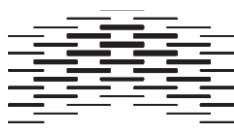Making children-inspired playgrounds everywhere:

A case study of the creation of the playground using recycled materials at Kampala School for

Physically Handicapped, Uganda

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FRONT COVER IMAGE

The photograph used on the cover page was taken during a final touches painting of the playground at KSPH. I took the photograph in its natural setting and no participant(s) was organized before taking them. This was done to capture the moment as it is.

APPROVAL

I declare that Mr. Tusingwire Ruganzu Bruno has done this Masters' thesis under my due supervision.

Signature ………………….

Name: Jan Stålhane

Date……………….............

ACKNOWLEDGEMENTS

ABSTRACT

Fred Rogers said that:

Play gives children to practice what they are learning

As an art educator and playground artist, I believe all children deserve safe places to place and learn. It might seem like play is free in all places of the world but the state at which children can access play while growing up in developing world with political, ecological and economic factors is alarming. This is due to the shortage of playgrounds to learn and play in and even harder to find playgrounds that are all-inclusive. Children with physical disabilities find it much harder to access play in some African societies due to stigma and poverty. Also, environmental challenges like damping non-biodegradable and waste management are poignant issues in the mushrooming urban areas. Is there a possibility of solution such community problem of lack of play and waste at once to create awareness?

This study's main objective was to build a playground together with Ugandan children with both physical and mental disabilities in order to investigate how inclusion and participation can create sustainable solutions targeting learning outcomes and human dignity within the education system. The creation of a playground inspired by the children's ideas and their participation led to a design process using recycled materials picked from the environment at the Kampala School of Physically Handicapped schools in Uganda.

The main findings of the study show that in general, Children who are the end users of the playgrounds need to be engaged by planners or playground makers to provide new ideas that are child centered and more engaging. Children with disabilities are labeled and stigmatized by the society yet deserve same equal opportunities to play and be children thus this research is part of raising their voice.

DEDICATION

To the children at Kampala School of Physically Handicapped, this is your story, our story. And to my Ubuntu family who accepted that their friend and father to be away while pursuing the Masters studies in Norway for two years.

LIST OF PICTURES

LIST OF ABBREVIATIONS

1. HiOA   Oslo and Akershus University College of Applied Sciences
2. KyU   Kyambogo University
3. KSPH   Kampala School of Physically Handicapped.
4. HOD   Head Of Department
5. MOES   Ministry of Education and Sports
6. MVP   Master of Vocational Pedagogy
7. GoU   Government of Uganda
8. KyU   Kyambogo University

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1. INTRODUCTION AND BACKGROUND

1.1 Introduction

'Do you remember that feeling the first time you went down the slide at your local playground. How about your child finally conquered all the monkey bars on his or her own?'. (Pincetl & Gearin, 2005); Weitzel (2013, p. 1) notes that:

These are some of the memories we cherish in Life. Now, try to imagine a city with more than 600,000 people and no playgrounds. No safe place for families and children to gather and have fun, grow strong or be challenged.

Playgrounds are important to all children everywhere. In reality, however, many societies around the globe lack such spaces for play. This may be a result of a general lack of resources or it can be a lack of awareness and ability to utilize playgrounds when the choice stands between a building for a school on the one hand and a playground on the other.

In Uganda, there are limited playgrounds for children in many schools, and the gap stretches more for an all-inclusive play where children with disabilities could freely play. That is why my thesis is based on the process of making a playground using what is seen as waste materials for the children at Kampala School of Physically Handicapped (KSPH).

There was a need to create an all-inclusive playground which would ensure that these children studying there could be engaged in creative play. So the children were therefore included in the design process, picking their ideas and using them to inspire and create the playground. In this way, the project of creating the playground demonstrated the children's ability and confidence in contributing creatively and openly.

Maybe more important in this regard, the project demonstrated how safe and fun space for play can be made using recycled materials that are regarded as waste, to build a playground using only a minimal amount of resources and money. It demonstrated that there is no longer any excuse not to create these spaces everywhere regardless of economic stability.

This piece of work is a summation of the activities I was directly involved in with the stakeholders to conceptualize a researchable theme on: "Making a recycled playground for children with

disabilities". The key stakeholders in this project were; practicing artists, students, and teachers at the KSPH. As part of the initial remarks, I present a brief personal background upon which the motivation for this study was based. It is at this point that I describe the background to the project, present the key leading questions as well as the general structure of the project.

1.2 Who am I and what do I wish to Investigate?

1.2.1: Personal Background

I was born in Kabale district, a rural part of South Western Uganda. To play was unlimited, unstructured, unsupervised and yet so much fun. I used to run with my peers in the rain. We would play in the banana plantations, jump off mango trees with small scratches of which we knew what natural herbs to apply in case one was hurt. My parents died when I was young, so I started living in several different homes and strongly bonded in children's rights to play as this was not an area of interest in many African home settings. I wandered around nature with wide imagination, I would look up in the sky and see an airplane flying and wonder what it meant to touch it or even better to experience being in it. It was all surreal and almost impossible to come close and touch airplanes. On a rear occasion, especially when the president visited our village, we would run kilometers to Makanga hill from Kekuubo with my friends to see it only to be stopped by military securities during the times they flew to Kabale.

My understanding of another life changed when I moved in 2007 to Kampala city and joined Kyambogo University (KyU) as a student at the Art and Industrial Design department. While here, it is then I realized how much garbage and waste was littered around the city and got concerned. I saw the waste as a material that was easy to get and cheap compared to other art materials. While building sculptural installations at street art festivals to raise environmental awareness, at the same time cleaning the environment. It was during these street art festivals where my sculptures would be built live with the audience and children seemed to enjoy them more and there it was when the idea of turning my sculptural art into play elements was conceived. 'I kind of felt a change within myself to think about others' as quoted by CNN's Kermeliotis (2013, p. 2).

While I made it as a Ugandan International artist making playgrounds all over the world, I had strong connections with my humble beginnings back home. It was the with deeply rooted

background engaged in the spirit of Ubuntu as quoted by (Mbigi & Maree, 1995). I needed to find better ways to build playgrounds for children while involving them in the process for sustainability and ownership. I know well by experience what a playground means to a child and their creative development. Initially, all the playgrounds I make with the communities had my ideas as an artist and this was not sustainable in the long run.

I am a trainer of trainees in the field of Art and Industrial design. Through my personal experience, observations and interactions with colleagues, with whom we completed together three years training in Art Education at KyU, I have noticed that most of the schools in Uganda prioritizes making four walled square buildings, so-called classrooms, instead of identifying ways to make children learn through play and outside in the environment. (Hansen Sandseter, 2007) urges that the need to combine play and learning outside is normally ignored. The results in her study indicated that the nature playground does not afford a higher frequency of risk-taking play among children but, rather, a higher level of risk in children's play because the features of the play environment are more challenging and risky. She adds that children seek risky forms of play in any play environment. However, one can assume that the nature playground enables the children to experience more intense, exhilarating, and thrilling play situations than the ordinary playground. With this in mind, we were able to keep in mind that all the natural plants like the mango tree had to be left to balance nature play.

My interest in this project is deep rooted in the need for children not to only get a play to play but also to participate in the realization of the ideas for the play elements. Building a playground, with children, creates so much joy and inspiration for the future leaders. It also improves my practice as a visual and Environmental Artist and educator. I have already been introduced to various pedagogical approaches including, among others, participatory and collaborative action research and I find this mode of training pertinent in preparing children to take up a central role in determining their own play spaces- a method that can be replicated in other places in the world.

1.2.2 Professional Background

I am a Visual and Environmental Artist and educator in the field of Art and Industrial Design at KyU where I acquired both a Diploma in Education and Degree in Industrial Art. I was later retained at the same institution, and have worked for four years as an art and design lecturer at KyU after completion of my bachelor studies. At the same time building playgrounds in places where there was none. The playgrounds are created out of a need, usually with limited resources, and we use interactive collaborative methods to engage the community in mobilizing materials from around them and using it to create the playgrounds. These have been realized in several places, including two playgrounds in Kampala, Uganda, one in Nairobi, Kenya, one in Tanzania, in Brazil and two in the North Carolina, USA.

I was selected as artist in residence to extend this research with play by children at *Fabrikken for Kunst og Design*, Denmark, in 2017, have been Artist in Residence at McColl Centre of Art and Innovation(McColl, 2012), a recipient of the Young Achievers Award(Wikipedia, 2016), and the TED Prize for City 2.0 (TED, 2012), amongst others. I have also inspired two documentaries, one in Brazil and one in Sweden, about my work and life. I initiated TEDxKampala in Uganda and now works as a curator of this independently organized TED Conference. My work has been featured in the Good Magazine, CNN, Inhabitant, Creative, the Independent Magazine, among others. Through my work, I have tried and still try my very best to share my aspirations of changing the world one playground at a time, as well as saving the environment from waste.

I was offered this scholarship by the Norwegian government to study at Oslo and Akershus University College (HiOA), with the facilities I found here, great teaching staff who were and are always wanting the best for me, I knew it was the right environment where I could develop a module that could be used to make playgrounds that are children inspired and be replicated elsewhere in the world.

1.3 Background of Inclusive Education in Uganda

Faced with these challenges, there is a trace of an increased interest in the idea of inclusive education. However, the field remains confused as to what actions need to be taken in order to move policy and practice forward. In some countries, inclusive education is thought of as an approach to serving children with disabilities within general education settings. Internationally, however, it is increasingly seen more broadly as a reform that supports and welcomes diversity amongst all learners (UNESCO, 2001),-(Ainscow & César, 2006, p. 1).

Uganda is a signatory to the International Agreements\ Commitments that provide for Learners with Special Needs. In consonance with the Government Constitution (1995), Uganda has put in place "The Persons with Disability Act" (2006) and has also ratified the United Nations Convention on the Rights of Persons with Disabilities.Both Instruments demand access, equity, and quality as regards educational services for persons with special learning needs. To meet those requirements, the Ministry of Education & Sports put in place a Department responsible for Special Needs and Inclusive Education. The mission is to coordinate and support the provision of Special Needs & Inclusive Education Services to meet the educational needs and rights of learners with special learning needs.

The traditional/long-established approach of Special Education was and is still focusing on learners with disabilities specifically. Learning support was and still is provided in special schools and in special classes (Units/Annexes) integrated in the ordinary schools. Learners with barriers (special needs) arising from disability conditions usually require Specialized support services, Specialized teaching methods; Access to resource rooms and use of specialized technology to access curricula. Summarily, this approach takes care of learners with visible impairments, usually in the severe-profound levels requiring specialized support.

The current approach of Inclusive Education (IE) focuses beyond both the traditional and the transitional practices of special education and integration respectively. The present trend of inclusive education and policy thrust embraces modifications in curricular, teaching methods, teaching/learning resources, medium of communication and adjusting the learning environment to meet individual learning needs. It is learner-centered, flexible and adjustable to the individual needs and potential of every child. This approach takes cognizance of and seeks to mitigate factors

that form barriers to children's participation in learning and development. It is meant to widen the opportunity for all children to interact, play, learn, experience the feeling of belonging and develop in accordance with their potentials and difficulties; thereby obtaining a good quality of life within their respective environments. It is all about changing attitudes, behavior, teaching methods, curriculum, environment and allocation of human, material, and financial resources to meet the educational needs of all Learners.

1.4 Background to the Project

1.4.1 Introduction
The idea behind this particular project was developed while I carried out a survey was carried out by the researcher to find out which school needed to benefit from the generous grant I had previously won the Visible Awards 2015(Zegna) finalist. The first school I went to was St. Josephs Primary school in Kampala. The school administration was still battling with acquiring a land title and was not sure if the school would exist in the next couple of days. The children at this school were studying without a play area and had been excited that finally, we could build one but the administrators deemed it not sustainable since they were still looking for ways to keep open. It was not until during a conference at Makerere University in June 2016 that I met Roland's Tibirusya. He is a Ugandan artist who had been working at the KSPH for five years and he invited me to come meet with the director and see what was possible since the school did not have a playground designed to suit their needs. From visiting the school, it was that time that it was discussed that the next playground.

1.5 School Background

With the background in building playgrounds, KSPH provided the ideal location and community. This is the oldest school for children with physical disabilities in Uganda started in the 1950's. It was started out of the dire need for children with disabilities to find a place to study at their pace with their needs put in mind. It is a privately owned since there was no special needs school that was started by parents with a Christian model serving both boys and girls with a day and boarding facilities. Among its mission are:

To educate, rehabilitate and equip physically handicapped children for development and self-reliance.

A society with all round educated physically handicapped people able to contribute to national development.

The school is committed to foster unity, understanding, kindness and forgiveness among the special children, staff, and stakeholders.

To maximize its service capacity through responsible stewardship of all entrusted resources.

It believes in strong partnership building with oversight agencies, institutions and the general public through effective collaboration and information sharing.

KSPH strives to maintain the highest degree of professionalism, respect, honesty, and fairness in dealing with partners, and public at large. KSPH strives to foster a culture of commitment and hard work in service provision to all handicapped children whose needs are consistent with the school mission. KSPH strongly believes in parents, guardians, and care givers and values their participation in school activities and events.

Volunteers help to fill the gaps in therapy department, mainstream classes, vocational and the sickbay. There were no playground facilities from which the children could learn and play with the needs of their physical abilities.

With this wealth of information and knowledge as a background, I have come to my statement of the problem as follows:

1.6 Statement of the problem

How to create a playground for children using recycled materials at Kampala School of Physically Handicapped?

1.7 Explanation of problem statement

When it comes to children with disabilities, it is a social construction that they are not consulted while making playgrounds that fit their physical inability. Combing learning and play requires going outside of the classroom walls.

The majority of schools in urban areas have limited land to plant classrooms structures later on leave space for play. Basically, when schools are built, little attention is put to the play area yet we know how important it is for children to play. KSPH was one of the schools that needed an all-

inclusive playground but because materials expensive, the plan was to use the waste materials around and recycle them into play elements.

Batte (2016, p. 16) writes that Lucchetti noted that:

'It is an exemplary approach that positions him and his work among those practices, on a global scale, that have decided to engage themselves with society and its many issues. From the singularity and peculiarity of building playgrounds for disadvantaged children in Uganda and elsewhere, springs the potential of a model that can be replicated and scaled down or up to other contexts,'.

1.8 Objectives of the study

The following objectives were generated with the stakeholders to guide data collection

i.   To engage and design a playground with children's ideas while using materials from the environment.

ii.   How can play impact learning?

1.9 Research Questions

i.   How can children be engaged in creating their own playgrounds?

ii.   To find out the Impact of play on learning?

iii.   To work with artists in collaboration with the school teachers to create the playground.

1.10 Collaborating with the Artists

Uganda being one of the developing countries, the political turmoil has an effect on the education system where majority of the schools do not have sufficient classrooms let alone playgrounds for the amount of children. The majority of artists are political conscious and use art as a force of change. When school was consulted about the collaboration of its teaching staff, parents and local community to make this playground, a suggestion was made to invite other artists too.

"It is an exemplary approach that positions him and his work among those practices, on a global scale, that have decided to engage themselves with society and its many issues. From the singularity and peculiarity of building playgrounds for disadvantaged children in Uganda and elsewhere, springs the potential of a model that can be replicated and scaled down or up to other contexts," Lucchetti observed.(Batte, 2016, p. 17)

Drawing lessons were suggested to be carried out during workshops facilitated by local and accomplished artists from Kampala. Also, sampling was to be carried out to find artists who work with community projects willing to volunteer.

1.11 Organization of the report

The writing of this thesis has been built up in different chapters as discussed below:

Chapter two:

This chapter is titled pedagogical framework and theories. When I started writing about pedagogical framework in which case I have used the didactical relations model to explain its main parts and why I find these theories useful to my study. There is education system in Uganda and gave a glimpse into what play games are in Africa and the representation of a child's position in African societies leading into what play opportunities exist. This chapter discusses the theories and conceptual framework that guides this study. The section discusses the theories underlying primary school education and the need for play outside the classroom drawing mainly upon play as a child's right and human relation theories.

Chapter three

This is my methodology chapter. I have included here the process how I did the systematic literature search. The research design is explained. The meaning of action research and its roots is also elaborated, and why I chose to use it. The population and how I chose my sample is explained. The methods and tools use to collect data are document and justified. Issues of reliability and validity, and also ethical issues are discussed.

Chapter four

This contains the data I got from the field using the different methods and tools. The descriptions of the findings were based on two themes. Theme one (4.1) explored different opinions and ways in which children can be engaged in the process of creating their own playground. Theme two

(4.2) examined the relationship between play and learning there by giving its impact as a pedagogical model.

Chapter five

The data is discussed in this chapter based on the titles directly generated from my objectives already stated.

Chapter six:

This contains the discussions on the reflections and recommendations. Here, I have discussed the basing on the presentation of findings and responses that emerged from the respondents. Also from the knowledge of experiences of the researcher in connecting to the observations, discussions with the respondents at different intervals.

2. CONCEPTUAL FRAMEWORK AND THEORETICAL ISSUES

2.1 Introduction

This chapter discusses the theories and conceptual framework that guides this study. The section discusses the theories underlying primary school education and the need for play outside the classroom drawing mainly upon play as a child's right and human relation theories. The chapter then, provides a conceptual framework that guides an understanding on how making an all-inclusive playground may influence the creativity of children and boost their quality of education.

2.2 The Didactical relations model

According to Hiim (2011, p. 20), didactics is regarded as a practical-theoretical process where student teachers and teachers develop concept of teaching and learning through systematic practicing and critically reflecting on educational work. In this case, making a playground was the students resource. The conceptual frame work used is the didactic relations model which helps teachers to analyze, improve and eventually do research in their various practices.
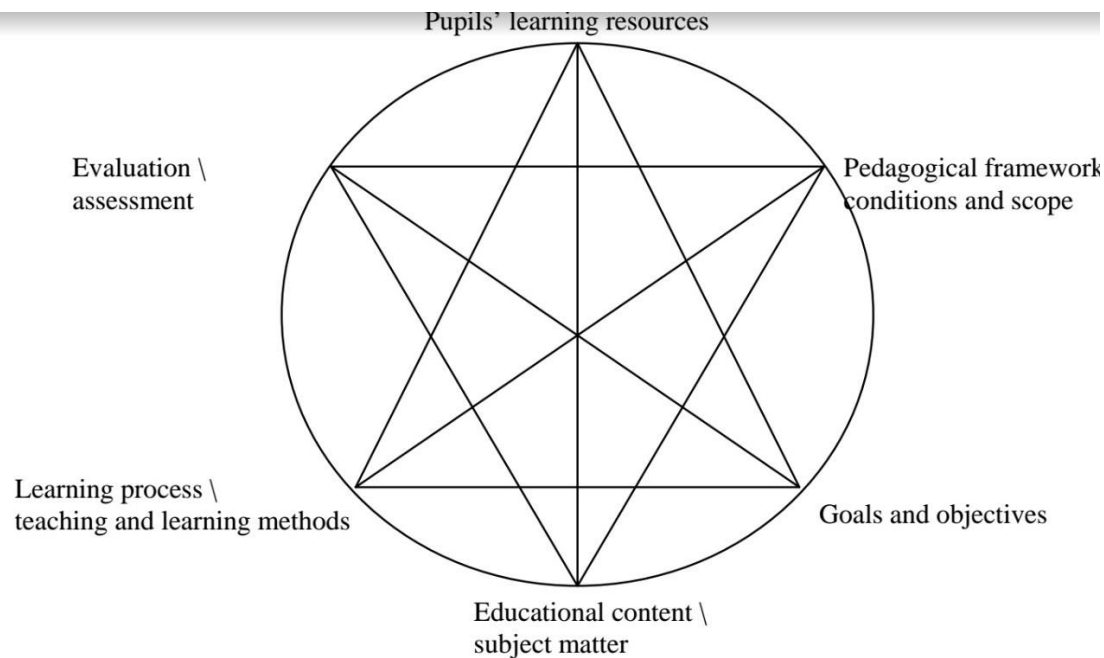
A model of didactic relations (Hiim & Hippe, 1989 based on Bjørndal & Lieberg, 1978)

Figure 1*: **A model of didactical relations model**

The model describes the relations between fundamental educational concepts: Pupils' learning resources and needs, pedagogical framework conditions and scope, educational aims and goals, subject matter and content, teaching and learning methods, and forms of assessment.

The teachers required that pupils of KSPH were interested in having a playground to which they could be connected in terms of understanding their strengths and challenges especially mobility. In contrast, the pupils did not mind how safe or limited the playground was to be. According to one of the pupils, all they care about is to play.

'Whether it is rolling in the sand, or climbing the mango tree at school, I like to play freely but am in the wheel chair most of the time'. Garvin, a pupil at KSPH

The pupils answered the question of didactical relations in the education situation by emphasizing the need for an all-inclusive playground. Concepts that children learn on their own, spontaneously self-reflective by participating in spoken interactions with other human beings urged(Mjelde & Daly, 2006, p. 125). This relationship between teachers and pupils shows the power gap in that adults are always deciding what is safe and ideal for children when it comes to play.

These relations can be improved by letting children air out their views freely and respected which stimulates their confidence levels that they manage the world ahead.

Examples of further questions are: What is the relation between pupils' learning resources, interests and needs, and subject matter in the actual situation? What are the relations between pupils' learning resources, educational goals, and teaching and learning methods?

(Hiim & Hippe, 1991) cited in (Hiim, 2011, p. 20) noted:

> *The main issue in this approach to teacher education is that student teachers learn to analyze didactic relations in various contexts and situations, and to involve pupils and colleagues in the analysis, with an aim of continuous development and improvement. A research based evaluation showed that students found this kind of teacher education relevant, and felt well prepared for work. But our experiences pointed towards a need for practice based research, which could contribute with professional concepts rooted in professional practice.*

This approach is quite intriguing for the way it sets free student teachers whereby they can explore their surroundings. Thought this approach is widely used in developed countries like Norway, it is a great exchange material for the south. Having studied at HiOA and visited several schools on excursions, I adopted the same model in our Ugandan education system that is still stuck on merging the interests of the school to those of society. This is one of the major reasons why unemployment in Uganda is escalading at a high rate. A lot of graduates come to the field with little knowledge of the needs and interests of the outside world. Thus when teachers work worth their student and community, then they can use their methods to solve community problems and challenges. Thus creating more efficiency and practical knowledge experiences that make job makers than job seekers for instance, when student teachers of Art and design go to the field, they can interact with what is going on in the community according to market needs and technological advancement and there could come up with projects that are like making playgrounds.

The purpose of educational action research conducted by teachers is to develop knowledge of importance to the teacher herself, participants in the project, and for the teaching profession. The research problem in this approach is not formulated as a proposition or a hypothesis, but is grounded in a question of how a professional task or challenge can be met. The source of the question is wishes and visions for change.

In this approach, the purpose of action research is to develop professional concepts, conceptual patterns and examples, rather than to develop theory. An important focus in this kind of teacher research is on pupils' or students' opportunities for experience based on learning in different fields, which means opportunities for relevant, involved primary experience. Teacher research is here based on professional tasks concerning educational processes. The intention is to develop the quality of essential educational and teaching functions, through systematic cooperation between all involved. It is also to document this kind of development on different fields, related to educational frameworks and structures.

2.2.1 Pupils' learning resources
The KSPH is an all-inclusive school with limited learning resources, the teachers are the primary knowledge givers and are trained in special need education at Kyambogo University, where I work and serve. The number of teacher to student level is way too below standards and the school is

under staffed. The pupils learning resources lack a library and is majorly school room based. Communication mediums like sign language is not easy since the ratio of staff is low so the school relies on volunteers. Some of the volunteers lack experience in special needs and are looking at enriching their CVs that actually helping the learners. The learners use mostly papers, books and have a garden and compound outside which we transformed into the play area. The need to take learning out of the classroom was a shared agreement with both the teachers and pupils.

2.2.2 Learning process
Most talk and chalk method of learning is conducted at the school. This is one of the oldest mediums of teaching where a teacher talks as he or she writes on the blackboard. The students are only involved in the mode of question and answer approach. The learner is subjected to materials prepared by the teachers and had to read, cram and await examinations that require revision than understanding. While at the school, as a pedagogue, I was able to introduce new approaches to learning where the children were to be engaged in the learning process. This was done by holding a workshop for all the teachers at the school. The feedback from this workshop led to teachers changing the way teaching and learning was carried out. Suggestions to bring pupils to the playground to learn about nature, recycling were encouraged and both teachers and pupils could play games together that reflected their goals of learning.

The Goals and objectives of the KSPH include building strong partnerships building oversight agencies, institutions and the general public through effective collaboration and information sharing. Thus made it easy to collaborate with Kyambogo University where the researcher works.

2.3 African proverb about the position of the child in society
To understand the position of a child within the African society, the researcher has used a proverb that best describes what a child is in a homestead. This cannot be generalized but stands true for most communities, Ugandan children included.

 It takes a whole village to raise a child. Igbo and Yoruba (Nigeria) Proverb

Explanation:

This Igbo and Yoruba (Nigeria) proverb exists in different forms in many African languages. The basic meaning is that child upbringing is a communal effort. The responsibility for raising a child

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is shared with the larger family (sometimes called the extended family). Everyone in the family participates especially the older children, aunts and uncles, grandparents, and even cousins. It is not unusual for African children to stay for long periods with their grandparents or aunts or uncles. Even the wider community gets involved such as neighbours and friends. Children are considered a blessing from God for the whole community.

This communal responsibility in raising children is also seen in the Sukuma (Tanzania) proverb "One knee does not bring up a child" and in the Swahili (East and Central Africa) proverb "One hand does not nurse a child."

In general, this proverb conveys the African view that emphasizes the values of family relationships, parental care, self-sacrificing concern for others, sharing, and even hospitality. However, when a child is born handicapped or developed physical disability, majority of the African societies are quick to respond with discrimination leading to stigma these children.

2.4 Social Stigma among children with disabilities.

(Durkheim, p. 1) defines social stigma is the extreme disapproval of (or discontent with) a person or group on socially characteristic grounds that are perceived, and serve to distinguish them, from other members of a society. Stigma may then be affixed to such a person, by the greater society, who differs from their culture. In Uganda, stigma amongst children with disabilities such as the deaf are labelled 'Kasilu' which is a local phrase for a 'stupid' person.

Thus it is important to highlight the dangers of stigma amongst the locals. Link and Phelan (2001, p. 368) urge that human differences are socially selected for salience, we have chosen to use the word "label" rather than "attribute," "condition" or "mark." Each of these latter terms locates the thing that is being referred to in the stigmatized person and risks obscuring that its identification and election for social significance is the product of social processes. In Uganda, stigma amongst children with disabilities such as the deaf are labelled 'Kasilu' which is a local phrase for a 'stupid' person. Thus it is important to highlight the dangers of stigma amongst the locals.

2.5 Education system in Uganda

Uganda's education system has been in place since the early 1960's. It consists of seven years of primary education following which students have a wide range of options for both public and private education institutions depending on their aptitude, ambitions and resources. It should be noted that although, the pre-primary level is not mentioned, some primary schools especially those in urban setting only admit children who have undergone 1-3 years of education at this level and the Ministry of Education and Sports is also beginning to regulate this level by standardizing its curriculum. Primary education, however, is still considered the first level of formal education in which pupils follow a common basic curriculum. Divergences in Uganda about where school education should be leading children are clearly part of a political game that has international, national and local stakeholders. Each category wishes to influence the future by directing children to certain places 'for own good' as well as 'for the common good'(Meinert, 2009, p. 193).

This is followed by a secondary cycle of six years (four at lower secondary and two and higher secondary) before proceeding to university education for three to five years depending on the duration of the course offered. On successful completion of primary school, the pupils can go either for secondary education; or take a three-year crafts course in technical schools. Those completing Uganda Certificate of Education have four possible outlets: successful candidates can either proceed for an advanced certificate of education; join a two-year advanced crafts course in technical institutes; join a two-year grade III primary teaching program; or join any of the government's departmental programs such as agriculture, health, veterinary, and cooperatives.

After the completion of the advanced certificate of education the students can either: proceed to university; join a two-year course leading to ordinary diploma in teacher education, technical education; business studies or join departmental programs More schools, institutions, colleges and universities have been established; and enrolments in all these institutions have exponentially increased. The private sector participation in the education sector has also been remarkable to the extent that education is increasingly being seen as an export sector(MOES, 2014).

In my opinion as an educator, I agree with (Briggs & Sharp, 2004, p. 662) who urges that 'development experts' from the West are brought in to analyze a development problem and to offer

a solution based on scientific method. Just as in the colonial period, an assumption dominates that either Western science and rationality are more advanced or refined than other positions or, more simply, that they are the norm— 'knowledge' in the singular form—from which others deviate in their fallibility. Added to the above, Shizha urges that deconstruction of colonial education discourse in higher education in Zimbabwe (which applies to Uganda) can be done by undertaking inclusive projects and programs.

These should focus on disrupting and deconstruction of the Eurocentric hegemonic perspective that is central to academic knowledge constructs(Shizha, 2010, p. 116).

2.6 Current national priorities, as stipulated by Ministry of Education and Sports

- Provision of Universal Primary and Secondary Education (UPE and USE)
- Sensitization of the population about UPE and USE in order that communities fully participate in their implementation
- Provision of construction materials for primary and secondary schools and tertiary institutions in a progressive manner
- Improvement of teacher training programs and rehabilitation of Teachers' Colleges
- Making the teacher central in the education system by creating a well-trained, facilitated and disciplined teacher
- Improving the teaching of science, mathematics, technical and technology education at all levels
- Review and reform of the examination in order to incorporate continuous assessment; and
- Implementation of strategies that will redress the existing imbalances i.e. gender, geographical, social, or otherwise as well as the disparities in education standards and performance throughout the education system in general and primary and secondary education in particular (MOES, 2014).

These priorities ignore indigenous knowledge amongst communities thus rely on a western education system. This has been one of the reasons for the gap between what is taught in schools than the expectations of the local community.

Some approaches to indigenous knowledge can lead to a freezing of traditional cultures and ways of knowing. Such treatment supports indigenous knowledge only if presented as an unchanging presence (Dei, 2000, p. 669). Adding to this alarming fact in education is Elliot (1991, p. 5) who urges:

> The 'theories' of learning, teaching and evaluation were articulated in staffroom gatherings and meetings to derive from the attempts to bring out change in a particular set of circumstances rather than from the teachers professional training gained in universities and colleges of education.

Teachers can be a force of change when they know that their students are fed on an education system that is bond to collapse. Setting up of education reforms or finding other ways to impact change is one of the ways I had to bridge the gap between the university and the community.

Integrating both Dei and Elliot, I embarked on reaching out beyond the university to the communities to use art as a form of social change. This required integrating indigenous environmental in the playground designs and thus a need to understand what games have been played on the continent over the years.

2.7 The games in Africa

Children play the same world over though some societies have indigenous games that have stood a taste of time. On the African continent, there are different games that the research found interesting to shade light on. These in a way influence my research to document their history and how they are connected to the playgrounds I help create since some of them are incorporated in the learning materials. Einarsdottir (2005, p. 484) notes that the wish to listen to and involve children originates in this cultural climate. This is the need to explore the games found in Africa. The games have been sustained by indigenous knowledge and passed on generations to the other through play. As a researcher interested in indigenous knowledge, to explore play required to understand and document some of the existing games and how they are played since we had to integrate them in the playground as described below:

1. MANCALA (THROUGHOUT AFRICA)

Mancala is believed to be the oldest game in the world. It was played in as many countries on the continent as there is variations of it. So if you don't recognize the name, it's probably because it's been called everything from kigogo in Kenya to oware in Ghana. How does it work? First you need a mancala board, with holes arranged in either two or four rows. Small stones or seeds were used in earlier days; today, using marbles is common. The name mancala literally means "to transfer" in Arabic, so the aim is to move your stones around so that you can capture more than your opponent. It's fun, but strategic, much like chess. The game is still played in Uganda today, enjoyed by both children and adults across the globe.

2. AMPE (GHANA)

This is a game best played with a group of four or more, but just two people will do, too. It's an active game, with so much clapping, singing, and jumping involved that it almost looks like a dance. It's a game that's been passed down from generation to generation. A leader is chosen and the rest of the group either stand in a semicircle or split into groups of two. The leader begins by jumping, and when you land from your jump, you place one leg forward. Points are earned depending on which leg (left or right) meets the opposite leg of your opponent first. Everyone gets a chance to be the leader and usually the first person to reach 10 points wins!

3. KUDODA (ZIMBABWE)

There's a few variations of this game, all which need at least three players to make it fun. In Kudoda, players sit in a circle around a wooden or metal bowl filled with 20 to 30 small stones or marbles. The first player picks up one of the stones and throws it up in the air. It's all about quick fingers. Before it drops down, the player tries to pick up as many other stones in the bowl as he/she can. Once all players have had a chance, the stones are counted and the one who collects the most is the winner.

4. NYAMA-NYAMA-NYAMA (UGANDA)

"Nyama!" is what you have to shout out when the leader in the game mentions an animal that can be eaten. The word literally means "meat" in Swahili. In nyama-nyama-nyama you stand in a

circle, with a leader in the middle. The group jumps up each time an animal is named. This game is still played across East Africa and is popular among children of all ages.

5. STOCKINGS (ACROSS AFRICA)

This game starts from the ankle, working all the way up to the neck. It's played by girls across the continent—and all over the globe. All you need is a skipping rope, but many use stockings as an alternative to the ones you can buy at the store. Two players stand on each end of the rope, swinging it in a circle motion often while singing a song. A third player jumps in the middle, skipping as the rope turns. The two players on each end start swinging the rope low, which is easy for the jumper, then gradually progress by lifting the rope higher and higher – to the knee, the thigh, then waist, until the third player can't jump high enough. A fourth player can also be introduced, which makes it more challenging.

These days, "child's play" seems to be about online gaming, from Play stations to pock man go. The game Pokémon Go is a "craze," a "sensation." You use a smartphone in a virtual scavenger hunt for cartoon characters, but in real locations. It appeals to youngsters and adults(Serino, Cordrey, McLaughlin, & Milanaik, 2016, p. 1). But many might recall the days when children congregated outdoors, playing their favorite games in the street. They were free and required little or no equipment. Apart from being fun, they also helped build fundamental skills, from social interaction to physical hand-eye co-ordination and even basic mathematics and strategic thinking. These games are integrated into the playgrounds and children experience learning as they play.

2.8 Playground as a workshop Pedagogy in vocational education
According to Mjelde and Daly (2006, p. 130), pedagogy has its point of departure in the work of the hand in relation to the process for acquiring new knowledge. Students learn by cooperating with teachers and other students. They learn through work activities. Hand and mind stand in a dialectical relationship to one another in the learning process itself. The whole body is in activity that implies social actions as well. In this research project, the playground built using materials which that are picked from the environment as waste makes children engage in saving their

environment. Also, learning about re using, recycling in the process of building and creating. This argument has been supported by (Roussou, 2004, p. 5) who notes that:

> Undoubtedly, play is a child's favorite activity, so the belief that learning occurs more readily in an environment of fun, challenge, and variety may seem obvious. However, concern has been raised regarding the drawbacks of learning through play, especially if learning is made to be "too much fun." According to this view, the goal is not to create fun-only environments but to create meaningful tasks, so that students take learning seriously and learn to do difficult tasks

Accomplished artists are brought in the picture as mentors for the young children at the school and in this case continuing my previous research of filling the apprenticeship in Uganda which I had presented in project three of my research.

2.9 Inclusive Education and necessity of play in Uganda

Necessity of play

Einarsdóttir (2007, p. 472) notes that despite the fact that children are the people most affected by the quality of early childhood institutions, surprisingly few attempts have been made to examine their perspectives on their early childhood program. The affordances of the environment include what it "invites" us to do, and the concept of affordances includes both the environment and the person, meaning that the affordances are unique for each individual and correspond with the individual's body size, strength, skills, courage, fear, etc.

Sandseter (2009, p. 439) notes that children's risky play has both positive and negative aspects. On the one hand, the imminent risk of being injured is present when children seek physical risks in play, an issue that has led to a growing focus on play safety and the development of legislation on playground design.

Faced with these challenges, there is a trace of an increased interest in the idea of inclusive education. However, the field remains confused as to what actions need to be taken in order to move policy and practice forward. In some countries, inclusive education is thought of as an approach to serving children with disabilities within general education settings. Internationally,

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however, it is increasingly seen more broadly as a reform that supports and welcomes diversity amongst all learners (UNESCO, 2001) as cited by Ainscow and César (2006, p. 1)

Uganda is a signatory to the International Agreements\ Commitments that provide for learners with Special Needs. In consonance with the Government Constitution (1995), Uganda has put in place The Persons with Disability Act (2006) and has also ratified the United Nations Convention on the Rights of Persons with Disabilities(Mukholi, 1995, p. 3). Both Instruments demand access, equity, and equality as regards educational services for persons with special learning needs. To meet those requirements, the Ministry of Education & Sports (MoES) put in place a Department responsible for Special Needs and Inclusive Education. This department's mission is to coordinate and support the provision of Special Needs & Inclusive Education services to meet the educational needs and rights of learners with special learning needs.

The traditional/long-established approach of Special Education was and is still focusing on learners with disabilities specifically. Learning support was and still is provided in special schools and in special classes (Units/Annexes) integrated in the ordinary schools. Learners with barriers (special needs) arising from disability conditions usually require Specialized support services, Specialized teaching methods; Access to resource rooms and use of specialized technology to access curricula. Summarily, this approach takes care of learners with visible impairments, usually in the severe-profound levels requiring specialized support.

The current approach of Inclusive Education (IE) focuses beyond both the traditional and the transitional practices of special education and integration respectively. The present trend of inclusive education and policy thrust embraces modifications in curricular, teaching methods, teaching/learning resources, medium of communication and adjusting the learning environment to meet individual learning needs. It is learner-centered, flexible and adjustable to the individual needs and potential of every child.. It is meant to widen the opportunity for all Children to interact, play, learn, experience the feeling of belonging and develop in accordance with their potentials and difficulties; thereby obtaining a good quality of life within their respective environments. It is all about changing attitudes, behavior, teaching methods, curriculum, environment and allocation of human, material, and financial resources to meet the educational needs of all Learners.

3. METHODOLOGY

3.1 Introduction

The study aimed at creating a recycled playground at the KSPH, Uganda. This study employed qualitative action research approach to obtain complementary data on the method of creating a playground with the help of children ideas. According to McNiff (2013, p. 24), Action research is given to a particular way of looking at your practice to check whether it is as you feel it should be. As a maker of playgrounds, I wanted to use action research to provide qualitative data on a more complete picture of noting trends and as well as in/depth knowledge of participants\s perspectives. The qualitative data would be got from students, teachers, directors of the school and the artists and used for validity.

3.2 Study Design

Action research involves learning in and through action and reflection and is conducted in a variety of contexts. Today, you can do action research in social and caring sciences, in education, nursing and health care, in artistic and creative practices and in virtually any other discipline or area. McNiff (2013, p. 24)

3.2.1 Participatory action research (PAR)

This chapter shows that, rather than the generation of new knowledge the purpose of conventional PAR is driven predominantly by a desire for positive change. Growing out of social and educational research, it is one of the few research approaches embracing the principles of participation and critical reflection. (Baldwin, 2012) With the collaboration of artists, teachers, students at the school empowered and emancipated group seeking to create a playground to improve the situation at the school. The investigator preferred to collaborate with this group as co researchers. The reason for choosing the qualitative research for this study is that this approach is flexible, therefore the research questions may be changed at any time during the process of execution and it allows open ended and inductive style of questioning and observation which is interactive and humanistic. Thus the qualitative research approach allows active participation between the informants and the investigator in the study.

Graue and Walsh state that the use of pair or small group interviews allows you collect more information from children participants. Children are more relaxed with a friend making it easier to interview them(Graue & Walsh, 1998, p. 114).

Qualitative research also involves an interpretative approach where by the investigator collects data and makes an interpretation of the data collected. This involves developing a description of an individual or setting, analyzing the data for themes and categories and finally making an interpretation and drawing conclusions about its meaning theoretically and personally

3.2.2 Starting with the participatory action research problem

An essential element of PAR is that the problem that needs solving or the objective that needs reaching must arise from the community of interest. In this response, after visiting Kampala School of Physically handicapped and getting permission to work with the school from the school Director Joy Mwesigwa it is those who have the problem or desire the objective that decided what the problem or objective is and that they want to achieve some change at the school. It had to be organically created or diagnosed from the ground up. The action part of PAR is situational in that attempts to resolve the problem or achieve the objectives are also located within and with the community of interest.

3.2.3 Putting PAR into place

Although theoretical insights are gained through research practice, PAR is essentially applied research. Rather than taking a standard linear model of research, participatory action research is cyclic, working its way through various iterations of planning, acting, observing and reflecting. The cyclical nature of PAR is its fundamental process feature (Walter, 2009)
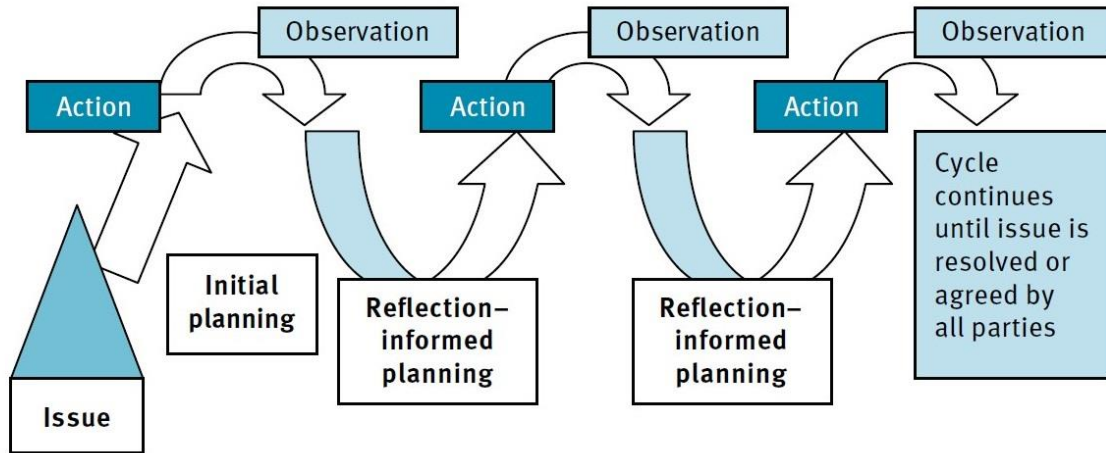
Figure 2: Participatory action research model

The following diagram summarizes how PAR was used in the creation of the playground in an iterative, cyclical mode.

The cycle took the following steps:

• The issue was lack of a playground which stimulated the desire for change and was identified by the community of research interest at KSPH. Consultation begun from the ground level, interviewing the children at the school and teachers about whether the playground as an immediate necessity, the children were involved in the creation of ideas to use in the playground.

First, the children were organized into groups which were to be facilitated in drawing workshops by the senior artists who had volunteers to help on the project. Within these groups, children expressed their desires to draw what they felt was ideal playground ideas and discussed their feelings and wishes of play structures to be placed in the play area.

• Initial collaboration takes place between the community of research interest and the researcher and planning how to tackle the problem then begun. At this point, the parents of the children were invited by the school which turned out to be non-responsive and also the teachers were invite to engage in the project although few teachers expressed their interest. Due to limited number of staff, the invited artists became facilitators of the workshops and the teachers who expressed interest were dissolve within the groups

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Other volunteers were invited to participate using social media platforms like Facebook and this turned out to be more effective than expected even though the attendance was unpredictable. The school already had four volunteers who were students from Germany doing their internship and one student from Makerere University who was undergoing his undergraduate research.

Informed planning took place in identifying what were the condition at the school, what materials were available at our disposal, what other materials did we have to first find out side or outsource and delegated artist were assigned responsibilities.

Together with the children, their drawings were used to develop the actual plan that comprised of the different sketches.

• The developed plan was then put into action. This meant that after the ideas were achieved and program schedule, the artists together with the children begun to collect all materials and were brought on the ground. We consulted with the Sports teacher to advise on how the play field was going to be allocated. Since the school uses the same place for functions, parties and sports day, it was negotiated that we keep in consideration these activities so that they could still go on after the construction of the playground. The land was divided onto portions and we embarked on using the side parts of the field to accommodate more space since the children had earlier on shared their need to keep a space to play their football from.

Some of the ideas placed on paper by the children were hard to bring on ground as a reality. This is because when children dream, it is surreal, full of freedom and open to creativity. There is no control or limitation to their ideas.

• The action of creating the playground and its outcomes were observed again by the community at KSPH as teachers, students and the artists performed different tasks and obligations to realize the ideas and I observed and participated as well.

• The final stage in the first cycle was to reflect on the action and its outcomes. What had worked and what needed considerations was discussed and we make some changes on the playground for example we had designed a moving vehicle that could cause accidents in case there was no supervision. So we ended up making it fixed in a permanent place. This reflection had led to an assessment that the first action step was not completely effective, then the

process of planning, action, observing and reflecting started again, building on this initial success.

action in the next cycle of planning action, observation and reflection.

• The cycle continues in as many iterations as needed to resolve the problem. As with all aspects of PAR, the deeming of a problem was solved or an objective was reached is a collaborative one.

3.2 Area of study

In this study, before going to the Kampala School of Physically Handicapped, I had previous visited another school in Acholi quarters, Kireka Kampala which had issues concerning their land title and were not sure whether the school will be in existence due to the land grabbing going on. Careful thought and selection was done considering how safe the playground will be and how long it would last. As a matter of procedure, the research area was preferred in the needs of the school, the accessibility in terms of transport and durability since the school is on premises that are legally owned. The research was carried out in Kampala, the capital city of Uganda where the investigator was comfortable as I live and work here. Secondly, the investigator found it easy to communicate with the informants in both the local language 'Luganda' of the area and the official language English. This simplified the whole research process being close to where I work and easy for the volunteer artists to meet.

3.3 Sampling procedure and Participants

Before sampling the schools from which to pick where to make the playground, I had to be consistent with research ethics. It was important that would not be perceived to be intrusive. To secure permissions to carry out research was vital for this research since I was working with children with disabilities in a school setting.

Permission had to be secured from relevant authorities. The process begun by the investigator obtaining a letter of introduction from the NOMA Master in Vocational Pedagogy, Faculty of Vocational studies, Kyambogo University introducing me to the field as a research student. By attaching the letter to the email, I wrote to the Director of KSPH, Mrs. Joy Mwesigwa who responded with a positive response accepting me to carry forward my research. Since the pupils at the school are below 18 years, which is Uganda\s official age of consent, it was the director's permission. I could have got permission from the ministry of Education (MoES), but Uganda is practicing the decentralized form of governance, it is more convenient to ask for permission from the director of the school on behalf of the pupils and parents. For the teachers involved, I had to

have oral permission to work with them because it is on personal interest. In purposeful sampling, the main goal is to select cases that are likely to be information/rich with respect to the purpose of the study.

Before starting on the project, meetings were held between me and Roland's Tibirusya, a practicing Ugandan Artist with the director sharing on what was going to transpire. We shared on the possibilities that were going to be, the challenges expected especially the fact that it was my first time to make a play ground with children with special needs. This was not the same with the rest of the artists who were participating, some had experience volunteering at the same school before.

The majority of schools in Kampala city lack playgrounds where children play and learn at the same time, so it was easy to sample which school to work with out of the many. The selected school was being positioned in the center of the city and this was important for the easy location for I was going to work with volunteers. The volunteer artists have to be motivated by the need to contribute to their community.

I chose to work with KSPH because it was in dire need on a playground among other things but also because it was fenced meaning that the playground would be in a safe environment once complete. The previous school I was to work with had issues with the land title meaning that because of land grabbing which is rampant in the country, you cannot rely on sustainability of a project on a land that is not protected. At the same time, language used is English and Luganda, most spoken local language in the region which is easy to use with the informants.

Three teachers from KPHS who are daily relevant and present in the pupils lives. The study utilized a type of purposeful sampling

All the selected artists had previous experience in working with community projects and were passionate about this project as well as excited to be part of this journey to impact social change to their society.

A local welder and shoe repairer with indigenous knowledge on crafting shoes. who are part of the community around the school who preferred to be anonymous in this study.

3.4 The samples

The interviews were conducted with the children most of the times in pairs and since children do not have all the time answers ready for questions, the researcher decided to carry out the interviews repetitiously.

The informants who participated in this study were all qualified with a wealth of experience in community work, working with children with children with disabilities but not with making playgrounds from scratch so it was a learning lesson for all.. The teachers were all primarily trained in Grade III general education primary school for children with physical disabilities. Grade III is still the current minimum qualification of any teacher who is trained to teach primary school in Uganda. The director had upgraded and attained higher diplomas and another teacher a Bachelor degree in Special needs education.

The information on the artists' qualifications and experience may influence the teachers' attitudes towards play and learning.

Some of the artists collaborating on the project which involves putting up an all-inclusive playground, include Innocent Baguma, Stacey Gillian Abe, Rolands Tibirusya, Sheila Nakitende, Simon Eroku, a deaf artist, Patrick Baguma and Alex Kwizera. The artists who participated all had accomplished University education in Art and Industrial design from Uganda\s leading universities, Makerere University and Kyambogo University.

The informant's academic backgrounds were described as explained below;

Innocent, is a male artist aged 33 years old and is a graduate of Bachelor of Art, Makerere University. He is a sculptor known for intricate sculptures and jewelry. He has worked as a professional artist for the last five years and owns an art studio and workshop where he works. Innocent had been volunteering at the KSPH for the last eight years since as a university student. Together with Roldan, they had started an art class for the children at the school which was run on a voluntary basis by students from the art school. It happens every Wednesday of the week and that is why he was influential to this project.

Roldan is a male artist aged 30 years old. He is a graduate with a bachelor in Art and is the founder of Armour Arts Uganda which initiated the drawing classes at the school and was my

recommender to go to the school to start the research at KSPH. He is one of the prominent artists who has run campaigns for the children at KSPH which resulted into an exhibition dubbed, Differently abled. He has been working at the school for five years as a volunteer art teacher and is familiar with working with children with disabilities as a result of experience.

Stacey Gillian graduated with a BA Hons in Art and Industrial Design from Kyambogo University in 2014. She has exhibited her work at a variety of group exhibitions including: International Stone talk, Nairobi Museum (2014), Kampala Contemporary Circle Art Agency, and Eroticism and Intimacy- Faces, Places and Paths. The Underground Art Space Stacey Gillian Abe's sculptural work focuses on misconceptions of gender equality in Uganda. The core of her work is metaphorical; a spider split in half in self-conflict, twisted (2014); a female figure struggling to stand up, Gender Equality (2012) and a Neem tree bearing clusters of glass fruit, Strange Fruit (2015). She works with glass as her principle medium through site-specific installations as it illustrates both the fragility and defiance of her personal experience as a sculptor. With her gradual embrace of new media, Gillian has incorporated a conceptual, metaphorical and experimental approach to her work.

Sheila Nakitende (1983) is a fulltime Ugandan visual artist. She graduated from Margaret Trowell School of Industrial, Fine Arts and Design (MUK) in 2005. Nakitende's arts practice ranges from visual arts to performance with experience from gallery curatorial practice, coordinating arts projects, participating in local and international artist workshops, residencies & exhibitions. This has influenced her role and growth as an artist.

Her artworks are inspired by the sacred book of her religion, preaching self-belief and optimism through the eyes of oneself. This motivates her progression and transformation ranging from technique, subject and situation.

Alex Kwizera, a 27-year-old years old Rwandan born in the south western Uganda district of Kabale. With a great passion for art, spanning since childhood, Kwizera started early in life fabricating toys using metal wire, sticks and rubber for his fellow children in the neighborhood. Indeed, this skill turned out to be a lucrative business for him, even though he was still too young to take care of his own bills.

Eroku Simon is a deaf artist who graduate of Kyambogo University. A young social entrepreneur with a strong commitment to providing solutions to community problems through innovation and creativity & inspiring inclusion and has participated in the previous playground projects the investigator accomplished in the previous years.

Patrick Baguma is a graduate of Makerere with a bachelor's degree in Art and been actively involved in the drawing classes at KSPH for five years. He is well conversant with the activities of special needs education and as well as experienced community resourceful organizer. The children at the school call him teacher even though he has no professional studies in education

Sam Ikiring is a male teacher aged 47 years old. He is a graduate of a bachelor's in Community Psychology from Kyambogo University. He has been working at KSPH for the last 17 years. A professional special needs teacher registered by the Ministry of Education and sports (M.O.E s) who has worked as volunteer and intern coordinator for sixteen years. Last year, the school management gave him a new position as estate manager, volunteer and intern coordinator. According to Sam, the children much needed a playground that could be all inclusive so that all can play and learn in the process. He says play is good for physical growth and creativity for children to be aware of the environment around them. He was quick to add that high time studying left the four walled classrooms and come out to nature and a playground that recognizes both learning and play was ideal.

3.5 Criteria for selecting KSPH

The school in this study is a privately owned and the oldest school for children with cerebral palsy and other physical challenges in Uganda, it was started in 1986 by Uganda Spastic Society consisting 138 pupils aging between 6 years to 20 years undergoing primary education and vocational training students and a staff of 37 employees. The school occupies 5.2 acres of land located on Barintuma road, Kampala-Uganda.

KSPH has several buildings which work as classrooms, dining hall, administration blocks, sick bay and hostel. There was a need for a playground at the school that would be all inclusive so that all children with different abilities can play and learn just like any other child.

It is located near the main road which makes it easily accessible by walking. Communication at the school is in English and the mostly known local language which the investigator speaks fluently with all the informants.

3.6 Data collection procedure

3.6.1 Pilot study

This study required the investigator to practice interviewing skills and check clarity of the guiding questions and also check the cameras, the tape recording equipment and how they work. A pilot study for interview process was conducted. The pilot study involving the Director of KPHS, the pupils at the school and two teachers from the school was conducted and the teacher Sam organized this meeting. Questions for the pilot study were similar to those of actual study, this was done so as to ensure that they yield reasonably unbiased data (Gall, et. Al,2007).

A pilot study can also be defined as a mini version of a full scale study or a trial done in preparation of the complete study to take place. With the knowledge of the situation at the school, there was need to be accustomed to Special needs education since the investigator was to work with children who are differently abled. A pilot study can be used as a measure to test the instruments used to collect the data. Nonverbal behavior and sign language of the participants in the pilot study can help provide useful information.

The investigator contacted the school through email and a meeting was arranged at the school premises which was facilitated by one of the participating artists. The pilot study contributed to the success of the research project as a whole since it was able to look at the loopholes within before. In addition, the pilot study verified if the materials and proposed methods or instruments were inappropriate or too complicated and we had to revise the methods and emphasize more on use of photography to collect the data. The artists and teachers at the school were selected using the same criteria for choosing the school and participants in the main study.

The participants were contacted by telephone which is the easiest and popular means of communication and later followed by writing through email. The participating artists were also contacted using social media platforms like WhatsApp and Facebook where it is easy to invite volunteers and artists for community based projects.

The artists participating were impressed by the idea of taking art into the community as a way of giving back. However, during the pilot study, some challenges were realized most especially during the interview. For instance, we needed to have a person who was good with sign language for the deaf artist who was present within the project. Also, because the ideas of the playground had to come from the children themselves, it was a challenge to interview the children aged between 6 and 21 years old. Many pupils have cerebral palsy; however, the school also caters for other disabilities, such as muscular dystrophy, polio, hydrocephalus, Down's syndrome and a variety of mental disorders. This meant that the original idea to have children as respondents had to adjust to only covered by photography and video. It was concluded that the teachers represent their views.

The interview guides were changed and updated with the necessary alterations and the questions which were long were divide into two sub questions without changing their meaning.

3.7 Methods of Data Collection and Research instruments

This study was carried out while building a playground using recycled materials considered by the participants to create a space to learn and play that foster creativity and use the children's ideas. The investigator preferred to use several data collection methods in order to attain authentic data. The study employed qualitative method of data collection as the all-inclusive playground in Uganda (Kampala city). Since the investigator is an artist, participatory observation, interviews and document analysis are the methods of data collection used.

Participatory action research (PAR) is an approach to research in communities that emphasizes participation and action. It seeks to understand the world by trying to change it, collaboratively and following reflection. PAR emphasizes collective inquiry and experimentation grounded in experience and social history. Within a PAR process, communities of inquiry and action evolve and address questions and issues that are significant for those who participate as co-researchers. In this case, we had teachers, pupils, artists and volunteers all working together.

3.7.1 Formal Interview

This study focused on the qualitative interview while carrying out qualitative method to collect its data. According to (Steinar Kvale & Flick, 2007) , Qualitative Research interview can be defined as an attempt to understand the world from a subject's view to unfold the meaning of people's experience to uncover their lived world prior to scientific explanation.

He adds that a qualitative research interview seeks to describe the meaning of central themes in the world of subjects, thus the main task of interviewing is to understand the meaning of the interviewees say, (S. Kvale, 1996). Data was collected during the interview with the participants of the study using this knowledge by the investigator.

It was important to talk to the participants about the reason why I was carrying out the research. To emphasize that all the information collected would be used for writing the master thesis and that it will be kept confidential. Also (S. Kvale, 1996, p. 24) notes that the interview is focused on particular themes, it is neither structured with standard questions nor nondirective. Through open questions the interview focuses on the topic of research. During the building of the playground, the investigator used 10 to 20 minutes in different sessions to talk attentively with the participants and this was also being documented using video and filming which was done by co researchers. In the process, material collected was being copied on the hard drive and several web spaces like Dropbox and iCloud so that it is safe from being lost.

According to King(King & Horrocks, 2010), the physical space in which an interview is located can have a strong influence on how it proceeds. Comfort, privacy and quiet are very crucial. The investigator made sure that he and the participant were both enjoying physical and psychological comfort in times of interview. Often in the evening after a day's work building the playground, the interviews guide would be used to collect data. I made sure I was close enough to hear clearly.

The questions that seemed hard to answer required that I proceed to the next question. And for the deaf artist, the translator happened to be one of the teachers at the school, teacher Sam who is fluent in sign language. This made it easy because the teacher was staying at the school premises. Because the interviews were carried out with a recording film crew, a backup method of information was obtained. Some of the questions from the interview guide were interesting for the

respondents especially questions like: Questions 4. Do you have friends you play with in school? Why is a playground important to you? 5. What is your favorite game you like to play?

During one of the interviews with a group child from the school participating in the study, the questions asked turned into a narration of the other difficulties they were going through and diverted the information the investigator was looking for.

 Being patient and persistent while interviewing children is crucial, most of what they know is implicitly. Knowledge is not filled away in their heads in answer format waiting for perfect question to release it(Graue & Walsh, 1998).

Overlapping the issue of category and the need to consider specific circumstances is the nature of the theme being studied. In particular, when interviews address very personal and very sensitive issues like sickness, discrimination.(Alvesson, 2010)

3.7.2 Participatory Observation

This study required the participation of the researcher as an artist with experience in building recycled playground thus participatory observation was used. This is the situation where researchers simultaneously observe and participate as much as possible in the social action they are tempting to document.(Hume & Mulcock, 2012). As a visual artist carrying out research in my field, being actively involved and engaged while observing the interactions at hand provided a great experience and understanding of the insider's point of view. This study was the most resourceful for collecting documents and bonding with the participants throughout the project.

3.7.3 Focus groups

This study also used focus groups as a supplementary method to get to the ideas that were directly from the children at KSPH. It is from the main motive of the focus groups which were comprising of the children who study at this school and the artists who were facilitators.

Focus groups have predetermined questions that focus on conversation. This focus is determined by the researcher, and the goal is not immediate action but rather later decisions by those who are conducting the study notes Kamberelis and Dimitriadis (2013, p. 6) . Focus groups encompassed a wide range of data from formal structured questions to the children to free flowing ideas about what they perceived of the playground. This finding was managed by the co-

researchers (artists) as collective conversations and allowed the participants to take over once the drawing motive of creating their own imaginations begun. This allowed me to explore group dynamics, the life blood of social activity as well as explore the constructive power of discourse in children's lives.

In this study, the artists who were moderators of the differently abled children were responsible for the individual focus groups. The participating children were screened on their ability to express themselves using age appropriate questions which was one of the challenges.

Later, the selected children were split into three groups of the same age range and children who were friends with each other were separated to get a wide range of ideas.

The artists who are the moderators took special steps to fit themselves getting acquainted with the local language, mannerisms and how the children express themselves from the teachers at KSPH. It was important to involve local leaders such as teachers at the school who spend most of the children and have special needs education.

Focus groups in this study provided the best way to obtain all the sketches that were later used to develop the final designs for the playground.

Children were asked and encouraged to speak for themselves on what kind of playground they desired to play in.

Community members were involved especially the teachers, matrons and care takers and they were free to use the local language which the investigator and the artist do speak fluently as well. (Krueger, King, & Krueger, 1998) This was the spring board of the study.

3.7.3 Data Analysis and processing

Analysis is a process of digesting the contents of qualitative data and finding related threads While analyzing and interpreting. It was the most time consuming process after collecting data where it required reading field notes, listening to the interviews, videos and transcribing.

(Yang & Ahn, 2007) has cited Straus and Corbin as stating that researchers using ground theory methodology is able to critically analyze situations, not remove themselves from the study but realize that they are part of it, recognize bias, obtain valid and reliable data, and think

abstractly. The first time I sat down to read my data was the first time that I came to write initial thoughts and sense of the data. This was achieved by two methods as I searched for recurring themes or common threads from the collected dat.

Describing:

Thorough and comprehensive descriptions were written down after going through the transcripts one by one, finding similar patterns of ideas and these were highlighted.

Classifying:

Breaking down the data into small units which were later categorized. Category is a classification of ideas or concepts, then grouping data into themes

The themes included the following:

-How to engage children in the process of building a playground

-How to keep the ideas from the children and develop them into life size play elements

-Identifying materials to use and its challenges.

The process of breaking down the data involved beginning with transcribing the interview data which helped to format into usable material and generate the above themes. This helped me familiarize with the data as I had to repeatedly go through it so that valid information was being selected. Thereby, common themes begun to emerge.

Coding takes place by summarizing the nature of the category with meaningful concepts

Using different colors and markers there by highlighting sections that had reflected similar themes. This lead to finding a connection between the themes and research questions.

During transcribing, notes were taken summarizing all the discussion in the interview transcript. These were typed into a word document in order to offer the investigator a summary statement that I could use to write. The main focus was to study how to engage and involve children in creating their playground that is all inclusive, therefore the information from the participants was to provide insight for the research problem. Transcribing all the interaction of the participants under one unit

of the question guided me to get clearly what was said under each question. Thereby being organized and focused on the research questions.

The categorized data was repeatedly scrutinized over and over again to become familiar with the interview information. By reading several times and organized, analyzed as a whole.

During this process, the investigator was able to sieve out data and keep what was more important from the data collected.

After this stage, the investigator transferred the informants interview responses into one document to identify how the themes were emerging. Names were provided for every category created to ease identification of themes of the study for analyzing data.

Putting experience into words, whether we do this verbally, in writing, or in thought, transforms the actual experience into a communicable representation of it. Thus, speech forms are not the experiences themselves, but a socially and culturally constructed device for creating shared understandings about them. (Thorne, 2000)

(Patton, 2015) advocates the use of triangulation by stating:

"triangulation strengthens a study by combining methods. This can mean using several kinds of methods or data, including using both quantitative and qualitative approaches" (p. 316).

The investigator triangulation was used by use of different researchers or evaluators in this case the artist who were participating as respondents. By combining observations and interviews, mixing different types of purposeful samples to inform how important the children ideas were in developing the playground to which they were the end users.

3.8 Validity and Reliability of Data

In this study, I carried out a pilot test of the interview questionnaire at the department of Art and Industrial design where I work. I had one of the colleagues I work with, one Tusiime Wycliff went through the interview questions and as an experienced research fellow, he suggested that since I had chosen to interview the participants, I should also engage the children who participated in making the playground. All the instruments to be used in the main research study were tested.

The role of the participant researcher and criteria for validity. (Reason & Bradbury, 2008) states that when he first introduced participatory research, he rejected the conventional participant observation as alienating and formulated his own position as a researcher.

The validity is closely linked to the reliability, and in this study it was essential to see clear connections between the findings in the research and findings in the document analysis. They are coherent, but more critically addressed in the interviews. In addition, the issues raised in the literature review about the importance of play to child development specifically addressed as the issues was closely linked. Since the literature review contains previous research, it may be concluded that this research also has a value of stability, which ensures the reliability and validity.

3.9.1 Ethical considerations

(Batshaw, Roizen, & Lotrecchiano, 2014, p. 681) notes that:

Respect for autonomy refers to respecting the decision-making capacities of autonomous (self-determining) persons. Children are not considered autonomous persons in this regard, but their parents possess the legal and moral authority to make decisions on their behalf. Parents are required to act in the best interests of their children and are considered to be in the best position to do so.

Informed consent was obtained from the director of KSPH on behalf of the children's parents/guardians. The school director possesses the legal and moral authority to make decisions on behalf of parents according to the rules and regulations and must inform the parents. To be accountable for creating a trustworthy piece of research is neatly reassured through the aspects of using reliable sources like the Ministry of Education (MOES, 2014) The substance of using other greater voices in the global society is also an aspect (Robson & McCartan, 2016) is emphases in relation to ensure accountability and reliability in social research. The aspect of conducting research with credibility is illuminated by all these powerful voices and statistics. Connor, David, Valle noted that: (*Practicing Disability Studies in Education : Acting Toward Social Change*, 2014, p. 160)

Full acceptance of the child's abilities must first come from the home. If the child is seen as being worthwhile and capable by parents and siblings, his or her self-image is usually positive. This acceptance includes participating in family activities ranging from family events and vacations to religious services and community recreational programs, and if possible, sports or physical play.

Ethical issues considered to be one of the major setbacks for the role of the researcher, bearing in mind that I come from a University educational system and was working with teachers from the primary educational background. This is also why this research is classified as a cross-cultural case study (Alasuutari, 1995, p. 88) . I was working with different artists as co researchers and it was at first seen as if the research project was a form of artistic publication until they signed participant information sheet (PIS)- Potentially, they could be of the impression that to have their names on print in an article from a Norwegian University could be of great value for them and in the consent forms, it was clearly stated that the participants will remain anonymous. Furthermore, they were carefully informed about this matter well in advance before the fieldwork started.

3.9.2 Confidentiality

The study involved participants who the investigator assured confidentiality of their personal information and anonymity. Normally, confidentiality and anonymity are mistaken in relation to qualitative interviewing to be the same yet they are distinctively different. ("The qualitative research interview," 1994)

The investigator assured his respondents of anonymity which refers to concealing the identity in all my research and obtained letters of consent to use their names and information only for this study purpose.

Personal information was respected concerning the research participants and during documentation such as filming and video work, we had to cross check if it was appropriate to record certain kinds of sensitive information.

3.9.2 Informed consent

The investigator asked voluntary participation and the participants were informed through writing to them by email. Letters were also drafted and presented to teachers containing information regarding the purpose of the study, the length the study and how the information will be collected and used.

In this study, confidentiality of the informants' information was high priority and very clear and letters included that no information would be leaked out. It would only be used to the purpose of study and after it would be all deleted.

3.10 Summary
This chapter presented the methods used in data correction, the procedures. It covered the ethical considerations like getting the respondents confidence in the research that their rights and privacy will be protected, methods to get the validity and reliability of the data as well as informed consent procedures.

Chapter four will present the data, its analysis and interpretation.

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

The main purpose of this study was to design and build an all-inclusive playground with children's ideas

using locally available resources (recycled materials) for the children at KSPH. The playground for children with disabilities was to be sustainably cheap and affordable. This was in collaboration with artists in collaboration with the school teachers to create the playground. The descriptions of the findings were based on two themes.

Theme one (4.1) explored different opinions and ways in which children can be engaged in the process of creating their own playground. Theme two (4.2) examined the relationship between play and learning there by giving its impact as a pedagogical model. The analysis of the findings in this chapter relate to research question one and two.

The main guiding question in this chapter was: How can you create a playground using recycled materials (found objects) for a school or community with limited resources for children with disabilities? The sources of data were the notes from transcripts from field observation and transcripts from field interviews, video recordings and transcripts with teachers, artists and students at KSPH.

The analysis of the data is presented according to themes that were arrived at following the analysis process and the themes have been used to introduce each category.

4.2 Theme One: Using children ideas to create recycled playgrounds

This theme explored Children's, teachers, artists, views about how important children's ideas were while creating play elements and using materials that were seen as waste. The first analysis involved the drawings to find out what the children had drawn and what had come into their minds when they heard the word 'playground'.

All the drawings were analyzed in a repeated and methodical manner viewing each drawing as a unit and noticing qualitative similarities and differences. Data from respondents and participating in the workshops organized at the school for the children. During the drawing workshops, generating ideas was the focus of the initial start of the design process.

PICTURE 1: Students at KSPH welcoming the idea of building their own playground

The pupils at KSPH were mobilized basing on their interest to participate in the playground project and categorized into groups. Each of these groups was to assigned to two professional artists who were facilitating the drawing process. Having noticed a missing link between what is built in the playgrounds and what is actually required by the children, I joined hands with practicing artists, the teachers, community members like carpenters, welders, and students (apprentices) from the school to make this study.

 In picture 1, students embrace the new concept of building their own playground and this was the genesis of the project. After winning their trust that, it was important for the investigator to know that the project had to develop from ground up and not the other way around.

PICTURE 2 : Students engage in idea generation session where groups are created

Disabled children are often included in mainstream schools. Successful integration and inclusion of these children depends to a great extent on their peers' attitudes and acceptance(Lewis, 2002) Being at KSPH which is an all-inclusive school that had all children

PICTURE 3: Drawing sessions where ideas come to life

In picture 3, Lawrence is seen amaong his peers drawly freely with his feet showing the ability and spirit of sharing materials like crayons, pencils and other colours. According to Frost and Sunderlin, ownership and sense of belonging to children play area can be begun right from the engaging them in the design process. When planning playscapes for children, it is important to focus on which environmental features are available for play. The possibilities to choose their own activities and create their own playscape in the environment are important elements in children's play(Frost & Sundelin, 1985)

The students were set free to draw whatever was on their mind with limited supervision by the facilitators who included the investigator, the teachers and artists.

As one respondent explained his drawing in this way:

> 'I am drawing an aero plane because I want to fly in it and go into the skies. When I grow up, I want to be a pilot but where are no ear planes where I live, so I decided to make one.' (Arnold, 9 years)

PICTURE 4: One of the students showing his drawing during the workshop

This is where ideas were born and developed in a period of two weeks. The teachers volunteered to escort the children to the drawing workshop every afternoon after their other studies to avoid interrupting school study program. This was according to the plan scheduled by the sports teacher who preferred to use this time since it was in line with the school games time.

The drawings generated from these workshops were all kept and we organized a mini exhibition of all the ideas generated for the children to select final ideas to be used in the playground.

This was in order to select the ideas that were possible to be put to action. A lot of the children drawings were surreal, free, uncontrolled and dreamy. This was an interesting contract to the existing ideas in playgrounds.

The art workshops to get ideas

Einarsdóttir (2007, p. 478) notes that when the children were asked to draw pictures of what they liked best, their pictures varied widely. The playground and outdoor play was drawn by several children. This was similar to the experiences at KSPH when children were asked same question.

PICTURE 5: Artist Stacey Gillian facilitating her group of students in a focus group.

After consulting with the children, their ideas were transferred onto one board from which the concept of selecting what was similar and unique but also possible to construct with the locally available resources were selected.

It is from here, that the artists would pick what materials were possible to use. The teachers helped by facilitating the special needs part especially children who were deaf and required sign language, it was vital that their ideas too had to be recorded and used.

The school opened itself for the research team to pick any materials that were available to be reused. This gave the starting ground to use what was broken and kept in the stores. On a visit to the stores and garage, a lot of equipment's that break down are sitting there, either because they

were expensive to repair or broken beyond repair. The team was able to pick wheel chair parts, and any other metal, steel, wood that could be used in construction.

After collection was materials within the school, the investigator run a campaign on social media platform, Facebook in particular for local community to provide any materials or things that they had at home that could be recycled. This turned out to be a great platform from which the local community engaged in following up the project and providing free hours to come and volunteer at the school to take part in the project. Due to the outsourcing materials and labor, several benefits came in handy like free photographers, painters, sculptors and others who brought food or smiles that would motivate the rest of the team building the children's ideas.

The construction process

This period begun when the children had gone home for holidays and it is the artists who were responsible to build using the already collected ideas that had been approved by the children.

This begun by collecting all the materials available from the surrounding. These included: Broken wheel chair parts and equipment form the repair stores, wooden pallets, metal bars, motor vehicle tires from the car garages in the neighborhood, outsourcing materials daily which the public was donating to the project. Tools like hoes, hammers, scissors, grinding machines, and materials like scrap metal, wood, drills, bolts, paints were also collected. This is due to economic situations at the school that led us to improvise on what is around and the need to create a social change action. The materials are picket from the environment and reused and the amount of waste has increased especially as the result of modernization. Thus we must not underestimate the significance of material conditions which influence the need for different knowledge. Indigenous knowledge cannot ever be understood in isolation of the critical analysis of economic, social, cultural and political conditions(Briggs & Sharp, 2004, p. 674). (Agrawal, 2002) notes that indigenous knowledge is not simply about language and expression but about material conditions through which people must survive.

PICTURE 6: Construction of the different play elements on the site at KSPH

The most outstanding and common drawing from the children sketches for the playground you would think would be either the swings, slides but surprisingly it was the Ugandan Taxi as seen in picture 6 above.. A taxi is not the usual rental or hire car but a minibus which stops at all stages in the city. Minibuses are also widely available throughout Kampala, and work as a type of taxi. These buses can be hailed from the side of the road, and can fit a large number of people. It was fascinating that so many children chose to draw it since it is the commonly moving form of vehicle and when asked, one of the respondents made her submission as:

'I always like to travel in the taxi to and from my home with my mother from my village when we are coming to the school. I like to be able to play in it at school and drive it anytime I like to drive the taxi whenever I want.' Lawrence.

The drawing used to make the eco art taxi was inspire by the sketch of Lawrence, an 8-year-old child who was born with no arms and writes with his feet. He envisioned a possibility of driving other children around at the school as part of play.

PICTURE 7: Children enjoying a ride on the streets of Kampala during street art festival

This was one of the most used element in the playground. It was named the Eco art Taxi which the students would push for it to move and carried up to fourteen children. After its construction, it was one of the art installations featured at the Kampala Laba street Art Festival, Uganda's largest street art festival where the children from the school accepted to loan it out for one day. And later featured in the local news for exciting a lot of kids towards innovation and building do it ourselves project.

According to Matteo, an international art curator made his submission as:

"In fact, Ecoart Uganda is not so much about the final forms that the parks take, but rather on who is in charge of shaping those playgrounds. And, how the long process that leads to the realization of the park is a path to empowerment for the future communities that will be responsible of the public domain and its future scenarios'(Batte, 2016)

It was more of the process than the final product that the investigator found most interesting for the children. When all the structural elements of play were built and installed in the area designated for the playground, the students were invited to start the finishing and furnishing process of painting. All the colors collected were weather-guard for a long lasting finish and water-based thus not harmful to use by the children. It was also a donation from Toto's- a local children's magazine.

PICTURE 8: Painting session done by the students themselves

Engaging the children in the painting session brought a spirit of ownership. This is mainly because they decided which colors to paint and how to paint them and on what. This was always intuition guided as a few times they would ask for their favorite colors. Also by the limited paints available, the artists assisted in mixing the colors to the choice of the children.

> 'The importance of community commitment through active involvement in the planning, physical building, and maintenance of the playground is emphasized. This commitment should involve children as well as their parents and those corporations that can be persuaded to contribute used or excess materials or space. The concluding section points out that these playgrounds are not maintenance-free and that the care taken in their upkeep is part of a community's commitment to "do something for itself"--to build a playground rather than buy one(Hogan, 1974)

PICTURE 9: Team work during the painting session

In the above picture, students take part in the painting session where the one X without hands collaborates with the investigator to come up with their desired painting pattern and color the tire. Team work between the children is unlimited. (Le Pine, Hanson, Borman, & Motowidlo, 2000)

have noted that, '*Because individual task performance in teams requires cooperation among team members, acts of helpfulness could well be required aspects of task performance*'.

The investigator encouraged safety comes first and all the equipment were double checked to see that they were safe to play with. The safety of playgrounds is important, not only for the prevention of injuries, but also to assure families that they are safe places for their children to play(Mott et al., 1997)

Disabled children are often excluded from their peer groups as a consequence of attitudes to disabilities within society.(Skar, 2010) The Ugandan attitude towards disability has been silenced over the years in schools especially with the campaign run by government in schools themed: ''Disability is not inability''.

Collaborative interface

When the respondents were asked how collaborative approach improved working together as team for a common cause amongst other members of the community. One of the respondents made his submission as:

"The highlight has been how collaborative art has been an avenue to interact and open us up to create more, paint, recycle and respond to our environment. So these children have gained confidence to continue doing art even after school because a practicing artist shared art with them. I find it very exciting that art has been a defining force in the eyes of the children and the artists," Tibirusya observes.

Across all the data collected from the artists' interviews, it seemed critically important for artists to reflect issues of their society and bridge the gap between art and society. The respondents also indicated that building the playground together plays an important role in strengthening collaboration amongst artists and creation of new avenues for artists to explore.

PICTURE 10: Attention to detail during the collaborative painting session.

In the above picture, children were paired up to work together on painting each of the play elements in the playground. This was in a way to allow them collaborate and think as team. Children that mutually shared skills depending on the needs at the moment. Play provides a mechanism for assessment, diagnosis and therapeutic intervention for atypically developing children(Goodley & Runswick-Cole, 2010)

4.1.5 Pretesting the play elements

PICTURE 11: Pre-testing of the different play elements by the children

The above image shows children at the playground pre testing the different play elements in the playground. New adjustments were carried out on the areas that required changing.

On the slide, one of the respondents reported,

'' Every time I slide down; it is so fast that I have problems landing so fast.''

This meant that we had to redesign and find where the fault was. It was discovered that the slide angle was steep making one move faster. We invited the welder back and expended the slide so that it was slow and more easy landing plus adding extra heaps of soft sand at the landing area. Interviews from the children

''Is it possible to make our own playground? I can't believe that we can build it.

The final part of Conceptualization

(Blanchard, Fabrycky, & Fabrycky, 1990)describe conceptualization as: "The 'what's' initiating conceptual design produce 'how's from the conceptual design evaluation effort applied to feasible conceptual design concepts. Next, the 'how's are taken into preliminary design through the means of allocated requirements. There they become 'what's' and drive preliminary design to address 'how's' at this lower level."

PICTURE 12: A student slides down with excitement during the final stages of painting as his friends' cheer on.

In the figure 12, students enjoy moments on the completed slide. There is anticipation and curiosity in their eyes knowing that the ideas they had envisioned are now a reality. Climbing through tires to the top of the slide was a challenge to some with physical disabilities but also fun to try. Precautions were talked on the safety rules in check.

 School and school district restructuring experiments in which a research team collaborates with teachers, school administrators, and other stakeholders to support organizational change (Cobb, Confrey, Lehrer, & Schauble, 2003)

PICTURE 13: The final look of one of the major play elements at the Eco-art playground at KSPH.

4.2 Theme Two: How can play impact learning?

This theme sought to examine the impact of play to learning. According to the data, informants expressed that play was a necessity for learning though it was secondly to the traditional methods of studying in the classroom.

Promoting inclusion and participatory decision making towards stakeholders and the Ministry of Education as an alternative approach towards the goal of creating tomorrows citizens, schools need to embrace play as a learning tool.

'Training learners with disabilities requires extra ordinary dedication to enable them achieve their goals'(Paul Watuwa, 2013)

PICTURE 14:Working in groups

No studies explicitly examined the influence of policies governing children's active free play. However, several informants broadly considered issues relating to policy, and the most consistent point, usually presented as a conclusion or future direction, was the need to include children in planning decisions to help ensure their 'voice' would be heard for instance, Teacher Sam urged:

"To see the world with the eyes of children means to allow for play opportunities that do not necessarily immediately serve adult interests and allay adult concerns but those of the end users. Normally when a playground is made, it is only decisions by grownups that are considered"

This study found out that many teachers in the school did not think that play was essential part of human growth, learning and creativity. This is because they took going to the playground as a way in which students go to play. They study further found that there were no other ways of having children with disabilities play other than go on swings and slides.

'*Stop playing in the sand, you will make your uniform dirty'*, one teacher

The idea that staying clean and smart makes a proper student relives the fun to play and be yourself as a child.

This was through the observable data collected from the observation field notes. Therefore, there was need to sensitize teachers on how important play is for children at school and offering breaks within their teaching schedule. On consultation with the head teacher, she asserted that she encouraged good performance through learning and play and would see how to implement play in the curriculum.

It was noted that from proper advice from the head teacher or director, play could bring enormous impact towards learning for the students. The head teacher said:

''I encourage my teachers to take the students outside to learn about nature, out in the trees for a walk and thus a firm believer in outdoor learning, so if we can have a playground that incorporates play and learning, then our mission is complete.'' (Head Teacher)

However, findings noted that the concept of building playgrounds was still focusing on play rather than an educational point of view. Some teachers were hesitant on whether learning continues outside the classroom sphere. For example, one informant said:

'When the children leave the classroom to the playground, they are there to play. Learning has ended. They are too tired of being in the class to continue learning outside.' Teacher Sam was able to urge out this statement when he said: '*There is so much to learn outside the*

classroom than meets the eye. When children are playing, they teach each other and see themselves as equals, they are unlimited and free to explore that it is in the present day classrooms in Uganda'

4.3 Summary

This chapter dealt with data presentation, analysis and interpretation. Data was presented according to themes that emerged from the data. Theme one (4.1) explored different opinions and ways in which children can be engaged in the process of creating their own playground. Theme two (4.2) examined the relationship between play and learning there by giving its impact as a pedagogical model.

Chapter five will present the discussion of the findings of the study.

5. PRESENTATION AND DISCUSSION OF FINDINGS

5.1 Introduction

The previous chapters looked at the background of the study, literature review, methodology, data analysis and interpretation of the findings. This chapter presents the discussion of the findings basing on the themes that emerged in relation to the sub research questions and later general perspective of the findings will be provided. The discussion will greatly refer to theories that are within the related literature and thus draw reflections from the whole study. This will have links with playgrounds as incentive for learning and play in the era of educational transformation.

5.2 Importance of children's voices towards play.

Observation was made that there was no playground at KSPH and thus the need to build one with the help of the student's ideas, teachers and artists participation. However, emphasis was put on children's ideas and how to engage them in order to contribute to Einarsdóttir (2007, p. 472) notes that despite the fact that children are the people most affected by the quality of early childhood institutions, surprisingly few attempts have been made to examine their perspectives on their early childhood program. This proved how much children know and are capable of despite the adult domination of their rights and freedom of expression.

(Hansen Sandseter, 2007) urges that there is a growing debate on the balance between making sure that our children are safe versus letting the children play in physically and emotionally stimulating and challenging environments. The fact that we were limited by resources to build the playground required that we recycle all the materials within our reach to make the playground.

5.3 Use of indigenous knowledge

(Briggs & Sharp, 2004, p. 662) argues that the indigenous knowledge of the people resident in particular places—can be of equal, or greater, value. Within this argument initially generated

by(Ellen & Bicker, 2000, p. 55) where they refer local knowledge as not necessarily identical with indigenous knowledge interlocked with exogenous knowledge.

PICTURE 15:Board game inspired by the Mancala board game.

Borrowing from the Mancala game, the most played game board in as many countries on the continent. The children love playing football so the game designed required applying indigenous knowledge where children could play as well as practice counting and problem solving. It was named 'Icuri' which is a metaphor for clever rabbit as shown in picture 15. This game was sculpted by Artist Lwanga Emmanuel as his contribution to the children's playground. The beauty of this game is that it is on ground level making it easy for those in wheel chairs.

In the playground project, locals such as basket weavers and craftsmen were engaged to figure out how to join tires together without leaving space that could lead to an injury.

'I have knowledge in weaving inherited from my grandmother but because modernity came, I use the same techniques to cut tires and weave out shoes and bags from the material.' Narrates Musoke, a local craftsman.

Musoke is one of the local community members who joined the team making the playground after he was curious about the project he was seeing at his neighborhood school, KSPH.

(King & Horrocks, 2010, p. 42)notes that privacy for the interview setting is vital. During the interviews, to avoid dangers of being overlooked or interrupted during the interviews, I politely asked that the phones we switched off and we used a private room near the playground since it was not easy to control the children who were always roaming around because of the camera distractions.

5.4: How designing the playground enhance learning process
Divergences in Uganda about where school education should be leading children are clearly part of a political game that has international, national and local stakeholders. Each category wishes to influence the future by directing children to certain places 'for own good' as well as 'for the common good'(Meinert, 2009, p. 193). By being part of the change, children are engaged in creating their destinies when they start deciding what games they want to play, what should be in the playground and so on. This is part of the influence using the bottom-up approach.

The process of achieving the playground involved conducting planning.

To meet and discuss the previous experiences with the previous playgrounds I had made.

Arrangements were made between the school and the artists to discuss next steps differently. One meeting was for the researcher and the school administration and the other with the artists. It was convenient to all assemble at the school because of its positioning in the city. Together with the artists, we met at the school premises and held conversations with the school administrators who included the director, the headmistress, the landscape and compound coordinator who was in charge of the area where the playground was to be located.

PICTURE 16: A gathering to create teams

It was noted that for effectiveness, we were going to work in teams. In picture 16, students of KSPH are gathered for the team building session. This would include, team for organizing children: this was mainly the teachers. A team for collection of materials and one on quality control and welfare that is food and health considerations such as first aid during the project. A general meeting would happen once a week to share faults and challenges plus the positives from each team every Friday evening while recording the interviews.

This current study's finding seemed to go hand in hand with another study's by King and Horrocks (2010, p. 44) as participants preferred to be interviewed away from their homes for privacy as noted above. Thereby, we used to sometimes use the room secured at the school premises and many times we used the field which was in the open. The major drawback was a practical one considering that Uganda has only two seasons and we were lucky that it was not the rainy season,

it was obtaining good sound recording of the conversations. The camera crew pretested every time before the interviews to keep us safe.

The other advantage at the same time compromise was the amount of staff of camera crew since the other purpose of the research material was to create a mini documentary. This camera assured that all the materials were safe and high quality since they were experienced. The low side was that it took time for the children to get used to the cameras which delayed our documentation.

The original idea of implementing a replica of a previous playground was challenged by the fact that the researcher and the artists had no previous knowledge with working with children with special needs. Yet, this was a new experience for all of us to create all-inclusive playground. Each artist and teacher would write their own logs about the daily activities during the period and put their reflections of what was happening.

It was agreed upon that the teachers would work hand in hand with the artists to facilitate easy communication and adaptation. Also, sign language was a new communication challenge since the school had deaf children and we had a deaf artist who also worked as our sign language interpreter and making it more inclusive by inviting more of participants.

Time was not sufficient to plan. In the first place, the playground project was timely in the sense that KSPH was preparing for a sports day for the students and parents in two months' time.

'This playground will be a great surprise for our parents when they come to the school next term. They have left the place green and empty and to come back and find play elements for their children will make appreciate that we care for their children' Juliet Tumuhairwe, the head teacher of KSPH.

Collection of ideas for the playground

In order to get the ideas generated by the children, the researcher and the artists with the assistance of teachers held drawing workshops. In the workshops, the school provided plain papers, pencils and crayons for drawing.

Children's drawings: The drawing sessions were facilitated by the artists as focus groups to derive a pool of ideas. Children were asked to draw what they imagined to find in the playground and what they disliked about the current play area. In connection, interviews were held in groups to find out what they liked or disliked about a playground. The artists collected this data and wrote their responses at the back of the papers to document their voices.

PICTURE 17: Lawrence draws with his feet during one of the workshops

In picture 17, Lawrence is seen drawing during one of the session. The school main hall was used as our meeting room where the artists joined the teachers as facilitators to guide and assist the children while they draw. The students were not limited to what they wanted their playground to look like. These drawing workshops were not easy to arrange as children with disabilities require enough time and patience to execute a given task. The drawings depicted a series of surreal imagination and creativity what was unlimited. Among the different images created, together with

the artists as mentors, students were able to hold a mini exhibition of all their drawings. Those that could freely express themselves were allowed to share what their drawings would mean to have them in the playground. It was as important to find the best ideas that could easily be reproduced on a large scale as sculptural play elements with the limited materials available.

Materials outsourcing and collection

At the school, there were already existing materials in the repair stores that were available to be recycled. These included broken wheel chairs, scrap metal, wooden pallets, wood, some tires and tools such as wheel barrows, hammers, hoes and so on.

However, these materials and tools were insufficient so there was need to outsource materials from the community by spreading word out to ask people to donate materials to realize the playground. Social media platforms like Facebook, which is widely used in Kampala and WhatsApp where handy and productive as many people contributed by either bringing the waste materials or informing our team to collect them from their premises. In the picture 18 below, artists assemble materials on site.

PICTURE 18: Artists carrying car tires to the playground construction site.

There was need to collect more car tires and this meant going to gas stations like Shell Nakulabye, Wandegeya and booking for the tires with the mechanics. At first, the mechanics wanted to sell them to us as they normally do but after explaining that we were going to make a playground, they would offer some for free or sell at a reduced price.

'Who knows., my child might end up playing from there', Musilamu a seasoned mechanic noted. He offered thirteen tires and six of these were a contribution to the project. Once the available materials were on the ground, we were ready to start the building process.

The process of building the playground

The implementation process was the most challenging session of this playground building. It was to figure out how to use the children's ideas to build the play elements without distorting their concepts. argued for the importance of learning about children's views indirectly and the need for creative use of methods and instruments when seeking children's views.

This study used varied research methods to discover children's perceptions and opinions, and data were gathered by different investigators(Einarsdottir, 2005, p. 12). In line with Einarsdottir, I also collaborated with my co researcher who were the participating artist to carry out interviews within their focus groups and deliver the data.

Interpreting the sketches into sculptural play elements

Equipped with the sketches from the children, the artists formulated the final artistic impression of how the playground was going to look like. This blue print had to be approved by the school's land and compound management committee which was responsible for allocating space. They discovered that the playground elements were going to occupy all the space in the free space yet there are other activities that are held at the same piece of land. This meant that the plan had to be redrawn to leave the required space.

Among the construction process, help of local welders was required to fix the metallic slide and other areas that required welding. This means that indigenous knowledge was crucial in this project as people with first hand experiences were at our service. The researcher was impressed by how much knowledge locals had without training in vocational institutions for instance, a

respondent suggested that instead of using seats in the swing, we could use found material like the chair that was in the garden.

Another suggestion came from the children participants that they requested artists to use vibrant colorful paint

PICTURE 19: Teachers take part in the painting session with the children at the tire hill.

In the picture 19 above, teachers join the students to paint one of the major elements in the playground. It was named the 'car tire hill' which was inspired by a drawing from the workshop. The child who drew the hills was depicting the hills of Kampala, confirming that children are inspired by their surroundings. Kampala city is built on seven hills.

5.5 Challenges experienced during the construction process

Safety concerns.

There were several challenges that were noted during the period of construction the playground. When asked about the challenges encountered during the making of the Eco art playground, children said that it is difficult to build and construct their ideas themselves because of safety concerns.

The most consistent and widely reported finding was that parents and teachers of children with physical disabilities was parental concern on their children's safety. This was a barrier to independent active free play and participation. For instance, reflecting on the challenge of being constantly over watched, one respondent said,

'I am not allowed to be out of site, sometimes I want to jump off this wheel chair and join the other children, but the they say that I will make the clothes dirty'.

Another added*, 'My parents fear that if I go out to play without being watched, someone will whisker me away or I will get lost'.*

Because children not allowed to be free to hurt themselves, to be free to do what they want is only in verbal.

Another challenge that was observed by the researcher for the children was that majority of the work was highly mechanical and physical like carrying heavy materials. Children were allowed to carry only what they could manage without physical considerations.

5.5 Summary

Chapter five was looking at the presentation and discussion of data focusing on the importance of children's ideas, the use of local knowledge, the design process and how it influences learning and challenges.

The next chapter will discuss the reflections from all the data and way forward considering ecological, economic and political points of view into the need of playgrounds.

6. REFLECTIONS AND RECOMMENDATIONS:

6.1: Introduction

The previous chapters have looked at the background of the study, literature review, methodology, data analysis, presentation and discussion of findings. This chapter presents the reflections and recommendations of the findings based on the general data collected and experiences documented during the construction process.

PICTURE 20: Official opening of the playground by the whole community.

During the opening ceremony of the complete playground, the school invited the entire community of parents, local leaders and well-wishers to a grand party. It was a day of celebrating the efforts of every participant and hand over the complete playground to the school. The guest of honuor was the chairman, Parents and Teachers Association. Kyambogo University (Masters of Pedagogy) was represented by my mentor and lecturer Kekimuri Joan.

In her opening remarks, the director of KSPH, Joy Mwesigwa had this to say:
'We as a school have been in need of a playground for such a long time, I know how important play is to the children. It is in dire timing.'

This was in agreement with the first object of the project which was to build an all-inclusive playground at the school with the children's ideas.

6.2: Reflections

Special needs education background

education was a major limitations experienced by the researcher and the artists. I had no prior knowledge about how to work and relate with children with disabilities. Prior to working at this school, my experience working with children was that they were all the same in every part of the world regardless of color, nationality. All children loved to play and embraced the same feelings when excited, happy or playing. Working with the special needs specialists like the teachers at the school helped the researcher and the artists freely understand that it was more about patience.

Time

Children with special needs required enough time to accomplish a task and thus the project took longer than expected but was all worth it. Watuta notes that, ''Due to the absence of other specialists, teaching becomes sophisticated. More so, at times a teacher may be forced to halt a lesson to support a disabled learner to the washrooms''(Paul Watuwa, 2013). A lot of time was wasted during the collection of materials, coming late of the participating artists, limited time of finalizing the project.

Skilled or experienced labor

Building playgrounds involves architecture understanding and considerations that the play structures stand strong and firm to avoid fatal accidents. This is why there is high risk of accidents if the plan is not approved by to fit in the safety regulations stipulated. The manpower depended on volunteers and most of whom have a desire to help and support community project even though they may not have had prior experience in building playgrounds. This was resolved by engaging local people with vocational skills such as welders, plumbers and a local architecture to approve the final drawings and plan of the space.

Resources

Materials and tools were a limitation when it came to building the playground. The use of waste materials comes with the challenge of collecting them from the environment, which is a tiresome and hectic process that takes time too. Much as most of these materials like car tires, scrap metal, wood could be free since they are seen as un useful, it takes time to collect enough for the desired project.

Government Policy issues:

Due to the absence of other specialists, teaching becomes sophisticated. More so, at times a teacher may be forced to halt a lesson to support a disabled learner to the washrooms. Free playgrounds

No studies explicitly examined the influence of policies governing children's right to access playgrounds. There are many schools without play structures where children can play and learn. However, several respondents at KSPH broadly considered issues relating to policy, and the most consistent point, usually presented as a conclusion or future direction, was the need to include children in planning decisions to help ensure their 'voice' would be heard. For instance, Teacher Sam urged government to "*To provide playground elements to schools and make sure that children are engaged in planning for play opportunities that do not necessarily serve adult interests but their own.*"

Surveillance

Teachers attempted to manage their safety concerns through some forms of surveillance, which could include setting spatial and time limits on the students. Children could only go to certain locations and had to play by a certain time and thus having a playground meant that they had a place to be free. However, some respondents suggested such measures only give teachers an illusion of safety because there is no risk-free approach to play. Furthermore, the researcher observed that children were resistant to the idea of both teacher and parental surveillance and wanted to be able to spend time in the playground away from the 'gaze' of adults. As shown in picture 21 below, teachers are seen supervising children as they play.

PICTURE 21: Teachers supervise the pupils during play time.

Retrospective and historical studies with teachers of different generations reported that safety concerns had increased over time, and in previous generations children had more freedom to 'roam' while in modern times such activity was constrained by parents and school code of conduct. One of the teachers who is also a parent at the KSPH said: "*When I was about thirteen, I used to spend days sliding on hills using banana plants. I wouldn't let my children do the same thing. The dangers are the same. It's the same hills and banana plantations but I just wouldn't allow it... Yet my parents never cared if we did it or not*".

Differences in children's and adults' preferences for play spaces

When the drawings were being presented from the workshops to the teachers and administration of the school, differences in children's and adults' preferences for play spaces were noticed. The need for age appropriate play areas was reported, and older children and teenagers found fixed playground equipment boring. Children reported preferences for flexible and movable elements around the space and locations at the school in which they could engage in a range of different types of games and activities. In contrast, teachers tended to have a more constrained view of play and often focused on specific types of fixed equipment in playgrounds, such as swings, slides and under the shade.

(Pincetl & Gearin, 2005)suggested that adults' propensity for creating large-scale new spaces was at odds with children's desires for casual open spaces.

PICTURE 22:Curiosity space in the movable taxi

In picture 22, light moment as children enjoy riding in the taxi during the street art

Maintenance

The need for playground maintenance was highlighted as a factor that could positively influence children's engagement in active free play. Once the children are engaged in the building process, they know how to fix parts that break up. This in the long run crates sustainability of the playground. Children are more likely to use, or be allowed to use, playgrounds that were well maintained.

With the analysis and discussion of findings, it was observed that both the main research question and minor research question were answered and provided room for further inquiry despite the weaknesses encountered.

This chapter will present the recommendations and conclusions taking in mind the gaps noted as regards to building a playground for children with disabilities as well as using recycled materials.

6.2 Recommendations

After looking at the analysis and discussion of findings, it was seen that both main research question was answered despite weaknesses encountered. Some recommendations were suggested for any parent that has a child to allow them play freely and also to the Government of Uganda and Ministry of Education and Sports. These included having children as experts of their destiny and putting the role of determining child play back in their hands.

Children as experts
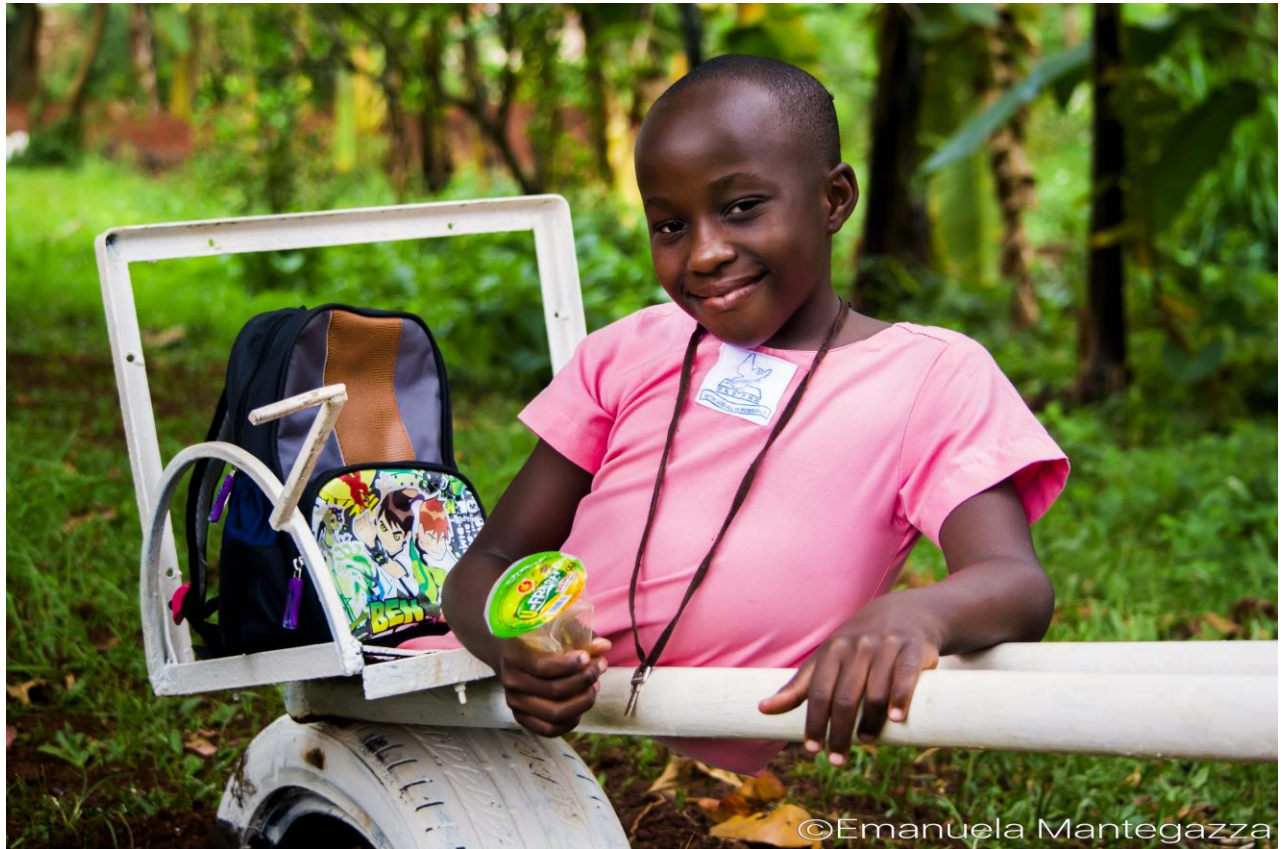
PICTURE 23*: Pupil enjoying snack time on the sea-saw in the eco-art playground area.*

There is need for children voices to be heard and aired out by themselves especially when implementing playgrounds. (Clark & Moss, 2011, p. 63) pointed out that children are experts on being children and their own lives, arguing therefore that their views and experiences should be sought and respected. Children are the end users for the playgrounds yet are not consulted by planners of playgrounds for their input.

Need for child inspired playgrounds

PICTURE 24: 'Bonga' moments , painting session

In picture 24, a proud moment with Garvin, who is proud of the efforts and realizing that his idea came to reality. To build more playgrounds together with Ugandan children with both physical and mental disabilities in order to investigate how inclusion and participation can create sustainable solutions targeting learning outcomes and human dignity within the Ugandan education system.

Every child deserves a playground no matter what part of the world they are in. Children are all the same where physically handicapped or not. A playground may not be about swings and slides, it could as well be a natural play area where children can be able to play and learn. Children's outdoor life keeps changing over the decades with technological drifts. Today, more children play with gadgets like play stations and have less time to go play outside in the nature. There is limited knowledge on the experiences of children's designing their own futures like playgrounds. To fill out the gap of knowledge, this works as a background for further action research.

Raising voices of vulnerable Ugandan children

There is need to show stakeholders of the Ugandan education system that is focused on the adults' decisions on the destiny of children rather than engage them in the development of the curriculum.

6.2 Conclusion

The purpose of this research was based on the process of making a playground using what is seen as waste materials for the children at Kampala School of Physically Handicapped (KSPH). There was a need to create an all-inclusive playground which would ensure that these children studying there could be engaged in creative play.

According to the findings in this study, it was concluded that the study was conducted on a small scale due to the nature of action research design adopted and the few number of informants due to ethical issues concerning working with children with disabilities. Therefore, it cannot be generalized to the entire country although a number of schools in Uganda lack basic requirements like playgrounds and even worse for cases of inclusion.

It was noted that the all-inclusive playground designed and built for the children at KSPH was a great success and received positive remarks from the children and community at large and thus as a model could be replicated in the entire country and the world at large. (Graue & Walsh, 1998)suggest that research is about getting at the invisible through the visible, and the process of getting to the invisible begins with the generation of data. Further, generating data on children challenges one to be creative and to find new and different ways to listen to and observe children, requiring constant improvisation. Whether children had disabilities or not, they all love to play and it is important that schools in Uganda consider play as important part of child development and creativity. (Frost, Wortham, & Reifel, p. 128)cautions us against the current educational trend of minimizing play and neglecting to consider the whole child in our instruction. This study also highlighted the strategies of design process towards making a playground with children ideas and thus providing feedback to improve the nature of play from the one that is world over.

The Ugandan government should make sure every school has a playground as a recommendation. It should also provide enough playgrounds in all schools and turn the existing ones in the few schools into all-inclusive to enable all children to access play. This will improve the quality of children's lives at school and improve on their health and creativity thinking.

Lastly, findings and recommendations done in this research have not exhausted the potential of children playgrounds and the need for their ideas to be used in the planning.

More action research can stem up from this study to improve the lives of children when it comes to all-inclusive play in Uganda in particular and the world in general.

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APPENDICES

APPENDIX I: Map of Uganda showing the research site – Kampala.

Map 1: Map of Uganda

Source: Google maps retrieved on 26th November 28, 2016

KEY: Red spot highlights Kampala city where the research was carried out.

APPENDIX II: Form/Questionnaire for children at KSPH.

1. Name: _____

2. How old are you? _____

3. Male   Female

4. Do you have friends you play with in school? Yes   No

5. What is your favorite game you like to play?

_____

6. Have you made your own games before?

7. If yes, what did you make?

8. How does your friends treat you? What about your teachers?

APPENDIX III: Interview guide, for artists.

Introduction: Explain briefly the research and ask for consent.

1. Age

2. Tribe, mother tongue

3. What motivates you as an artist? Is it voluntarily or not, Political or economic motivation?

   to pursue a carrier in art and design?

4. How did you become involved in community art projects?

5.Have you worked with children before? Any experience with children with disability

6.How long have you practiced as an artist in community service? How has your relation to collaborative art projects?

7. What has been your input? Any challenges with

8. Are you facing stigma that children with disabilities do not play?

APPENDIX IV: Introduction letter from Kyambogo University.

Masters in Vocational Pedagogy

25th February, 2016

To whom it may concern

RE: INTRODUCTION OF TUSINGWIRE RUGANZU BRUNO

This comes to introduce to you **RUGANZU BRUNO** a student of Masters in Vocational Pedagogy (MVP) Programme at Kyambogo University under the Quota Programme with Oslo and Akershus University. This student bears registration no. s239292 and in his final year. As a requirement for graduation, this student is expected to carry out Action Research whose results make up his master's thesis.

Kyambogo University is running two Vocational Pedagogy programmes: the Post-Graduate Diploma in Vocational Pedagogy (PGDVP), and the Masters in Vocational Pedagogy (MVP). While the PGDVP programme is mainly concerned with production of teachers and trainers or instructors in vocational disciplines or subjects in the public and private sector, MVP is not only concerned with production of trainers of trainers (TOTs) at higher levels but also production of personnel at policy level as well as researchers in VET. The purpose of MVP programme is to strengthen the link between learning and work, and experience-based learning in work places, research projects and the masters' research constitute a big proportion of the MVP programme.

The program has produced three cohorts of with 63 graduates. As part of its achievements the themes identified in the Masters theses of the first cohort graduates include VET country cases, VET and work life, VET and persons with special needs, VET and the labour market, VET and gender, and vocational pedagogy and indigenous knowledge.

Any support rendered to him is highly appreciated.

Looking forward to your usual support.

Yours Sincerely,

Chris Serwaniko
Project Coordinator, NORHED MVP Program
Masters in Vocational Pedagogy Program

APPENDIX V: Letter to the school director.

The Director,

Kampala School of Physically Handicapped,

P. O. Box 14278,

Kampala.

Dear Madam,

RE: REQUEST TO CONDUCT ACTION RESEARCH AT YOUR SCHOOL

I am **Ruganzu Bruno Tusingwire,** a student at **Oslo and Akershus University College-Norway** pursuing a Masters of Vocational Pedagogy. I would like to conduct an action based research project on making an all-inclusive playground inspired by the children's ideas at your school. As a parent figure for the pupils at KSPH participate in a research t your school. In particular, am interested in the need for all-inclusive play. That is, together with teachers and invited artists, we are interested in studying how children's ideas can be the source of inspiration to designing their own playground. Such an initiative can bring out the voices of children, creating a source of connection and ownership of the spaces in which they play and learn.

This research will take a maximum of 2 months. During this time, we will require to meet with you and your staff for about 0.5-2 hour sessions, between 1 to 4 times each month, for 2 consecutive months. At each session, your pupils will be videotaped while drawing, while playing and as they take part in the building of the playing including painting it. At the first

session, you will also be asked to fill out a brief and confidential questionnaire. These sessions can be conducted in your office, or outside including your home - wherever you prefer.

You may find participation in this study enjoyable, as it is a chance to have your pupils videotaped throughout process of creating the playground. By participating in this research, you may also benefit others by helping your teachers collaborate with artists to better understand play and its impact on learning. This information can be useful in identifying data for building up my research thesis.

Several steps will be taken to protect your anonymity and identity. Firstly, you can decide for the videotaping to record your images or not. Second, you, teachers and your student's name and personal information will be kept confidential. Names will be translated into ID codes and all data collected, will be labeled with the ID codes rather than your names. This information and the videotapes will be kept in the researcher's locked office at the Kyambogo University. The only person, other than the researcher and yourself, who will view the raw data (videotapes) will be my research supervisor Jan Stålhane, who is the co-researcher of this study.

Your participation in this research is completely voluntary. Although I cannot offer you any compensation, I can provide you with a copy of all the videotapes taken of you and your pupils in this study. We hope that you will decide to participate in this study. If you choose to participate and then change your mind, you may withdraw from the study at any time for any reason. If you do this, you will have the choice of having the information contributed removed from the study and destroyed, or allowing the information contributed until the time of withdrawal to be included in the study, and that no more information or data will be collected from you from that point on. Again, there will be no consequences to any decisions you make.

The results from this study will be reported in general terms in the form of speech, writing, photograph or video that may be presented in manuscripts submitted for the Masters in Vocational Pedagogy thesis. Any photograph or video selected for potential presentation will be carefully selected and edited in order to conceal your, and your pupils', identity. Furthermore, the use of photograph and/or video will only be used for such presentations if you provide permission after you are given the opportunity to view the selected photographs/videos. Your personal information, including your staff, and your pupils' names, will be kept confidential and not be

distributed in any way. At no time, will your name be used or any identifying information revealed. If you wish to receive a copy of the results from this study, you may contact one of the researchers at the telephone number given below.

If you require any information about this study, or would like to speak to one of the researchers, please call Ruganzu Bruno Tusingwire at +256782964446 at the Kyambogo University.

I have read the above information regarding this research study on the creation of a recycled playground, and consent to participate in this study. I also provide consent for my pupils to participate in this study.

_____ (Printed Name)

_____ (Signature)

_____ (Date)

APPENDIX VI: Consent letter for artists and teachers

<div align="right">

17TH June 2016

</div>

TO:

OCCUPATION:

 Dear sir/Madam,

> Re: <u>**Request to participate in a research and letter of consent.**</u>

I am **Ruganzu Bruno Tusingwire,** a student at **Oslo and Akershus University College-Norway** pursuing a Masters of Vocational Pedagogy. I would like to conduct an action based research project on making an all-inclusive playground inspired by the children's ideas at Kampala School of Physically Handicapped. In particular, am interested in the need for all-inclusive play and hope you find this project of your interest. That is, together with teachers and invited artists, we are interested in studying how children's ideas can be the source of inspiration to designing their own playground. Such an initiative can bring out the voices of children, creating a source of connection and ownership of the spaces in which they play and learn.

This research will take a maximum of 2 months. During this time, I would request to meet with you for about 0.5- hour sessions, between 1 to 4 times each month, for 2 consecutive months. At each session, your contributions will be videotaped while you assist pupils as a mentor during drawing workshops, while they play and as they take part in the building of the playground. At the first session, you will also be asked to fill out a brief and confidential questionnaire. These sessions can be conducted in your office, or outside including your home - wherever you prefer.

There are no anticipated risks or discomforts related to this research. However, if you feel uncomfortable with any part of this study at any time, you have the right to terminate participation without consequence.

If you have questions at any time about this study, or you experience adverse effects as the result of participating in this study, you may contact the researcher whose contact information is provided on the first page. If you have questions regarding your rights as a research participant, or if problems arise which you do not feel you can discuss with the Primary Investigator, if you require any information about this study, or would like to speak to one of the researchers, please call Ruganzu Bruno Tusingwire at +256782964446 at the Kyambogo University.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to sign a consent form. After you sign the consent form, you are still free to withdraw at any time and without giving a reason. Withdrawing from this study will not affect the relationship you have, if any, with the researcher. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed.

Note: Please delineate the "Consent" section of the Informed Consent Form by drawing a line across the page (like the one above this paragraph). This delineation is important because the consent form grammar shifts from second person to first person, as shown in this example.

CONSENT

I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this study.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

APPENDIX VII: A thank you letter and gift from the children at KSPH
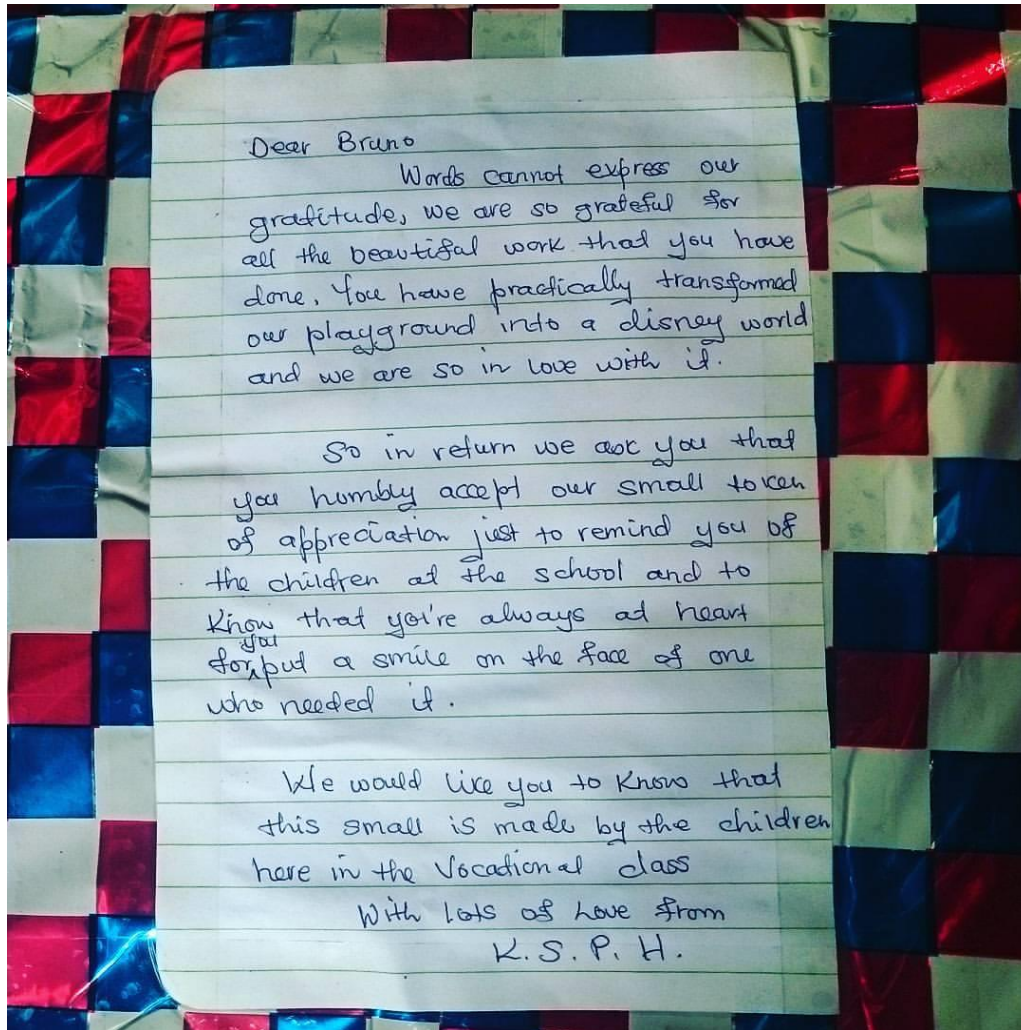
Appendix Picture 6-1: Letter of appreciation

This letter right here made me cry, smile, laugh and love. It was attached on the gift made for me by the children at the Kampala School of Physically Handicapped as they received the playground on the 19th of June 2016.
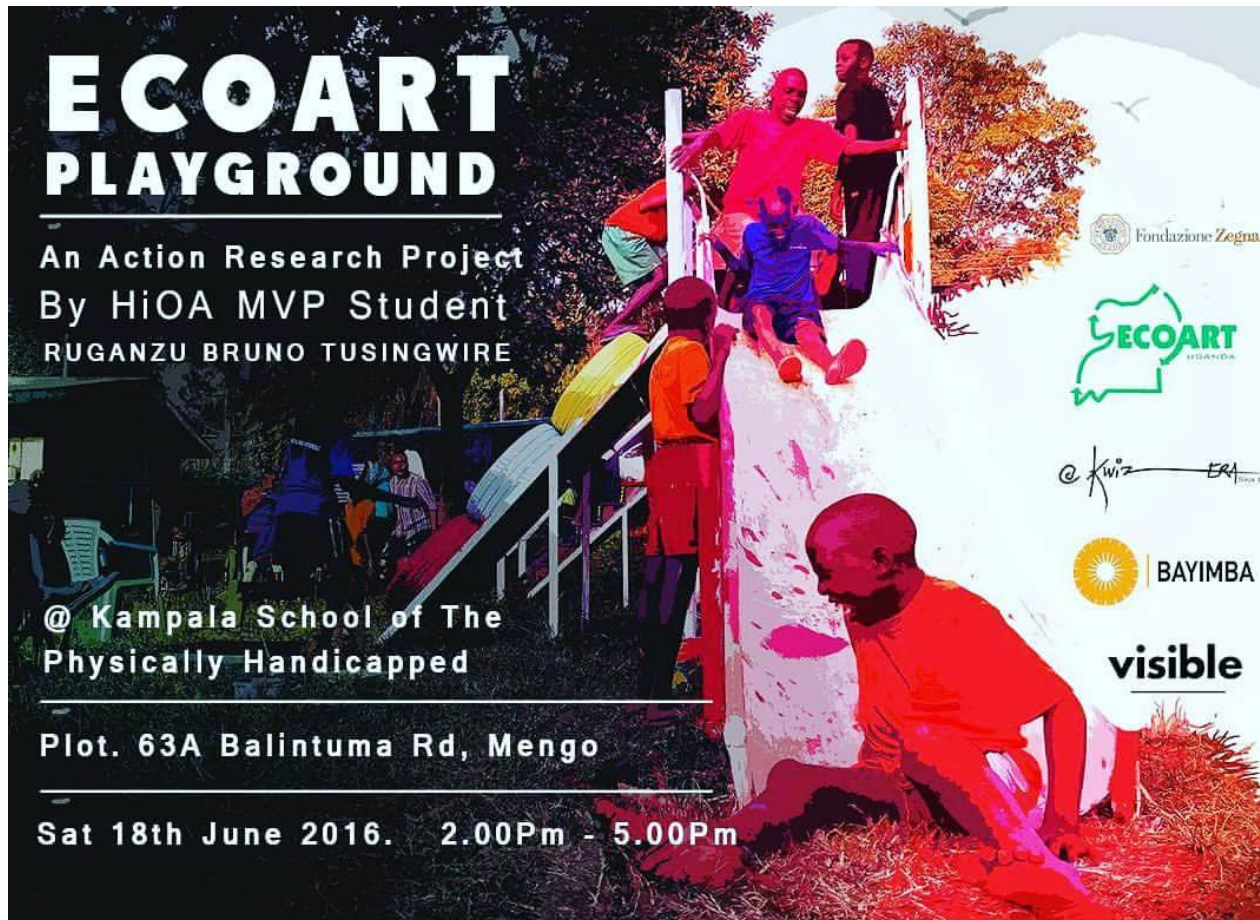
APPENDIX VIII: Newspaper article containing the action research project.

Appendix picture 6-2: Newspaper article from the monitor dated 25th June 2016.

APPENDIX VIII: Poster design used in the promotion material on social media

This poster was used as promotional material for inviting volunteers and the public to the events at the playground. It also included names of Non-Governmental Organizations in Uganda that were collaborating on the project and provided financial support.

APPENDIX IX: Other Playgrounds completed in previous projects

The Eco Art playground at Kampala, 2012

The Eco plane

The Eco plane that was movable throughout Kampala suburbs, 2012

Eco Art playgrounds in North Carolina, USA 2014.