

# THE EXTENT OF KNOWLEDGE POSSESSED BY TEACHERS TO ENHANCE COMMUNICATION SKILLS OF LEARNERS WITH SPEECH AND LANGUAGE DISORDERS: A CASE OF JOY TOWN, KIAMBU COUNTY, KENYA

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**Abstract:** The purpose of this study was to investigate the extent of knowledge possessed by teachers to enhance communication skills of learners with speech and language disorders. The study is guided by Vygotsky's Social Interactionist Theory. The study location was Joy town special primary school and the school teaching staff purposively sampled constituted the study population. This research used a descriptive case study design using both qualitative and quantitative methods. The design primarily used questionnaires for teachers, interview guide for the head teacher and observation schedule for teachers. Qualitative data was analyzed thematically while descriptive statistics was used for quantitative data. The study instruments used were validated by the supervisors' suggestions and expert judgment. The reliability was determined by pre-testing the questionnaires on the purposively selected teachers in the school under the study. The study found out that learners with speech and language disorders are heterogeneous and require recognition by knowledgeable personnel. The study findings indicated that the majority of teachers are aware that speech and language disorders significantly affect the communication skills of learners but lacked adequate knowledge to accurately articulate their needs. It was also revealed that majority of teachers have so far not been trained on speech and language disorders and that they lack adequate knowledge and skills needed to make the correct diagnostic and therapeutic measures to competently intervene and remediate speech and language disorders. The study further showed that teachers lack sufficient materials and support to enhance the communication skills of learners with speech and language disorders. However, it was observed that although most teachers are not conversant with speech and language disorders, they are actively involved in enhancing reading skills, spelling competencies, instructing learners about pronunciation, promoting play skills and interest in games as well as making referrals for further diagnostic assessment and therapeutic considerations for learners with speech and language disorders. The major study conclusion is that majority of teachers are not adequately trained to competently work with learners with speech and language disorders. Teachers require maximum support to ultimately realize optimal educational goals for their learners. The available minimal assistance is not enough to adequately support learners with communication disability. The study is significant because the findings are expected to adequately inform the appropriate allocation of resources and training support for educational professionals to broaden their understanding of speech and language disorders.

**Keywords:** intervention, speech, language, disorders, learners, teachers, strategies, knowledge, training and support.

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## 1. INTRODUCTION

Communication skills are important because they help children to communicate their intentions. Typically, communication skills begin developing in the first year of life when children begin producing different sounds through their vocal mechanisms. As they grow cognitively they start to associate meaning to these sounds forming language (Schramm, Keilmann & Brahmaier, 2010). Apparently, not all children are so fortunate to experience normal language acquisition (Tomblin, Records & Zang, 1996) making their speech and language appear different from what is considered normal.

According to Morales, (2009) teachers are a critical link in the implementation of learners intervention plans. The key role of teachers in the intervention is to offer appropriate teaching to children to enhance their communication skills. It is the responsibility of teachers to ensure continuous training to develop their knowledge and competence to be able to provide appropriate support to children with speech and language disorders (SLD). Teachers should also work with parents of children with SLD to facilitate their involvement in the intervention. The challenge is that there is little evidence in literature on how knowledgeable and competent teachers are to demonstrate this fundamental role in developing countries such as Kenya.

The American Speech and Hearing Association (ASHA, 2009), a national professional, scientific and credentialing association for different professionals including audiologists, speech and language pathologists, and other related specialists, shows that there are effective strategies available to improve children's communication skills particularly in the developed world. In U.S.A, professional development programs are available for professionals including special education teachers, speech and language pathologists (SLPs) and medical personnel. These programs are provided by local education agencies, unions, school districts, state departments of education, colleges and universities (Massachusetts Department of Education, 1994). The federal government through the Individuals with Disabilities Education Act (IDEA) has mandated special education services to all disabled children (5-18) years old. In the United Kingdom, teachers are members of multi-disciplinary assessment teams who conduct classroom and playground observation on school children (Wright, 1992).

However, evidence shows that there is lack of a shared understanding between teachers, parents and other practitioners which can have a negative impact on meeting the child's needs (Barron, Holmes, MacLure and Runswick-Cole, 2007). In UK teachers have expressed anxiety and lack of confidence both in assessing children's spoken language and implementing strategies to support development of their communication skills particularly when they have difficulties (Sadler, 2005).

According to the U.S Department of Education (1994) speech and language services have been expanded in schools to meet the need of children with SLD. Teachers consult with school-based SLPs for expert advice and professional support. Emphasis is put on working in interdisciplinary teams of special education teachers and SLPs to effectively work with learners with SLD (Clark 1994).

However, in many schools the availability of school-based SLPs who can liaise with teachers has been a challenge (Edgar & Rosa-Lugo, 2007). The available support is even much less in developing countries such as Kenya and many other third world countries globally where speech and language pathology has been lacking. In South Africa few assessments have been developed but research shows that selection and implementation of intervention approaches is affected by inadequate assessments and limited evidence base in South African context (Joffe & Pring, 2008).

In Kenya the Sessional Paper No. 6 of 1988 states that there is urgent need to develop teacher education including training teachers specially to work with children with SLD. More emphasis has so far been put on the training of teachers in other areas of special needs while training in SLD has largely been ignored. Therefore, the majority of teachers working with learners with SLD lack enough understanding of SLD particularly in Joy town special primary school in Thika where the majority of learners are physically challenged in association with SLD. So far, very little is known about how teachers work with these learners. Therefore, the current study informs the need for adequate teacher training, support and creation of evidence based strategies that can effectively work for learners with SLD in school settings.

### **Purpose of the study:**

The purpose of the study was to find out the extent of knowledge possessed by teachers of learners with speech and language disorders.

**Significance of the study:**

The study was significant because the findings were expected to assist in making informed decisions in the allocation of resources and provision of teacher training to advance their knowledge of SLD. Teachers' understanding of SLD may be the baseline for informed evaluation and choice of appropriate teaching strategies to remediate the SLD affecting communication efficacy of school children. The findings may be of immediate benefit to caregivers or parents of children with SLD on the vitality of active participation in alleviating communication challenges in their children. The findings of the study may also put impetus to policy makers including MOEST and other related stakeholders to make informed decisions in the formulation of educational policy frameworks that can help to meet the needs of children with communication disabilities. Furthermore, the results of the study may enlighten the KICD on the need to develop special curriculum that serves largely specific needs of children with disabilities with special reference to SLD. The study may ultimately provide insights for making informed diagnostic decisions, therapeutic choices and sufficient training of teachers in relevant professional knowledge and expertise that can support the implementation of treatment programs during learning activities.

**2. LITERATURE REVIEW****Theoretical underpinnings:**

The theoretical framework for this study was guided by zone of proximal development (ZPD) a social interactionist theory (Vygotsky, 1978). Vygotsky describes knowledge as the product of social interaction. According to the theory, teachers are expected to provide an interactively conducive environment for successful learning through guidance and support. According to Vygotsky ZPD is the range of abilities that learners can perform with assistance but cannot yet perform independently. Vygotsky argues that the ZPD is a moving target. As learner gain new knowledge, this zone moves progressively forward to a higher zone but as learning progresses to higher levels and reinforcement reduces they can construct new knowledge on their own.

Vygotsky advances the concept of the More Knowledgeable Other (MKO) as the person who has a higher level of knowledge than the learner and provides critical guidance during the learning process. In this theory MKO is the teacher who is required to provide initial guidance to learners so that they can develop new ideas in problem solving situations. The study showed the reason why teachers must be well knowledgeable to provide informed support to learners with SLD.

The implication of Vygotsky's theory for this study is that informed interaction between the teacher and the learner is pertinent in the effective communication competence. According to this study this means that teachers need to be well trained to understand communication needs in order to make informed decisions on the assessment and teaching of learners with SLD. Sufficient knowledge will help teachers establish learner's communication strengths and weaknesses in order to determine the appropriate teaching strategies for those with SLD.

**Empirical literature:**

Literature shows that SLD represent one of the most prevalent disabilities in early childhood (Special Ed. 2006). It is shown that with the right support by teachers, many of these children can catch up with their age peers. The prevalence is said to decline across the 0-16 year's age range (Law, Boyle, Harris, Harkness & Nye (2000). The nature and impact of SLD change as children get older in relation to the changing educational demands (Conti-Ramsden & Botting, 1999).

An investigation by Sadler (2005) into levels of teacher knowledge about SLD noted that over 60% lacked confidence in their ability to work with children with SLD. This was a survey conducted in UK involving a group of training sessions for teachers and teaching assistants working with children with SLD in seven mainstream primary schools. Pre- and post-training questionnaires and classroom observations were used to examine the impact of the program.

Gardner (2006) asserts that the SLPs need to understand the school community and curriculum demands in the school context to support teachers in enhancing pupil's outcome. In the UK teachers identified a need for further training and a difficulty with providing effective support (Dockrell & Lindsay, 2001). The SLPs' knowledge of the school systems can help them work effectively with teachers to promote their role in the intervention to enhance communication skills of learners with SLD.

According to the Developing people to support learning, (2006) report teacher training and development need to be part of long-term strategic planning as indicated. This is a toolkit prepared in USA to provide advice and support to teachers and other professionals. The reviewed literature is precise indicator that there is a knowledge gap in literature concerning teachers' understanding of SLD which hampers their pertinent participatory role of intervention in the educational context. The findings of the present study provide some insight to see the need of training and support for teachers to effectively teach learners with SLD.

### 3. RESEARCH DESIGN AND METHODOLOGY

#### Design:

This study adopted a descriptive case study design using both quantitative and qualitative approaches (Creswell, 2003 & Creswell, 2012). Case study was used because the study phenomenon had similar characteristics. Quantitative and qualitative approaches are important because they strengthen one another (Odeny, 2007). The descriptive design was important to provide insight into the research problem by describing the variables of interest helping the researcher to relate the research problem to the missing gap in other related studies.

#### Participants:

This study targeted 31 teaching staff working in Joy town special primary school. This number was inclusive of the head teacher. The school has a national outlook drawing children from all over Kenya and since teachers have direct contact with these children they constituted the most substantial target population which provided the needed information for the study.

#### Methods:

A structured interview with open-ended and closed-ended questions was prepared for the head teacher to obtain the required information. An interview guide was used in order to obtain in-depth information through probing the head teacher. Kothari (2009) asserts that this strategy allows flexibility in probing and exploring certain subjects in greater depth. Questionnaires were prepared for the teachers because they can individually record and interpret them well. The questionnaire procedure was useful in this study because it was time saving and the researcher was not needed to be present during the filling of the questionnaire. The study used non-participant observation method where the researcher was merely taking notes of what was observed. Observation schedule was prepared for teachers and were observed by the researcher in the classroom during teaching activities.

#### Procedure:

The primary data was collected using questionnaires, observation schedule and interview guide. Following a successful application requesting for piloting and data collection, the researcher explained the nature and purpose of the study to establish rapport with the piloting teachers. Then, during the actual data collection on a separate day the researcher held interview with the head teacher early in the morning before distributing questionnaires to teachers in the staffroom during tea break. Once again, the researcher explained the study purpose to teachers who were not used in the piloting exercise and personally distributed questionnaires to them. The researcher was present to clarify any possible ambiguities during the filling of the questionnaires. Teachers' classroom observation was done on the same day. The collection of questionnaires was done on the following day since it was not possible to have them fully completed on the first day.

#### Testing research validity and reliability:

An instrument is valid if it measures what it is intended to measure and accurately achieves the purpose for what it was designed. Research instruments were validated through application of content validity determined by expert judgment and inclusion of supervisors' suggestions. Further, a pilot testing was used to enhance the validity. This means the degree of consistency demonstrated in a study (Welman & Kruger, 2001). Reliability was determined by the split-half technique during the pre-testing on the respondents in the purposively selected pilot school. The respondents' responses were correlated using Coefficient alpha (Cronbach, 1951) method using Kuder-Richardson Formular 20 (KR-20) for internal consistency to obtain the average score of the split-half estimates. It is claimed that if the correlation coefficient is high (e.g. > 0.90) then the test is considered to be reliable. However, it is important to note that a liability coefficient of 0.70 or higher is considered acceptable in most situations of social science.

**Data Analysis:**

The researcher edited the data collected from the field to ensure that it is error-free. In the case of quantitative data the researcher numbered the questionnaires appropriately. This was followed by the coding process to mark and categorize information such as gender, age and level of education. Then, data was entered into the computer program known as Statistics package for social sciences (SPSS) to aid in data analysis. The quantitative data from questionnaire and observation schedules was analyzed using descriptive statistics such as graphs, percentages, charts, tables and frequencies. Qualitative data was analyzed thematically and sorted according to the emerging themes.

**4. RESULTS**

A total of 29 questionnaires were given to the teachers of Joy town school of which 24 were returned giving a response of 85%. According to Mugenda and Mugenda (1999), a 50% response rate is adequate, 60% good and above 70% rated very good. Based on this assertion the response rate for this study can be said to be very good at 85%.

**Professional knowledge of the respondents**

Table below shows the level of knowledge of SLD recorded by the respondents.

Knowledge of SLD	Frequency	Percent
Learners difficulties in talking and understand	16	88.9
Not conversant with it	1	5.6
Poor phonology, syntax and semantics	1	5.6
System	6	25

The majority of the respondents (88.9%) indicated that SLD is learner's difficulties in speech and language as emphasized by one of the respondents, '*it is the challenges learners encounter while trying to acquire language and communicate and they take time before explaining themselves*'. About 5.6% of the respondents said that children with SLD have poor phonological skills, limited syntax and semantic abilities which to a large extent affects their literacy and communication competency. A reasonable number of the respondents (25%) indicated absolute lack of understanding of SLD by referring SLD to as system. The context in which this concept (system) was used remains unclear to this study further indicating relevant knowledge deficit. The head teacher confirmed that although he had a degree in special needs education he did not have any knowledge of SLD. However, the head teacher reported that teachers were exposed to training programs such as 'Tusome Early Grade Reading Program' which is a literacy enhancement program used in class one and two to improve learning outcomes. Using the observation checklist the researcher observed that teachers working with learners in different classes. It was observed that teachers demonstrated inadequate understanding of learners with SLD and at some point required assistance from other learners who possibly understood their peers' communication more easily.

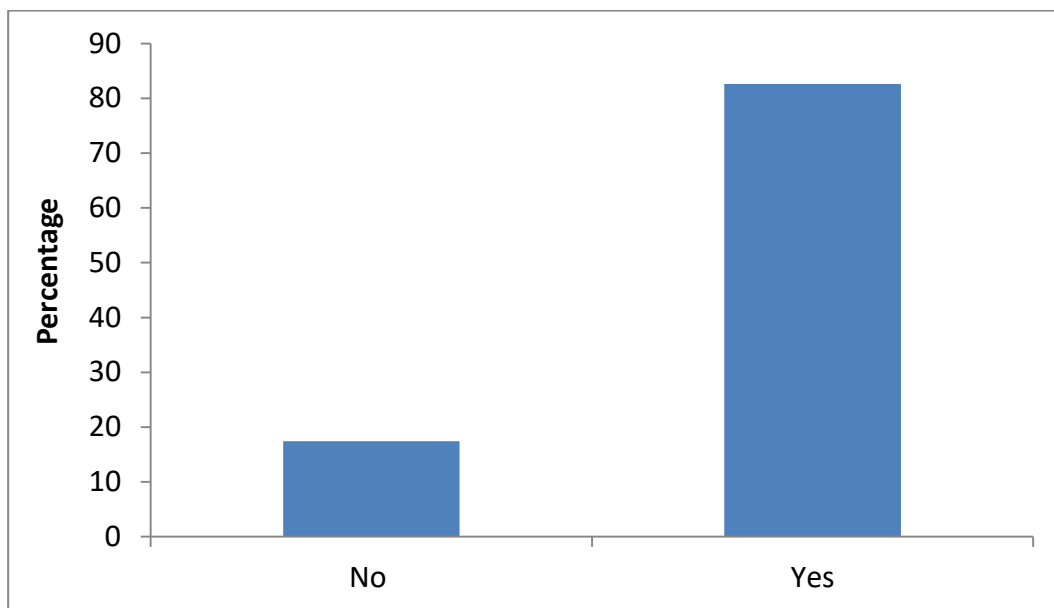
**Level of confidence by teachers:**

Confidence	Frequency	Percentage
Confident	15	62.5
Not confident	5	20.8
Not sure	2	8.3
Sure	2	8.3

Although close to two-thirds of the respondents (62.5%) expressed confidence in teaching children with SLD simply because they were already trained in special education with the exemption of communication disorders. Thus, it is still unclear how effective their teaching is since the majority of them have expressed inadequate understanding of SLD. About quarter of the respondents (20.8%) presented anxiety arguing that they were not confident in working with learners with SLD due to knowledge deficit and limited understanding of SLD. This finding was slightly a reflection of the results obtained by Sadler (2005) from an investigation into levels of teacher knowledge about SLD in which over 60% lacked confidence in their ability to work with learners with SLD. Less than a quarter of the respondents (8.3%) were not sure about their confidence in teaching learners with SLD while an equal percentage (8.3%) said that they were sure of their confidence in the teaching of learners with SLD.

**Experience of difficulties by teachers:**

Figure below shows responses on whether the respondents experience difficulties during their interaction with learners with SLD.



The majority of the respondents (79.9) expressed their concern about the difficulties they experienced in teaching learners with SLD. One of the respondents reported, '*we experience difficulties in trying to understand what they are saying and they need more time which is not available*'. This report concurs with the study by Dockrell and Lindsay (2001) who reported that teachers face challenges when working with learners with SLD hence the need to provide further training for them to promote their role in the intervention. Less than a quarter of the respondents (18.3%) stressed on having adequate satisfaction in teaching them.

#### Presentation of difficulties faced by the respondents:

The respondents were required to record the difficulties they faced when working with learners with SLD. They emphasized on the following responses in the table below.

Area of difficulty	Frequency	Percent
When answering questions	1	5.0
Difficult to understand the response	4	20.0
Lack of skills	2	10.0
More time	7	35.0
Pronunciation is distorted	1	5.0
Articulation	1	5.0
Hampered communication	1	5.0
Can't comprehend	2	10.0
Not fully equipped	1	5.0
System	4	16.7

Nearly half of the respondents (35%) emphasized on the need for more time to enable learners to satisfactorily complete the given tasks. They cited associated difficulties including following a hugely rigid curriculum which is insensitive to the needs of learners with SLD. Slightly less than a quarter of the respondents (20%) portrayed their inability to understand responses of learners with SLD. About 10% of the respondents emphasized on the fact that teachers lacked adequate knowledge and skills which continued to be detrimental to their involvement in intervention programs in the school setting. A small percentage which was far much below quarter of the respondents (5%) argued that teachers are not fully equipped with enough resources to work with learners with SLD as indicated by one of the respondents, '*I have not been equipped properly to sufficiently work with learners with SLD*'. A part of the respondents (5%) reported that the majority of the learners identified with SLD had articulation difficulties making their speech unintelligible.

### Responses on the training:

Table following shows the findings from the responses on the training of respondents

Trained on SLD	Frequency	Percentage
No	18	75.0
Yes	6	25.0

When asked whether they had any training in SLD three quarters of the respondents (75%) said they did not study SLD during their training in Special Needs Education. The rest of the respondents (25%) showed that they had received some minimal training in communication disability but was not enough to effectively understand the complexity of SLD. The head teacher stressed in the interview that he was trained in inclusive education but did not have knowledge of communication disorders particularly SLD hence found trouble understanding learners with SLD and that he had to listen to them more keenly to enhance their communication clarity.

### Training of teachers is key to effective intervention:

The majority of the respondents (40%) argued that training of teachers is key to intervention because the fact that learners interact most with teachers shows that they can benefit more from adequately trained and competent teachers as reported by one respondent, *'through training teachers will be more enlightened and will have skills to handle learners with SLD'*. Less than half of the respondents (33.3%) stressed that trained teachers will effectively be able to handle learners with SLD. 20% of the respondents pointed out that when teachers are sufficiently trained they can practice fairness among learners as an intervention strategy. A very minimal percentage (6.7%) of the respondents saw the need to train teachers to enhance professionalism in the teaching of learners with SLD.

## 5. DISCUSSION

According to the findings of this study, teachers lack adequate knowledge and informed strategies to effectively support learners with SLD. It is shown that due to lack of sufficient knowledge teachers face immense difficulties in the identification and choice of intervention strategies to appropriately teach learners with SLD consequently impacting negatively on the learning outcome of their communication skills, school work and social participation. The findings of the study are guided by the principle of Vygotsky Social Interactionist Theory. The findings have exposed teachers' incompetence due to lack of sufficient knowledge to teach learners with SLD. Vygotsky shows the vital role played by teachers as the More Knowledgeable Other (MKO) to transit learners progressively from one level of knowledge to another referring to Zonal of Proximal Development (ZPD).

Vygotsky reports the need to train teachers to be more skillful and competent to effectively support learning processes. Similarly this view is championed and enlightened further by the current study by highlighting the role of teachers and providing evidence on the scarcity of knowledge and inadequate support for teachers of learners of SLD thus, informing the need to establish supportive systems and training programs for teachers to effectively be involved in enhancing communication skills of learners with SLD.

## 6. CONCLUSIONS

The study established that although the majority of teachers working with learners with SLD had degrees in other fields of special needs education they did not clearly understand the nature of speech difficulties affecting their learners and the possible corrective measures which can effectively work for learners with SLD. The findings have further shown that due to inadequate knowledge of SLD a significant number of teachers lacked confidence in giving satisfactory support to learners with SLD.

The study elaborately reported that special training has been largely limited to other areas of special needs without putting much emphasis on SLD. It was also established that collaboration and consultation with relevant professionals and agencies to provide teachers with resources, technical support and professional advice has not been fully embraced.

Although the study does not ignore the benefits obtained from the available partnerships it is apparent that the said partners did not give much focus on the communication challenges affecting learners with SLD hence have not done much to adequately support teachers to maximally enhance the communication efficacy of learners.

This research evidenced the fact that the majority of teachers working with learners with SLD lack professional training and thus lack adequate knowledge required to enhance the communication skills of those learners. Therefore, it is apparent that the research findings have attempted to fill the knowledge gap that has been existing in the field of literature by creating insight on the need to provide professional training to teachers of learners with SLD.

## 7. RECOMMENDATIONS

- i) It is important to provide professional training to teachers of children with SLD to equip them with adequate knowledge to make accurate identification, comprehensive assessment and informed choices of teaching strategies to effectively remediate and minimize the impact of SLD in school children.
- ii) The government and other related stake holders should be fully committed to the teaching and general well being of learners with SLD by providing appropriate equipments that can enhance severely impaired communication including Augmentative and alternative communication systems (AAC). This will enhance their ability to express their needs to ultimately lead more meaningful and fulfilling lives as their typically developing peers.
- iii) Increased extensive and functional collaborative and consultative networks should be established to link the educational fraternity with supportive multi-disciplinary paradigms particularly the relevant medical practitioners and clinicians such as speech and language pathologists for professional advice, expert and technical support.
- iv) The Ministry of Education through the Kenya Institute of Curriculum Development should carefully evaluate the special needs curriculum to sufficiently accommodate individual needs including making drastic adjustments that can facilitate and pave way for possible adaptations and modifications of teaching strategies and management to promote classroom participation, academic progress and social integration of learners with SLD.
- v) The government should establish a scheme of service for speech and language therapists in the country and deploy them not only to hospitals but also to schools to closely monitor and work consultatively with teachers to promote their efficiency and effectiveness in professionally structured intervention programs.
- vi) Parental involvement to be enhanced by strengthening advocacy and community sensitization showing the need for early intervention and adequate linguistic stimulation to significantly promote reading readiness, physical, social and emotional gratification which if not addressed may have an adverse effect on speech and language development.

## REFERENCES

- [1] ASHA.(2009). Language-based learning disabilities. Retrieved July 10, 2009 from <http://asha.org/public/speech/disorders/LBLD.htm>.
- [2] ASHA.(2009). Augmentative and alternative communication. Retrieved July11,2009, from <http://asha.org/public/speech/disorders/AAC.htm>.
- [3] Barron, L., Holmes, R., MacLure, M. and Runswick-Cole, K. (2007). *Primary Schools and Other Agencies (Primary Review Research Survey 8/2)*. Cambridge: University of Cambridge Faculty of Education.
- [4] Bloom, L. (1988). What is language? In M. Lahey, *Language disorders and language development*. New York: Macmillan.
- [5] Bowyer-Crane C.A, Snowling M. J, Duff.F, and Hulme. C. (2011). Response to early intervention of children with specific and general language impairment. *Learning Disabilities: A contemporary Journal* 9: 107-21.
- [6] Brown, H. D. (1994). *Teaching by principles: An interactive approach to language pedagogy*. Englewood Cliffs, NJ: Prentice Hall Regents.
- [7] Cronbach, L., J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334.
- [8] Creswell, J.W. (2012). *Educational research, planning, conducting and evaluating qualitative and quantitative research*. Upper Saddle River, NJ: Prentice Hall.
- [9] Creswell, J.W. (2003). *Research design: Qualitative and mixed method approaches*(second Edition Ed.). USA: Sage Publications, Inc.
- [10] Conti-Ramsden, G and Botting, N. (1999). Characteristics of children attending Language Units in England: a national study of 7 year olds *IJLCD*42.
- [11] Clark G. (1994). Is a functional curriculum approach compatible with an inclusive Education model? *Teaching Exceptional Children*, 26:36-39.



- [12] DfES (2003). *Primary National Strategy: Speaking, Listening, Learning*.
- [13] Daniels, H. and Porter, J. (2007). *Learning Needs and Difficulties among Children of Primary School Age: definition, identification, provision and issues (Primary Review Research Survey 5/2)* Cambridge: University of Cambridge Faculty of Education.
- [14] Dockrell, J.E. and Lindsay, G. (2001). *Children with Specific Speech and Language Difficulties: The Teachers' Perspectives* Oxford Review of Education. 27, 369-394.
- [15] Dockrell, J. E., Lindsay, G, Letchford, B. and Mackie, C. (2006). *Educational provision for children with specific speech and language difficulties: Perspectives* Speech and language therapy service managers IJLCD July-August 2006 vol.41 N0.4. Developing people to support learning: *a skill and strategy for the wider School workforce*. 2006-09 (2006). TDA.
- [16] Edgar D. L, Rosa-Lugo L. I. (2007). *Lang Speech Hear Serv Sch*. Jan; 38(1):31-46.
- [17] Gardner, H. (2006). *Training others in the Art of Therapy for speech sound disorders: An Interactional Approach*. *Child Language Teaching and Therapy* 22; 1
- [18] Goswami, U. & Bryant, P. (2007). *Children's cognitive Development and Learning* (Primary Review Survey 2/1a) Cambridge: University of Cambridge Faculty of Education.
- [19] Hartas, D. (2004). *Teacher and speech-language therapist collaboration: being equal And achieving a common goal?* *Child Language Teaching and Therapy*, 20, 1: 33-53.
- [20] Howland, J. L. (2013). *Facts 101: Textbook Key Facts*. Contents Technologies Inc. Retrieved 2015-10-03.
- [21] Institute of Education Science: *What works Clearing House*, U.S. Department of Education (2006). *Intervention: Fast Forward Language*. Retrieved from <http://iesred.gov/ncee/wwc/reports/Englishlang/ffl/references.asp>, March 20, 2014.
- [22] Joffe, V; & Pring, T. (2008). *Children with phonological problems, a survey of clinical Practice*. *International journal of Language & Communication Disorders* 33, 154-165.
- [23] Kids Health. (2009). *Speech language therapy*. Retrieved July 13, 2009, from <http://kidshealth.org/parents/system/ill/speech-therapy.html#>.
- [24] Law, J., Boyle, J., Harris, F., Harkness, A. and Nye, C. (2000). *Prevalence and Natural History of Primary Speech and Language Delay*. Findings from a systematic review of the literature IJLCD Vol. 36.
- [25] Lee, C. (2004). *Language output communication strategies and communication tasks*. University Press of America.
- [26] Lof, G.L. (2006). *Logic, theory, and evidence against the use of non-speech oral motor Exercises to change speech sound production*. ASHA Convention 2006 1-11.
- [27] Maxwell D, L; & Satake, E. (2006). *Research and statistical methods in communication Sciences & disorders* (1<sup>st</sup> ed.). Boston: Thomson
- [28] Delmar Learning. Massachusetts Department of Education. (1994). *Massachusetts Regulations for Certification of Educational Personnel*. Quincy, MA: Massachusetts Department of Education. (1994).
- [29] Mecrow C, Beckwith J, and Klee, T. (2010). *An exploratory trial of the effectiveness of an Enhanced consultative approach to delivering speech and language intervention In schools*. *International Journal of Language and Communication Disorders*. 45:354-672.
- [30] Marinez-Moyano, I. J. *Exploring the dynamics of Collaboration in Interorganizational Settings*, Ch. 4, p. 83, in Schuman (Editor). *Creating a Culture of Collaboration*. Jossey-bass. ISBN 0-7879-8116-8.
- [31] Morales, S. (2009). *The mechanics of speech and language*. Retrieved July 10, 2009, From <http://www.childspeech.net/u-ii.html>.
- [32] Mintzberg, Henry, Quinn and James Brian (1996). *The Strategy Process: Concepts, Contexts, Cases*. Prentice Hall. ISBN 975-0-132-340304.

- [33] Ndung'u, R. & Kinyua, M.K. (2009). Cultural perspectives in language and speech disorders. *Disability Studies Quarterly*, 29: 4.
- [34] Odeny, O.M. L. (2007). *Factors contributing to job satisfaction and dissatisfaction Among teachers in Special Education*. Unpublished med. Thesis, Kenyatta University.
- [35] *Persons with Disabilities (Amendment) Act, 2007*. Kenya Law. Policy Framework for Education and Training: *The Sessional Paper No. 1 of 2005 on Education, Training and Research*, Kenya.
- [36] Repley, K. and Yuill, N. (2005). *Patterns of Language Impairment and Behavior in Boys Excluded from school*. March, 75.
- [37] Reilly, J. and Murray, S. (2005). *Thinking and Speaking in Primary Schools*. Barrington Stoke.
- [38] Roseberry-McKibbin, C. (1995). *Multicultural Students with Special Language Needs*. Oceanside, CA, Academic Communication Associates.
- [39] Schramm, B., Keilmaann, A., & Brachmair, J. (2010). Cranial babbling and early hearing and Language development of normal hearing children and Cochlear Implant. *Cochlear Implants International*, 11 (1), 375-378.
- [40] Sadler, J. (2005). Knowledge, attitudes and beliefs of the mainstream preschool diagnosis of speech-language impairment. *Child Language Teaching and Therapy*, 21, 2: 147-163.
- [41] Shaddock, T.J., Smyth King, B. and Giorcelli, L. (2007). *Project to improve the learning outcomes of students with disabilities in the early, middle and post Compulsory years of schooling*. Canberra, Australia: Australian Department of Education, Science and Training. Retrieved from: <http://www.canberra.edu.au/Researchrepository/items/IcIcba2b-42d9-248e-b79d-5eI3e28C89Ie/I/>.
- [42] Stanley Cravell, (2002). "Knowing and Acknowledging", Must We Mean What We Say? Cambridge University Press, 238-266.
- [43] Special Educational and Disability: *Tribunal Annual Report (2006)*.
- [44] The Kenya Institute of Curriculum Development: *Act No. 4 of 2013*, Kenya Law.
- [45] Tomblin, J. B., Records, N. L., & Zhang, X. (1996). A system for the diagnosis of Specific language impairment in kindergarten children. *Journal of Specific And Hearing Research*, 39, 1284-1294.
- [46] Vygotsky, L.S. (1978). *Mind in society: The development of higher psychology processes*. Cambridge, MA: Harvard University press.
- [47] Williams, A.L. (2002a). *Speech disorders resource guide for preschool children*. Clifton Park, NY: Delmar Learning.
- [48] United States Department of Education. (1994). *To assure the Free Appropriate Public Education of All Children with Disabilities: Sixteenth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act*. Washington, DC.
- [49] Weiman, J. C., & Kruger, S. J. (2001). *Research methodology for the business and administrative science (2<sup>nd</sup> Ed)*. Cape Town: Oxford University Press.
- [50] Wright, J., & Kersner, M. (2001). *Supporting children with communication problems: Sharing workload*. London: David Fulton.
- [51] Wright, J., & Kersner, M. (2004). Short-term projects; the standards Fund and collaboration between speech and language therapists and teachers. *Support for learning*, 19, 1: 19- 23.
- [52] Wright, J. A. (1992). Collaboration between teachers and speech therapists with Language impaired children in Fletcher P. and Hall D. (Eds). *Specific speech and language disorders in children*. Whurr Publishers.
- [53] Saunders Comprehensive Veterinary Dictionary, (2007). 3ed. Elsevier, Inc. All rights Reserved.