

**INFLUENCE OF ALTERNATIVE EDUCATION ON PUPIL'S
ACADEMIC PERFORMANCE DURING EMERGENCIES:
A CASE OF PUBLIC SCHOOLS IN NYANDO
BASIN, KISUMU COUNTY, KENYA.**

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DECLARATION

This report is my original work and it has not been presented for a degree in any other university.

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DEDICATION

This research report is dedicated to my loving husband Hannington Owato and children Prisca, Bob, Mark, Dorcas and Martha, for their unwavering moral support and sacrifice.

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LIST OF ACRONYMS AND ABBREVIATIONS

CECs	Community Education committees
DRR	Disaster Risk Reduction
EFA	Education for All
EIE	Education in Emergency
GOK	Government Of Kenya
IJDMRR	International Journal of Disaster Management and Risk Reduction.
IRIN	Intergraded Regional Information Networks
KRCS	Kenya Red Cross Society
MDGS	Millennium Development Goals
NADIMA	National policy on Disaster Management.
NESSP	National Education Sector Support Program me
NGO'S	Non-Governmental Organization
PTA'S	Parent-Teacher association
TAC	Teachers Advisory Centre
UN	United Nations

ABSTRACT

According to Millennium Development Goals (MDGs) and Education For All (EFA's) objective for the year 2015 it is necessary to reinforce Education In Emergencies (EIE) is important for it offers preparedness, response and recovery of victims during disaster. The study sought to answer the Ho hypothesis that there is no difference in offering alternative physical environment during emergencies and pupils' performance. This study sought to stress on the importance of combating environmental related conflicts by proposing sound management of floods in Nyando Basin. Just as is like the feeling of UN Peace building Commission, it is important to avail chance to address environmental risks and provide a more consistent and coherent way of capitalizing on potential opportunities. The study sought to express that managing floods is no longer an option but a security imperative. The study highlight several educational ways of ensuring that sustainable peace is obtained through flood management. These factors identified are, alternative physical learning environment, alternative learning programs, teaching strategies, support services and therapeutic program. The mechanisms mentioned would go a long way in ensuring that performance is enhanced thus pointing out to a culture of peace. The purpose of the study was to assess the influence of alternative educational program on pupils' performance and its long run impact on the state of peace in the basin region. In the study, the researcher employed descriptive research design. The target population for the study was respondents from public primary schools in Nyando Basin Ombeyi Zone. The proportion of the target population was unavailable so 384 size following Fisher et al's recommendation in Mugenda and Mugenda (2003) was used. The sample size of the study was 384 respondents. This study planned to use questionnaires to collect data from 1 TAC tutor, 19 Head teachers, 38 class five to seven class teachers and 323 class six to eight pupils all from the 19 schools of study. Interviews were to be done among 3 class eight class teachers from the schools in the sample, however only 309 pupils responded while from the other groups all response were retrieved.. Quantitative and qualitative data were collected by using the mentioned tools that were later analyzed by the use of descriptive statistics using the Statistical Package for Social Sciences (SPSS) and presented by using both statistical and graphical techniques. The findings were that when physical learning environment is offered during floods there tends to be an influence in performance. The study therefore recommended that the meteorological Department needs to be a little bit keener in forecasting early warning of floods, the school stake holders should strive be fore hand and to ensure that schools physical learning environment is safe for the pupils.

CHAPTER ONE: INTRODUCTION

1.0. Background to the Problem

Alternative Education also known as “Nontraditional Education’ is an education with a philosophy and style which differ from that of mainstream education. Alternative Education does not take place in the normal physical environment guided by normal curriculum. It could be home based apprenticeship or independent style and it is a contrast to conventional school system. Conventional school discourages freedom of thought, personal expression and social development personal expression and social development http://en.wikipedia.org/wiki/alternative_education, (January 2013).

Alternative Education enables youth to be independent thinkers and it is aimed at “Risk youth’. In the world Education forum at Dakar in 2000 the ministers in attendance endorsed that all children who are asylum seekers must have access to education. The ministers pledged to meet the needs of the stated education systems affected by conflict, natural calamity and instability. They stressed to conduct educational programs in ways that promote peace and tolerance (Sinclair 2002). Following the Global campaign for education (2007) momentum by the 2001-MDGs under the United Nations General assembly to achieve universal primary Education and gender parity, this study achieves its strength in order to intervene for the pupils facing flooding disaster.

Education is a fundamental human rights embodied in human rights instruments , UN convention on the Rights of the child (1989) , International Human Rights law (law of peace) and Guiding principles on International displacements just to mention a few. It is important to note that EFA shows that every child has a right to an education. This does not discriminate against children living in emergency regions.

In the Kenyan system of Education, progress reports are used to reveal the ability on academics performance in the course of the term, end term report provides the pupils’ academic performance the term while the Kenya National Examination Council Certificate shows the progress for the level of education on offer. Learning during flood

season may not be stable thus an Alternative Education may deem necessary. Pupils enrolled in alternative programs are unlikely to drop out of school and they are recorded to earn more course credit. (Sinclair 1998).

The area of study was within Nyando river Basin, an area prone to floods. When such a catastrophic event takes place normal education is incapacitated, learning materials are destroyed and lost, there is massive destruction of infrastructure, the unaffected schools are used as evacuation centers, learners and teachers may die and therefore with all these there is need for external support to meet education needs.

Education offered in such a situation is significant for it would help learners make informed decisions on how to survive in such a dangerous environment. Education provides lifesaving information that strengthens critical survival skills and coping mechanisms that enhance culture of peace. It is from this understanding that the study attempted to establish how Alternative Education influence performance. The study endeavored to prove that during emergencies there is utmost need to engage pupils in an alternative education. This study fell under the general area of Education. Education empowers the citizens enabling them face live with confidence.

1.1 1 Emergency

Emergency is a situation that poses an immediate risk/disaster to life and it needs urgent intervention. Similarly on January /12/ 2010 an earthquake struck Haiti affecting 3 million people. The earthquake inflicted significant damage especially to health, communication, transport and basic utility, a considerable amount of health damage is documented. (Public health risk assessment and intervention 2010). Such health issues included wounds and injuries, water/ sanitation/hygiene-related and food diseases. This subjected the health sector to intervene and the world vision responded by providing some basics such as food, water and sanitation. ([www.world vision.org/our – impact/disaster-relief](http://www.worldvision.org/our-impact/disaster-relief)).

Today 72 million children are out of school worldwide due to disasters (Kishore- 2012). The special Rapporteur on the right to Education has urged all states to ensure that the

right to education is respected in emergency situations. Equally, children have confessed that education is a best option for them amidst emergencies and have prioritized it as a part of emergency assistance. (Nicola, 2003).

1.1.2. Flood and Education

Flood is a sudden-on set Disaster that occurs when rivers are unable to carry their waters. This makes rivers burst, spilling over to the land. Its' effect is felt within hours or days. Most of the world's documented floods have resulted from failure of natural dams and those conditions, such as large ice-dam failure at the margin of continental ice-sheets, however are now absent (O'Connor and Costa 2004) .In Africa's Northern hemisphere the scale of flood event in 2007 has been the worst in extent in the last three decades. More than 20 million people have been affected. Infrastructures and soils have been washed away. (British Red Cross, 2008, and BBC News, 2007).

It is important to underscore the impact of disasters, like floods, on education access, equality and quality (Masese *et al* 2012).This journal affirms the need of not only EFA but a type that befits the context. The NADIMA also underpins the importance of alternative education for DRR (Republic of Kenya -2007 a) for effective support during an emergency. In Kenya, flood is common in North Eastern, Western, Nyanza (particularly several parts of Nyando and Homabay region) and Tana River (UNICEF-2009 a). From this point an intervention that befits effective education is necessary within the basin.

1.2. Statement of the Problem

MDGS stresses that education is necessary, however it is important to note that EIE is still viewed as secondary. Many donors are reluctant to fund it, given the destructive impact of a disaster. Therefore not providing an alternative education during emergency is as crucial as denying the affected children important knowledge, skills and attitudes that are vital for the capacity of becoming a productive citizen once the emergency is over. (Sinclair 2002).

Education provides psychosocial and physical protections during emergency. Alternative Education is likely to empower the child enabling them improve in performance. Being present in school makes a child less vulnerable to school destructors leaving the pupil concentrate in learning. Onditi (2007) shows that during floods many pupils engage on the rice fields and other farm activities for the sake of earning some money. This study therefore tried to determine how alternative education and related programs would influence performance.

1.3. Purpose of the Study

The purpose of the study was to assess the influence of alternative education learning environment on pupil's performance.

1.4. Objectives

This study was undertaken for the following objectives.

- i. To find the extent to which alternative physical learning environment influence pupil's performance during floods in Nyando Basin.
- ii. To identify alternative learning programs that influence pupil's performance during floods in Nyando Basin.
- iii. To establish how teaching strategies used influence pupil's performance during floods in Nyando Basin
- iv. To determine how support services used influences pupil's performance during floods in Nyando Basin.
- v. To establish therapeutic programs applied that influences pupil's performance during floods in Nyando Basin.

1.5. Research Questions

In order to realize the stated objectives the research questions below guided the study.

- i. Is there a relationship between alternative physical learning environments with pupils' performance during floods in Nyando Basin?
- ii. Which are the alternative learning programs during floods in Nyando Basin that would influence performance?
- iii. Which are the learning strategies during floods in Nyando Basin that would influence performance?
- iv. What support services can be offered during floods in Nyando Basin that would influence performance?
- v. What therapeutic programs can be re-enforced during floods in Nyando Basin that would influence performance?

1.6 Hypothesis

The study attempted to verify the null hypothesis. The hypothesis in question was 'There is no significant difference on offering alternative physical learning environment and pupils' performance'.

1.7 Significance of the Study

This study will be of great importance to the various groups in the society. This includes Researchers, research findings in this study will be of great use for further studies in various disciplines by other researchers, Curriculum developers, once the stated objectives are realized the curriculum developers would find a suitable reference for educational content and methodology to offer during emergency, various NGOs concerned with Disaster management would find this study a useful tool to refer to when intervening to educational matters at the times of emergencies last but not least Nyando Basin would find the study an important contribution that would enhance peace and sustainable development in the said region. This is because when Alternative Education is offered during floods performance of pupils is likely to improve. With good performance the child will be able to pursue further education, empowering them for sustainable development enhancing 'culture of peace'. Ledarach J.Paul contends that

peace building should start from below (Ramsbotham Woodhouse and Miall: 2007: 215.) “Sustainable peace” has to start at the lowest level of education and this is in primary school.

1.8 Delimitation of the Study

This study drew its research data from Nyando Basin ‘Ombeyi Zone’ in Kisumu county-Kenya. The study specifically researched in public primary schools in the said region and on environmental factors, specifically on floods, that most likely influenced performance.

1.9 Limitation of the Study

During the course of the study certain limitations were experienced. This included the following:

Presence of other factors other than floods interfered with the findings. The factors included the following:

- Absence of a good number of role models within the community and the relatively low economic status of the community.
- Insufficient funds to undertake the research, especially which required to facilitate visiting the said schools.
- The area of study was located so much in the interior and the available means of transport were motorbikes and bicycles. This made accessing the area a challenge especially during flood season.
- Given the flood situation in the area, the roads and bridges were often wiped away by floods further worsening the accessibility of the region for study.
- There was no adequate time for the study. This is because the schools started their day at 10.00 am and end as early as 3.00 pm, barely six hours as opposed to the recommended eight hours. The time mentioned was considered the safest period since the area experiences convectional rains that start in the early afternoons and takes long to dry up in the morning hours.

However, given that there would be some substantive amount of benefits resulting from provision of Alternative Education in the basin than not doing so, it is worth braving the

adverse mentioned conditions for the sake of achieving the ultimate goal. The following points are worth considering in helping alleviate the above identified limitations. Poverty level existing within the community was noted as an inhibiting factor to education. Given the meager earning within the area, very little resources or non are spend on education thus worsening the performance. On this note the community should be encouraged to engage in activities that make use of the water. The study noted that it would be great if the government and NGO'S combine efforts and construct dams that can store water other than leaving it into waste. Lack of sufficient role model was another negative factor and for this reason the researcher propose that during the provision of Alternative Education the pupils be exposed to other people from elsewhere who have braved the flood and achieved a successful life, this would motivate the learners. To curb the challenge of transport, measures were taken to ensure that those involved in the study were people from within the locality. These people are acquainted to such difficulties so could brave the conditions therein while doing the research. As far as lack of time was concerned the researcher ensured that proper planning was done so that no time was lost. This was done by designing the study tools as clear and as precise as possible, limiting time wastage.

1.10. Assumption of the Study

From the proposal the following was assumed; that the alternative physical learning environment put in place, the alternative learning programs, the applied teaching strategies ,the support programs and therapeutic mechanism applied during floods would influence performance. It was equally assumed that the community would be willing to support the study to its conclusion, the effort put in the proposal would enable the study to move smoothly towards a logical conclusion, the government and other NGO's will continue with their co-ordinate support during the emergencies and a remarkable improved performance would be noted as the Alternative Education is offered.

1.11 Definitions of Significant Terms

Alternative Education:	Type of education offered following a disaster with Conditions adjusted to accommodate to defeat adverse effect.
Child/ children:	Learner/learners living within flooding region. This refers to the pupil in the study.
Disaster Risk Reduction:	Deliberate measures undertaken to alleviate the impact of a disaster. It is normally taken by an external agency/agencies.
Education For All:	A deliberate attempt to ensure that education is inclusive. An education that is available ,acceptable ,assessable and adaptable to all.
Education In Emergences:	Provision of quality education that meet the physical, psychological, developmental and cognitive needs of people affected by conflicts, disasters and crisis which can be both life saving and life sustaining.
Emergency:	A situation with a serious disruption of function of a society causing wide spread human material or environmental losses which exceed the ability of affected society to cope using its own resources
Evacuation center:	An area where the community find peace at the time of floods. While here the humanitarian agencies provides some aids to the victims.
Teaching strategies:	Deliberate effort carefully selected to be used during the instructions of the pupils.
Migrating schools:	Schools that move from place to place as they tend to be driven away by disasters.
Performance:	Outcome after an evaluation. It normally reflects the capability and academic level of the learner and academic
Support services:	External help extended to the learners to enhance learning. They reinforce the teaching and learning aids influencing performance.

1.12. Summary

This study has given the background to the problem, explained the significant terms and shown the effect of floods to education. The objective, purpose, limitation and delimitations are clearly spelt out. Influence of Alternative Education has been referred to in this study to show that its provision affects performance. Alternative Education is likely to influence children in their academic performance. Provision of this education is possible amidst all odds.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter allows for the review of past research work related to education and floods adding more knowledge to the research study. It further points out weaknesses and critically analyses published body of knowledge by way of justification and comparison to prior research studies. It thus comprises review of empirical data. It examines various literature related to floods and its influence to performance. Ideas documented on alternative learning environment, alternative learning programs, teaching strategies, support services and therapeutic services that influence performance are also examined. Theoretical and conceptual frameworks of the literatures are presented. To conclude, a summary of the literature is given.

2.1.1 Floods in Kenya

www.irinnews.org/.../Kenya-floods (2007) provides a review of floods in Kenya and it mentions that the regions usually affected are Budalangi, Migori, Nyando, Kisumu and Malindi.. This study borrows from the mentioned sites approach that shows that communities are usually displaced at the time of flooding. When communities are displaced, pupils are affected too and in return their performance is most likely to be affected. When this takes place the question is ‘would alternative educational programme influence performance?’

2.1.2 Floods in Nyando Basin

According to Telewa (2011) Nyando basin experiences two spells of flooding. The two spells are the long rains in March to May and short rains in October to December. Ongor (2007) and Jamba, (2010) shares the same view with Telewa (2011) with regards to the period of flood except the latter two moves ahead and discuss on how to manage it. This study observes that unfortunately school programs are usually at their peak during the times mentioned.

2.1.3 Floods and Society

Liao (2012) proposes that societies need to have management approach based on resilience to floods rather than management on resistance. According to him resistance

fails to address an extreme event that follows floods. He claims that urban resistance to floods is an alternative framework for urban floods. Given that education is a part of societal norm, then this contribution supports the study in that if educational programs can be made resilient, performance would be enhanced. The text is important to the study since it supports the objective of providing alternative physical activities

2.1.4 Floods and Performance

Floods influences performance in various ways and the following can be observed:

During floods, absenteeism of both learners and teachers are a common scenario. (Reche *et al* 2012) when addressing school based factors influencing education observed that time of commencing learning influences pupils academic performance. Eshwani (1983) too does not differ with Reche *et al* (2012)'s view. Destruction of learning materials makes them unavailable and Ubogu (2004) strongly suggests that learning aids are vital in aiding and understanding lessons. This study insists that absenteeism of learners, teachers and teaching materials influence performance. A task force report (February 2009) of Thika District Education Board admits that absenteeism is one factor that influence performance. This contribution is useful since it can be used to ensure that certain reliance is upheld within Nyando Basin in order to propel candidates to better performance even during floods. Liao (2012) and Emergency appeal n^o MDRKEO23 (5th April 2013) shares the same opinion that Tana delta recorded a better performance compared to the previous years. Tana Delta was ranked first in the country in the 2012 KCPE examinations. This is reported to have been as a result of coordinated and partnership effort of Kenya Red Cross Society (KRCS) working jointly with the ministry of education. The two contributions confirm that a lot of support has to be given to candidates if good performance is to be realized. Alternative programs are vital since they would enable the candidates to be resilient to flooding. World Vision Overview (2008) does not have a divergent view. It express that world vision programs should be those that enhance coping mechanisms to social and economic resilience as well as long term development.

2.1.5. Education and Peace

It should be noted that Education combats poverty, promotes social justice, human right democracy, cultural diversity, environmental awareness and all these culminates into peace.(Education International <http://www.ei-ie.org/en/websections/content>). Peace to exist is as a result of behavior change. Behavior development is linked with behavior and norms of a particular group. Existing values and norms either contribute or hinder behavior that promotes peace (Fountain 1999)

In 1990 the World Declaration on Education for All clearly stated that basic learning needs comprise of tools such as literacy and numeracy as well as knowledge skills and attitude required to live and work in dignity and to participate in development. It further states that all these values promote social justice, acceptance of differences and peace. (Inter Agency commission, WCEFA, 1990). The main agenda of Fountain (1999) and Inter Agency Commission (1990) stresses that acquisition of education enhances a peaceful coexistence.

2.2 Effects of Floods

In this study, effects to floods will be dwelt within four aspects. This includes; destructions of school buildings, hunger, diseases and destruction of school routes. Masese *et al.* (2012) states that floods cause are interference to learning. Amer (2007) shares the same opinion and further states that it is accelerated as syllabus coverage lags behind thus influencing performance. This study bears similar opinion with the contributions in that in Nyando Basin the situation is similar.

2.2.1 Flood and Destructions of School buildings.

Buildings, houses and classes are usually destroyed by floods (Scani 2013 and Carreno 2008). This makes learning space unavailable during flooding. The study presents that so long as when classes are missing learning will not be adequately achieved and in return performance is influenced. The two contributions are important since both have given some efforts of averting the menace. They have presented that UNICEF has made efforts in providing humanitarian assistance in health nutrition and hygiene. However both have

sadly missed out on assisting in education. They have indicated that reconstruction of classrooms is viewed to take too long to be engaged in. This widens the gap that works against performance.

Kenya Displaced Thousands, IRIN, (2012) reveals that in Baringo and Marigat at least five schools were submerged. According to the data from KRCS there is evidence that the communities worry in most cases over performance whenever floods come. This contribution concurs with the study in that floods influence performance. In Nyando basin it is common to find classrooms unavailable since they get submerged in water (Kenya today 2011). However in the contribution, villagers spearheads in flood management by raising buildings within the school.

2.2.2 Hunger and Famine during Floods.

Lack of foods is common during floods .Water covers the ground completely inhibiting the survival of crops. www.irinnews.org/report/88612 shows that extensive floods along the rivers of central and southern Mozambique did occur leaving 465,000 people in need of food assistance. Of that population only 175000 could be assisted by an agent, the World Food Programme (WFP).

In 1995 Korea experienced a severe famine catalyzed by floods. The flood ravaged the country affecting arable land, grain reserves as well as social and economic infrastructure.(North Korean famine - Wikipedia, the free Encyclopedia). This contribution reveals that much as some assistance could be offered by humanitarian agents this could not be sufficient. A more sustainable method would be better if considered. The question that would then arise is what's the fate of people who may not get food assistance or those whose humanitarian aids has run out ' ? It is important to note that numerous studies demonstrate that malnutrition, even with no clinical signs affect intelligence and academic performance. (Schoenthaler 1991)

2.2.3 Floods and Diseases

During floods outbreak of disease are not uncommon. Some of the causes of the outbreak results from nutritional deficiency and water borne complications. When food is scarce then malnutrition sets in. Am J (2006) contributes that Diarrheal Epidemic in Dakar occurred three times consecutively during the floods of 1988, 1998 and 2004. Kondo *et al* 2002 also confirms that waterborne diseases are common during disasters. Relating to the study, these diseases are intestinal subjecting the patient to successive diarrhea and general weakness of the body. Such a condition will not allow the pupil to concentrate in their studies. In Bangladesh diarrheal diseases was responsible for all flood related for 35% of flood related illness and 27% of 154 flood related deaths in a population of 45,000 patients (Siddique *et al* 1991). Jamba 2010 expresses similar opinion showing that a good number of people in Kenya interviewed have associated flooding with increased incidences of cholera, typhoid, dysentery, amoeba and fungal skin diseases. These contributions strongly feels that flooding comes with health challenges and these are not likely to miss among the pupils.. Ari, Jakarta (2014) brings it out clearly that most diseases increase following flooding due to the heavy rains and strong winds through which pupils have to walk in. This is common with pupils since they have to wake up early to catch up with early prep times the early morning prep times. It is important to note that in Nyando basin very few pupils ever have proper protective clothing such as masks, gloves, foot ware or cardigans. This is largely contributed by the fact that the region remains hot for the better part of the year therefore heavy dressing is not common. It is important to note that pupils who experience poor health have significantly poor adult outcome such as lower academic attainment, adverse health conditions and lower social status .(Case *et al*, 2002; Case *et. al.* 2005). Hanson *et al* 2004) re enforces that a child with poor health does not engage fully in learning activities. The contribution however does not give a solution to the poor heath experienced.

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2.2.4 Destruction of School Routes

It is common that during flooding the bridges are washed away and roads remains impassable (www.Wavitu. Com / 2014 / 04 and [http// en. Wikipedia .org / wiki effects](http://en.Wikipedia.org/wiki/effects)

of hurricane. Sandry. New York). In both contributions temporary closure of schools is noted to take place. When school routes are destroyed pupil may have to flee with their family members to neighboring districts thus disrupting their learning inversely influencing performance. Pupils who do not flee have to move to school in boats, a kind of means that is not only tedious but also dangerous.

2.2.5 Displacements by Floods

Displacements are a common scenario during floods. Internal Displacements Monitoring Centre (IDMC) reveals that 32.4 million people were forced to flee their homes in 2012 during the disasters such as floods, storms and earthquakes. (Www. Internal - displacement .org. IDMC 13/5/2013). In Central Somalia at least 2,500 people were affected by floods in March 2013 (<http://unocha.org.somalia/top; stories/ Somalia displaced-people-heat-hardest-flooding>). In both the contributions the humanitarian agencies are reported to have assisted curb the situations. Both www.irinnews.org/.../Kenya-floods ((2007) and Emergency appeal Kenya (2013) contributes on Nyando basin as being one of the affected regions by floods in Kenya. Both contribution reveals that support have been given by KRCS and Government of Kenya (GOK) (Kisumu Kira Assessment, April 19th 2013).

2.3. Measures likely to influence performance.

Floods as a disaster disrupts school programs since school routes are destroyed, diseases are increased and pupils are often hungry thus performance is likely to be affected. The following reasonable alternatives if implemented may influence the said.

2.3.1 Alternative physical learning environment:

As it has been discussed earlier in the study floods affects the environment and schools are not left out. Physical learning environment has a lot of influence in learning performance. Knirk (1979) believes that an environment that is uncomfortable would not allow proper processing of information. Earthman C (2004) is assertive that the building in which students spends a good deal of their time learning does influence how they learn. Equally Ellis (2005) contributes that children's environment has an effect on

learners cognitive and behavioral development as well as childhood vulnerability. Similarly Lippman (2013) holds it that learning environment shapes the learners and that learner's influence environment. This study seeks to investigate the extent to which alternative physical learning environment influence pupils' performance during floods in Nyando Basin.

Amidst floods an alternative learning environment could be provided. It is worth noting that some adjustment to the flood environment may improve comfort and save time which is transferred to learning culminating into an improved performance. When providing alternative physical learning environment it is important to judiciously select the alternative in order to minimize negative environmental impact;

- Kuuskorpi *et al* (2013) emphasizes the importance of resilience as was contributed by Liao, K, (2012) during flooding. However the literature even improves the suggestion and further spells out that the equipment used in schools are best if are resistant, durable and easy to repair in order to facilitate acquisition of skills.
- Embracing diversity (2006) has a striking contribution on taking care of destroyed paths to school. It mentions that the fear that is usually experienced when travelling to and from school may cause a pupil to withdraw and not fully concentrate in learning contributing to poor performance. It suggests a remedy of establishing a 'child watch' activity among community leaders and parents. This activity would provide assurance to the pupils while on their way to and from school leaving them calm to maximize their efforts on learning.
- To handle destroyed school structures Dec; (2000a) and Kent *et al* (2004) mentions the need flood proof measures such as plinths or foundations for the buildings. Similarly, Kenya Today (2011), ITDG (undated) and WED 'C' (2007) echoes the same idea. But the latter views are broader and subtler. They specifically talk about raising latrine pits and tanks for health purposes. Apart from raising buildings, use of a strong frame with lighter wall materials that can be replaced after floods is recommended (IFRC 2001). This will ensure a much more stable environment conducive for learning hence improved performance.

- It is important to construct schools on raised grounds. Such grounds would not encourage impassable ‘pathways’ alongside other environmental factor (Tanner 2000) and (Kenya Today 2011). This contribution is important because a raised ground would not only avail structures for learning but will also reduce health complications.
- It is important that no settlement is done on flood prone ground and schools have to be relocated in case they are there (Mac clustery 2011). This contribution is vital since flood is a sudden onset disaster and it may not allow sufficient time to move away to safer ground.

2.3.2 Alternative Learning Programs during floods.

During floods traditional learning may face some challenges so an alternative learning program may be necessary. This study therefore seeks to identify alternative learning programs that would influence pupil’s performance during floods in Nyando Basin.

The alternative program should consist of a curriculum that would cater for the needs of crisis-stricken population and one that would offer a paradigm shift in flood disaster to peace amidst the floods (Sinclair 2002). The alternative should be a program that is diverse to be selected from in order to offer short term adjustment and long term adaptation (Folk *et al* 2002). This contribution is important to the study since it opens up windows giving a free hand to varied disasters scenarios to tailor that which suits them. Teerathumaskul and Manowalailao (2002) shares that learning through group discussion is one of the key measures for effective learning since the method is learner centered. To achieve this it would be a good idea to incorporate co curriculum activities that gives pupils plenty of time for discussions. The text also contributes that the pupils should be guided to discuss topics related to their lives. However it is important to note that as much as the suggested learning program is effective this study suggests that implementers would be compelled to do some reasonable adjustment since a group facing a common disaster may not enhance unity with others of diverse situation.

Alternative programs should be innovative and posses practices that offer critical pathway for disadvantaged children (Sena and Miyazewa 2011). The programme should

highly be enriched with contents of life skills, environmental awareness, and health and safety education (Sinclair 2002). Apart from just engaging the pupil on alternative programs it would be also motivating to have some evidence of the acquired skills. It would be a good idea to plan and make available means of accreditation and certification of the non-formal education to recognize the learning achievement (Sinclair 2002). It is worth noting that a pupil who successfully goes through the challenges of a disaster and will have acquired some knowledge, skills and attitudes that would have an additional merit other than just achieving end of primary certificate. This contributions offer such an extensive alternative learning programs and this would enrich the choice of actions to be used. It is important to have teachers trained on important principles of emergency (Sinclair 2002) and as well have proper incentives given to them to avoid frequent turn over from disaster areas. It is also important to review the curriculum offered in the Basin as was done in Afghanistan during the two decades of the conflicts. Then in Afghanistan, there was no nationally accepted curriculum. Different curriculums were developed, one for the refugee schools and the other for government controlled ones (Sinclair 2002) and (Telewa 2011). In both of their contributions flood management courses are infused in the usual curriculum. This contribution is important for it will help reinforce learning, it will enlighten the pupils and empower them for better performance.

It is important to let the children possess some knowledge about flood, to forecast it and to mitigate it (Keys 1997). This will enable pupils gauge and respond to disaster before it cause havoc. With the acquired knowledge, pupils would organize sand bags or evacuation as is necessary. When such measures are undertaken, learning materials would be saved thus aiding in improving performance. However Keys (1997) mentioned that flood warning system and flood response have been less effective. The contributions misses out on pointing out the best way of giving the pupils early warning. This then justifies the necessity of the study for it has an expectation of finding out the best way of making early warnings and early response to flooding more effective so that in the process alternative learning programs take place influencing performance.

2.3.3 Teaching strategies during floods.

Given that flooding is a sudden onset disaster that is likely to cause a lot of damage at its onset. It is important to put specific teaching strategies that would contradict the effect of the disaster. This study seeks to establish teaching strategies that could be reinforced to influence performance during floods in Nyando Basin.

The strategies should aim at orientating the pupil on being resilient to floods. At the end of learning, the pupil should not be affected by floods (Keys 1997). The teaching method should be more of learner centered and should give them opportunities to participate and interact among one another (Tewksbury and Mackdonald, 2005). This contribution is important since it will influence the actual person enabling them to be transformed, as well as enrich and strengthen their experience and resilience.

“Attachment theory” is significant for a child faced with disaster. A significant adult need to be attached to the pupil to help them be more resilient (DeBord 1993). However it is important to note the strength of the contribution that it recommends the attachment be carefully done otherwise if ill done the pupil would relapse to a stressful time with the absence of the adult. The pupil should be helped to cope in school by allowing them tell stories and work on group projects. Pupils should also be guided on discussion on how to be helpful for community rehabilitation. (DeBord 1993).

It is important that the teacher uses much of their personal experience (Lewis *et al* 2011). Such strategy draws learners closer thus improving on learning. When using such a strategy it is important to ensure the experiences identified benefit the content. However it is important to note that the contribution may be challenged when teachers with the experiences are not always available.

Lewis *et al* (2011) stress that pupils should be directed to explore and in the process they learn. The strength of this contribution hinges on the importance of learner centered approach as was mentioned by Teerathumaskul and Manawalailao (2012). A teaching method that is learner centered strengthens learning which in turn influence performance.

2.3.4 Support services during floods.

Floods as a disaster causes dozen of death, massive damage to both public and private properties and severe disruption to community life (Pfisfer and Rutledge , 2002) , However some people remain unaffected , Human societies and individuals who survive are those who are best enabled to do so by their groups (Montagu ,1965). This contribution strengthens the ‘structural functional theory’ that a society is enabled to exist as a result of support from its other supporting parts. The study seeks to determine various support services that would be offered to combat flooding and improve performance.

It is important to support children against respiratory diseases. World vision overview (2008) contributes that in Peru world vision supported “Warm your children” campaign and this ensured children got less vulnerable to diseases. Humanitarian needs such as food, water, temporary toilets can be offered in order to help communities survive and recover (Pfisfer and Rutledge, 2002).This contribution is important for it will keep pupils fit enabling them to pursue learning influencing performance. On the other hand the contribution calls for an extra effort, to warm the children, amidst the existing scarcity of resource As education is important in combating floods, it is important that parents and guardians are empowered to facilitate education amidst disaster as was done in 2004 following the tsunami (World vision over view 2008). The same contribution demonstrates the need of refurbishing schools after 2004 tsunami. In case schools are not reachable as may be the case there would be need to have ‘Alternative schools’ and ‘Migrating schools’ (Addis Ababa, 15th March 2003-IRIN).This contribution can be easily attained since during floods there is plenty of migration to safe areas and at these places such schools can be established. Telewa (2011) shows where community actions were involved in choosing sites for construction of evacuation, raising grounds, class rooms and pit latrines. The mentioned site would act as support service to flood victims. This contribution offers a suitable practical adjustment that is workable in flood region except it calls for a careful implementation of the structures otherwise the facilities would posses dangerous.

Flood victims should be taken through appropriate coordination mechanism to reduce vulnerability to floods by improving resource base income (Ministry of water and irrigation 2009). This will raise the living standards as well as improve education that would be limping.

Pifister and Rutledge (2011) mentions that it is important to provide a number of activities such as provision of flood warning, conducting evacuation, rescuing people from flood water, resupply of people who have been cut off and provisions of information and services to community under the threat of flooding. The contribution is improved by proposing training of members in relevant skills and emergency management principles, organizing forums to provide and promote discussions aspect of flood management. It should be noted that this will go a long way in supporting that which is affected by floods.

2.3.5 Therapeutic Programs during floods.

During floods some people's mental and social health may be affected and may continue over long time culminating to both primary and secondary stressors (stanke *et al* 2012). This study sought to establish therapeutic programs that could be applied to alleviate the stressors thus improve their positive emotional and cognitive functioning that would eventually influence performance during floods.

Both Berkowitz *et al* (2010) and (Stanke *et al* (2012) agrees that there is need for psychological support skills for flood victims to help them recover. The skill is evidence based and it will be able to aid victims be in a position to solve problems, schedule activities, think helpfully and manage distress well. This contribution comes in handy since after a flood, as has been mentioned, the victims are likely to face psychological torture whose effect could be devastating.

Psychological First Aid (P FA) approach is suggested by Brymer *et al* , (2006).This approach is based on five empirical supported principles; promoting sense of safety, promoting calmness., promoting sense of self and community efficacy, promoting

connectedness and ,instilling hope. The strength of this contribution lies in the fact that the flood situation would be addressed early enough to give room for learning and preparation for exams as well as it minds about the aftermath of the same.

Psychological debriefing will not be recommended at the therapy stage, (Forbes *et al*, 2010). The victim should not be made to recount the traumatic event if any. They should not be allowed to ventilate their feeling following the disaster. This is likely to make the victim get stressed and when this happens performance is likely to be influenced. However ACPMH (2017) offers a solution to the involuntary recounting of the events. Use of Trauma Focused Cognitive Behavior Therapy (TFCBT) or Eye Movement Desensitization and Reprocessing (EMDR) is recommended. These interventions comprise the following; Confronting the traumatic memory in a controlled and safe manner, Confronting the maladaptive thoughts and believes about the disaster .and Confronting avoided situations, places and activities.

Trauma Recovery Program can be implemented (Dyregrov *et al* 2000). This type was used in Rwanda in 1994 following the genocide. Here, the communities dealing with the children i.e. teachers, caregivers in the orphanages, social workers and health providers should be trained by strengthening their knowledge and skills about child development. However it should be noted that it may not be possible to have such trained community to reach out all the pupils. To achieve this it will call for an improvement in the teacher training college in such a way that the teachers are taken through the trauma program. Pharmacological treatment can also be administered (ACPMH 2007). However it is important to note that medical facilities may also have been destroyed alongside other physical facilities.

2.4 Theoretical Framework

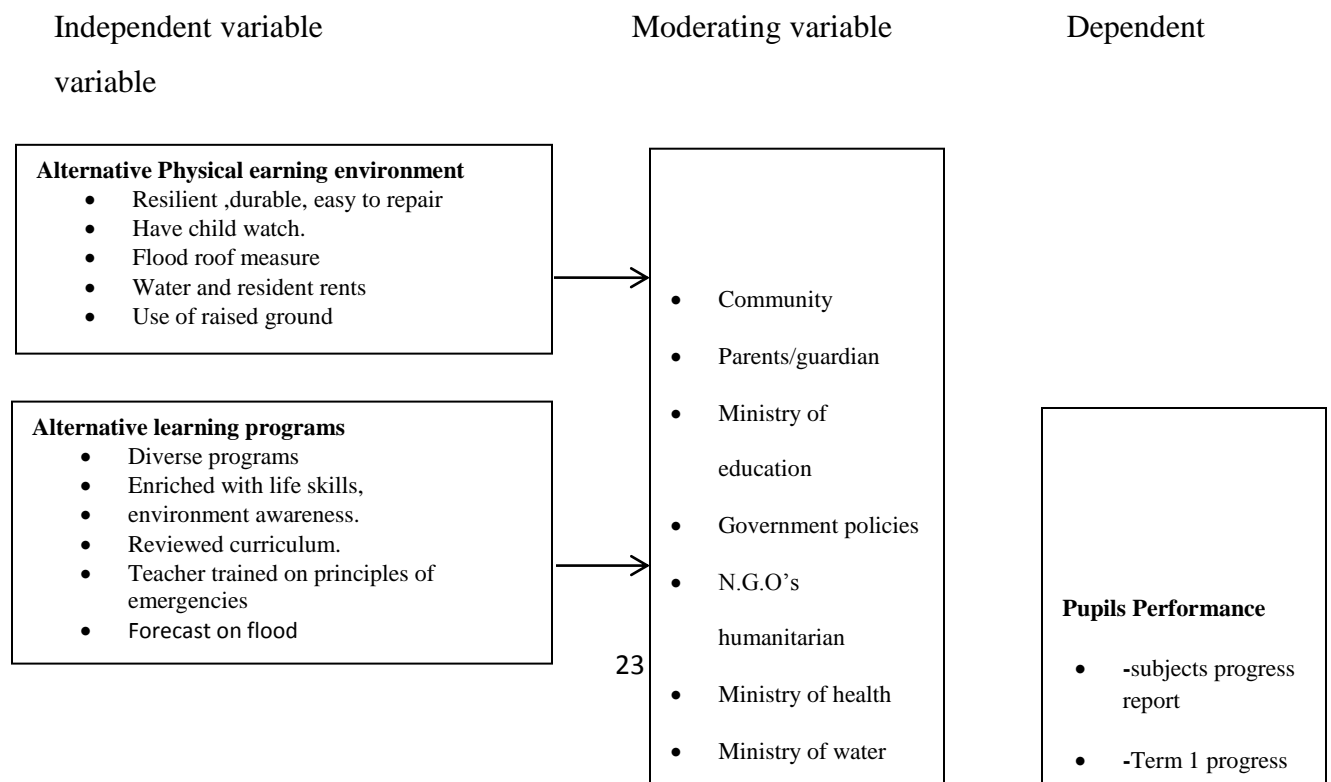
This study was based on the following theories;

- Structural Functionalism theory: The theory was developed by Auguste Comte in the 19th century and Emile Durkheim (1858 -1917) compared it to human body. It attempts to explain that the society is organized in different parts and that each part is important for the existence of each other. The theory expresses that a single

part of a society can disrupt the whole part. These intuitions are specifically structured so that they perform different functions on behalf of a society. This study attempts to show that effects of floods can be combated by involving independent variables which in turn would influence dependent variable. It is noted that flood cannot be handled by a single alternative. A clear demonstration by Bruneau *et al* (2003) states that resilience depends on four properties: robustness, or the physical strength to withstand a disturbance without functional degradation, redundancy, or the extent to which system components are substitutable, resourcefulness, or the capacity to identify problems and mobilize needed resources; and rapidity, or the capacity to restore the system in a timely manner.

- Ecological Resilience concept: This is an important theory for flood hazard management. The theory builds on a realistic paradigm of multi – equilibrium. It focus on the persistence in a world of flux’ (Adger *et al* .2005) as is characterized by floods. The independent variables as will be studied will offer the multi-equilibra alternatives that would influence the dependent one. The study attempts to present that the usual changes at the disaster period can be moderated by certain programs put in place

2.5 Conceptual Framework



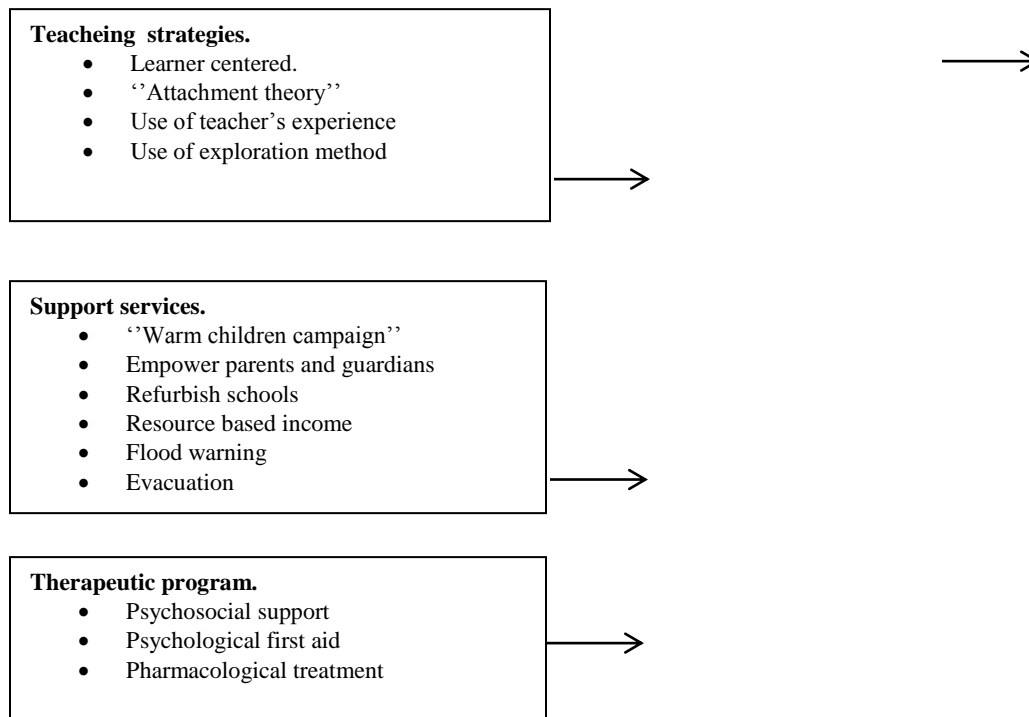


Fig. 1.1 Alternatives likely to influence performance

The dependent variable in this study was pupils’ performance. The performance is influenced by several factors that constitute the independent variables. Based on the literature review, factors that influence performance are alternative physical learning environment, alternative learning programs, teaching strategies, support services and therapeutic support.

It is important to note that the moderating variables are not related to the study (Kothari, 2004) but can have effect on the dependent variable. Example of moderating variables are the School community, Parents /Guardian, the Ministry of Education, Health, and Water, Government Policies and NGO’S /Humanitarian Agencies .To ascertain that moderating variables were not influencing the dependent ones the study researched and noted that they only contributed to provision of the alternative physical learning environment.

2.6. Conclusion

From the literature that was reviewed it is clear that floods disrupt the physical learning environment that is conducive for learning. It is from this point that the study asserts that offering an alternative physical learning environment would likely influence performance. It is also observed that it is imperative that schools found within the flood basin, need to embrace alternative learning programs, teaching strategies, support services and therapeutic programs which have been confirmed to influence performance. Poor performance especially in primary schools is an early warning indication of a poor future life which would lead to uncontrolled conflicts.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter is a blueprint of the methodology that was used to find answers to the research questions. In this chapter, the research methodology is presented in the following order: research design, target population, sampling procedure, data collection methods, instruments of data collection, reliability and validity and finally the data analysis. Ethical considerations are also presented.

3.2 Research Design

For the purposes of this study, the researcher employed a case study design. A case study is an in-depth investigation to determine the relationship resulting to the behavior under study (Mugenda and Mugenda 2003). The case study as is the hypothesis 'there is no significant difference on offering alternative physical learning environment and pupil's performance' was subjected to descriptive method, the design was concerned with determining the frequency with which something occurs or the relationship between variables (Bryman and Bell, 2003) and this was a relationship between variables which had to be established. Descriptive research design is a valid method for researching

specific subjects and as a precursor to quantitative studies. The design was deemed suitable since it helped to describe the state of affairs as it existed without manipulation of variables which was the aim of the study.

3.3 The Study Site

The study was Nyando River Basin, an area covering an area of 3500 square kilometers in Western Kenya. About 750,000 persons reside within the Nyando Basin, most of who live in the Nyando sub-county in Kisumu County, the Nandi and Kericho counties in the Rift Valley Region. For the study, the site was in Nyando sub –county in Kisumu County. At the administrative location level, the locations of the site include Nyando Division, Muhoroni Division and Upper Nyakach Division. The catchment has a steep gradient upstream but a gentle one downstream in the Kano plains where the river dissipates in a wetland area and finally discharges into the Nyakach Bay, Lake Victoria. Over 5,000 people are affected every year by floods in the area.(Swallow et al,2005,and Ongor ,2007

3.4 Target Population

According to Ngechu (2004), a population is a well-defined set of people, services, elements, and events, group of things or households that are being investigated. They are a group of people with common observable characteristic. (Mugenda and Mugenda 2003). In this study the target population was the public primary schools in Nyando Basin, a region which is normally affected by floods, however the estimate of its proportion was not available. This population is targeted, since Emergency Appeal Kenya (2013) shows Nyando Basin as one of the worst affected regions by floods in Kenya. Beside's this, News.24 Kenya (2013) reveals documented efforts of tackling floods in Nyando Basin and it can be noted that efforts have been made to supply foodstuffs mosquito nets, beddings, build dykes and dams but notable omission has been on direct efforts to provide alternative education in schools. The accessible population was in Ombeyi Zone. This area has 19 public primary and one private schools The area was selected based on the fact that of all the region in the basin it is rated as a region of high risk (Jamba 2010).Other regions that follows closely are 'Wawidhi' and 'North East Nyakach' both found within the target population.

3.5 Sampling Techniques in the Study

This study used a sampling technique of non probability design for observations .This design enabled proper representativeness of the concepts in varying forms. The technique was accomplished by using extreme case purposive sampling. Each respondent in the study was of utmost value and this design maximized the range of variation of the study (Kombo and Tiromp, 2006). This sample size provided rich information because of their unique experience of floods as well as giving representative information about influence of alternative education to performance in Nyando Basin.

The study used Fisher *et al* recommendation in Mugenda and Mugenda (2003) since there was no estimate available of the proportion of the target population and the population is assumed to have the characteristic of interest. The characteristic was 50, z-statistic was 1.96 and the desired accuracy was at the .05 level then the sample size is

$$n = \frac{(1.96)^2(.50)(.50)}{(.50)^2}$$
$$= 384$$

From the above recommendation 384 respondents was used. Going by purposive sampling, all the 19 public primary schools in the zone were used. This type of sampling was suitable since the study was specifically interested in that particular characteristic. The respondents of the study by use of questionnaires were from all the 19 public primary schools in the zone. 1 TAC tutor, 19 head teachers, 38 class five, six and seven class teachers, (2 from each of the schools) and 323 class six to eight pupils. The interviewees were 3 class eight class teachers from 3 different schools among the 19 schools stipulated. It was envisaged that the representative sample would give typical perceptions and perspectives on the subject matter.

3.6 Data Collection Instruments

To collect necessary information the instruments used were questionnaire and interviews schedules. Questionnaires were used because they are cheap to administer to respondents who are scattered over a large area. They were convenient for collecting information

from a large population within a short span of time. The questionnaires had both open and close ended questions. The structured questions were used as in an effort to conserve time and money as well as to facilitate in easier analysis as they are in immediate usable form, while the unstructured questions were used in order to encourage the respondent to give an in-depth and felt response without feeling held back in revealing of any information. Interviews were used because they are very effective in giving a human face to research problems and they helped obtain primary data which are more reliable and accurate. In addition, conducting and participating in interviews can be a rewarding experience for participants and interviewers alike. For participants, whether members of the study population or someone related to the population in a professional capacity, in-depth interviews offer the opportunity to express themselves in a way ordinary life rarely affords them. In the study such an opportunity was e therapeutic support for a victim of floods as indicated in the literature review. Many people find it flattering and even cathartic to discuss their opinions and life experiences and to have someone listen with interest. For their part, interviewers engaged in in-depth interviews are offered the privilege of having people who are virtually strangers entrust them with a glimpse into their personal lives. (Mack at al 2011).

The instruments were concentrated on the following variables; Alternative Physical learning environment, Alternative learning programs, Teaching strategies, Support services and Therapeutic programs.

3.7 Instrument Validity and Reliability

The questionnaires and interviews yielded a data type that can be used to answer the research question. Mugenda (2003) states that the instruments used must not only yield information that is relevant to the hypotheses but must also be correct. The study ensured that the instruments used were valid, the instruments used relied heavily on the theoretical frameworks discussed earlier on. The study guarded the instruments reliability against random error as well as against artificial co efficiency.

3.7.1. Validity of the Instrument

Validity of the questionnaire and interview guide was established by peers, experts and a panel of examiners from the Department of Educational Studies at Nairobi University. The research instruments was availed to the mentioned who established its content and construct validity to ensure that the items will be adequate representative of the subject area to be studied.

3.7.2. Reliability of the Instrument

Reliability is a measure of the degree to which a research instrument yields consistent results after repeated trials (Nsubuga 2000). This research study used test-re test method which involved administering the same scale or measure to the same group of respondents at two separate times each after a time lapse of one week. A pilot study was conducted in the Basin where two schools were used and respondents were 2 head teachers, 4 class six - seven class teachers and 24 class six - eight pupils from the public primary schools. Test re-test method was used to test for reliability of the instrument. This was in line with Shuttleworth (2009) who stated that the instrument should be administered at two different times and then the correlation between the two sets of scores computed to obtain ' the coefficient of reliability'

A correlation coefficient of above 0.7 was deemed to mean that the instrument was reliable thus the questionnaire and interviews were used for data collection.

3.8 Data Collection Procedure

The researcher ensured that all relevant ethical issues were adhered to. Clearance from the university was paramount, permission to undertake the academic research in the accessible population was sought as well as consent advice from the respondents. Valid signed documents were used as evidence.

3.9 Data Collection Methods

Data was collected from the accessible population in the 19 public primary schools in Ombeyi ward. The researcher administered the interview to 3 class eight teachers from 3

out of 19 schools. The questionnaires was administered to the 1 TAC tutor, existing in the sample size for the study, 19 head teachers (1 from each of the schools), 38 class teachers (2 each from the selected schools) and 323 pupils (17 from each public primary school from the same sample size). The support of a trained research assistant was sought to assist in data collection owing to the expansiveness of the area to be covered. The researcher made subsequent visits and paid courtesy calls to the respondents' institution to remind them to fill in the questionnaires to enhance their response rate.

3.10 Data Analysis

Data Analysis is to find answers by a way of interpreting the data and results since it is usually difficult in interpreting raw data. Analysis means categorizing, ordering, manipulating and summarizing data to obtain answers to research questions. This is done to reduce data to a manageable form thus study, test and draw informed conclusion. The researcher pursued the completed research instruments and document analysis recording sheets. Quantitative data collected using questionnaires was analyzed by the use of descriptive statistics using SPSS (Statistical Package for Social Sciences) and was presented through percentages, means and frequencies. The information was also displayed by use of frequency tables and charts. Content analysis was used to analyze data that was collected using open ended questions that was qualitative in nature. According to Baulcomb, (2003), content analysis uses a set of categorization for making valid and replicable inferences from data to their context. In addition, the researcher conducted a multiple regression analysis so as to determine the relationship between performance and the variables of the study. The regression equation that will guide the study was ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \epsilon$):

Whereby Y = Pupil's performance

X₁ = Alternative Physical learning environment

X₂ = Alternative learning programs

X₃ = Teaching strategies

X₄ = Support services

X₅ = Therapeutic programs

And β_0 was a constant while β_1 , β_2 , β_3 , β_4 and β_5 were the regression equation coefficients for each of the variables discussed.

3.11 Ethical Consideration and Authority

Participation in the research or any activity of the research is voluntary and each participant will be requested for written formal consent. There is guaranteed freedom to refuse to answer or continue their participation with no generalization and confidentiality was upheld. Any promises made to the participants about anonymity were kept. The research techniques included structured interviews, and administered questionnaires. Clearance was sought from University of Nairobi College of Education and External Studies Department of Educational Studies.

3.12 Conclusion

In conclusion both quantitative and qualitative data's were used for the study. However 14 respondents among the group of pupils were unable to be reached. Structured and open-ended questions were used to collect primary data. The next chapter presents the discussions of the results.

CHAPTER FOUR: RESULTS AND DISCUSSIONS

4.0. INTRODUCTION

This chapter provides an introduction to the discussion on the results of the research based on the primary and secondary data collected. Discussions have been done on the background information, influence of alternative education, on pupil's performance and on the regression analysis. Lastly a conclusion was drawn.

4.1.0 BACKGROUND INFORMATION

4.1.1. Gender of Respondents

60% of the respondents were male while 40% were female (see figure 4.1 below). This then gives the research findings power to stand out as universally gender balanced having done the study among more or less relatively balanced gender. The implication is that the opinion given is gender balanced.

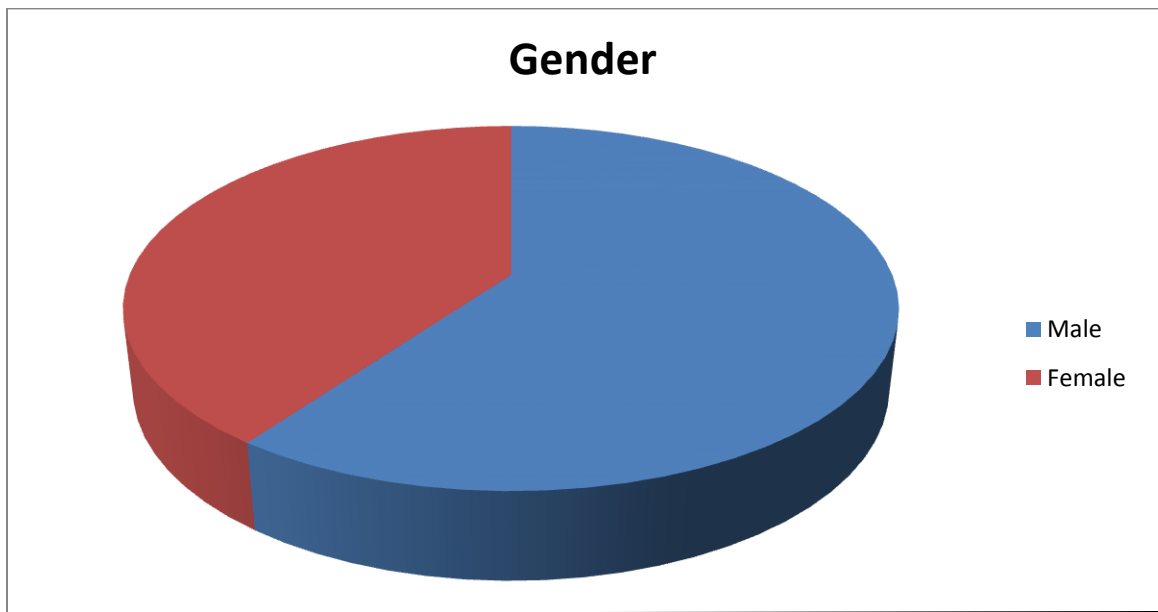


Figure 4.1: Gender of the Respondents

The table below (Table 4.1) shows that the data was collected over a wide section within the school. It was collected among class six, seven and eight .This attempts to confirm that the findings cut across a larger population of the pupils’ experiences thus enriching the research’s findings. However it is important to note that the response was good with just a few missing, 14 out of the expected 323 pupils respondents could not be reached and this was contributed by the fact that absenteeism is a common scenario during floods a view similar to that of Reche *et al* (2012) as indicated in the literature reviewed. Absenteeism is may be caused by a number of factors such as sickness or destroyed pathway and bridges that leads to schools.

Table 4.1: Students Stratification per Class

Class	Number
6	27
7	140
8	142
Total	309

4.1.3. Respondents’ level of experience in years

Most (51%) of the respondents (TAC tutor, head teachers and classroom teachers) interviewed were experienced having served for more than 4 (four) years in their respective areas, 19% having served for 2 – 4 years and a further 30% having served for 0 – 2 years ,(as shown in figure 4.2 below). It is important to note that a good number of teachers within the latter category have indicated that they do not mind serving in the basin much longer. The research reveals that the teachers therein have experienced floods, have adapted to the situation making them competent enough to handle it pretty well, a finding, and concurrent with the literature contributions of *Lewis et al* (2011). Having had experience, such teachers are better off in reinforcing “Attachment theory” as well as offering psychosocial support needed by the pupils thus influencing their performance.

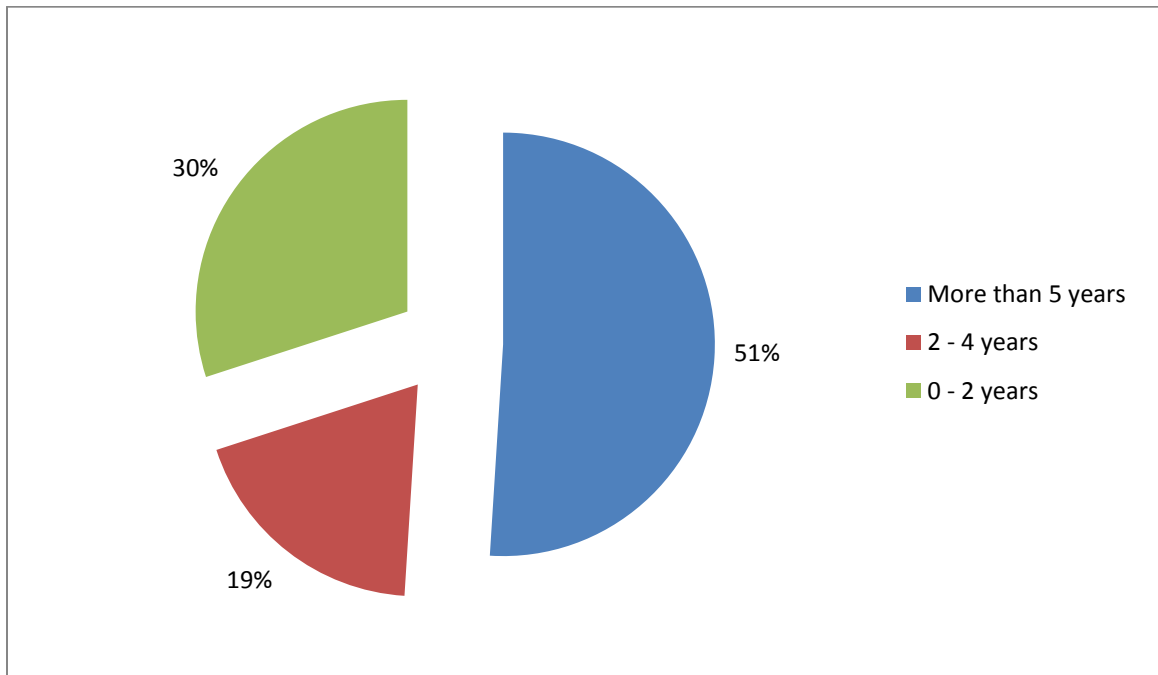


Figure 4.2: Teachers Experiences

4.1.4. Pupils' feelings about being accompanied to and from school and with a stable physical environment during floods

Most (158) of the pupils felt very safe, 90 felt safe while 61 of them (see Figure 4,3 below) felt unsafe while accompanied to and from school and with a stable physical environment during floods. When accompanied, the pupils would be helped pass dangerous paths such as the bridges that may have been weakened by floods or even swept away. It is important to note that the group of pupils who felt unsafe were mainly the female and findings revealed that their fear was not because of the primary reason for company as the study puts it but was a secondary one, that is being molested sexually by male companions. The respondents revealed that when pathways and toilets were raised the pupils felt safe and enjoyed being in school. The research reveals that most learners need assurance when travelling to and from school during floods just as contributed by Embracing diversity (2006). It further reveals that the classrooms made of flood proof materials are rated highly than the others. The implications of this finding is that with stable physical environment during floods and with a proper company, the pupils calmed down faster giving them chance to focus on studies thus influencing performance.

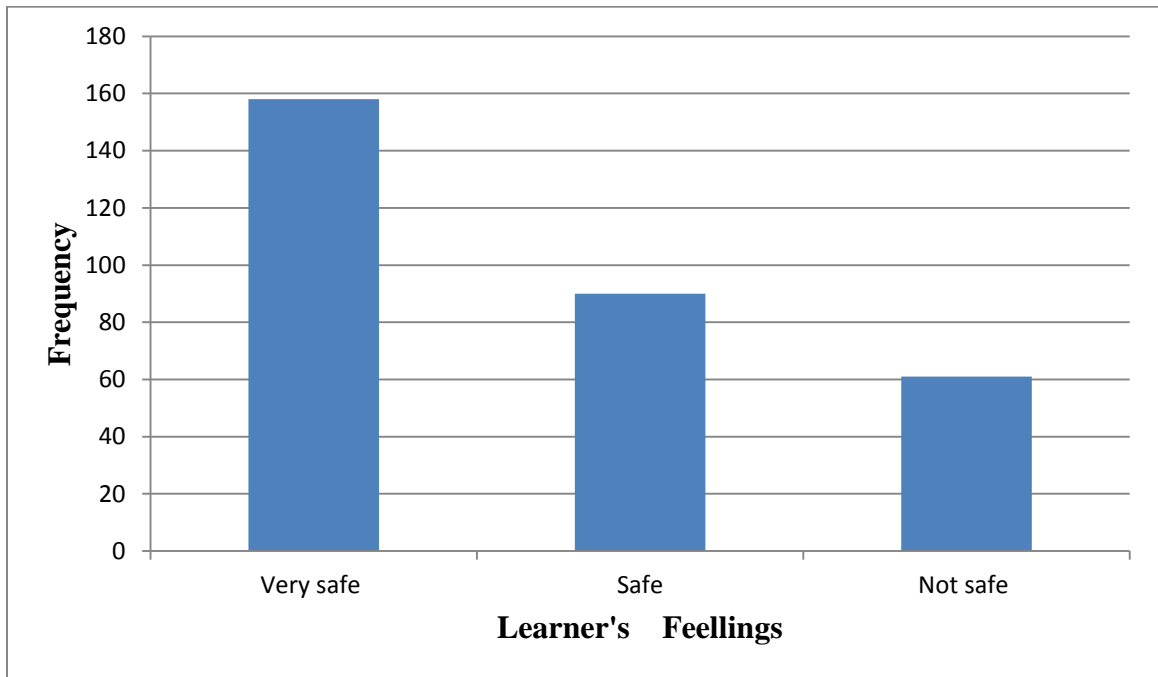


Figure 4.3: Feelings of Learners

4.2. Alternative learning programs that influence pupil’s performance during floods

The respondents felt that addition of other programs other than normal academic ones would go a long way in influencing performance. When programs were listed and weighed, exposure to life skill scored 26%, to principles of first aid 24%, to environmental awareness 26% and to flood management 24 % (see Figure 4.4 below). Other than the above programs all (100%) of respondents was assertive that remedial learning programs during the mornings, in the evenings and over the holidays enhanced learners’ performance. The respondents further identified other programs such as music, creative arts, responsibility awareness, and leadership skills that were not listed and weighed as equally important. The research has observed that such programs provide pupils with very essential knowledge that would enable them cope with the flood while in school. When knowledge from the programs are acquired, pupils would have skills that would cushion the impact of floods thus they get quality time for learning hence influence performance. This observation is in line with the contribution of Sinclair (2002) who advocate for a curriculum that offers a paradigm shift in flood disaster to peace as well as with that of Sena and Miyazewa 2011 who insists that Alternative programs

should be that which offer critical pathway for disadvantaged children. The pathway as suggested should enable the pupils manage life despite any challenges against them.

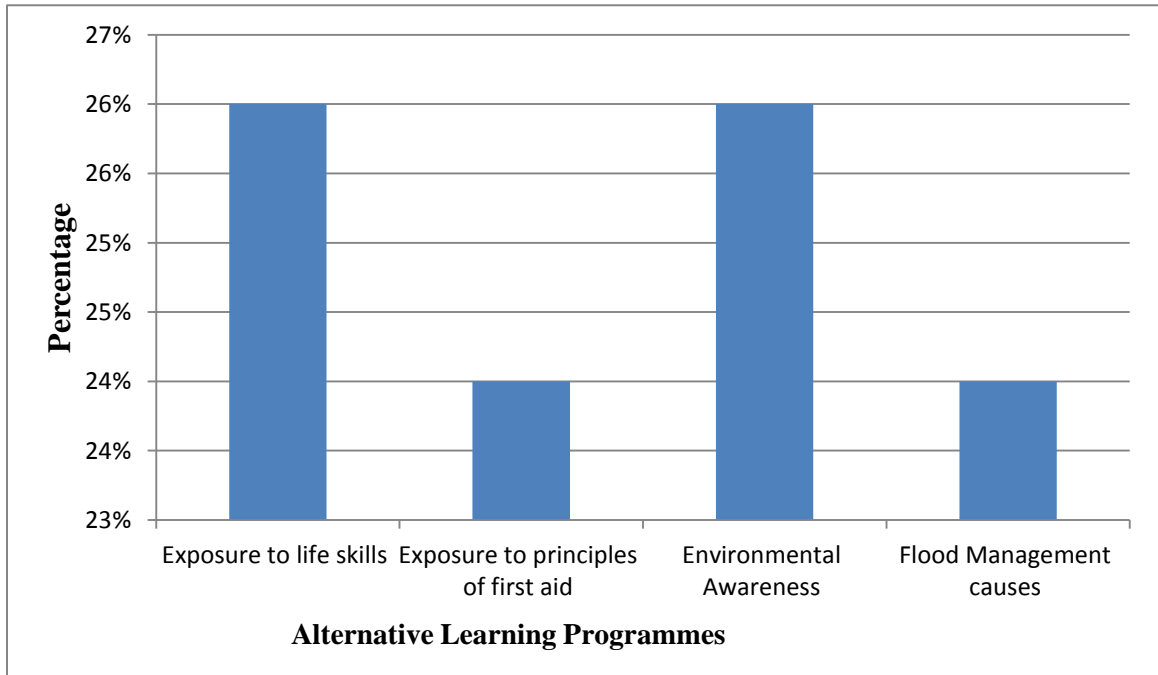


Figure 4.4: Alternative Learning Programs that influence Pupil’s Performance during floods.

4.3. Impact of the teaching strategies on Pupil’s Performance during Floods.

Majority (69%) felt that teaching strategies impacted highly on performance, medium and low impact were almost at par at 18% and 13% respectively (see Figure 4.5). If in much of the strategies, teaching is learner centered as well as have the pupils attached to teachers who have the experience of floods, this would go a long way in allowing the pupils explore much more thus raising their opportunity in performance. If these strategies are undertaken they would go a long way in enabling the pupil be helpful for community rehabilitation after floods just as indicated by DeBord (1993).

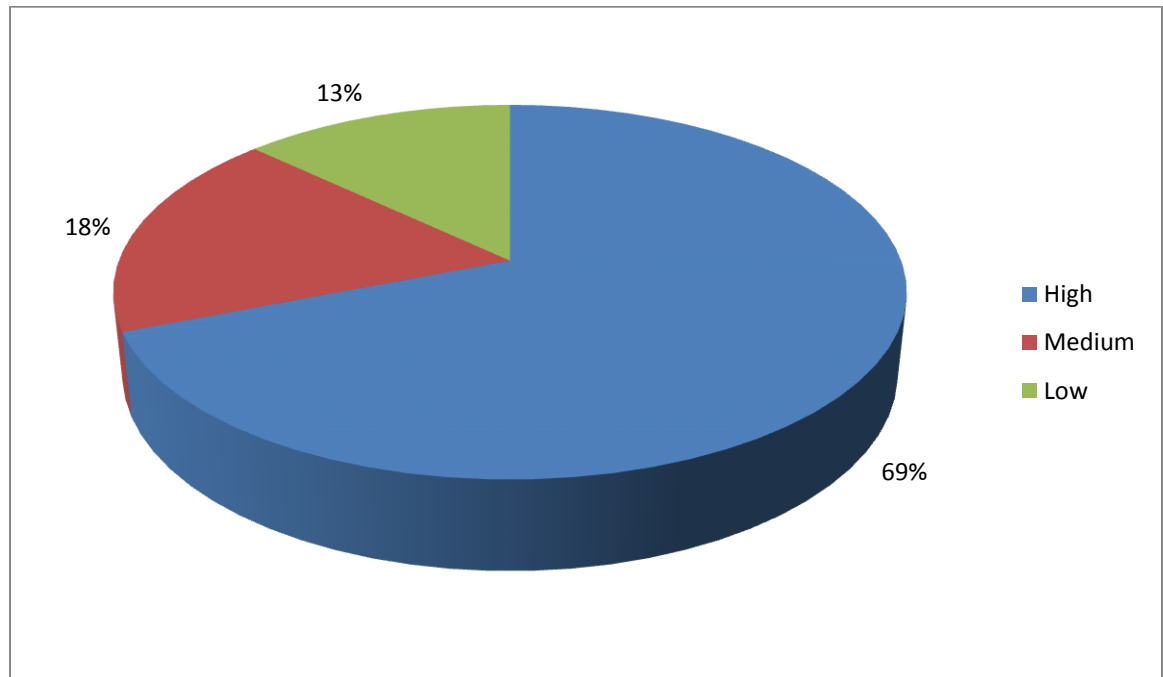


Figure 4.5: Impact of Teaching strategies on Pupil’s Performance during Floods

4.4. Support Services provided to Pupils during Floods.

The respondents recognized the value of support given in various forms as quiet motivating. It was noted that donation such as books, funds, food and clothing were given in aid of education (see Table 4.2). These supports are provided by many groups including humanitarian agencies religious, government bodies and the communities living around the school. The supports provided has displayed certain impacts as shown in Figure 4.6. The impact has been noted high at 71%, at 22% it has been the same and low at 7%. Other support deemed necessary by the respondents but not provided by the identified groups included gumboots, raincoats and mobile medical clinics that would handle health conditions commonly caused by floods. Such supports are important for they facilitate learning as well as enable the society face floods with confidence, a research revelation similar to contribution of Montagu (1965)’s literature. Further still, back at home if parents and guardians are economically empowered this would go a long way in enabling them provide school necessities. It is important to note that Education is an important reinforcement for combating floods thus it is important in making efforts in supporting it. With proper support, performance is likely to be influenced.

Table 4.2: Nature of Support Services

Nature of Support	Percentage
Books	29
Food	36
Funds	28
Clothing	7
TOTAL	100

4.4.2. Impact of Support Services on Pupils' Performance during Floods.

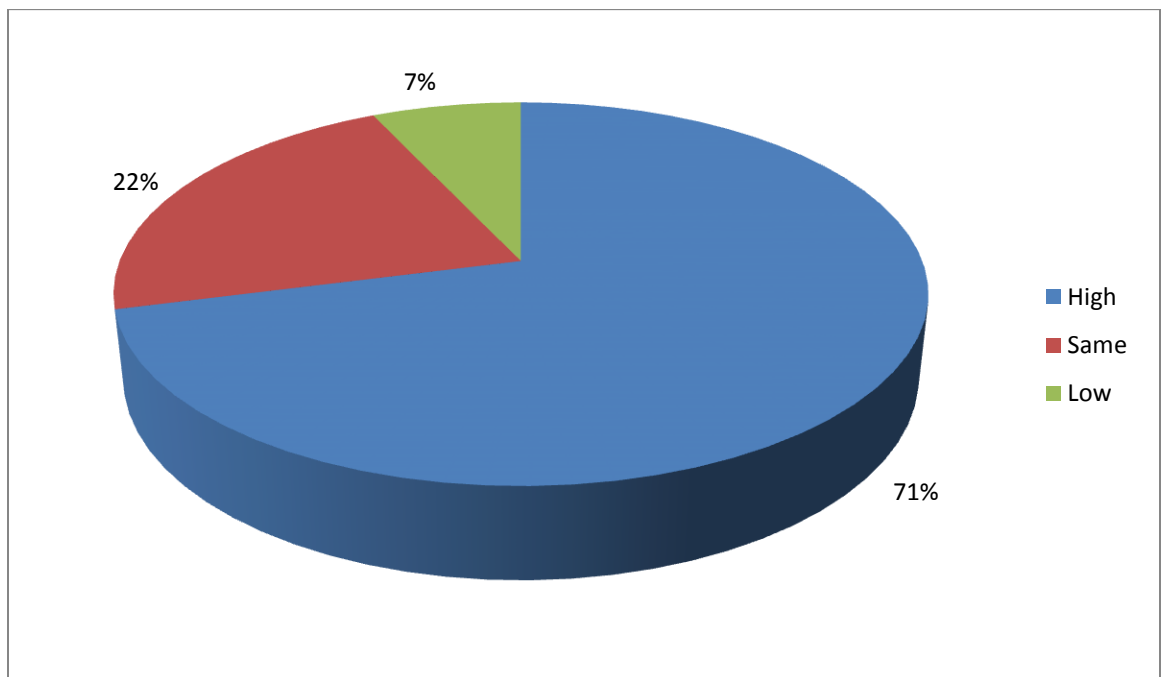


Figure 4.6: Impact of Support Services on Pupils' Performance

4.5. Therapeutic Programs that Influence Pupils' Performance during floods.

The research observed that during floods it was necessary to implement certain therapeutic programs in order to enable the affected pupils recover. The following programs were identified as contributors in influencing pupils' performance during floods in Nyando Basin.

- Help the pupils not remember traumatic flood experience.
- Provide warm clothing such as rain coats, gumboots, beddings and tents in order to forget the disaster being experienced.
- Provide guidance and counseling to victims
- Conducting awareness campaigns on disaster mitigation measures.
- Provision of pharmacological support for those in need.

This revelation is in line with Brymer *et al* (2006)'s approach which suggests the five empirical supported principles of promoting sense of safety, of calmness, of self and community efficacy, of connectedness and of hope. However the research noted that there was a common practice that took place in schools which was unhealthy, a practice of debriefing. Many a times after floods the teachers and other pupils unconsciously subjected the pupils to narrate their experience. According to Forbes et al (2010) debriefing is not recommend

4.6. Influence of alternative education learning environment on pupils' performance and its impact on the state of peace in Nyando Basin

There is clear evidence that when alternative education is offered performance is likely to be influenced. Table 4.3 below shows the mean rating of all the checked perceptions on various alternative education learning environment at a scale of 5 response category to stand at above 3. The implication of this is that majority of the respondents felt there was need of adjusting the learning environment in order to counteract the effect of floods giving room for performance. This perception is similar to that of Sinclair (1998) where she insists that pupils enrolled in alternative programs are unlikely to drop out of school and they are recorded to earn more course credit.

Table 4.3: Mean Rating

Alternative education learning Environment	Mean Rating (MR)
Psychosocial support	4.28
Having diverse learning programme	4.28
Learner Centered teaching method	4.28
Enriching learning programmes with life skills and	4.23

environmental awareness	
Having flood proof measure in school	4.21
Empowering parents and guardians financially	4.18
Refurbishing destroyed school's physical environment	4.14
Keeping children warm during floods	4.04
Proper forecasting on flood	3.93
Having "child watch" in society	3.86
Resilient, durable easy to repair educational facilities	3.84
Raising ground during floods	3.81

Key: 1= Strongly Agree, 2 = Agree, 3 = Moderately Agree, 4 = Disagree, 5 = Strongly Disagree

4.7. Regression Analysis

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.959 (a)	.900	.817	.69541

The adjusted R^2 is the coefficient of determination which highlights the variation in dependent variable due to changes in independent variable. The adjusted R^2 was 0.817 showing that there was 81.7% variation due to alternative physical learning environment, alternative learning programs, teacher strategies, support services and therapeutic programs.

Table 4.5: Analysis of Variance (ANOVA)

Model	d.f.	Sum of Squares (s.s.)	Mean Square (m.s)	v.r.	F pr.
1 Regression	7	348.85	49.835	31.16	< .001
Residual	8	12.79	1.599		
Total	15	361.64	24.109		

From the analysis of variance table, the p-value was 0.001 which means that the model was statistically significant.

Table 4.6: Estimates of Parameters

	Estimate	s.e.	t	t pr.
Constant	28.22	1.99	14.17	< .001
Alternative Physical Learning Environment	2.99	1.94	1.54	0.152
Alternative Learning Programs	5.24	0.913	5.25	< .001
Teacher Strategies	2.04	0.951	2.25	0.045
Support Services	3.907	0.903	3.14	0.008
Therapeutic programs	2.716	0.963	2.82	0.022

From the table of parameters, the established regression equation was;

$$Y = 28.22 + 2.99X_1 + 5.24X_2 + 2.04X_3 + 3.907X_4 + 2.716X_5$$

From the above regression equation having alternative physical learning environment, alternative learning programs, teacher strategies, support services and therapeutic programs would to an increase in pupils' performance by a factor 28.22. Unit increase in Alternative Physical Learning Environment would lead to an increase in pupils performance by a factor of 2.99, a unit increase in Alternative Learning Programs would lead to an increase in pupils' performance by a factor 5.24 while a unit increase in Teacher Strategies would improve pupils' performance by a factor 2.04. A unit increase in Support Services would lead to an increase in pupils' performance by a factor of 3.907 and a unit increase in Therapeutic programs would lead to an increase in pupils' performance by a factor 2.716.

4.8 Limitation of Results.

- Accessibility for data collection was a challenge since at the time of collection there were floods.
- Transportation was a challenge since the schools are vastly situated with no proper means of transport.

- Some respondents did not understand the questionnaires well especially those in class six.

4.9 Conclusion

Having analyzed and tested the data collected, the hypothesis in question, 'There is no significant difference on offering alternative physical learning environment and pupil's performance' fails to be rejected.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents the conclusion and recommendations that arose from the study. The research reviewed a wide range of secondary literature and collected primary data on which the conclusion and recommendations were based. The study was conducted within the theoretical framework which emphasized both Structural Functionalism and Ecological Resilience theories approach to floods. The research endeavored to answer the following questions;

- i. Is there a relationship between alternative physical learning environments with pupil s' performance during floods in Nyando Basin?
- ii. Which are the alternative learning programs during floods in Nyando Basin that would influence performance?
- iii. Which are the learning strategies during floods in Nyando Basin that would influence performance?
- iv. What support services can be offered during floods in Nyando Basin that would influence performance?
- v. What therapeutic programs can be re enforced during floods in Nyando Basin that would influence performance?

The study endeavored to respond to the hypothesis in question, “There is no significant difference on offering alternative physical learning environment and pupil’s performance”. The following were the conclusion and recommendations:

5.2 Conclusion

The study has established that when alternative physical learning environment is offered during floods there tends to be an influence in performance. A good number of respondents felt that an alternative physical environment is important during floods. This explains that the flood environment is not a friendly one to the pupils. When alternatives such as raising grounds, offering resilient durable and easy to repair physical environment, being accompanied are provided pupils become comfortable influencing performance.

The study has demonstrated that other than academic subjects, other programs such as life skills, health and safety, flood management and environmental ones are important for they would empower the pupils. The responses from the research demonstrated that, for exposure to life skill 26%, to principles of first aid 24%, to environmental awareness 26% and to flood management 24% expressed that these programs complement one another in ensuring that the pupils undertake their studies well influencing their performance.

The study demonstrates that support programmes are vital during floods. If pupils are warmly dressed, provided with sufficient food and given medical attention as needed, this would go a long way in ensuring them undertake their studies without hitches.

The study recognizes that it is important to ensure that the schools as well as the community around embrace early warning signs on floods. This would enable early preparedness which would prevent any adverse impact that would affect the pupils. No child should be encouraged to remember any traumatic flood event they may have been experienced. On that note, any pupil affected needs to be given proper first aid and psychological counseling as much as is available. The study further recommends that there is need for consolidated efforts from the entire school community in ensuring the pupils are safe and their needs are met as well. On that note, the study demonstrated that parents and guardians needs socioeconomic support that would provide the mentioned, to the pupils. The study shows that support programmes are vital during floods. Children have to be dressed warmly and food has to be provided for them to enable them go through their education. Finally it is important to note that the study has failed to reject the hypothesis “There is no significant difference on offering alternative physical learning environment and pupil’s performance”.

5.3 Recommendations

It is therefore appropriate in this chapter to highlight some policy considerations which if implemented would play an important role in influencing performance.

These would include the following:

- i. The community in Nyando Basin needs to be prepared at all times in order to manage floods as soon as they occur.
- ii. The Government and Key Stakeholders should be proactive by ensuring that schools physical environment are safe, easy to repair, and resilient.
- iii. The Curriculum in Teachers Training colleges needs to have a lot more on education during emergency.
- iv. The Metrological Department needs to be much keener in order to provide sufficient and accurate early warning signals.
- v. Construction and maintenance of dams should be a serious development program in the basin in order to control the excess water as well as trap it in order to make better use of it.
- vi. A much more serious flood management mechanism if displayed within the basin would go a long way in saving the pupils from wastage in performance.
- vii. The policy of not settling on designated river banks should be reinforced in the region and more so schools should not be within the proximity.

5.3.1 Consideration for Further Research

- There is a clear need for more research into the behavior of primary school drop outs in relation to their maintenance of peace within their environment.

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APPENDICES

APPENDIX I: LETTER OF TRANSMITTAL OF DATA COLLECTION



UNIVERSITY OF NAIROBI
COLLEGE OF EDUCATION AND EXTERNAL STUDIES
SCHOOL OF CONTINUING AND DISTANCE EDUCATION
DEPARTMENT OF EDUCATIONAL STUDIES

Your Ref:

Our Ref:

Telephone: 318262 Ext. 120

Main Campus
Gandhi Wing, Ground Floor
P.O. Box 30197
NAIROBI

3rd September, 2014

REF: UON/CEES/DES/2/15

TO WHOM IT MAY CONCERN

RE: KEZIAH AWOUR OCHIENG - REG. NO L51/75553/2012

This is to confirm that the above named is a student at the University of Nairobi College of Education and External Studies, School of Continuing and Distance Education, Department of Educational Studies pursuing Master of Arts in Peace Education.

She is proceeding for research entitled "Influence of Alternative Education on Pupil Academic Performance during Emergencies in Public Schools;" A case of Nyando Basin, Kisumu County.

Any assistance given to her will be highly appreciated.

Dr. Omondi Bowa
Chairman
Department of Educational Studies

CHAIRMAN
DEPARTMENT OF EDUCATIONAL STUDIES
COLLEGE OF EDUCATION AND EXTERNAL STUDIES
UNIVERSITY OF NAIROBI
P.O. Box 30197
NAIROBI.

**APPENDIX II: LETTER INFORMING RESPONDENTS OF
THE PURPOSE OF DATA COLLECTION**

KEZIA AWUOR OCHIENG,
REG/ NO: L51/75553/2012
UNIVERSITY OF NAIROBI,
P O BOX 30197-00100,
NAIROBI KENYA.
Date.....

Dear Sir/Madam/pupil,

RE: REQUEST TO CARRY OUT AN ACADEMIC RESEARCH IN YOUR
SCHOOL/OFFICE.

I am a student at University Of Nairobi taking a Master of Arts in Peace Education degree course. As a requirement for the fulfillment of the Master degree, I intend to carry out A RESEARCH ON “INFLUENCE OF ALTERNATIVE EDUCATION ON PUPIL’S ACADEMIC PERFORMANCE DURING EMERGENCIES: A CASE OF PUBLIC SCHOOLS IN NYANDO BASIN, KISUMU COUNTY, KENYA.”.Please note that all sensitive information will be handled with outermost confidentiality. If you consent to participate in the study, kindly spare some of your time to help me complete the questionnaire attached herein / respond to the interview.

Yours faithfully

Ochieng Kezia Awuor

APPENDIX I11: CLASS SIX - EIGHT PUPILS QUESTIONNAIRE

Instructions:

- *Please read the instructions given and answer the questions as appropriately as possible.*
- *It is advisable that you answer or fill in each section as provided.*
- *Make an attempt to answer every question fully and honestly.*

SECTION A:

This section deals with general questions and its purpose is to establish the population representation of the data. Tick your correct choice.

1. Indicate your gender. Male [] Female []
2. Indicate your class. Class 5 [] Class 6 [] Class 8 []

SECTION B:

This section deals with issues related to influence of alternative Education. Its purpose is to assess the influence of alternative education learning environment on pupil's performance and its long run impact on the state of peace in Nyando Basin.

Tick your best choice

3. What is usually your feeling when you have company to and from school during flood seasons? Very safe [] Safe [] Not safe []
4. Other than normal academic subjects taught in school, would the following programs assist you go through a flood season?
Life skills programs Yes [] No []
Health and Safety programs Yes [] No []
Flood management programs Yes [] No []
Environmental care Programs Yes [] No []
5. How much do you support dressing warmly during floods when going to and from school.
Highly support [] Lowly support [] Does not support []
6. How much do you enjoy remembering a traumatic event you ever experienced during a flood season? Very much [] Not at all []

END AND THANK YOU FOR YOUR CO-OPERATION

APPENDIX IV: CLASS SIX - EIGHT CLASS TEACHER'S QUESTIONNAIRE

Instructions:

- *Please read the instructions given and answer the questions as appropriately as possible.*
- *It is advisable that you answer or fill in each section as provided.*
- *Make an attempt to answer every question fully and honestly.*

SECTION A:

This section deals with general questions and its purpose is to establish the population representation of the data. Tick your correct choice.

1. Indicate your gender.

Male []

Female []

2. How long have you taught in this school?

0-2 years []

2- 4 years []

above 4 years []

SECTION B:

This section deals with issues related to influence of alternative Education. Its purpose is to assess the influence of alternative education learning environment on pupils performance and its long run impact on the state of peace in Nyando Basin.

Tick your best choice

3 a) With the negative environmental conditions usually experienced during floods, how much work are you able to cover from the syllabus?

Much more [] same as normal [] Much less []

b) How do you compensate for the lost time in order to catch up with the syllabus?

c) With the mentioned arrangement in place, what would you note about the pupil's academic performance?

Better [] Same [] Bad []

4 Other than the normal school programs, show if the following learning programs would be of any importance in supporting pupils performance

Exposure to life skills Yes [] No []

Exposure to Principles of First Aid Yes [] No []

Environmental Awareness Yes [] No []

Flood management courses Yes [] No []

Others (specify if any)

5 How much does your personal experience with floods assist you in helping the pupils during the same season? Very Much [] Much [] Not Much []

6 a) Other than the academic teaching you give the pupils, what other physical support services do you consider necessary that would enhance pupil's performance. Give as many as possible

b) Which group is responsible for providing the above mentioned support?

(Tick as many as applicable)

Humanitarian NGO's [] Communities around the school []
Religious sectors [] Government bodies []

7 What psychological support would be important to pupils affected by floods? Give as many as possible.

8 What is your level of agreement with the following statements on the influence of Alternative Education on pupils' performance during emergencies?

Use a scale of **1-5**.

1= strongly agree, 2= agree, 3= moderately agree, 4= disagree and 5= strongly disagree.

Influence of alternative Education learning environment On pupil's performance and it's impact on the state of Peace in Nyando Basin.	1	2	3	4	5
1) Resilient, durable easy to repair educational facilities Influence performance.					
2) Having "child watch" in the society influence performance.					
3) Having flood proof measures in school has a major role in performance.					
4) Raising grounds during floods influence performance.					
5) Having diverse learning programs influence performance.					
6) Enriching learning programs with life skills and environmental awareness influence performance.					
7) Proper forecasting on flood influence performance.					
8) Learner centered teaching method influence performance.					
9) Empowering parents and guardians financially influence performance.					
10) Refurbishing destroyed school's physical environment influence performance.					
11) Keeping children warm during floods influence performance.					
12) Psychosocial support contributes to influence of performance.					

END AND THANK YOU FOR YOUR CO-OPERATION

APPENDIX V: HEAD TEACHER'S QUESTIONNAIRE

Instruction

- *Please read the instructions given and answer the questions as appropriately as possible.*
- *It is advisable that you answer or fill in each section as provided.*
- *Make an attempt to answer every question fully and honestly.*

SECTION A:

This section deals with general questions and its purpose is to establish the population representation of the data. Tick your correct choice.

1. Indicate your gender.

Male [] Female []

2. How long have you been a head teacher?

0-2 years [] 2-4 years [] above 4 years []

SECTION B:

This section deals with issues related to influence of alternative Education. Its purpose is to assess the influence of alternative education learning environment on pupil's performance and its long run impact on the state of peace in Nyando Basin.

3. When the school physical environment is raised during floods, how do you compare the pupil's vulnerability to diseases?

High [] medium [] low []

4. How much do you support the community's effort in keeping watch on pupils while to and from schools during floods?

Very much [] Much [] Does not support []

5. Rate your assessment on the value of ;

a) Having teachers who have experienced floods in your school.

Highly value [] Lowly value []

b) Having teachers who have trained on principles of emergencies.

Highly value [] Lowly value []

6. a) What kind of support services if any are given to your school by external bodies during floods?

Books [] Food [] Clothing [] Funds []

b) What is your experience with pupil's academic performance when such services have been offered?

High [] same [] Low []

7. What is the level of agreement with the following statements on the influence of Alternative Education on pupils' performance during emergencies?

Use a scale of **1-5**.

1= strongly agree, 2= agree, 3= moderately agree, 4= disagree and 5= strongly disagree.

Influence of alternative Education learning environment On pupil's performance and it's impact on the state of Peace in Nyando Basin.	1	2	3	4	5
1) Resilient, durable easy to repair educational facilities Influence performance.					
2) Having "child watch" in the society influence performance.					
3) Having flood proof measures in school has a major role in performance.					
4) Raising grounds during floods influence performance.					
5) Having diverse learning programs influence performance.					
6) Enriching learning programs with life skills and environmental awareness influence performance.					
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8) Learner centered teaching method influence performance.					
9) Empowering parents and guardians financially influence performance.					
10) Refurbishing destroyed school's physical environment influence performance.					
11) Keeping children warm during floods influence performance.					
12) Psychosocial support contributes to influence of performance.					

END AND THANK YOU FOR YOUR CO-OPERATION

**APPENDIX VI: TEACHERS' ADIVOSORY CENTER TUTOR'S
QUESTIONNAIRE**

Instructions:

- *Please read the instructions given and answer the questions as appropriately as possible.*
- It is advisable that you answer or fill in each section as provided.
- Make an attempt to answer every question fully and honestly.

SECTION A:

This section deals with general questions and its purpose is to establish the population representation of the data. Tick your correct choice.

1. Indicate your gender.

Male [] Female []

2 How long have you worked in this area?

0-2 years [] 2-4 years [] above 4 years []

SECTION B:

This section deals with issues related to influence of alternative Education. Its purpose is to assess the influence of alternative education learning environment on pupil's performance and its long run impact on the state of peace in Nyando Basin.

3 How do you rate pupil's performance in school that provides alternative physical environment in attempt to combat floods with those that do not?

Better [] same [] low []

4 How do you assess the effects of the following alternative learning programs during floods to pupil's performance in your area?

Life skills programs,	High []	moderate []	low []
Health and safety programs.	High []	moderate []	low []
Flood management programs.	High []	moderate []	low []
Environmental care programmes.	High []	moderate []	low []

5 What is your experience with the effects of humanitarian supports during floods given to public primary schools in your area to the pupils performance

Highly effective [] moderately effective [] Not effective []

6 What is your observation on pupils’ performance in schools in your area who psychologically recover early from floods?

Good [] average [] low []

7 .What is the level of agreement with the following statements on the influence of Alternative Education on pupils’ performance during emergencies?

Use a scale of **1-5**.

1= strongly agree, 2= agree, 3= moderately agree, 4= disagree and 5= strongly disagree.

Influence of alternative Education learning environment On pupil’s performance and it’s impact on the state of Peace in Nyando Basin.	1	2	3	4	5
1) Resilient, durable easy to repair educational facilities Influence performance.					
2) Having “child watch” in the society influence performance.					
3) Having flood proof measures in school has a major role in performance.					
4) Raising grounds during floods influence performance.					
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10) Refurbishing destroyed school’s physical environment influence performance.					
11) Keeping children warm during floods influence performance.					
12) Psychosocial support contributes to influence of performance.					

END AND THANK YOU FOR YOUR CO-OPERATION

APPENDIX VII: INTERVIEW GUIDE TO CLASS EIGHT TEACHERS

Interviewer will read the script below to the participant at the beginning of the interview:

“Thank you for taking the time to speak with me today. My name is _____ and I would like to talk to you about your thoughts and experiences with working in an environment facing floods with regards to provision of alternative education and influence to performance. This interview is to help us get a better understanding of the influence of Alternative Education on pupils’ performance during emergency. This interview should take 20 minutes. If it is okay with you, notes will be taken while you talk.

All of your responses will be confidential. Information from the interview that is included in the reports will not include any information that could identify you. Your participation is completely voluntary, and you can end the interview at any time .Do you have any questions or need any clarifications?

Are you willing to participate in the interview? Ok, let’s begin.”

QUALITATIVE INTERVIEW QUESTIONS.

SECTION A: Demographic information

1. How long have you taught in this school?

2. Give your assement with regards to working in this region during floods.

SECTION B: Information related to the study

To determine the extent to which alternative physical learning environment influence pupils’ performance during floods in Nyando basin.

3. Share with me your experience with alternative physical learning environment offered during floods.

.....
.....
.....

4. What influence does the alternative physical learning environment have on pupils' performance during floods?

.....
.....

5. Tell me more.

.....
.....
.....

To identify how alternative learning programs influence pupils performance during floods in Nyando basin.

6. What is your experience with alternative programs offered during floods?

.....
.....
.....

7. What effect do the alternative learning programs have on pupils' performance?

.....
.....

To establish how teaching strategies influence performance during floods?

8. What teaching strategies do you use during floods?

.....
.....

9. What effect has the teaching strategies have on performance during floods?

.....
.....

10. Please explain.

.....
.....

To determine how support services used influences performance during floods.

11. Share with me your experience with the support services offered during floods.

12. How much do support services offered influence performance?

To establish how therapeutic services influence performance during floods.

13. Share with me your experience with the therapeutic services offered to pupils' during floods.

14. What effect do the therapeutic services have on performance?

Interviewer at the end of the interview:

“Is there anything else you would like to add? Do you have any questions or concerns?”

This concludes the interview.

Thank you for your participation! It is greatly appreciated.”

APPENDIX VIII: TIME FRAME

ACTIVITY	TIME	RESPONSIBLE PARTY	EXPECTED OUTCOME	CRITICAL ASSUPTION
Submission of proposed document to the school	30 th June 2014	Researcher	Document Accepted	Availability of Document
Developing the proposal	4 th July 2014	Researcher and Examination body	Discussions and positive criticisms	Proposal document harmonized
Developing terms of reference	18 th July 2014	Researcher	Terms of reference	Availability of research funds
Appointment of research assistants	28 th July 2014	Researcher	Contract agreement	Budget will take care of the cost
Development of draft instrument	31 st July 2014	Researcher	Draft instrument	Draft developed in time
Review of draft instrument	4 th August 2014	Researcher and research assistants	Revision of draft instrument if need be	Draft developed in time
Developing of sample frame	6 th August 2014	Researcher	Sample frame	Sample frame is available
Training research Assistants'	8 th -11 August 2014	Researcher	Well trained research assistants	Suitable assistants identified.
Pre-test and pilot Survey	18 th -21 st August 2014	Researcher and research assistants	Pre-test instrument	The assistants are capable
Developing dummy table using pre-test data	23 rd August 2014	Researcher and research assistants	Dummy tables	Pre test data are available on time
Collecting data in the field	15 th -27 th September 2014	Researcher and the assistants	Draft report	Analysis of data on time
Writing of draft report	18 th -24 th October 2014	Researcher	Research report	Report writing done on time
Submission of final report in hard copies and diskette	20 th November 2014	Researcher	Final report and diskette	Review and revision of research done

APPENDIX IX: GENERAL BUDGET

	ITEM	COST
1.	Consolidating literature	4,600.00
2.	Designing and developing research instruments	930.00
3.	Research introduction and training	7,500.00
4.	Pilot survey	9,450.00
5.	Finalizing of research instruments	14,000.00
6.	Main field data collection	24,750.00
7.	Data processing, analysis and report writing	20,000.00
8.	Purchase of computers	25,000.00
9.	Miscellaneous	10,623.00
	GRAND TOTAL	116,853.00

APPENDIX X: BUDGET BREAKDOWN

SR/NO	EXPENSE HEADING	COST
1.1.	Consolidating literature	
1.1.1	Travelling for library search	4,600.00
Sub Total		4,600.00
2.1	Designing and developing research Instruments	
2.1.1	Typing the instruments	750.00
2.1.2	Photocopy of instruments	180.00
Sub Total		930.00
3.1	Research introduction and training	
3.1.1	Transport for 1 researcher and 2 research assistants (for 5 days)	7,500.00
Sub Total		7,500.00
4.1	Pilot survey	
4.1.1	Travelling	3,600.00
4.1.2	Subsistence allowance	1,350.00
4.1.3	Per diem (for 3 days)	4,500.00
Sub Total		9,450.00
5.1.	Finalizing of Research Instruments	
5.1.1.	Photocopying of Questionnaires 500 copies x 14 pages @ 2.00	14,000.00
Sub total		14,000.00
6.1.	Main field data Collection	
6.1.1.	Travelling	12,600.00
6.1.2.	Subsistence	3,150.00
6.1.3	Per diem (1 researcher and 2 research assistants) for 6 days	9,000.00
Sub Total		24,750.00
7.1.	Data processing, analysis and report writing	
7.1.1.	Process analysis and report writing	20,000.00
Sub Total		20,000.00
8.1.	Purchase of Computer	
8.1.1.	1 Computer Accessories	25,000.00
Sub Total		25,000.00
	Miscellaneous	10,623.00
GRAND TOTAL		116,853.00