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Challenges Faced by Music Learners with Cerebral Palsy: A Case of Joy Town Secondary School for the Physically Impaired, Kiambu County, Kenya. Cross Sectional Study

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Abstract:

Objective: The article describes the challenges facing music learners with cerebral palsy (CP) in Joy Town Secondary School for the physically impaired in Kiambu County Kenya.

Methods: The study employed a descriptive research design because it sought to get a clear picture of the situation, attitude and behavior of individual students with CP. The study considered an estimated target population of 197 students and 17 teachers. However it was noted that not all students suffered from CP, therefore a non-probabilistic sampling technique was applied to select a sample of 48 students for the study. The sample size also included 17 teachers. Data was collected through interviews and questionnaires. The data gathered was analyzed using qualitative approach and the findings presented using tables, charts and graphs where it was applicable. To compute the data the statistical package for the social sciences (SPSS) was used for data analysis.

Results: Challenges faced by CP learners included: lack of appropriate music foundation for this group of students in the primary school, complex subject content considering their physical challenges, teachers, parent/their peers, attitude towards them pursuing music, a wide syllabus and limited time in teaching and learning music.

Conclusion the challenges that faced music learners with CP affected their interest in music and this discourages them from pursuing the subject. However, with the various strategies put in place, they can be assisted.

Keywords: Cerebral palsy, music education, children with special educational needs, disability, special schools, special needs education, music therapy

1. Introduction

Music teaching in Kenya today has been influenced by various factors. These include; cultural factors, the coming of the missionaries and colonial factors (Akuno, 2005). In the early days, music as a subject was offered in selected schools that were economically advantaged with qualified staff and appropriate equipment. However, by 1985, music in Kenya was offered as an examinable subject and this gave way a number of challenges including negative attitude toward the subject, as well as inadequate staffing and resources. As revealed by Akuno (2005), music was been considered as an extracurricular activity hence it became difficult for the teachers and institutions to implement it when the current 8-4-4 syllabus was launched. ⁽¹⁾

Recommendations concerning music education resulted in the restructuring of a music syllabus for Kenyan schools in 1985. Prior to this, music had not been a compulsory subject. The new syllabus reflected the struggle between African and European elements, but it definitely represented a shift of emphasis in favour of traditional Kenyan music. The syllabus treated music as a performing cultural art whose main element was expression of feelings and ideas. It explored both local and international culture with three main areas. These were; Basic Skills, History and Analysis and Practicals (Aural and performance). Although this did not address music and special education, it contributed to the many challenges associated with music education in Kenya which this study addresses. ⁽¹⁾

For years now, music has been taught in the secondary school as an elective subject, with very few schools presenting candidates for National Examination. Before 1985, there were just a handful of schools, notably those that were formerly European or some of the former Missionary schools, which taught music at form IV. Of these, fewer schools still taught music at high school level, IV and VI. The report goes on to say that even in the late 1980s, schools were struggling to implement this ambitious syllabus. This reveals the origin of the challenges experienced in the teaching of music in Kenya that have spilled into the current attempts at music education. This situation is what necessitated this study, to try and understand the challenges faced by learners with cerebral palsy (CP) and find solutions to these problems ⁽²⁾

In schools today, Kenyan teachers have adopted a theoretical pedagogy, resulting in a number of music students who are unable to behave musically, be it in the area of performing, listening or composing. This study was ultimately undertaken to articulate teaching strategies that can assist learners with CP. Elliot (1995) argues that without a prior sense of the nature and significance of music, it is impossible to justify the place of music teaching and learning in any educational scheme. Here lies the challenge of conceptualizing music education in a manner that portrays the subject as exciting and one that can be used to impart knowledge and skills to enable learner express themselves musically. Elliot (1995:134) highlighted the role of music education programs in schools and the role that teachers ought to play in empowering their learners to be musically competent. ⁽²⁾

Music learning is cumulative and requires that previously mastered skills be employed in new situations (Mbeche, 2000). Dalcroze Eurhythmics approach to music education believed that every musician should strive to be sensitive and expressive. They should be able to express music through purposeful movement, sound, thought, feeling and creativity. This, according to the approach, would lead to performance at high level beyond expectations (Caldwell, 1995). This approach has been successful in the developed countries where learners with special needs succeed well in music. Most educators subscribe to the fact that what is learnt should ideally make an impact on the learners' lives. This should spark a high degree of interest from the learners. When interest wanes off, there is a problem.⁽³⁾

This study was also anchored on the view that basic education is a right to all regardless of disability, sex, race, color or social status as Hayford (2002) noted. In developing countries, learners with special needs are often marginalized from under resources and poor quality education system. As Oxfam Education Report, 2002 states:⁽³⁻⁴⁾

“Good quality education is available to only a small proportion of children with Special needs. Children with disabilities, especially girls, are far less likely to attend primary school. Many of those who do go to school receive education that is entirely inappropriate. Educational disadvantage prevents children with special needs from gaining the skills and confidence that they need to avoid extreme poverty in adulthood”.

The strength of music as an art and the reason every society has nurtured and valued its music lie in the strong appeal of music to the life of emotions and to the imagination. The potential strength and value of the music education program lie in the development of responsiveness to the expressive import of music. Without its expressive function and its aesthetic quality, music has nothing unique to offer to the education of children, young people or adults. This means that music is the vehicle through which individuals activate their creativity and use it to express themselves. This can encourage creativity among the learners once they have grasped the music concepts taught. (Mbeche, 2004) ⁽⁴⁻⁵⁾

On average Learners with physical challenges just like other learners without challenges show a significant interest in the study of music when they are admitted in form one. However in most schools it's observed that most learners drop the subject may because they imagine music is not a career subject. However it has been observed that learners with challenges show a lot of interest in music and they actually respond well to music as compared to other regular learners. This is shown by the large number of students taking music in form one. Among the many students who enjoy learning this subject are learners with CP, one of the disability classifications of students who are admitted in Joy Town each year. However, as they proceed to form two the number of students interested in pursuing music diminishes. Literature from developed nations such as United States (US), United Kingdom (UK), Finland and many others however show that a lot of studies have been done on this area. However, the researcher found very scanty documentation of instructional issues faced by learners with physical challenges in developing countries and more specifically in Kenya.⁽⁶⁾

A study by J. King'uru (2010) carried out in Joy Town Secondary School on psychological problems facing learners with physical challenges established that, the students who cannot perform heavy tasks like farming, sewing and cooking will avoid such subjects like agriculture and home science in favour of less demanding ones like music and Fine Art to compensate for their weak limbs. Though this does not really address the issues of learners with cerebral palsy and music, it diverts to the psychological problems that affect learners with physical challenges (PC).The researcher found that learners with PC preferred music to other technical subjects. However, learners with CP who are also under this category of PC drop the subject as they proceed to form two ⁽⁷⁾

The intriguing question then is why would these learners drop music as a study subject contrary to initial interest in the subject? Amongst the many challenges for classroom music practitioners globally, are the processes of developing inclusive pedagogies which celebrate differences, promote inclusive learning experiences and overcome learner disaffection in reaching the young people mostly at risk of exclusion, topics which are receiving considerable global and public exposure and attention, (Bernard, 2008).This calls for the need to carry out a research on the challenges that lead to loss of music interest among learners with CP. ⁽⁸⁾

This study sought to examine why these learners with CP at Joy Town Secondary School for the Physically Impaired in Thika, discontinued studying music, contrary to the apparent interest displayed when they joined form one (first year of secondary school cycle). That was the anomalous situation that the study considered worth investigating. Objectives of the Study

1.1. Objectives of the Study

The main objective of the study was to provide information on how best learners with CP can be assisted to pursue music education up to the highest levels. The objectives of the study were to:

- Identify challenges faced by learners with CP in studying music.
- Establish factors that lead learners with CP dropout in music.
- Assess strategies that can be put in place to facilitate participation in music learning and sustain the interest of the learners with CP.

1.2. Method

The study employed a descriptive research design.

1.2.1. Target Population

The target population was 197 students with physical challenges in Joy Town Secondary School Thika plus the 17 teachers. However, not all the 197 students who suffer from CP, only 66 students are CP.

2. Data Collection Technique

This study used questionnaires and interview guides to collect data from the respondents. The questionnaires and the interview were administered to the individual learners with CP, while the teachers were subjected to the questionnaires only.

3. Data Analysis

Data was analyzed using qualitative approach. Descriptive statistics were mainly used in data analysis. Descriptive statistics involved tabulating in describing the data (Orodho, 2005). After the actual fieldwork, data collected from interviews were assembled according to emerging themes and classified by different categories. The items that sought information on the same objective were grouped. The responses to the items were coded, and analyzed both quantitatively and qualitatively using SPSS Statistics 17.0 software. This was done by assigning symbols numerals to each answer that followed in a pre-determined class. Descriptive statistics such as frequencies and percentages were employed to analyze data.

4. Logistical and Ethical Considerations

An authorization letter from Kenyatta University and a research permit from the National Commission for Science, Technology and Innovation (NACOSTI) were obtained. The researcher sought consent of the Sub County Director of Education in Kiambu County before embarking on the research. A letter requesting for permission to conduct the study was sent to the school principal, with whose permission this research was conducted. The rights of all learners with CP and the teachers participating were put into consideration. Right measures were put in place to overcome the challenges of getting the learners to reveal some information due the nature of their disability; the researcher assured the respondents of confidentiality in the Information they gave. Sensitization on the benefits of the study to the learners was done to the respondents.

4.1. Results

From the findings, there were more boys (58.3%) with CP condition than girls (41.7%) as shown in the Table 1 below.

Gender	No of Respondents	% N=48
Male	28	58.3
Female	20	41.7

Table 1: Learner's Gender

4.1.1. Previous Music Experiences.

From the statistics below, it was revealed that a very good number of the learners with CP had not undertaken any music lessons before joining form one; 72.9 % had not had any music lessons, only 27.1% had music lessons before.

Previous Music Lessons Learnt	Number of Respondents	% N=48
Yes	13	27.1
No	35	72.9

Table 2: Previous Music Lessons Learnt

4.1.2. Areas Learnt Previously.

It was important for the study to find out areas learnt in the previous music lessons. It was revealed that 20.8 % had learnt singing, while only 2.1% had lessons on dancing. Majority of the respondents 77.1% indicated they had no lessons before.

The Areas Studied That They	Number .of Respondents	% n=48
Singing	10	20.8
Dancing	1	2.1
None	37	77.1

Table 3: Areas of Study

4.1.3. The Rating of Interest in Music

In response to the interest in music, 56.2% of the respondents indicated that they like music, while 43.7% indicated that they did not like music as a subject.

Interest Music	Number of Participants	% n=48
Yes	27	56.2
No	21	43.7

Table 4: The Rating of Interest in Music

4.1.4. Preferred Areas in Music

In response to the areas in music that they liked most 41.6% indicated they liked singing, followed by 27.1% who like dancing, 6.3% like composing music, 14.5 % liked playing music instruments, and 6.3% liked History of African music, 2.1% liked history of Western Music and Aural respectively. The finding from this question led to a conclusion that most of the students with CP liked singing as indicated in table 5.

Areas Liked	Number of Respondent	%n=48
Singing	20	41.6
Dancing	13	27.1
Composing	3	6.3
Playing of instruments	7	14.5
History of Africa Music	3	6.3
History western Music	1	2.1
Aural	1	2.1

Table 5: Preferred Music Areas

4.1.5. Engagement in Out of Class Music Activities

With regard to the engagement of other music activities, The study revealed that 41.6% learners were involved in singing folk songs followed by 33.3% who sang in the school choir (S,A,T,B) 10.4% acknowledged that they dance during school entertainment sessions while 8.3% composed songs. Lastly 6.3% stated they did poetry.

Engagement in out of class activities	Number of Response	%n=48
School choir	16	33.3
Folk songs	20	41.6
Entertainment	5	10.4
Composing songs	4	8.3
Poetry	3	6.3

Table 6: Out of Class Music Activity

4.1.6. The Reason of Discontinuing Music as a Subject

This question was administered to find out the challenges faced by the identified learners which made them stop learning music. The finding provided in Table 7 and consequent figures indicates that 56.3% of learners with CP discontinued with music because the content taught was difficult for them to understand, 12.5% couldn't play the descant recorder, 25% acknowledged that they could not coordinate well in the music activities, while 6.3% expressed that they could not access the music room easily.

Why Discontinue Learning Music	Number of Respondents	%n=48
Content was difficult to understand	27	56.3
Could not play the recorder	6	12.5
Could not coordinate well while singing	12	25
Could not access the music room easily	3	6.3

Table 7: Reasons for Dropping Music

4.1.7. Challenges Encountered in Class When Learning Music

From the table below it is clear that learners with CP experienced several challenges while learning music as 33.3% indicated that they could not write on the staff and drawing the music notes and other figure; 20.8 % indicated that the music room facilities were a problem to them, 33.3% also said they could not coordinate well like their fellow classmates in clapping or tapping various rhythmic patterns, 8.3% indicated they could not sing well like others did, while 4.1% expressed that the music teacher was fast in teaching them. The Table 8 illustrates this clearly.

Challenges Encountered When Learning Music	Number of Respondents	%n=48
Writing of music notes and the drawings.	16	33.3
Using the music room tables were too high	10	20.8
Could not coordinate	16	33.3
Could not sing well	4	8.3
The teacher was too fast	2	4.1

Table 8: Challenges

4.1.8. Intervention Measures

This question was administered to find out the interventions can be put in place to help the learner with CP learn music. The outcome was as follows, 50 % expressed that the music curriculum should be adapted so as to accommodate them. 25% said that learners with CP should be tested differently in practical; 14.6% expressed that the music writing materials like the music manuscript books should be adapted so that they are able to use them well. 6.3% indicated that music room should be easy to access, while 4.1% still said that areas tested in music should be separated and made optional.

Intervention Measures	Number of Respondents	%n=48
To adapt the music curriculum	24	50
Test practical differently	12	25
Adapt the writing materials	7	14.6
Make music room more accessible	3	6.3
Separate the areas tested and make them optional	2	4.1

Table 9: Intervention Measures

4.1.9. Determining If the Dropping of Music Affected the Choice of Career Choices

From the results 60.4% indicated that not continuing learning music affected their choice of career. While 39.6 stated that it did not affect.

Did the Dropping of Music as a Subject Affect Your Career Choices	Number Respondents	of	%n=48
Yes	29		60.4
No	19		39.6

Table 10: Dropping of Music Affected Choice of Careers

4.1.10. Continuation of Music Study

From the findings, 60.4% stated that given a chance and having the changes suggested put in place, they would study music while 39.6% would not continue learning music.

Given an Opportunity Would They Still Learn Music	Number of Respondents	%n=48
Yes	29	60.4
No	19	39.6

Table 11: Continuation of Music Study

4.1.11. Determining Whether Other Learners with CP Would Study Music If the Changes and Adjustments Were Made

This question was administered to find out whether they would still do music or advise others to study if all the adjustments and changes suggested were implemented. As the table illustrates, 72.9% indicated that they would, while 27.1% stated they would not.

With Appropriate Changes Would Other CP Learners Continue to Study Music?	Number of Respondents	%=48
Yes	35	72.9
No	13	27.1

Table 12: Studying Music While the Changes and Adjustments Are in Place

5. Discussion

The study found that majority of the learners with CP had not had any formal instruction in music before joining high school. A majority of the respondents (72.9%) indicated that they had not taken music lessons in the primary school. 27.1% stated that they had learnt some music and were involved in singing during the school activities. A small of number of 2.1% stated that they had taken part in dancing at the school level. These findings indicate that the lack of foundation in music in the primary school had contributed to their challenge in sustaining interest in music. Abeles (1995) points out

that whatever is learned in the early years of a child's life helps form a foundation for subsequent educational development. Furthermore, similarly, Gordon (1987) stated that unless a child has favourable early informal and formal environmental experiences with music, that level of music aptitude will never be realized in achievement. The findings agree with the observations made by both Abeles and Gordon that late introduction to Music Education in Kenya poses a challenge to interest in music in later years. Akuno (2012) urged that music in public schools is a paradox; she contends that Music Education in early childhood is merely singing during school activities at some interval of learning. This can be attributed to the many education reforms that have taken place since the introduction of the 8-4-4 systems. For instance, the Koech Commission (1990) affected music education greatly when they rendered music as a non-examinable subject in primary school and optional in secondary school. The reason was that these students did not have any music instruction before they got to secondary school.

The findings indicated that learners with CP faced various challenges and these challenges interfered with their interest in music. About 56.3% indicated that they were interested in learning music despite the challenges they faced, while 43.7% indicated that they did not have interest in music. Students population involved in this study provided a clear picture of the interest they had in music.

In regard to the question on the various areas that they preferred to learn in music, 41.6% indicated that they preferred singing, 15% had a liking in dancing, 6.3% liked composing music, 14.5% chose playing instruments, 63% selected history of music and lastly 2.1% liked aural and history of western music respectively. This finding is in line with King'uru (2010) observation that students with physical disability favoured activities that were less demanding on them physical. However the current secondary school music curriculum entails much more than singing.

Abeles (1995) points out that:

"The fact that people enjoy performances by schools music groups is both a boon and bane for music education".

He argued that performances have a number of significant benefits, they give students an opportunity to perform before the audience, and they build awareness of and support for certain portions of the music program. Unfortunately, there is a downside to performances as they are currently misused in some schools. He contends that the basic problem is that entertainment begins to dominate the curriculum and the educational reason for including music in the school seems to become lost. For the applied musicians, performing is both the end and the means. However, for school students performance should be the means, with the learning of music as the ultimate goal. Unfortunately, because of the visibility and prestige that can be realized through performance, educators frequently confuse ends with the means in such a case. This is the situation these learners with CP seem to view performance as the end rather than the means, thus shifting learning of music to gratification of the audience and performers. This poses a challenge to them because Music Education in secondary school is more than mere performance.

From the responses obtained from the respondents, there was a clear indication that learners with CP can be assisted to overcome the various challenges they face while learning music. Half of the respondents indicated that the music curriculum should be adapted to fit the needs of learners with CP. This is in line with the disability act 14 of 2003 which states and supports the reforms of exams for learners with disability, the response from 25% of learners with CP suggested that the practical set exam for KCSE should be tested differently for them and 14.6% also stated that the music writing materials such as the manuscript book should be adapted to suit their different needs by enlarging the spaces in the lines. The disability act states that every institution should be fitted with facilities or infrastructures that are friendly and accessible to persons with disability. However from the response, 6.3% indicated that the music room should be made accessible and friendlier. Still on the disability act on education in examination matters, any education institution should consider the needs of the learners although the institutions may provide the various subjects to be taught, the curriculum still hinders students from accessing the preferred subjects due to the shortcoming encountered as it is evident with music and learners with CP.

The examinations set for learners with special needs should be adapted to fit their needs. From the results obtained, 4.1% stated that areas tested should be separated and made optional. This can be in areas like theory of music testing harmony using sol-fa notation rather than staff notation in the exams. The respondents stated that if the named challenges are mended, they would continue to study music up to higher levels. Majority of the respondents (60.4%) indicated that they would still study music, if the amendment were made as compared to 39.6% who indicated that they will still not study music. From these responses, it can be observed that these learners drop the subject because they are faced by a lot of challenges and if the intervention measures discussed and illustrated in figure 4.9 in chapter 4 of this study are put in place, they would continue to study music. Study sought to discover the challenges that made the learners to discontinue music and found that their physical and mental condition contributed greatly to their dropping music. Music subject requires a lot of co-ordination of the body like in rhythm, drawing music notes and the staff. However their impairment made this very difficult. For instance, 33.3% of them indicated that their speech problems also made them to discontinue music. This is clearly indicated in chapter 2 of this study (2.4 persons with disability); ataxic cerebral palsy and athetoid have problems in coordination and speech. Also 8.3% indicated that they could not sing like their fellow students who did not suffer from the same condition. The teacher handling the learners with special needs also need to be well-trained in order to assist them in their learning. 2% stated that the music teacher was too fast when teaching and as such could not cope with the subject. The study also found that due to the challenges encountered by these learners did not just affect their choice of subject but it also affected the choice of their careers. 60.4% attested to this while 39.6% stated that it did not affect them. This means that majority cannot choose any career that is related to music.

5.1. Conclusion

The challenges that faced music learners with CP affected their interest in music and this discourages them from pursuing the subject. However, with the various strategies put in place, they can be assisted.

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7. References

- i. Abeles, H.A, Hoffer, C.F, and Klotman, R.H (1984). *Foundations of Music Education*. New York. Macmillan Publishing Company.
- ii. Abeles, H. F, Hoffer, C.R., and Klotman, R.H. (1995) *Foundation of music education* (2nd Ed). NewYork: Thomason Schirmer
- iii. Abramo, J. (2012). *Disability in the classroom: Current trend and Impact on Music Education*. Music Educators Journal (99) 1, 39-45.doc10.
- iv. Africa, Imfundo Report- Phase 1. *Department for International Development*.
- v. From:<http://imfundo.digitalbrain.com/imfundo/web/papers/refpapers/>
- vi. Akuno, E.A (2005). *Issues in music education in Kenya: A Handbook for teachers of music*. Nairobi. Emak Music Services.
- vii. Allison, R.R. (2008). *Maslow's Theory of motivation and hierarchy of human Needs. A critical Analysis*. A school of social Welfare university of California Berkeley An Introduction. Nairobi: Paulinespublication Africa,
- viii. Andolo, E.K. (2006). *Adjustment of people with acquired disability and its impact on their caregivers*. M.A.Thesis.Nairobi: USIU.
- ix. Bell, J. (1993). *Doing your research project* (2nd Ed.).Buckingham: Open University. Boules, C & D. Rohwer (eds.) International Journal of Community
- x. Caddwell J.T (1995). Expressive sing: Dalcroze Eurythmic for voice. *Music Educator Journal* 79(7), 27-28.
- xi. Campbell, P.S and Scott-Kassner (1991). *Music in childhood: From pre-school through the elementary grades*. Schirmer Books Limited.
- xii. Campbell, P, S (1991) *Rhythmic movement and public-school education progressive views informative years*. Journal of research in music education 19 pp12-20
- xiii. Casely-Hayford, L. and Lynch, P. (2003a). *ICT and Special Needs Education*
- xiv. Casely-Hayford, L. and Lynch, P. (2003b). *ICT Based Solutions for Special combines affective and cognitive functioning*. In D. Dai & R. Sternberg (Eds.), *Motivation, emotion and cognition: Integrative perspectives on intellectual functioning and development* (pp. 89-115). Mahwah, NJ: Erlbaum.
- xv. Cronbach, L.J. (1951). *Coefficient alpha and the internal structure of tests*. psychometrika, 16(3), 297-334.
- xvi. Dewey, J. (1913). *Interest and effort in education*. Cambridge, MA: Riverside Press.
- xvii. Dornyei, Z. (2007). *Research Methods in Applied Linguistics: Quantitative, Qualitative and Mixed Methodologies*. Oxford: Oxford University Press.
- xviii. *Educational Needs in Ghana, Imfundo Report - Phase 21*. Department for International Development. Retrieved, July 28 July 2015 from [http://imfundo.digitalbrain.com/imfundo/web/papers/refpapers/ Educational Psychologist](http://imfundo.digitalbrain.com/imfundo/web/papers/refpapers/Educational Psychologist), 41, 111-127.
- xix. Elliot, D. J. (1995). *Music Matters: A new philosophy of musical education*. New York. Oxford University Press.
- xx. European Journal of special needs education. (March 2001) educational need of students with special needs 16(1), 29-40
- xxi. Gordon E. (1987). *Nature, Descriptive Measurement and Evaluation of Music aptitudes*. California. G.I.A Company
- xxii. Heward.H. (2009). *Current issues and trends in special education*. Retrieved July 28, 2015 from <https://books.google.com/books>
- xxiii. Hidi, S. (1990). Interest and its contribution as a mental resource for learning. Review Ucp.(n.d).http://www.uCPa.org/uCP_generalsub.cfm/124/4/24.
- xxiv. Hidi, S., & Renninger, A. (2006). The four-phase model of interest development. Ucp.(n.d).http://www.uCPa.org/uCP_generalsub.cfm/124/4/24
- xxv. Hidi, S., Renninger, K. A., & Krapp, A. (2004). *Interest, a motivational construct that* Ucp.(n.d).http://www.uCPa.org/uCP_generalsub.cfm/124/4/24
- xxvi. Music in Africa (n.d) *Music Education in Kenya* Retrieved. March28 2019, from <http:s//www.musicafrika.net/magazine/music-education Kenya>
- xxvii. Jellison, G. (1984). *Structuring small groups and music reinforcement to facilitate positive interactions and acceptance of severely handicapped students in the regular music classroom*. Journal of Research in Music Education, 32(4)243246
- xxviii. Jonathan, G. (2010). *The foundation of research* (2nd Ed. ed.). United Kingdom: Palgrave Macmillan.
- xxix. Kingu'ru J. (2010). *Psychological problems facing learners with physical challenges in Joytown Special Secondary School in Thika*. Unpublished M.A Thesis. Nairobi: Kenyatta University.
- xxx. Koech Education Commission(1991).Retrieved from <http://www.africog.org/reports/Commissionsofinquiryaper.pdf>

- xxxi. Kombo, D. & Tromp, L.A.D. (2006). *A proposal and thesis writing*:
xxxii. Kothari, C.R. (2004). *Research Methodology. Methods and Techniques* (2nd ed.). New Delhi, India: New Age International Publishers.
xxxiii. Krapp, A. (2002a). *An educational-psychological theory of interest and its relation to*
xxxiv. Leppert. R. (1988). *Music and image: Domesticity, ideology and social-cultural formation in eighteenth century England*. Retrieved July 28, 2015 from <https://books.google.com/books>.
xxxv. Leslie, B. (1994). *Music therapy: An art beyond words*. London: Rutledge.
xxxvi. Lockesh, K. (1994). *Methodologies of educational research*. New Delhi: Vikas Publishing House PVT Ltd.
xxxvii. Mbeche, C.G (2003). *Perceptions and experiences of Kenyatta University Music students towards aural musicianship teaching in Kenyan secondary schools*. Unpublished Paper presented at Kenyatta University Music Institute Research Seminar.
xxxviii. Mbeche, C.G. (2000) *Factors affecting student performance of aural skills at KCSE in Nairobi secondary schools*. Unpublished MA Project, Kenyatta University.
xxxix. MediZine, (2010). *Cerebralpalsy*. University of Guelph Library Journal. Retrieved July 28, 2015 from journal.lib.ouguelph.ca/index.php/ajote/art.
xl. Mindoti, WM. (2010). *The development of music as an academic discipline in Kenya (1978–2002) Music in Kenya: Development, management, composition and performance: A Tribute to Daniel T. ArapMoi*. Nakuru: Kabarak University.
xli. Ministry of Education (2003). *Report on special needs education*. Appraisal Exercise (Kochung"s) Nairobi Government of Kenya.
xlii. Ministry of Education. (2006). *Draft policy on special needs education for children with disabilities*. Nairobi: Ministry of Education.
xlili. Mpofo, J., Gasva, D., Gwembire, J., & Mubika, D. (2011). *Introduction to Special*
xliv. Mugenda, O., & Mugenda, G. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: ACTS Press,
xlv. Mugenda, O.M, and Mugenda A.G. (1999). *Research Methods*. Nairobi: Acts Press.
xlvi. Music. *Proceedings of Music and Lifelong Learning Symposium of April 14-16, 2005*. Madison, US: University of Wisconsin-Madison.
xlvii. National Council for Persons with Disabilities, (2003). *Persons with Disabilities Act Needs Education*. Zimbabwe: Zimbabwe Open University Harare
xlviii. No. 14. Nairobi: Government Printer.
xlix. Norfford, P. and Clive, R. (1973). *Therapy in music for handicapped children*. London: Victor Galanoz Ltd.
l. Orodho, J.A. (2004). *Techniques of writing research proposal and report in education and social sciences* (1st Ed.) .Nairobi: Masola Publishers.
li. Orodho, J.A (2005). *Techniques of Writing Research Proposals and Reports in Education and Social Sciences* (2nd ed.). Nairobi: Kanezja HP Enterprises, Maseno
lii. Oso, Y, W. & Onen, D. (2005). *A guide to writing research proposal and report: A handbook for beginning research* .Kisumu; Optional Press and Publishers.
liii. Paul, O. (2004). *Writing your thesis*. London: Sage Publications, 6 Born Hill.
liv. Pregrine, J. (2005). *Music as medicine: The history of music therapy since antiquity*. England: Ashgate Publishing Ltd.*psychometrika*, 16(3), 297-334.*Qualitative and Mixed Methodologies*. Oxford: Oxford University Press. retrieved,28 July 2015]
lv. Shitandi,W.O.(2005) Issues of Access, Demand and Teaching of African music and its Related Technology in the Kenya Higher Education Systems. In Hertbert, A. (Ed), *Emerging solutions for musical Arts in Africa* (pp.283-297). Cape town: African Minds.
lvi. Schiefele, H., Krapp, A., Prenzel, M., Heiland, A., & Kasten, H. (1983). *Principles of An educational theory of interest*. Paper presented at the 7th Meeting of the International Society for the Study of Behavioral Development, Munich, Germany.
lvii. Self-determination theory. In E. Deci & R. Ryan (Eds.), *The Handbook of self-determination research* (pp. 405-427). Rochester, NY: University of Rochester Press.
lviii. Touliatos, J. & Compton.W.H. (1988). *Research methods in human ecology /home economics*. Iowa state University Press. Ames, Iowa 50010
lix. UCP, (2011). *United Cerebral Pals*. Retrieved July 15/07/2015, 2015, from [UnitedCerebralPalsy:http://www.pecentral.org/adapted/factsheets/cerebralpalsy.html](http://www.pecentral.org/adapted/factsheets/cerebralpalsy.html)
lxi. UNESCO, (2001). *Understanding and responding to children's needs in an inclusive*. United Cerebral Palsy (UCP) Research Fact Sheets
lxii. United Nations. (1948). *Universal Declaration of Human Rights Adopted by the General Assembly*. Resolution 2174(111). New York.
lxiii. Verma, G. and Beard, R. (1981). *What is Educational Research*. Hants: Gower Publishing Company.
lxiv. Wang"ang"a, A.W. (2010). *Instructional Constraints Faced by Learners with Duchene Muscular Dystrophy*. Unpublished M.A. Thesis. Nairobi: Kenyatta University.
lxv. Wanyama, MN. (2006). *Music Education: An Unexploited Goldmine in Kenya*.