in the course of their teaching duties. The teacher's attitude has also turned to be positive, thanks to training, capacitation and exposure in inclusive classrooms. From the foregoing, this paper calls for the mobilization of teaching and learning resources, assistive technologies and all other relevant aids towards the success of SNL.

References

- [1]. Ainscow, M. Booth, T. & Dyson, A. (2006a). *Improving schools, developing inclusion*. London: Routledge.
- [2]. Ali, M. M., Mustapha, R., & Jelas, M. Z. (2006). An empirical study on teachers' perceptions towards inclusive education in Malaysia. *International Journal of Special Education*, 21(3), 36-44.
- [3]. Artiles, A. J., & Kozleski, E. B. (2007). Beyond convictions: interrogating culture, history, and power in inclusive education. *Journal of Language Arts*, 84(4), 351-358.
- [4]. Artiles, A. J., Kozleski, E. B., & Waitoller, F. R. (Eds.), (2011). *Inclusive education on five continents: Unravelling equity issues*. Cambridge, MA: Harvard Education Press.

- [5]. Artiles, A. J., Kozleski, E., Dorn, S., & Christensen, C. (2006). Learning in inclusive education research: Re-mediating theory and methods with a transformative agenda. *Review of Research in Education*, 30, 65-108. <http://dx.doi.org/10.3102/0091732X030001065>
- [6]. Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/ inclusion: A review of literature. *European Journal of Special Education*, 17 (2), 129-147.
- [7]. Bean, R. M., Hamilton, R., & Zigmond, N. (1994). The changing roles of special education teachers in a full-time mainstreaming program: Rights without labels. *Reading and Writing Quarterly: Overcoming Learning Difficulties*, 10, 171-185.
- [8]. Blanton, L., Sindelar, P.T., Correa, V., Hardman, M., McDonnell, J., & Kuhel, K. (2003). *Conceptions of beginning teacher quality: Models of conducting research*. (COPSSE Document Number RS-6). Gainesville, FL: University of Florida, Center on Personnel Studies in Special Education.
- [9]. Bouwer, A.C. & Du Toit, L.D. (2000). The At-Risk Disk: differential identification of intellectual and specific learning disability by teacher-teams in regular schools. *South African Journal of Education*, 20, 241-247.
- [10]. Brighton, C. M. (2003). The effects of middle school teachers' beliefs on classroom practices. *Journal for the Education of the Gifted*, 27(3), 177-206.
- [11]. Bronfenbrenner, U. (1992). Ecological systems theory. In R. Vasta (Ed.), *Six theories of child development: Revised formulations and current issues* (pp. 187-249). Philadelphia: Kingsley.
- [12]. Buell, M. J., Hallam, R. & Gamel-McCormick, M. (1999). A survey of general and special education teachers' perceptions and in-service needs concerning inclusion. *International Journal of Disability, Development and Education*, 46 (2), 143-156.
- [13]. Carnell, L., & Tillery, M. (2005). Preparing pre-service teachers for inclusive co-teaching: A new approach for mathematics methods instruction. *Teaching Children Mathematics*, 11(7), 384-389.
- [14]. Charema, J. (2007). From special schools to inclusive education: The way forward for developing countries south of the Sahara. *The Journal of the International Association of Special Education*, 8(1), 88-97.
- [15]. Chhabra, S. Srivastava, I. & Srivastava, R. (2010). Inclusive Education in Botswana: The Perceptions of School Teachers. *Journal of Disability Policy Studies* 20(4), 219-228.
- [16]. Creswell, J. W., & Plano, C. V. (2011). *Designing and Conducting Mixed Methods Research*, (2nd ed). Thousand Oaks: Sage.
- [17]. Croll, P., & Moses, D., (2000). Ideologies and utopias: educational professionals views of inclusion. *European Journal of Special Needs Education* 15(1), 1-12.
- [18]. Cross, A. F., Traub, E. K., Hutter-Pishgahi, L., & Shelton, G. (2004). Elements of successful inclusion for children with significant disabilities. *Topics in Early Childhood Special Education*, 24, 169-183.
- [19]. Davis, K. & Peters, S. (2011). *Moments of wonder, everyday events: Children's working theories in action*. Teaching Learning Research Initiative Final Report.
- [20]. Dyson, A., Farrell, P., Polat, F., Hutcheson, G., & Gallannaugh, F. (2004). *Inclusion and Pupil Achievement*. Department for Education. University of Bristol.
- [21]. Engelbrecht, P., Oswald, M., Swart, E., & Eloff, I. (2003). Including learners with intellectual disabilities: Stressful for teachers? *International Journal of Disability, Development and Education*, 50, 293-308.
- [22]. Exley, S (2003). The effectiveness of teaching strategies for students with dyslexia based on their preferred learning styles. *British J. Special Educ.*, 30(4), 213-219.
- [23]. Fallon, M., & Brown, S. (Eds.). (2010). *Teaching inclusively in higher education*. Charlotte, NC: Information Age Publishing Co.
- [24]. Florian, L. (2005). 'Inclusion', 'special needs' and the search for new understandings. *Support for Learning*, 20(2), 96-98.
- [25]. Florian, L., & Holly, L. (2010). Preparing teachers for inclusive education: Using inclusive pedagogy to enhance teaching and learning for all. *Cambridge Journal of Education*, 40(4), 369-386.
- [26]. Forlin, C. (2010). Developing and implementing quality inclusive education in Hong Kong: Implications for teacher education. *Journal of Research in Special Educational Needs*, 10, 177-184.
- [27]. Forlin, C., Chambers, D., Loreman, T., Deppeler, J., & Sharma, U. (2014). *Inclusive Education for Students with Disability: A review of the best evidence in relation to theory and practice*. Report to the Australian Government Department of Education, Employment and Workplace Relations & Australian Research Alliance for Children and Youth, Canberra. DOI: 10.13140/RG.2.1.4255.8166.
- [28]. GOK (2007). *Kenya Vision 2030 Agenda*. Government Printer: Nairobi, Kenya
- [29]. Guralnick, M. J. (2005). An overview of the developmental systems model for early intervention. In M. J. Guralnick (Ed.), *The developmental systems approach to early intervention* (pp. 3-28) Baltimore: Brookes.
- [30]. Gyimah E.K (2006). Teachers' attitudes to inclusive education in Ghana. (PhD Thesis), University of Leeds, United Kingdom.
- [31]. Jordan, A. & Stanovich, P. (2003) Teachers' personal epistemological beliefs about students with disabilities as indicators of effective teaching practices. *Journal of Research in Special Educational Needs*, 3. Available: <http://www.nasen.org.uk>.
- [32]. Jordan, A., & Stanovich, P. (2004). The beliefs and practices of Canadian teachers about including students with special needs in their regular elementary classrooms. *Exceptionality Education Canada*, 14(2-3), 25-46.
- [33]. Kabiari, R., N. (2013). Analysis of the roles of school management Committees in the implementation of inclusive Education in public primary schools in Kasarani District, Kenya. University of Nairobi, Nairobi, Kenya
- [34]. Kenya Institute of Education. (2008). *Teacher certificate in ECDE syllabus*. Nairobi: KIE.
- [35]. Leung, C. H., & Mak, K. Y. (2010). Training, understanding, and the attitudes of primary school teachers regarding inclusive education in Hong Kong. *The International Journal of Inclusive Education*, 14(8), 829-842.
- [36]. McLaughlin, M. J., & Jordan, A. (2005). Push and pull: Forces that are shaping inclusion in the United States and Canada. In D. Mitchell (Ed.), *Contextualizing inclusive education: Evaluating old and new international perspectives* (pp. 89-113). London: Routledge.
- [37]. Moberg, S., Zumberg, M., & Reinmaa, A. (1997). Inclusive education as perceived by prospective special education teachers in Estonia, Finland, and the United States. *Journal of the Association for Persons with Severe Handicaps*, 22(1), 49-55.
- [38]. Murphy, P. K., Delli, L. M., & Edwards, M. N. (2004). The good teacher and good teaching: Comparing beliefs of second grade students, pre-service teachers, and in-service teachers. *The Journal of Experimental Education*, 72, 69-93.
- [39]. Nataša P., Theo, W. & Mainhard, T. (2011). *Competence as a Basis for Teacher Education: Comparing Views of Teachers and Teacher Educators in Five Western Balkan Countries*.
- [40]. Norwich, B. & Lewis, A. (2001) A critical review of evidence concerning pedagogic strategies for pupils with special educational needs. *British Educational Research Journal*, 27(3), 313-29.
- [41]. Parasuram, K. (2006). Variables that affect teachers' attitudes towards disability and inclusive education in Mumbai, India. *Disability & Society*, 21(3), 231-242.
- [42]. Rajovic, V., & Jovanovic, O. (2013). The barriers to inclusive education: Mapping 10 years of Serbian teachers' attitudes toward inclusive education. *Journal of Special Education and Rehabilitation*, 14, 78-97.

- [43]. Ross-Hill, R. (2009). Teacher Attitude towards inclusion practices and special needs students. *Journal of Research in Special Educational Needs*, 9(3), 188-198.
- [44]. Sharma, U., Forlin, C., & Loreman, T. (2008). Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities. *Disability & Society*, 23(7), 773–785. doi:10.1080/09687590802469271
- [45]. Singal, K. (2008). Inclusive Education in South Africa. *International Journal of Special Education*, 39(2), 116-142.
- [46]. Slavin, R. (2011). Including Inclusion in School Reform: Success for All and Roots and Wings. In *Inclusion and School Reform: Transforming America's Schools*, edited by D. K. Lipsky, Gartner, A. Baltimore: Paul Brookes Publishing Company.
- [47]. Stakes R., & Hornby, G. (2010). *Meeting special needs in mainstream schools a practical guide for teachers* (2nd ed.) London: David Fulton.
- [48]. Subban, P. & Sharma, U. (2006). Primary school teachers' perceptions of inclusive education in Victoria, Australia. *International Journal of Special Education*, 21(2), 42-52.
- [49]. Swart, E. & Pettipher, R., (2005). A framework for understanding inclusion', in E. Landsberg, D. Kruger & N. Nel (eds.), *Addressing barriers to learning: A South African perspective*, pp. 3–23, Van Schaik Publishers, Pretoria.
- [50]. Thomas, G. & O'Hanlon, C. (2005). Inclusive education: discourse and action. *British Educational Research Journal*, 31(2), 269-275.
- [51]. Toni, R V., Munk, D.D. Lynch, K. Bosma, J., & Rouse, J. (2007). A model for preparing special and general education preservice teachers for inclusive education. *Journal of Teacher Education* 58 (5), 440-455
- [52]. UNESCO. (2009). *Guidelines for Inclusion: Ensuring Access to Education for All*. Paris: UNESCO.
- [53]. Vaughn, S., Gersten, R., & Chard, D. J. (2000). The underlying message in LD intervention research: Findings from research syntheses. *Exceptional Children*, 67, 99–114.
- [54]. Whyte, B. (2005). Collaborating with diverse cultures. In D. Fraser, R. Moltzen, & K. Ryba, (Eds.), *Learners with special education needs in Aotearoa New Zealand* (3rd ed.) (pp. 117 127). Melbourne: Dunmore Press.
- [55]. Wilczenski, F. L. (2012). Development of a scale to measure attitude toward inclusive education. *Psychology in the Schools*, 29, 306-312.
- [56]. Wilkins, T. & Nietfeld, J.L. (2004). The effect of a school-wide inclusion training programme upon teachers' attitudes about inclusion. *Journal of Research in Special Educational Needs*, 4(3), 115-121.
- [57]. Wong, S., & Cumming, T. (2010). Family day care is for normal kids: Facilitators and barriers to the inclusion of children with disabilities in family day care. *Australasian Journal of Early Childhood*, 35, 4–12.
- [58]. Woolfson, L., Grant, E. & Campbell, L. (2007). A comparison of special, general and support teachers' controllability and stability attributions for children's difficulties in learning. *Educational Psychology*, 27 (2), 295-306.
- [59]. Yeung, A. S., Taylor, P. G., Hui, C., Lam-Chiang, A. C., & Low, E. L. (2012). Mandatory use of technology in teaching: Who cares and so what? *British Journal of Educational Technology*, 43, 859–870.
- [60]. Yuen, M., & Westwood, P. (2002). Teachers' attitudes toward integration: Validation of a Chinese version of the Attitudes toward Mainstreaming Scale (ATMS). *Psychologia*, 45, 1–11.

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