

**THE INTERACTIVE E-BOOK PROJECT REPORT**

**INNOVATIVE TEACHING METHODOLOGIES IN HIGHER**

**EDUCATION FOR TARGETED SOLUTIONS**

**BY JACKLINE. A.BWIRE**

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## **ABBREVATIONS**

UCU-Uganda Christian University

BCDCM –Bachelor of Child Development and Children's ministry

BTVET- Business, Technical, Vocational and Education Training

UBOS-Uganda Bureau of Statistics

## **INTRODUCTION**

This is a report about the Interactive E-book project which was conceived and implemented in the UCU department of Child Development and Children's ministry within a period of about 11 months (August 2015-July 2016). The report is a storied account of the project beginning from its conceptualization, implementation, dissemination and report writing. The report systematically explains the project background including how the idea was conceived, then it explains what the interactive E-book project is about, why and how the project was carried out, using descriptions and explanations of the project activities and processes, the report unveils a process of action and reflection which leads to the conceptualization of the phenomenon 'project inclusive teaching'. Lastly the report presents the project results and the implication it is likely to have on the future of curriculum development for child workers and child work practice. The challenges faced in project implementation are also cited and recommendations are given. Please note that this report to be complete must be accompanied by a CD of flash disk of the actual E-books.

## **PROJECT BACKGROUND**

Over the years in my high school teaching career, I have realized that the most challenging time for students is the period when they have successfully finished their studies and the whole world is looking at them to prove whether all their time spent at the University was worthwhile. In other words this is the time they

are supposed to get engaged in the real world of job and show what school has taught them. It gets very sad when very many graduates fail to find jobs or are able to create jobs. It is upon this background that I found myself as an academician getting interest in the domain of practice. Thus when the call from the UCU research fund came, it was therefore no doubt in my mind that I needed to do a project that would help my students get jobs or create jobs. Although other important issues such as my interest to improve lives of children in Uganda deemed necessary along the way, the first compellation for me to do this project was the need to help students become job creators

### **WHAT IS THE INTERACTIVE E-BOOK PROJECT**

In line with the UCU school of Divinity and Theology, department of child development and Children Ministry strategic plan 2015-2020, the core objective of the school among others was to provide education that would give students hands-on experience and skills supposed to help them compete favorably in the job market. The interactive E-book project therefore was an attempt to put this plan into action. The rationale was that at the end of the project the students would have knowledge and skills on how to create and design books. The BCDCM 2015/2016 third year class was chosen to participate in this project. They were trained for a period of 3 months in basic knowledge and skills on how to create interactive E-books for children.

An interactive E-book is a book that includes interactivities to engage readers such as animations, audio, video clips, self-assessments and use of fine and gross motor skills (Bartoszewicki 2013). This definition therefore implies that the usage of an E-book has the ability to holistically develop the child mentally, physically, socially and emotionally. Thus knowledge and skill on how to produce such books is a plus for realizing holistic child development. Upon this background the project assumes that BCDCM students who gain such relevant skills for child development will likely to be better placed in the competitive job market compared to their other counter parts.

## **PROJECT ABSTRACT**

Every year Ugandan universities train thousands of graduates, yet the unemployment rate has remained high and the challenges faced by children are sky rocketing. The gap between the training offered, the challenges faced by children and the skills needed in the job market seems too wide. The purpose of this report is to show how Uganda Christian University(UCU), department of child development and children Ministry is purposely working towards creating innovative teaching methodologies which are meant to enhance the curriculum for job creation and also improve the lives of children in Uganda. Through an innovative teaching methodology referred to as ' inclusive project teaching', 27 third year bachelor of Child Development and Children

Ministry(BCDCM) students participated in an E-book project which was integrated in the third year BCDCM curriculum. The result of this curriculum integration was the creation of 27 interactive E-books for children with the theme child protection.

### **PROJECT AIM**

The aim of the project was to contribute to debates on finding solutions to the increasing unemployment rate in Uganda and finding solutions to challenges children face in Uganda.

### **PROJECT OBJECTIVE**

To have 3<sup>rd</sup> year BCDCM students create interactive E-Books for children using concepts from the integrated curriculum model.

### **CHARACTERISITCS OF PARTICIPANTS**

The project participants included 27 BCDCM 3<sup>rd</sup> year students who had very limited knowledge of IT. For most of them it was their very first time to hear about an E-book for children and also experience thematic and integrated teaching.



The project also employed the Child Development Head of department, to foresee and make sure the project is running on schedule as per meeting the project goals and objectives.

A lecturer (myself) in the field of child protection, child development and curriculum development for children was employed to site out relevant concepts from those fields that related to the project.

A training Team of Intern from UCU Information Technology department were called upon to train the students on how to use the Animation software and how to add voice to the E-books.

A student assistant was identified during the teaching process and was employed to coordinate the students and assist them at times when the trainers were not available. The assistant's role was to work closely with the students making sure to help those who had not yet clearly grasped the concepts being taught to them.

## **STATEMENT OF THE PROBLEM**

According to the skill Uganda project (Uganda BTVET 2011-2010) academic institutions in Uganda have concentrated on issuing of certificates instead of creating employable skills and competencies relevant in today's market. This problem has contributed to the majority of the young people in Uganda aged 18-30 being unemployed. There also seems to a skills mismatch between what is offered in the training institutions and the actual skills needed to mitigate the societal challenges (ILO 2013). In the context of child workers and child development training in Uganda one wonders as to whether the training in the education institutions are indeed skills relevant looking at the fact that the situation of children (2015) leaves a lot to be desired.

## **PROJECT ASSUMPTIONS**

There is a relationship between finding solutions to unemployment for child workers, finding solutions to challenges faced by children and making changes in the Child Development curriculum and implementation process. In other words in order to provide Child Development students with knowledge and skills that are relevant in the job market, the Child Development department has got to offer students innovative courses that are relevant to the given context. The curriculum implementation process and resources must also be appropriate

for the learners and also appropriate for finding the solutions to the problems at hand.

### **SIGNIFICANCE OF THE PROJECT**

As earlier stated the project contributes to the work of the integrated curriculum model approach. Relating to the thoughts of (Wolf & Brandt, 1998 ) who argue that one of the best ways to promote problem solving is through an enriched environment that makes connections among several disciplines. The project innovatively through curriculum integration purposefully chooses to teach BCDCM 3<sup>rd</sup> year students the skills that will enable them to create interactive E-books.

### **WHY THE SKILL OF CREATING INTERACTIVE E-BOOK**

The skill of creating interactive E-books is just one of the many skills that an educator is likely to conceive after a thorough scrutiny of relevant work skills that are needed to mitigate some of the major challenges children face today. In this project education challenges are viewed as a major challenge for children in Uganda. From literature review one of the biggest challenges in childhood education in Uganda is a poor literacy foundation. It is argued that if children fail to get the foundation skills in literacy the academic performance rates remain poor and the students' performance rates in later life also remain poor.

Previous research showed that Uganda lacks a reading culture and one of the major obstacles is because Uganda just like any other African country was predominantly oral (Magara and Batambuze, 2005).

This project therefore uses E-book as form of mediation between culture and modern technology. The project relates with thoughts from (Dike, 1995) who argues that western culture and African culture should not work against each other but rather work together to promote positive change and build a reading culture. I see the E-book having similar features of the informal methodology of teaching which can for example stimulate a desire in the child to read before trying to teach him to read. This is done inform or voice rerecording, narrations recording and picture illustrations. Reading was mostly used only for education purposes (Nalusiba 2010). From my experience as a Uganda I have always heard of a saying that if you want to conceal information from a Ugandan then hide it in books. This project therefore choses to use interactive E books which calls for a sought of mental and physical interaction with the reader. The assumption is that the interesting features in E-books may easily interest a child to read. It is upon this background that the project chooses to skill students in developing interactive E-books.

## **METHODOLOGY FOR PROJECT IMPLEMENTATION**

The project used thematic teaching and curriculum integration to guide the methodology to accomplish the different planned project activities or tasks. Curriculum integration was defined as the process which recognizes the need for organizing learning around ideas that connect as opposed to discrete features. The project used elements from the BCDCM third year curriculum which consisted of courses that related to the major project concepts namely child protection, curriculum development for children and child development theories. These elements were organized around ideas that connect and relate with the project for example Child protection became the content for the E – book, Curriculum development for children's ministry was the process to arrive at the E- book i.e. how to choose the content, how to organize and arrange. The soft wares Microsoft power point was used at the E-book template and then Anime and the others were used for including sound and creating characters.

Generally the project training program consisted of 6 topics which also worked as project activities. Students began with doing a pre-course evaluation which revealed that most students had very little knowledge on how to design books for children. The project activities or topics were as below:

1. Provide students with skills on how to choose interactive learning experiences for a book

2. Provide students with skills on how to organize interactive experiences for a book
3. Provide students with skills on how to formulate goals and objectives for book content
4. To provide students with skills on how to plan interactive story scenes using PowerPoint
5. Provide students with skills on how to search on line for relevant pictures/illustrations for book content
6. Provide students with skill on how to add speech and sound to E- book pages.

### **CRITICAL STEPS IN THE PROJECT IMPLEMENTATION**

According to the BCDCM third year curriculum, the project manager was supposed to teach child protection and curriculum development for children. Right from the beginning, the lecturer made known to the students that they were going to participate in an E-book creation project as well as study the other two course units on the 3<sup>rd</sup> year BCDCM curriculum. The E-book therefore became the end product (goal) of the training while the other two course units i.e. child protection, curriculum development for children and basic IT training became a means to arrive to the goal. The content of the interactive E-book was to center around elements in the child protection course outline while the

elements in curriculum development for children course outline, were meant to teach the students how to choose and organize the child protection learning experiences. With continued guidance from the project manager most of the students were successfully able to create interactive book narratives with the theme of child protection at the end of the training.

Listed below are some of the critical steps that led to the actual creation of the interactive E-books.

1. Formulating the book goal and objectives with a focus of child protection
2. Planning and documenting in writing the specific book content and scene
3. Choosing the specific interactive elements such a pictures and cartoons
4. Deciding on the specific book prototypes such as dialogue and narratives
5. Adding voice or audio to the text and picture
6. Transferring the creations and text to an E book template
7. Chronologically organizing the content and experiences to create meaning for the different age categories of children
8. Developing user manuals for the books

## **CONCEPTUALISATION OF THE PHENOMENON 'PROJECT INCLUSIVE TEACHING'**

As earlier mentioned the project used curriculum integration to guide project implementation. However during the process of analysis of results, comparing and relating the whole process to theories in childhood education and curriculum development, there was a realization that curriculum integration may not be enough to explain the processes that were used in the project. So a new teaching methodology was coined i.e. 'Project inclusive teaching'. This new terminology is seen as the closest term to describe the project methodology. It is defined as a teaching method in which the teachers intentionally integrate projects in their teaching process in order to help students gain targeted skills that is relevant in the job market and responsive challenges in the society.

## **PROJECT RESULTS**

At the end of the training each student created interactive E-books which were saved in flash disks and CDS. This report is therefore not complete without the actual E-creations. All the E-books created by the students were narratives created in a Microsoft book template. The Microsoft template was conceived as the most available and affordable software to use for this project. It had options for voicing and creating text. There was provision for speed control of the narratives in the book templates by use of arrows as illustrated below.





The button above is for next or forward and the one below is for back or previous



The assumption is that as the book user navigates by using the arrows above, the user is able to learn how to use the computer or phone as well as engaging with the content of the book. For children who will be reading the E- books on the computer or on line, it is inevitable for them not to engage with the gadget. They will get engaged in learning and mastering some basic computer skills like using the mouse and shutting down and starting a computer to locate files. The arrows also enhance repetition of learning to take place. For this reason parents or teachers are cautioned to control time spent on the screen.

### **BRIEF DESCRIPTIONS OF THE E-BOOKS CREATED**

The following are titles and brief descriptions of the E-books that were created. To watch the details please view the CD or Flash Disk that was availed as an accompaniment to this report. Some books are also available on Utube if you search by title and author.

1. FACTS ABOUT MALARIA BY ANYANGO SUSZAN

This is an interaction about malaria between a science teacher and children in class. It is a malaria awareness lesson showing how it is caused, symptoms, signs and how it can be prevented, minimized/ controlled and spread. The book is to be used by Ugandan children of ages between 6-12 years, their parents, care givers and the community at large.

## 2. AWARENESS OF ELECTRICITY BY NANTAYI REBECCA

The major aim of this E- book (8-12years) was to create awareness on the importance of electricity and its dangers. The content showed the importance of electricity for example cooking, ironing, lighting, and watching television. The dangers of electricity shown also included electric shock leading to death. For instance; touching fallen broken wires, putting things into the sockets, playing under or near electric wires, and climbing trees with electric wires.

## 3. WELCOME THE SPECIAL CHILDREN BY NABATYANG CAROLINE

This is a story that aims to promote the value of special children in our communities. The story is about a young boy who faces challenges at school because of his disability. One day this boy gets to change the other children's perception about disability.

## 4. SAY NO TO STRANGERS BY MULINDWA SHEENA

This book (5-8 years) is a narrative on how children could protect themselves from strangers and the possible dangers associated with strangers such as defilement and being trafficked out of the country.

#### 5. PLAYING IN BUSHY AREAS by ANKUNDA NAOMI

The main aim of this E-Book (5-10yers) was to create awareness among children about dangers of playing in bushy areas and the dangerous animals found in bushes such as snakes.

#### 6. POEM BY MUGERWA SARAH

This poem was created for 14 year olds and above. It was mean to provide them with information about their rights.

#### 7. ASSERTIVENESS BY ANGWECH MIRIAM

This book is meant to train children to be able to stand up for themselves and learn to interact well with their peers. It is a narrative teaching them assertiveness and self-confidence, as opposed to aggression.

#### 8. PETER A SMART BOY BY NDINDA MARIA

This book is for children of ages four to six years. The aim is for children to learn how to share and avoid conflicts. At the end of the reading children should be able to tell why they should avoid fighting and why they should share.

#### 9. KIDNAP BY NAKIMERA JACKLINE

This book was created for children aged 5-10 years to foster security consciousness in them. It teaches children what kidnap is and how to avoid situations that lead to kidnap.

#### 10. MORAL DEVELOPMENT IN CHILDREN BY GIFT NORAH

This E-book (7-8 years) is to teach children about importance and values of obedience and consequences of disobedience so as to promote their moral development. At the end of the reading a child should be able to tell why they should obey their parents, the consequences of disobeying elders, the benefits of doing home chores.

#### 11. ROAD SIGNS BY AHUMUZA ANITA

This E-book narration for children (3-5years) teaches children about road signs. By the end of reading children should be able to cite examples of road signs and explain the meaning of the colors red, green and yellow on traffic lights.

#### 12. GOING TO CHURCH ON SUNDAY BY NAMUYOMBA SANDRA HELLEN

This E- book narration teaches the importance of going to church on Sunday. By the end of reading children should be able to tell what a church is and why it is good to go to church.

#### 13. SAFE PLAYING ENVIROMENT BY MAGOBA GODFREY

This E- book narration is a general sensitization of children about safety in the child's immediate environment. It is an explanation of the dangerous places in our environment and reasons why there are dangerous.

#### 14. HOW TO PREPARE FOR RAIN BY NASSINDE JULIAN

The major aim of this E-book narration is to teach children how to prepare for weather seasons for example what to do when it is about to rain. It also has elements of learning new words and counting and spelling basics.

#### 15. KEEPING SAFE AT HOME AND AT SCHOOL BY AYUME JIMMY

This book narration teaches children how to avoid un safe games, appreciate the need for safety at school and at home and knowledge on how to protect themselves in case of any problem.

#### 16. AWARENESS OF HIV BY NAKIBUUKA JACKLINE

This is an audio book teaching children about AIDS. It informs children what AIDS is, how it is spread and how it is prevented.

#### 17. DEFILEMENT BY MUDONDO FAITH

This eBook uses narratives to teach children (7-12 years) about Defilement. Specifically the circumstances that lead to defilement and how to avoid it.

## 18. IMPORTANCE OF A COMPLETE EDUCATION BY SEMPA DOMINIC

This e-book narration attempts to portray the benefits of attending a school with Christian values and principles. It portrays different education experiences of which children should learn from.

## 19. DEFILEMENT BY CALEB

This book narration is for children of eight to fourteen years. It is meant to equip children on knowledge and skills of how to avoid defilement. At the end of the reading children should be able to identify and list risk factors for defilement, identify some of the causes of defilement and potential defilers, mention some ways of combating defilement and how to help the victims.

## 20. HOW TO PRAY BY NAKINTU BABIRYE

This is a narration for children aged 3-7 years old. It is about prayer and its importance. Children are taught how to pray, what to pray for and reasons for praying.

## 21. PERSONAL HYGIENE BY AYESIGA ANITA

This is a narration children 4-5 years of age. It is to enable children understand the meaning of personal hygiene. Children are taught aspects of personal hygiene like how to brush and comb their hair

## 22. MUNDAKA GRACE

This is a narration about how to make good decisions when faced with difficult circumstances. Two characters Skelton and Sonnie are faced with making a decision on what they should eat when famine struck.

#### 23. NALULE HILDA

This is a narration by Hilda to children on how to stay safe at home. Children are told how to organize the rooms in a home and how to avoid dangerous circumstances such as opening a door for a stranger, leaving the tap open and keeping away from fire.

#### 24. STRANGER DANGER BY SANYU MARY

This is a narration meant to teach children to be alert about stranger danger. Children are taught how to avoid lifts and offers from strangers.

#### 25. COPORAL PUNISHMENT BY YANGI ESTHER

This is a sensitization to children about corporal punishment and its dangers. Parents are also told about positive ways of parenting.

#### 26. BAD TOUCHES BY KANYUNYUZI OLIVER

This book creates awareness bad touches among the children. It also trains children on how to defend themselves by saying “no” to bad touches.

#### 27. SAFE AND UNSAFE TOUCHES BY NYAKATO WINNIE MUTABAZI

In this E-book Nyakato teaches children on the different types of touches. Children are highlighted about safe and bad touches. Ways of how to avoid unsafe touches that may lead to child abuse are also highlighted.

## **CHALLENGES FACED DURING PROJECT IMPLEMENTATION**

The Anime Software for animation that was introduced by the IT team seemed very hard for the students to grasp. For this reason the project manager had to look for a more user friendly software i.e. Microsoft PowerPoint.

Anime Software was very expensive to purchase and maintain. The trainers therefore used a trial version which only lasted for one month. The project manager through some of her contacts abroad had to look for an affordable software hence the acquisition of Scratch Software.

The training time with IT team was also deemed short for the students to fully grasp the concepts hence need to employ a student assistant whose work was to make a one to one follow-up of the students making sure they are on track.

The students Lacked relevant children books for reference when they were in the process of creating their personal books. Most of the available children's books were written from and with the western context. There was a general lack of culturally diversity books in the children's library at UCU.

There was also a general lack of knowledge in publishing trends to guide the training. This knowledge is important to have in mind when creating content for sale.



## **PROJECT DISEMINATION**

The preliminary project results were presented at the 'Kyambogo University International Multi-Disciplinary Conference' in January 2016.

The Conference theme was: Supporting Communities for Sustainable Development: The Role of Universities and Tertiary Institutions.

Abstract title: Finding solutions to ECD challenges through University interdepartmental collaboration' by Jackline Bwire

While there is evidence that a holistic approach to early childhood education programming is effective, there are many challenges. As a result early childhood training and innovations in universities have continued to be fragmented in nature. The danger with compartmentalized interventions is that they focus on single issues other than the holistic needs of children thus ineffective programming. The purpose of this paper is to show how Uganda Christian University, department of child development is working with other departments to try to provide child development students with holistic skills that can meet children's needs and also job market demands.

Reactions from the project conference pointed towards making the illustrations more context specific and need for collaboration with the major publishing and producing industries

The project results will also be presented at the 24<sup>th</sup> International Reconceptualising Early Childhood Education (RECE) Conference in Resort - Taupo, New Zealand Wairakei on *October 30 – November 3, 2016*.

Conference Theme: Re-weaving theories and practices to re (construct) critical questions, new imaginings and social activism.

Title of approved abstract: ' Collective Solidarity in Finding Solutions to Early Childhood Education Challenges 'by Jackline Bwire

While there is evidence that a holistic approach to early childhood education programming is effective, there are many challenges. As a result early childhood training and innovations in universities have continued to be fragmented in nature. The danger with compartmentalized interventions is that they focus on single issues other than the holistic needs of children thus ineffective programming. The purpose of this paper is to show how Uganda Christian University, department of child development is working with other departments to try to provide child development students with holistic skills that can meet children's holistic needs and also job market demands.

## **RECOMMENDATIONS/CONCLUSIONS**

The interactive E-book project was a worthwhile project at many different levels. The students gained new skills on how to create interactive E- books for children while the lecturer was able to gain new skills in teaching, writing academic papers and presentation at academic conferences. The child development department at UCU, other departments within UCU and other external intuitions could use the project report to review their curriculum. However, there is need for more funding to test the interactive E-creations usage with children and teachers and document the results. There is also need to share the project with all the academic units to allow for integrated efforts in the book development.

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